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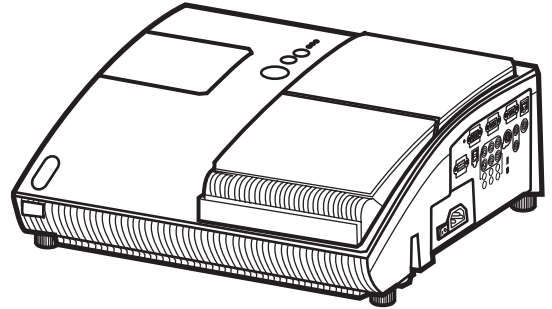http://www.discount-merchant.com

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Projector

ED-A100/ED-A110/CP-A100W
User's Manual (detailed)
Operating Guide

Thank you for purchasing this projector.

⚠️ **WARNING** ►Before using this product, please read all manuals for this product. Be sure to read "Safety Guide" first. After reading them, store them in a safe place for future reference.

About this manual

Various symbols are used in this manual. The meanings of these symbols are described below.

⚠️ **WARNING** This symbol indicates information that, if ignored, could possibly result in personal injury or even death due to incorrect handling.

⚠️ **CAUTION** This symbol indicates information that, if ignored, could possibly result in personal injury or physical damage due to incorrect handling.

📖 Please refer to the pages written following this symbol.

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HITACHI
Inspire the Next

Read this Safety Guide first.

Projector

User's Manual - Safety Guide

Thank you for purchasing this projector.

⚠ **WARNING** • **Before using, read these user's manuals of this projector to ensure correct usage through understanding. After reading, store them in a safe place for future reference. Incorrect handling of this product could possibly result in personal injury or physical damage. The manufacturer assumes no responsibility for any damage caused by mishandling that is beyond normal usage defined in these manuals of this projector.**

 NOTE • The information in this manual is subject to change without notice.
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About The Symbols

Various symbols are used in this manual, the user's manual and on the product itself to ensure correct usage, to prevent danger to the user and others, and to prevent property damage. The meanings of these symbols are described below. It is important that you read these descriptions thoroughly and fully understand the contents.

⚠ WARNING	This symbol indicates information that, if ignored, could possibly result in personal injury or even death due to incorrect handling.
⚠ CAUTION	This symbol indicates information that, if ignored, could result possibly in personal injury or physical damage due to incorrect handling.

Typical Symbols

⚠ This symbol indicates an additional warning (including cautions). An illustration is provided to clarify the contents.

🚫 This symbol indicates a prohibited action. The contents will be clearly indicated in an illustration or nearby (the symbol to the left indicates that disassembly is prohibited).

This symbol indicates a compulsory action. The contents will be clearly indicated in an illustration or nearby (the symbol to the left indicates that the power plug should be disconnected from the power outlet).

SG1

Safety Precautions

⚠ WARNING

Never use the projector if a problem should occur.
Abnormal operations such as smoke, strange odor, no image, no sound, excessive sound, damaged casing or elements or cables, penetration of liquids or foreign matter, etc. can cause a fire or electrical shock.
In such case, immediately turn off the power switch and then disconnect the power plug from the power outlet. After making sure that the smoke or odor has stopped, contact your dealer. Never attempt to make repairs yourself because this could be dangerous.

Disconnect the plug from the power outlet.

• The power outlet should be close to the projector and easily accessible.

Use special caution for children and pets.
Incorrect handling could result in fire, electrical shock, injury, burn or vision problem.
Use special caution in households where children and pets are present.

Do not insert liquids or foreign object.
Penetration of liquids or foreign objects could result in fire or electrical shock.
Use special caution in households where children are present.
If liquids or foreign object should enter the projector, immediately turn off the power switch, disconnect the power plug from the power outlet and contact your dealer.

• Do not place the projector near water (ex. a bathroom, a beach, etc.).

• Do not expose the projector to rain or moisture. Do not place the projector outdoors.

• Do not place flower vases, pots, cups, cosmetics, liquids such as water, etc on or around the projector.

• Do not place metals, combustibles, etc on or around the projector.

• To avoid penetration of foreign objects, do not put the projector into a case or bag together with any thing except the accessories of the projector, signal cables and connectors.

Never disassemble and modify.
The projector contains high voltage components. Modification and/or disassembly of the projector or accessories could result in fire or electrical shock.

• Never open the cabinet.

• Ask your dealer to repair and clean insider.

Do not disassemble.

Do not give the projector any shock or impact.
If the projector should be shocked and/or broken, it could result in an injury, and continued use could result in fire or electrical shock.
If the projector is shocked, immediately turn off the power switch, disconnect the power plug from the power outlet and contact your dealer.

Do not place the projector on an unstable surface.
If the projector should be dropped and/or broken, it could result in an injury, and continued use could result in fire or electrical shock.

• Do not place the projector on an unstable, slant or vibrant surface such as a wobbly or inclined stand.

• Use the caster brakes placing the projector on a stand with casters.

• Do not place the projector in the side up position, the lens up position or the lens down position.

• In the case of a ceiling installation or the like, contact your dealer before installation.

SG2

Safety Precautions (continued)

⚠ WARNING

Be cautious of High temperatures of the projector.
High temperatures are generated when the lamp is lit. It could result in fire or burn. Use special caution in households where children are present.
Do not touch about the lens, air fans and ventilation openings during use or immediately after use, to prevent a burn. Take care of ventilation.
• Keep a space of 30 cm or more between the sides and other objects such as walls.
• Do not place the projector on a metallic table or anything weak in heat.
• Do not place anything about the lens, air fans and ventilation openings of the projector.
• Never block the air fan and ventilation openings.
• Do not cover the projector with a tablecloth, etc.
• Do not place the projector on a carpet or bedding.

Never look through the lens or openings when the lamp is on.
The powerful light could adversely affect vision.
Use special caution in households where children are present.

Use only the correct power cord and the correct power outlet.
Incorrect power supply could result in fire or electrical shock.
• Use only the correct power outlet depending on the indication on the projector and the safety standard.
• The enclosed power cord must be used depending on the power outlet to be used.

Be cautious of the power cord connection.
Incorrect connection of the power cord could result in fire or electrical shock.
• Do not touch the power cord with a wet hand.
• Check that the connecting portion of the power cord is clean (with no dust), before using. Use a soft and dry cloth to clean the power plug.
• Insert the power plug into a power outlet firmly. Avoid using a loose, unsound outlet or contact failure.

Be sure to connect with ground wire.
Connect the ground terminal of AC inlet of this unit with the ground terminal provided at the building using the correct power cord; otherwise, fire or electric shock can result.
• Don't take the core of power cord away.

Surely connect the ground wire.

SG3

Safety Precautions (continued)

⚠ WARNING

Be careful in handling the light source lamp.
The projector uses a high-pressure mercury glass lamp made of glass. The lamp can break with a loud bang, or burn out. When the bulb bursts, it is possible for shards of glass to fly into the lamp housing, and for gas containing mercury to escape from the projector's vent holes.
Please carefully read the section "Lamp".

Be careful in handling the power cord and external connection cables.
If you keep using a damaged the power cord or cables, it can cause a fire or electrical shock. Do not apply too much heat, pressure or tension to the power cord and cables.
If the power cord or cables is damaged (exposed or broken core wires, etc.), contact your dealer.
• Do not place the projector or heavy objects on the power cord and cables. Also, do not place a spread, cover, etc, over them because this could result in the inadvertent placing of heavy objects on the concealed power cord or cables.
• Do not pull the power cord and cables. When connecting and disconnecting the power cord or cables, do it with your hand holding the plug or connector.
• Do not place the cord near the heater.
• Avoid bending the power cord sharply.
• Do not attempt to work on the power cord.

Be careful in handling the battery of the remote control.
Incorrect handling of the battery could result in fire or personal injury. The battery may explode if not handled properly.
• Keep the battery away from children and pets. If swallowed consult a physician immediately for emergency treatment.
• Do not allow the battery in a fire or water.
• Avoid fire or high-temperature environment.
• Do not hold the battery with the metallic tweezers.
• Keep the battery in a dark, cool and dry play.
• Do not short circuit the battery.
• Do not recharge, disassemble or solder the battery.
• Do not give the battery a physical impact.
• Use only the battery specified in the other manual of this projector.
• Make sure the plus and minus terminals are correctly aligned when loading the battery.
• If you observe a leakage of the battery, wipe out the flower and then replace the battery. If the flower adheres your body or clothes, rinse well with water.
• Obey the local laws on disposing the battery.

SG4

⚠ CAUTION

Be careful in moving the projector.
Neglect could result in an injury or damage.
• Do not move the projector during use. Before moving, disconnect the power cord and all external connections, and close the slide lens door or attach the lens cap.
• Avoid any impact or shock to the projector.
• Do not drag the projector.
• For moving the projector, use the enclosed case or bag if provided.

Do not put anything on top of the projector.
Placing anything on the projector could result in loss of balance or falling, and cause an injury or damage. Use special caution in households where children are present.

Do not attach anything other than specified things to the projector.
Neglect could result in an injury or damage.
• Some projector has a screw thread in a lens part. Do not attach anything other than specified options (such as conversion lens) to the screw thread.

Avoid a smoky, humid or dusty place.
Placing the projector in a smoke, a highly humid, dusty place, oily soot or corrosive gas could result in fire or electrical shock.
• Do not place the projector near a smoky, humid or dusty place (ex. a smoking space, a kitchen, a beach, etc.). Do not place the projector outdoors.
• Do not use a humidifier near the projector.

Take care of the air filter to normal ventilate.
The air filter should be cleaned periodically. If the air filter becomes clogged by dust or the like, internal temperature rises and could cause malfunction. The projector may display the message such as "CHECK THE AIR FLOW" or turn off the projector, to prevent the internal heat level rising.
• When the indicators or a message prompts you to clean the air filter, clean the air filter as soon as possible.
• If the soiling will not come off the air filter, or it becomes damaged, replace the air filter.
• Use the air filter of the specified type only. Please order the air filter specified in the other manual of this projector to your dealer.
• When you replace the lamp, replace also the air filter. The air filter may be attached when you buy a replacement lamp for this projector.
• Do not turn on the projector without air filter.

Avoid a high temperature environment.
The heat could have adverse influence on the cabinet of the projector and other parts. Do not place the projector, the remote control and other parts in direct sunlight or near a hot object such as heater, etc.

Avoid Magnetism.
Manufacture strongly recommends to avoid any magnetic contact that is not shielded or protected on or near the projector itself. (ie.,. Magnetic Security Devices, or other projector accessory that contains magnetic material that has not been provided by the manufacture etc.) Magnetic objects may cause interruption of the projector's internal mechanical performance which may interfere with cooling fans speed or stopping, and may cause the projector to completely shut down.

SG5

⚠ CAUTION

Remove the power cord for complete separation.

• For safety purposes, disconnect the power cord if the projector is not to be used for prolonged periods of time.

• Before cleaning, turn off and unplug the projector. Neglect could result in fire or electrical shock.

Disconnect the plug from the power outlet.

Ask your dealer to cleaning inside of the projector about every year.

Accumulations of dust inside the projector cause result in fire or malfunction. Cleaning inside is more effective if performed before every humid periods such as rainy season.

• Do not clean inside yourself because it is dangerous.

NOTE

Do not give the remote control any physical impact.

A physical impact could cause damage or malfunction of the remote control.

• Take care not to drop the remote control.

• Do not place the projector or heavy objects on the remote control.

Take care of the lens.

• Close the slide lens door or attach the lens cap to prevent the lens surface being scratched when the projector is not used.

• Do not touch the lens to prevent fog or dirt of the lens that cause deterioration of display quality.

• Use commercially available lens tissue to clean the lens (used to clean cameras, eyeglasses, etc.). Be careful not to scratch the lens with hard objects.

Take care of the cabinet and the remote control.

Incorrect care could have adverse influence such as discoloration, peeling paint, etc.

• Use a soft cloth to clean the cabinet and control panel of the projector and the remote control. When excessively soiled dilute a neutral detergent in water, wet and wring out the soft cloth and afterward wipe with a dry soft cloth. Do not use undiluted detergent directly.

• Do not use an aerosol sprays, solvents, volatile substances or abrasive cleaner.

• Before using chemical wipes, be sure to read and observe the instructions.

• Do not allow long-term close contact with rubber or vinyl.

About bright spots or dark spots.

Although bright spots or dark spots may appear on the screen, this is a unique characteristic of liquid crystal displays, and such do not constitute or imply a machine defect.

Be careful of printing of the LCD panel.

If the projector continues projecting a still image, inactive images or 16:9 aspect images in case of 4:3 panel, etc., for long time, the LCD panel might possibly be printed.

SG6

NOTE

About consumables.

Lamp, LCD panels, polarizors and other optical components, and air filter and cooling fans have a different lifetime in each. These parts may need to be replaced after a long usage time.

• This product isn't designed for continuous use of long time. In the case of continuous use for 6 hours or more, or use for 6 hours or more every day (even if it isn't continuous), or repetitious use, the lifetime may be shortened, and these parts may need to be replaced even if one year has not passed since the beginning of using.

• Any inclining use beyond the adjustment range explained in these user's manuals may shorten the lifetimes of the consumables.

Before turning on the power, make the projector cool down adequately.

After turning the projector off, pushing the restart switch or interrupting of the power supply, make the projector cool down adequately. Operation in a high temperature state of the projector causes a damage of the electrode and un-lighting of the lamp.

Avoid strong rays.

Any strong ray (such as direct rays of the sun or room lighting) onto the remote control sensors could invalidate the remote control.

Avoid radio interference.

Any interfering radiation could cause disordered image or noises.

• Avoid radio generator such as a mobile telephone, transceiver, etc. around the projector.

About displaying characteristic.

The display condition of the projector (such as color, contrast, etc.) depends on characteristic of the screen, because the projector uses a liquid crystal display panel. The display condition can differ from the display of CRT.

• Do not use a polarized screen. It can cause red image.

Turn the power on/off in right order.

To prevent any trouble, turn on/off the projector in right order mentioned below unless specifying.

• Power on the projector before the computer or video tape recorder.

• Power off the projector after the computer or video tape recorder.

Take care not to fatigue your eyes.

Rest the eyes periodically.

Set the sound volume at a suitable level to avoid bothering other people.

• It is better to keep the volume level low and close the windows at night to protect the neighborhood environment.

Connecting with notebook computer

When connecting with notebook computer, set to valid the RGB external image output (setting CRT display or simultaneous display of LCD and CRT).

Please read instruction manual of the notebook for more information.

Lamp

⚠ **WARNING**	⚡ **HIGH VOLTAGE**	♨ **HIGH TEMPERATURE**	💥 **HIGH PRESSURE**

The projector uses a high-pressure mercury glass lamp. The lamp can **break with a loud bang, or burn out,** if jolted or scratched, handled while hot, or worn over time. Note that each lamp has a different lifetime, and some may burst or burn out soon after you start using them. In addition, when the bulb bursts, it is possible for **shards of glass** to fly into the lamp housing, and for **gas containing mercury** to escape from the projector's vent holes.

About disposal of a lamp • This product contains a mercury lamp; do not put in trash. Dispose of in accord with environmental laws.
For lamp recycling, go to www.lamprecycle.org. (in USA)
For product disposal, contact your local government agency or www.eiae.org (in the US) or www.epsc.ca (in Canada).
For more information, call your dealer.

Disconnect the plug from the power outlet

• If the lamp should break (it will make a loud bang when it does), unplug the power cord from the outlet, and make sure to request a replacement lamp from your local dealer. Note that shards of glass could damage the projector's internals, or cause injury during handling, so please do not try to clean the projector or replace the lamp yourself.
• If the lamp should break (it will make a loud bang when it does), ventilate the room well, and make sure not to breathe the gas that comes out of the projector vents, or get it in your eyes or mouth.
• Before replacing the lamp, make sure the power switch is off and the power cable is not plugged in, then wait at least 45 minutes for the lamp to cool sufficiently. Handling the lamp while hot can cause burns, as well as damaging the lamp.

🚫

• Do not open the lamp cover while the projector is suspended from above. This is dangerous, since if the lamp's bulb has broken, the shards will fall out when the cover is opened. In addition, working in high places is dangerous, so ask your local dealer to have the lamp replaced even if the bulb is not broken.
• Do not use the projector with the lamp cover removed. At the lamp replacing, make sure that the screws are screwed in firmly. Loose screws could result in damage or injury.

❗

• Use the lamp of the specified type only.
• If the lamp breaks soon after the first time it is used, it is possible that there are electrical problems elsewhere besides the lamp. If this happens, contact your local dealer or a service representative.
• Handle with care: jolting or scratching could cause the lamp bulb to burst during use.
• Using the lamp for long periods of time, could cause it dark, not to light up or to burst. When the pictures appear dark, or when the color tone is poor, please replace the lamp as soon as possible. Do not use old (used) lamps; this is a cause of breakage.

Regulatory Notices

FCC Statement Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

INSTRUCTIONS TO USERS: This equipment complies with the requirements of FCC (Federal Communication Commission) equipment provided that the following conditions are met. Some cables have to be used with the core set. Use the accessory cable or a designated-type cable for the connection. For cables that have a core only at one end, connect the core to the projector.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

For the Customers in CANADA
NOTICE: This Class B digital apparatus complies with Canadian ICES-003.

Warranty And After-Service

Unless seen any abnormal operations (mentioned with the first paragraph of WARNING in this manual), when a problem occurs with the equipment, first refer to the "Troubleshooting" section of the "Operating Guide", and run through the suggested checks. If this does not resolve the problem contact your dealer or service company. They will tell you what warranty condition is applied.

Contents

Projector features

This product realizes the large projection image of various image signals, even if in a small space. This product can offer you convenience and various uses by the following features.

✓ The unique lens and mirror system realizes ultra short distance projection, which gives you more various way of use.
✓ The motorized lens door offers you very simple use of the projector.
✓ This projector can be controlled and monitored via LAN connection.

Preparations

Contents of package

Please see the "Checking the contents" section in the User's Manual (concise) which is a book. Your projector should come with the items shown there. Contact immediately your dealer if anything is missing.

> **NOTE** • Keep the original packing materials, for future reshipment. Be sure to use the original packing materials when moving the projector. Use special caution for the lens.

Part names

Projector

(1) Control buttons
(See the following page.)
(2) Lamp cover (📖*61*)
(3) Remote sensors (📖*14*)
(4) Speaker (📖*37*)
(5) Exhaust vents
(6) Lens door (📖*16, 66*)
(7) Ports (📖*5, 10*)
(8) AC inlet (📖*12*)
(9) Power switch (📖*16*)
(10) Security bar (📖*13*)
(11) Intake vents
(12) Filter unit (📖*63*)
(13) Elevator feet (📖*20*)
(14) Battery cover (📖*65*)
(15) Internal threads
These are threads for optional
mounting accessories.
(16) Lens (📖*16, 66*)
(17) Mirror (📖*16, 66*)
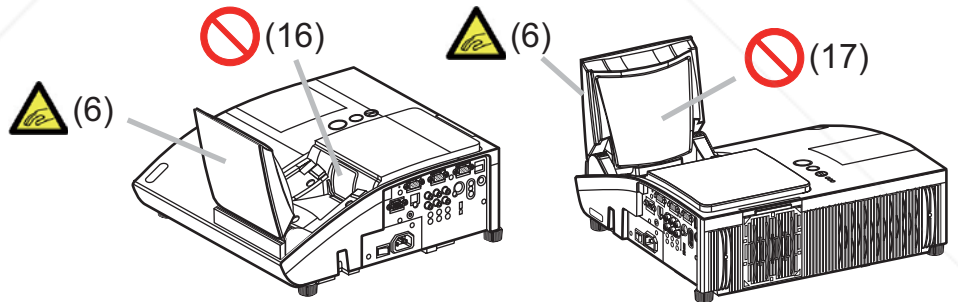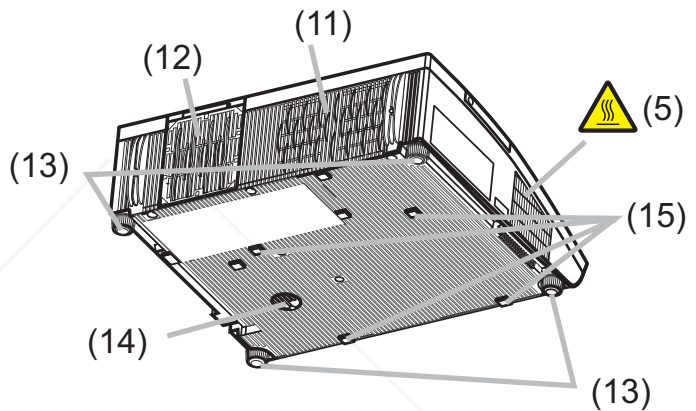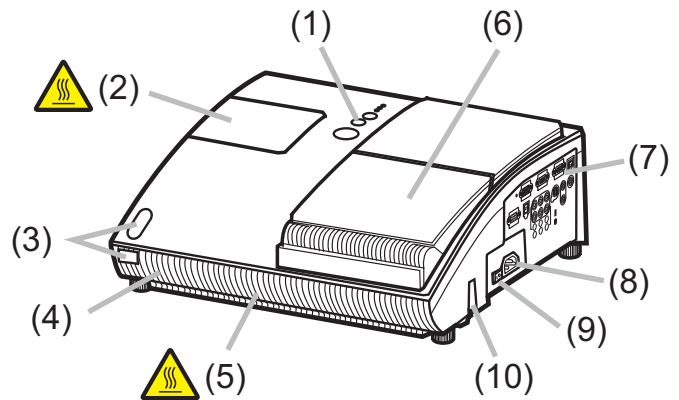
WARNING ►Be careful not to pinch your finger with the lens door, to prevent an injury.
►Never look into the projection lens or mirror while the projection lamp lights, since the projection lamp ray may cause a trouble on your eyes.

CAUTION ►Do not touch the lamp cover or approach the exhaust vents while using the projector and for a while after use, to prevent a burn.
►Do not cover, block, or plug up the vents to keep normal ventilation. Do not place anything that can stick or be sucked to the vents, around the intake vents.

4

Control buttons

(1) LAMP indicator (📖*69*)
(2) TEMP indicator (📖*69*)
(3) POWER indicator (📖*16, 17, 69*)
(4) STANDBY/ON button (📖*16, 17*)
(5) INPUT button (📖*18*)
(6) FOCUS +/- buttons
   when no menu is displayed (📖*21*), or
   Cursor ◄, ► buttons
   when a menu is displayed (📖*24*).
(7) MENU buttons
   when no menu is displayed (📖*24*), or
   Cursor ▲, ▼ buttons
   when a menu is displayed (📖*24*).

(1) — LAMP
(2) — TEMP
(3) — POWER

STANDBY/ON

(4)

INPUT

(5)

MENU

(6)   (7)

FOCUS -   + FOCUS
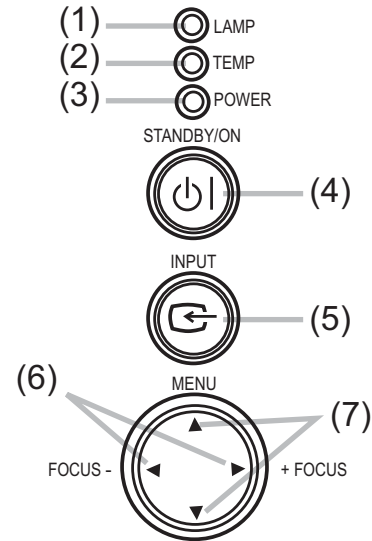
Ports (📖*10, Technical's 3 to 6*)

(1) Shutdown switch
(2) MONITOR OUT port
(3) Y, C_B/P_B, C_R/P_R
   (Component video) ports
(4) COMPUTER IN2 port
(5) COMPUTER IN1 port
(6) LAN port
(7) CONTROL port

(8) USB port (📖*15*)
(9) VIDEO port
(10) AUDIO IN3 (L,R) ports (📖*37*)
(11) AUDIO OUT port
(12) AUDIO IN1 port (📖*37*)
(13) AUDIO IN2 port (📖*37*)
(14) S-VIDEO port
(15) Security slot (📖*13*)

(1) (2) (3) (4) (5) (6)

MONITOR OUT   COMPUTER IN2   COMPUTER IN1   LAN

(7)   (11)

CONTROL   USB   S-VIDEO   AUDIO OUT   (12)

(8)   (13)

Y   C_B/P_B   C_R/P_R   AUDIO IN

VIDEO   L   R   AUDIO IN3

(9)   (10)   (15)

5
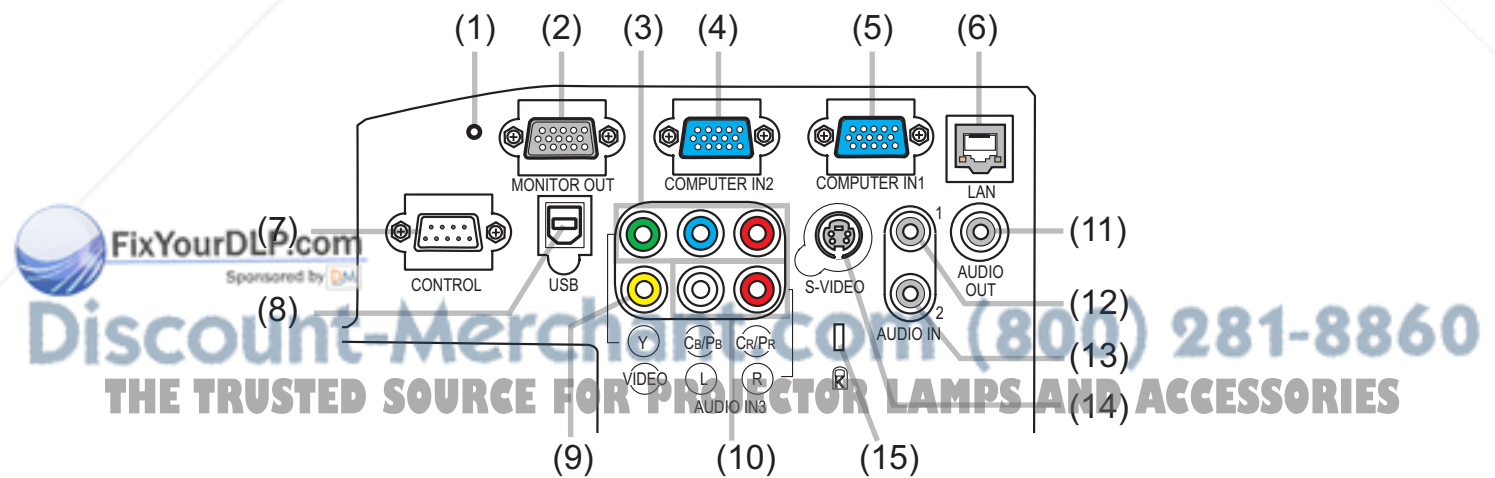
Remote control

(1) STANDBY/ON button (**□***16, 17*)
(2) VIDEO button (**□***19*)
(3) COMPUTER button (**□***18*)
(4) SEARCH button (**□***19*)
(5) ASPECT button (**□***19*)
(6) AUTO button (**□***21*)
(7) BLANK button (**□***23*)
(8) MAGNIFY ON button (**□***22*)
(9) MAGNIFY OFF button (**□***15, 22*)
(10) HOME button (**□***15*)
(11) END button (**□***15*)
(12) PAGE UP button (**□***15*)
(13) PAGE DOWN button (**□***15*)
(14) VOLUME button (**□***18*)
(15) MUTE button (**□***15, 18*)
(16) FREEZE button (**□***23*)
(17) MY BUTTON 1 button (**□***44*)
(18) MY BUTTON 2 button (**□***44*)
(19) KEYSTONE button (**□***22*)
(20) FOCUS – button (**□***21*)
(21) FOCUS + button (**□***21*)
(22) D-ZOOM – button (**□***20*)
(23) D-ZOOM + button (**□***20*)
(24) POSITION button (**□***20, 22, 24*)
(25) MENU button (**□***24*)
(26) Cursor ▲/▼/◄/► buttons (**□***24, 25*)
(27) ENTER button (**□***24, 25*)
(28) ESC button (**□***24, 25*)
(29) RESET button (**□***24, 25*)
(30) Battery cover (**□***14*)

(3)   (4)
(2)   (1)
(5)   (6)
(10)   (7)
(8)   (12)
(9)   (14)
(11)   (15)
(16)   (13)
(17)   (19)
(20)   (18)
(21)   (23)
(24)   (22)
(26)   (25)
(28)   (27)
    (29)

(30)

Back of
the remote control

6
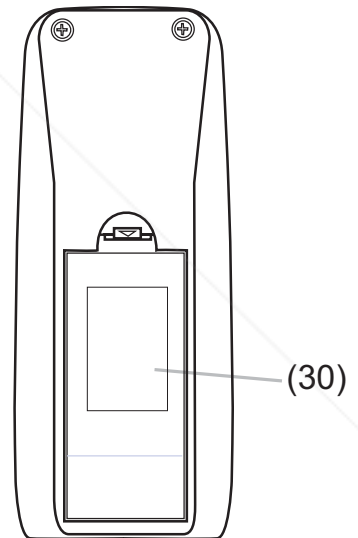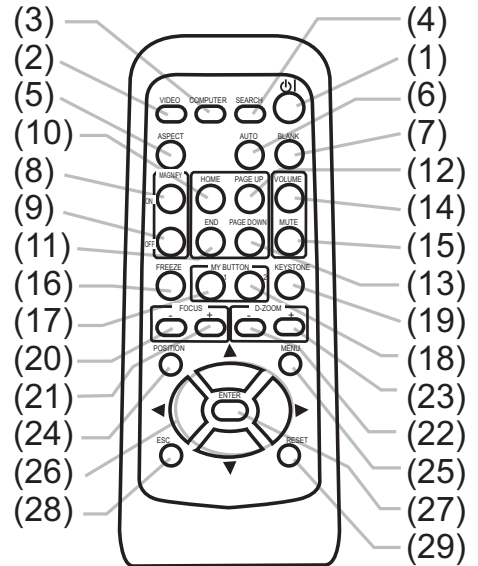
Arrangement

Install the projector in a stable, cool, dry and airy place, keeping a space of 30 cm or more between the sides of the projector and other objects such as walls. Refer to the following to decide the projection style. Ceiling mount and tabletop use must be setup with the designated optional accessories. Ask your dealer for details.

(3) Ceiling mount

(2) Tabletop use — Mirror protector

Tabletop use feet

(1) Usual use
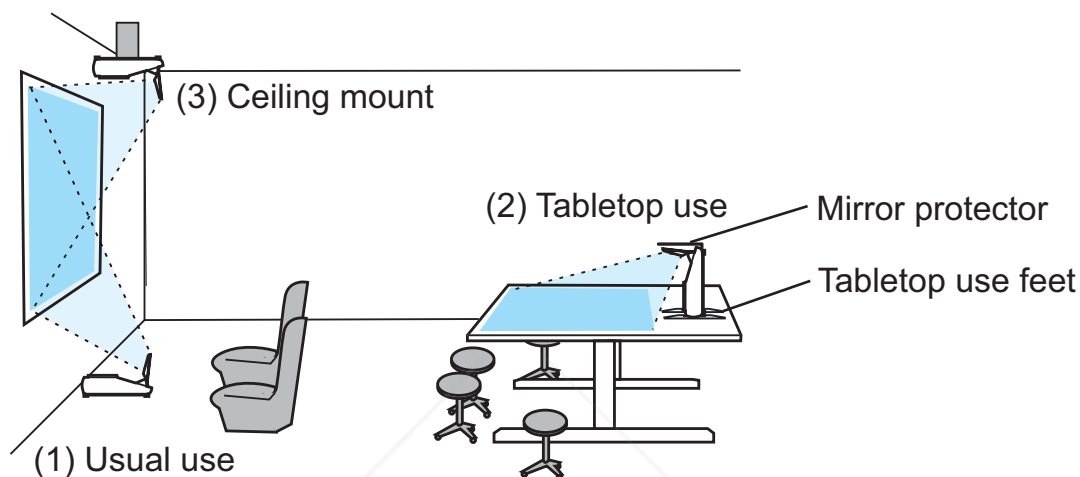
NOTE • When installing the projector, confirm that there is nothing that blocks the projection light between the projector and the screen.
• When installing the projector, check that the remote sensors are not exposed to any strong ray (*14*).

⚠**CAUTION** ►The designated optional accessory for the tabletop use contains the tabletop use feet and mirror protector. Please see the manual enclosed with the accessory.
• The tabletop use feet must be used for the tabletop use, otherwise the projector can't stand or falls down broken.
• The mirror protector must be used to protect the lens door when the projector falls to the table.

Arrangement (continued)

Refer to the following for the projection distance.
The values shown in the table are calculated for a full size screen: 1024x768.
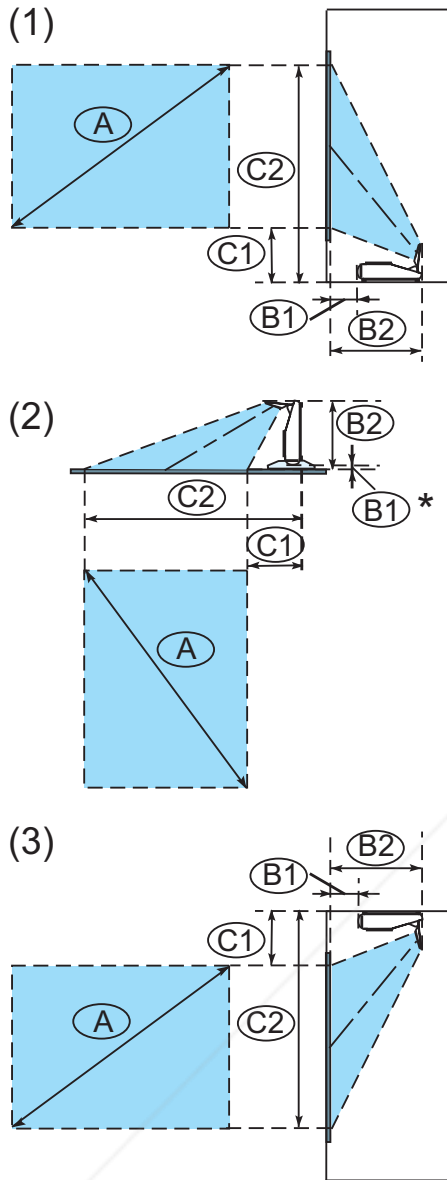
(1)

(2)

(3)

Table for 4:3 screen   (±8%)

A	B1		B2		C1		C2	
inch	cm	inch	cm	inch	cm	inch	cm	inch
48	* 0.5	*(0.2)	38.3	15	24.4	10	98.2	39
50	2.0	1	39.8	16	25.2	10	101.9	40
60	9.6	4	47.4	19	28.9	11	120.4	47
70	17.2	7	55.0	22	32.6	13	139.3	55
80	24.8	10	62.6	25	36.2	14	158.2	62
90	32.4	13	70.2	28	39.9	16	177.1	70
100	39.9	16	77.7	31	43.6	17	196.0	77
120	55.0	22	92.8	37	50.9	20	234.0	92
150	77.7	31	115.5	45	62.0	24	291.0	115
200	115.5	45	153.3	60	80.4	32	385.7	152

Table for 16:9 screen   (±8%)

A	B1		B2		C1		C2	
inch	cm	inch	cm	inch	cm	inch	cm	inch
44	* 0.5	*(0.2)	38.3	15	33.6	13	88.9	35
50	5.4	2	43.2	17	37.3	15	99.9	39
60	13.7	5	51.5	20	43.5	17	118.3	47
70	22.0	9	59.8	24	49.6	20	136.8	54
80	30.2	12	68.0	27	55.7	22	155.3	61
90	38.5	15	76.3	30	61.8	24	173.9	68
100	46.6	18	84.4	33	67.9	27	192.3	76
120	63.1	25	100.9	40	80.1	32	229.5	90
150	87.8	35	125.6	49	98.4	39	285.3	112
200	129.0	51	166.8	66	129.0	51	378.2	149

NOTE • It is recommended to adjust the screen size from 60 inch to 100 inch diagonal. The screen image adjusted out of this range, either smaller or larger, may be deteriorated.
• The screen position may be shifted after installation if the projector is suspended on a ceiling or somewhere, since the body of this projector is made of plastics. If readjustment is necessary, consult with your dealer or installater.

Arrangement (continued)

⚠ **WARNING** ►Place the projector in a stable horizontal position. If the projector falls or is knocked over it could cause injury and/or damage to the projector. Using a damaged projector could then result in fire and/or electric shock.

• Do not place the projector on an unstable, slanted or vibrational surface such as a wobbly or inclined stand.

• Do not place the projector on its side or front position. To place the projector on its rear position for the table top use, it is required to use the designated optional parts. Consult with your dealer.

• Consult with your dealer before a special installation such as suspending from a ceiling or somewhere else.

►Place the projector in a cool place, and ensure that there is sufficient ventilation. The high temperature of the projector could cause fire, burns and/or malfunction of the projector.

• Do not stop-up, block or cover the projector's vents.

• Keep a space of 30 cm or more around the projector from other objects such as walls.

• Do not place the projector on metallic thing or anything weak in heat.

• Do not place the projector on carpet, cushions or bedding.

• Do not place the projector in direct sunlight or near hot objects such as heaters.

• Do not place anything near the lens door, lens, mirror, vents. or on the top of the projector.

• Do not place anything that may be sucked into or stick to the vents on the rear and bottom of the projector. This projector has some intake vents on the rear and bottom.

►Do not place the projector anyplace where it may get wet. Getting the projector wet or inserting liquid into the projector could cause fire, electric shock and/or malfunction of the projector.

• Do not place the projector in a bathroom or the outdoors.

• Do not place anything containing liquid near the projector.

⚠ **CAUTION** ►Avoid placing the projector in smoky, humid or dusty place. Placing the projector in such places could cause fire, electric shock and/or malfunction of the projector.

• Do not place the projector near humidifiers, smoking spaces or a kitchen.

►Position the projector to prevent light from directly hitting the projector's remote sensor.

9

Connecting with your devices

Before connecting them, make sure that the devices are suitable to connect with this projector, and prepare the required signal cables and adapters. Consult your dealer if the accessory that is not included in this product is required. Refer to the following for connection. If you want to use the cable cover, see the Using the cable cover (📖*13*).
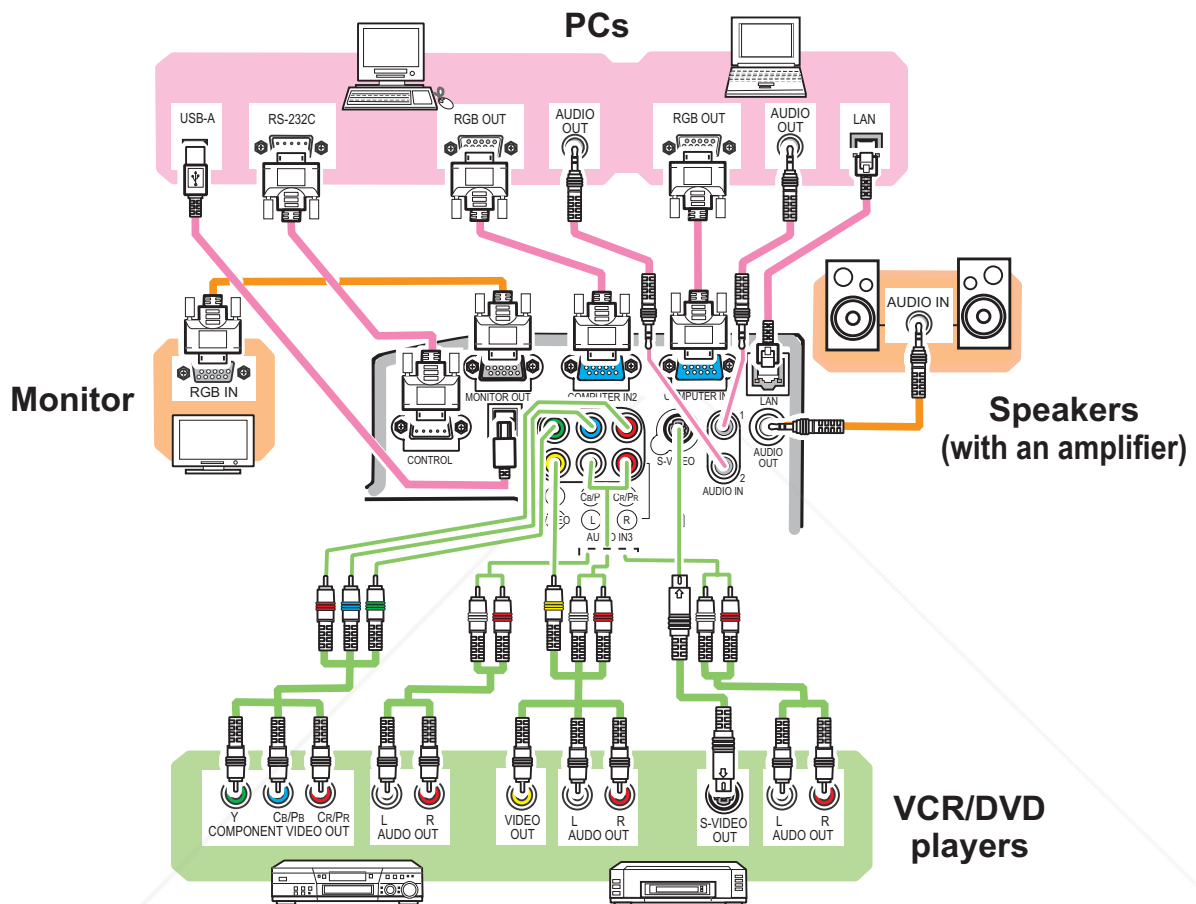
WARNING ►Use only the accessories contained in this product or recommended by your dealer. Do not modify the projector or accessories.
►For the cable with a ferrite core only at one end, connect the end with the core to the projector. The cables may be required a specific length or a ferrite core by the regulations.
►Be careful not to damage the cables. Route the cables so that they are not likely to be walked on or pinched by items placed upon or against them.

CAUTION ►Do not connect or disconnect the projector with devices while they are connected to a power supply, except for the cases directed by the manuals.
►Be careful not to set a connector into a wrong port or with a wrong way.

(continued on next page)

10

Connecting your devices (continued)

NOTE • Be sure to read the manuals for devices before connecting them to the projector, and make sure that all the devices are suitable to be connected with this product. Before connecting to a PC, check the signal level, the signal timing, and the resolution.
- Be sure to consult to the administrator of the network. Do not connect **LAN** port to any network that might have the excessive voltage.
- Some signal may need an adapter to input this projector.
- Some PCs have multiple screen display modes that may include some signals which are not supported by this projector.
- Although the projector can display signals with resolution up to UXGA (1600X1200), the signal will be converted to the projector's panel resolution before being displayed. The best display performance will be achieved if the resolutions of the input signal and the projector panel are identical.
• While connecting, make sure that the shape of the cable's connector fits the port to connect with. And be sure to tighten the screws on connectors with screws.
• When connecting a laptop PC to the projector, be sure to activate the PC's external RGB output. (Set the laptop PC to CRT display or to simultaneous LCD and CRT display.) For details on how this is done, please refer to the instruction manual of the corresponding laptop PC.
• When the picture resolution is changed on a PC depending on an input, automatic adjustment function may take some time and may not be completed. In this case, you may not be able to see a check box to select "Yes/No" for the new resolution on Windows. Then the resolution will go back to the original. It might be recommended to use other CRT or LCD monitors to change the resolution.
• In some cases, this projector may not display a proper picture or display any picture on screen. For example, automatic adjustment may not function correctly with some input signals. An input signal of composite sync or sync on G may confuse this projector, so the projector may not display a proper picture.

About Plug-and-Play capability

Plug-and-Play is a system composed of a PC, its operating system and peripheral equipment (i.e. display devices). This projector is VESA DDC 2B compatible. Plug-and-Play can be used by connecting this projector to a PC that is VESA DDC (display data channel) compatible.
• Take advantage of this feature by connecting an RGB cable to the **COMPUTER IN1** port (DDC 2B compatible). Plug-and-Play may not work properly if any other type of connection is attempted.
• Please use the standard drivers in your PC as this projector is a Plug-and-Play monitor.
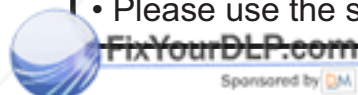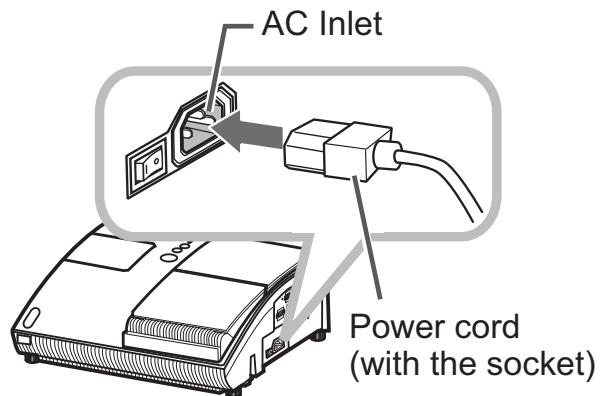
Connecting with a power supply

Before connection, confirm that the power outlet is suitable for this projector and the power cord.
Then follow the procedure below for connection.

AC Inlet

1. Insert the end of the power cord with the socket into the AC inlet of the projector.

2. Plug the other end of the power cord into a power outlet.

Power cord
(with the socket)

⚠**WARNING** ►Be careful of operation for a power supply not to cause an electric shock or a fire.
• Do not handle the power cord with the wet hand.
• Use this product with only the type of power supply indicated on the projector.
• Use a power outlet that is close to the projector and easily accessible.
• Connect firmly the power cord not to result in loose connection. Do not use a loose or unsound power outlet.
• Do not overload the outlet, since overloading can result in a risk of fire or electric shock.
• Use only the power cord contained in this product unless it is damaged. If it is damaged, consult your dealer to get new one. Do not modify the power cord.

Using the security bar and slot

This projector has the security bar for a commercial anti-theft chain or wire up to 10 mm in diameter, and also the security slot for the Kensington lock.

For details, see the manual of the security tool.

Security slot

Security bar

> **NOTE** • These are not provided as comprehensive theft preventions but supplemental measures.
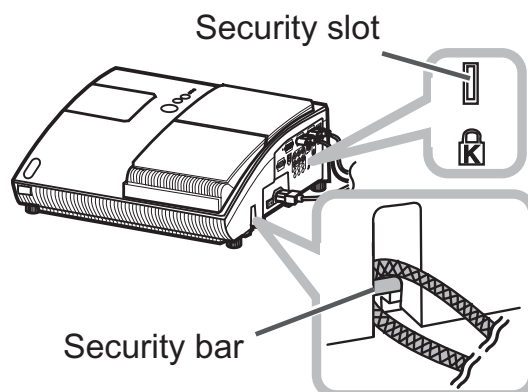
⚠ **WARNING** ►Do not place the anti-theft chain or wire near the projector's exhaust vents, since the chain or wire heated by the hot exhaust gas may cause a burn.
►Do not use the security bar or slot for the purpose of fall prevention, since these are not designed for it.

Using the cable cover

Utilize the cable cover as the guard and blind for the connecting parts.

1. Connect the signal cables and the power cord to the projector first.

2. Attach the cable cover to the projector, uniting the interlocking parts.

3. Tighten the screw to fix the cable cover.

4. Connect the other ends of the cables to other devices, and plug the power cord to the power outlet.

Cable cover

Screw

Interlocking parts

Screw driver
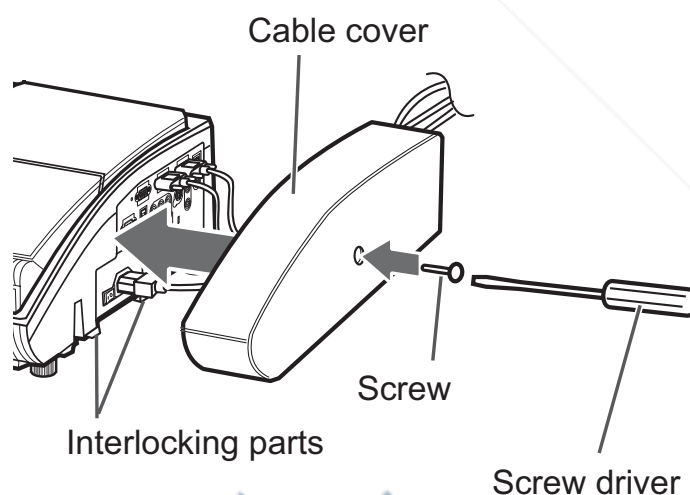
⚠ **CAUTION** ►Be careful not to pinch the cables in the cable cover, to prevent damage to the cables.

Remote control

Preparing for the remote control

The accessory remote control needs batteries. Use the batteries included in this product or two new batteries of the specified type: **HITACHI MAXELL**, part number **LR6** or **R6P**. Follow the following procedure.

1. Remove the battery cover in the back of the remote control.

2. Put the batteries into the battery holder, according to the polarity markings (+) and (-) inside the holder.

3. Put the battery cover back to the former state.
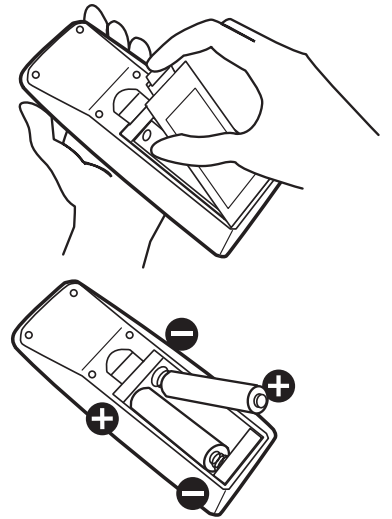
NOTE • Try changing the batteries when the remote control malfunctions.
• This remote control works with the remote sensors on the projector using infrared light (Class 1 LED). The active sensor senses the remote control signal assigned within 60 degrees to right and left, and within 3 meters.
• The remote control signal reflected in the screen or the like may be available.
• Prevent the remote sensors from being hit by a strong ray. It may cause malfunction of the projector and remote control.

Remote sensors
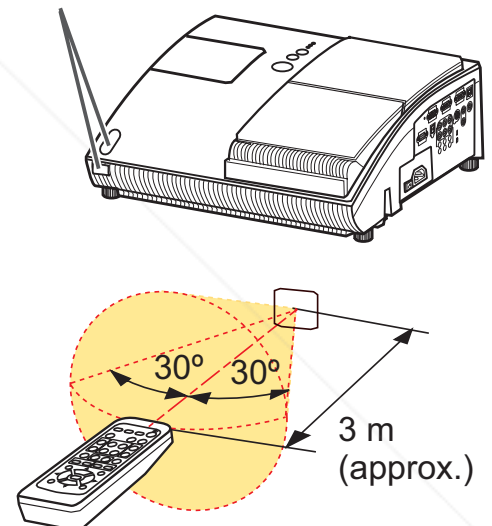
30º 30º

3 m
(approx.)

⚠ **WARNING** ►Be careful of handling a battery, as a battery can cause explosion, cracking or leakage, which could result in a fire, an injury, and environment pollution.
• Use only the specified and new battery. Do not use a battery with damage, such as a scratch, a dent, rust or leakage. Do not mix a new battery with used one.
• When a battery leaked, wipe the leakage out well with a waste cloth. If the leakage adhered to your body, immediately rinse it well with water. When a battery leaked in the battery holder, replace the batteries after wiping the leakage out.
• Make sure the plus and minus terminals are correctly aligned when loading a battery.
• Do not work on a battery; for example recharging or soldering.
• Do not keep the batteries put into the remote control when the remote control is not used for a long while. Keep a battery in a dark, cool and dry place. Never expose a battery to a fire or water.
• Obey the local laws on disposing a battery.

Changing the frequency of remote control signal

The accessory remote control has the two choices on signal
frequency Mode 1:NORMAL and Mode 2:HIGH. If the remote control
does not function properly, attempt to change the signal frequency.
In order to set the Mode, please keep pressing the combination of
two buttons listed below simultaneously for about 3 seconds.

(1) Set to Mode 1:NORMAL... **MUTE** and **RESET** buttons
(2) Set to Mode 2:HIGH... **MAGNIFY OFF** and **ESC** buttons

Please remember that the REMOTE FREQ. in the SERVICE item of
the OPTION Menu (&*46*) of the projector to be controlled should be
set to the same mode as the remote control.
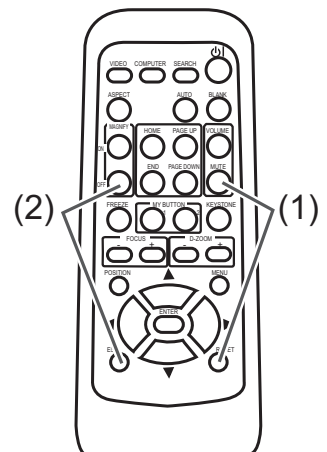
Using as a simple PC mouse & keyboard

The accessory remote control works as a simple mouse
and keyboard of the PC, when the projector's **USB** port
(B type) connects with the PC's **USB** port (A type) port
via a mouse cable.

USB port

(1) HOME key: Press **HOME** button.
(2) END key: Press **END** button.
(3) PAGE UP key: Press **PAGE UP** button.
(4) PAGE DOWN key: Press **PAGE DOWN** button.
(5) Mouse left button: Press **ENTER** button.
(6) Move pointer: Use the cursor buttons ▲, ▼, ◄ and ►.
(7) ESC key: Press **ESC** button.
(8) Mouse right button: Press **RESET** button.
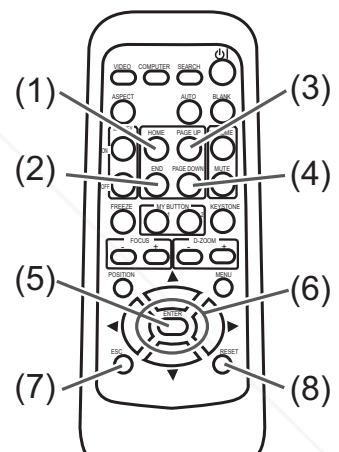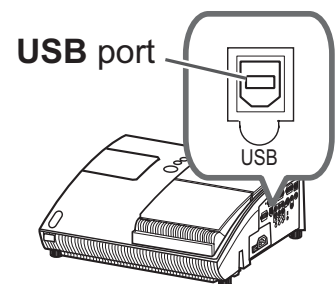
⚠ **WARNING** ►Improper use of the simple mouse &
keyboard function could damage your equipment. While
using this function, please connect this product only
to a PC. Be sure to check your PC's manuals before
connecting this product to the PC.

NOTE • When the simple mouse & keyboard function of this product does not work
correctly, please check the following.
- When a USB cable connects this projector with a PC having a built-in pointing device
(e.g. track ball) like a notebook PC, open BIOS setup menu, then select the external
mouse and disable the built-in pointing device, because the built-in pointing device may
have priority to this function.
- Windows 95 OSR 2.1 or higher is required for this function. And also this function may
not work depending on the PC's configurations and mouse drivers.
- You cannot do things like press two buttons at once (for instance, pressing two buttons
at the same time to move the mouse pointer diagonally).
- This function is activated only when the projector is working properly. This function is
not available while the lamp is warming up (the **POWER** indicator blinks green), and
while adjusting the volume and display, correcting for keystone, magnifying the screen,
using the BLANK function, or displaying the menu screen.

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Power on/off

Turning on the power

Turn on the projector and the connected devices. Turn on the projector ahead of other connected devices, unless mentioned in the manuals.
For this projector, follow the procedure below.

POWER indicator

STANDBY/ON button

1. Press the side marked " **I** " of the power switch, as the power-on position.
The **POWER** indicator lights up in orange.

  ● For a couple of seconds after the **POWER** indicator lights up, wait to use the control buttons (on the projector and remote control). The buttons may not work soon.

2. Confirm that there is nothing that the lens door hits while opening.
Then, press the **STANDBY/ON** button (on the projector or remote control).
The lens door opens, the projection lamp lights up, and the **POWER** indicator begins to blink green.

Power switch
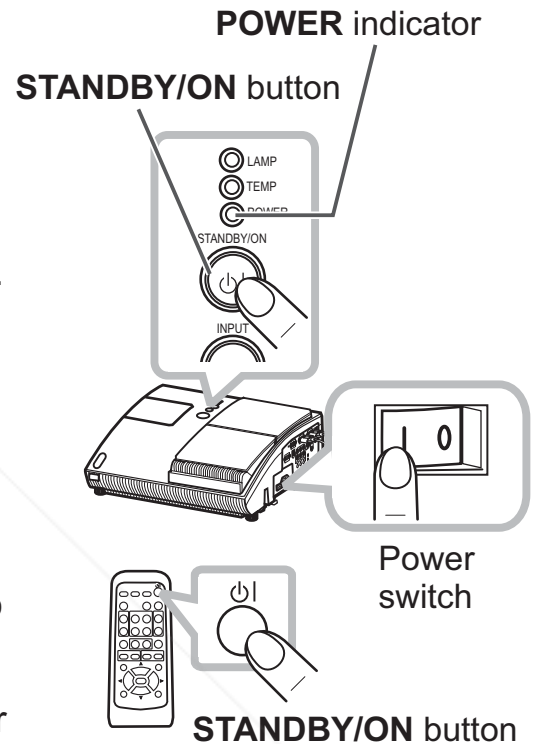
When the projector starts completely, the indicator will turn steady green.

STANDBY/ON button

To display the picture, select an input signal according to the section "Selecting an input signal" (📖*18*).

NOTE • When the AUTO ON of the OPTION Menu is set to the TURN ON, and the power was turned off by the power switch last time, turning the power switch on makes the projection lamp light on without pushing the **STANDBY/ON** button (📖*42)*.

⚠**WARNING** ►Never look into the projection lens or mirror while the projection lamp lights, since the projection lamp ray may cause a trouble on your eyes.
►Do not touch around the lamp cover and the exhaust vents during use or just after use, since it is too hot.
⚠**CAUTION** ►Be careful not to pinch your finger with the lens door, as it may cause an injury.

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Turn off the power

Turn the projector off after turning off the other connected devices, unless mentioned in the manuals. For this projector, follow the procedure below.

1. Press the **STANDBY/ON** button (on the projector or remote control).
The "Power off?" dialog appears on the screen for about 5 seconds.

2. Confirm that there is nothing that the lens door hits while closing.
Then press the **STANDBY/ON** button again while the message appears.
The projection lamp goes off, the lens door closes, and the **POWER** indicator begins to blink orange.

● For cooling the projector down, wait for the **POWER** indicator to stop blinking and turn steady orange.
The projector can be turned off without waiting for cooling down. However, the manufacture recommends cooling the projector down enough.
Do not turn the projector on for about 10 minutes or more after turning it off to prevent shortening its life.

POWER indicator

STANDBY/ON button

LAMP
TEMP
POWER
STANDBY/ON

INPUT

Power switch

STANDBY/ON button

3. Press the side marked " ○ " of the power switch, as the power-off position.
The **POWER** indicator goes off.
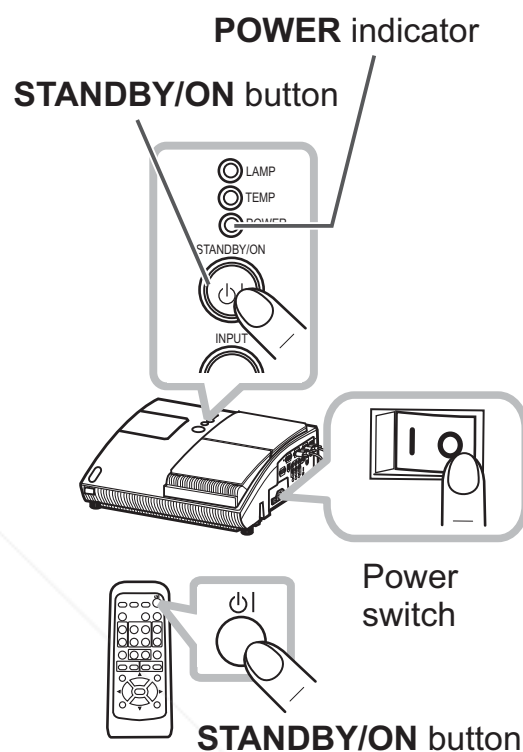
When you will not use the projector for a long while, unplug and separate the power cord from the power outlet, for safety purposes.

> **NOTE** • Use the shutdown switch (📖*70*) only when the projector is not turned off by normal procedure.
> • Do not turn the projector on for about 10 minutes or more after turning it off. Turning the projector on again too soon could shorten the lifetime of some consumable parts of the projector.

⚠**CAUTION** ►Be careful not to pinch your finger with the lens door, to prevent an injury.
►Do not touch the lamp cover or approach the exhaust vents while using the projector and for a while after use, to prevent a burn.

Operating

VOLUME button

Adjusting the volume

1. Press **VOLUME** button on the remote control.
   A dialog will appear on the screen to aid you in adjusting the volume.

2. Use the ▲/▼ cursor buttons to adjust the volume.
   To close the dialog and complete the operation, press the **VOLUME** button again. Even if you do not do anything, the dialog will automatically disappear after a few seconds.

   ● When ⚫ is selected for current picture input port, the volume adjustment is disable. Please see AUDIO item of SETUP Menu (📖*37*).
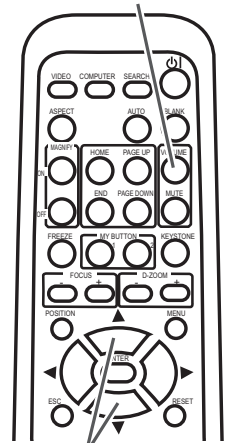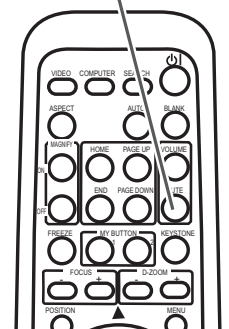
▲/▼ button

Temporarily muting the sound

1. Press **MUTE** button on the remote control.
   A dialog will appear on the screen indicating that you have muted the sound. To restore the sound, press the **MUTE** or **VOLUME** button. Even if you do not do anything, the dialog will automatically disappear after a few seconds.

   ● When ⚫ is selected for current picture input port, the sound is always muted. Please see AUDIO item of SETUP Menu (📖*37*).

   ● When ⚫ is selected to **VIDEO**, **S-VIDEO** or **COMPONENT** port, the C.C. (Closed Caption) is automatically activated if the C.C. is set to AUTO in the DISPLAY of the C.C. Menu and the input signal from the port supports the C.C. feature (📖*60*).

MUTE button

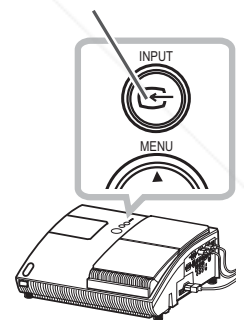# Selecting an input signal

1. Press **INPUT** button on the projector.
   Each time you press the button, the projector switches its input port from the current port as below.

   → COMPUTER IN 1 → COMPUTER IN 2 ⌐
   └ VIDEO ← S-VIDEO ← COMPONENT (Y, C_B/P_B, C_R/P_R) ←

   ● While TURN ON is selected for AUTO SEARCH item in OPTION Menu (📖*42*), the projector will keep checking the ports in above order repeatedly till an input signal is detected.

INPUT button

1. Press **COMPUTER** button on the remote control.
   Each time you press the button, the projector switches its input port from the current port as below.

   COMPUTER IN 1 ←→ COMPUTER IN 2

   ● While TURN ON is selected for AUTO SEARCH item in OPTION Menu, the projector will keep checking every port sequentially till an input signal is detected (📖*42*). If **COMPUTER** button is pushed when **VIDEO**, **S-VIDEO** or **COMPONENT** port is selected, the projector will check **COMPUTER IN1** port first.

COMPUTER button
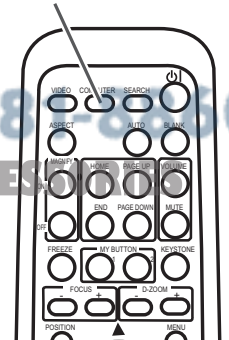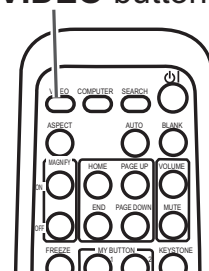
Selecting an input signal (continued)

VIDEO button

1. Press **VIDEO** button on the remote control.
   Each time you press the button, the projector switches its input port from the current port as below.

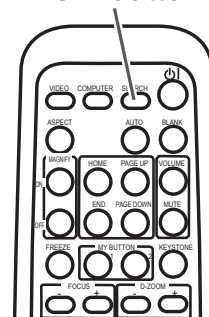   COMPONENT (Y, C$_B$/P$_B$, C$_R$/P$_R$) → S-VIDEO → VIDEO

● While TURN ON is selected for AUTO SEARCH item in OPTION Menu, the projector will keep checking every port sequentially till an input signal is detected (*42*). If **VIDEO** button is pushed when **COMPUTER IN1** or **COMPUTER IN2** port is selected, the projector will check **COMPONENT** port first.

Searching an input signal

SEARCH button

1. Press **SEARCH** button on the remote control.
   The projector will start to check its input ports as below in order to find any input signals.
   When an input is found, the projector will stop searching and display the image. If no signal is found, the projector will return to the state selected before the operation.

   → COMPUTER IN 1 → COMPUTER IN 2
   └ VIDEO ← S-VIDEO ← COMPONENT (Y, C$_B$/P$_B$, C$_R$/P$_R$) ←

● While TURN ON is selected for AUTO SEARCH item in OPTION Menu (*42*), the projector will keep checking the ports in above order repeatedly till an input signal is detected.

Selecting an aspect ratio

ASPECT button

1. Press **ASPECT** button on the remote control.
   Each time you press the button, the projector switches the mode for aspect ratio in turn.

   ❍ **For a computer signal**
   NORMAL → 4:3 → 16:9

   ❍ **For a video signal, s-video signal or component video signal**
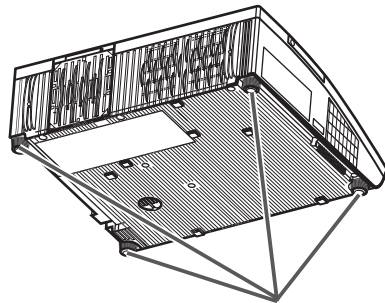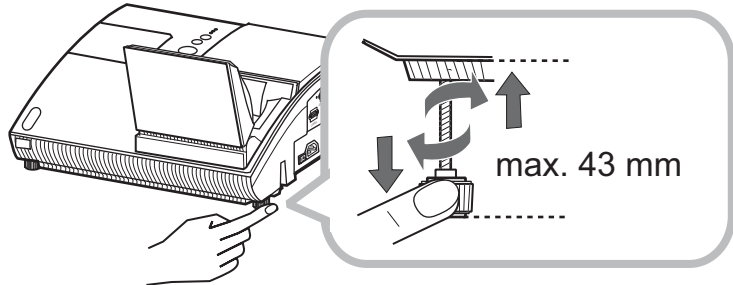   4:3 → 16:9 → 14:9

   ❍ **For no signal**
   4:3 (fixed)
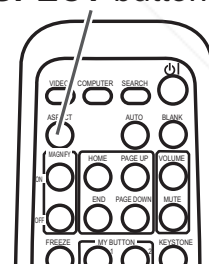
● **ASPECT** button does not work when no proper signal is inputted.
● NORMAL mode keeps the original aspect ratio setting.

Adjusting the projection position

This projector has four elevator feet in the bottom. Use them to adjust the projection position.

Elevator feet

max. 43 mm

⚠ **CAUTION** ►Do not lengthen the elevator feet to 43 mm or more. The foot lengthened exceeding the limit may come off from the projector, and result in an injury.
►Tilt the projector with these elevating feet only.
►Do not tilt the projector over 5 degrees, when it is suspended from a ceiling or somewhere.

Adjusting the zoom

Press the **D-ZOOM +** or **D-ZOOM –** button on the remote control to display D-ZOOM dialog on screen.
Use the **D-ZOOM +** and **D-ZOOM –** buttons to adjust the picture size.
To finish the operation, do not touch these buttons for a few seconds until the dialog is disappeared.

● If you want to expand a part of the image, use the magnify function (📖*22*).

D-ZOOM + button
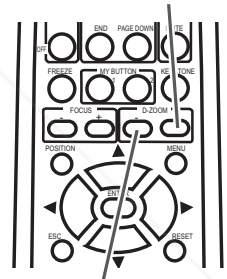
D-ZOOM – button

Adjusting the picture position

Press the **POSITION** button on the remote control while no menu is on screen, to display the D-SHIFT dialog on screen.
Use the ▲, ▼, ◄ and ► buttons to adjust the picture position.
Press the **POSITION** button again to finish this operation.

● This is a function to shift the position of the shrunken picture by the zoom function.
● The function is not available, if any menu is displayed on screen.
● The function is not available, if the D-ZOOM is adjusted to 100 (full screen) on its dialog.
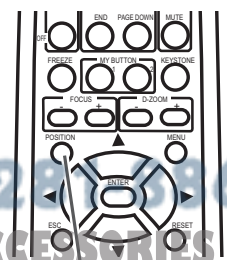
POSITION button

Adjusting the focus

Press the **FOCUS +** or **FOCUS –** button on the remote control, or **FOCUS +** or **FOCUS –** button on the projector while no menu is on screen, to display the FOCUS box on screen. Use the **FOCUS +** and **FOCUS –** buttons to adjust the screen focus. After the focus adjustment, wait for a while until the FOCUS box is disappeared, if you want to display any other menu on screen by pushing the **MENU** button on the projector.

FOCUS + button
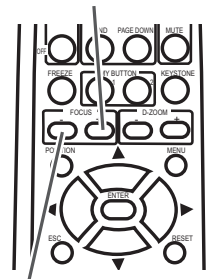
FOCUS – button

Using the automatic adjustment feature

1. Press **AUTO** button on the remote control.
Pressing this button performs the following.

AUTO button

❍ **For a computer signal**
The vertical position, the horizontal position and the horizontal phase will be automatically adjusted.
Make sure that the application window is set to its maximum size prior to attempting to use this feature. A dark picture may still be incorrectly adjusted. Use a bright picture when adjusting.

❍ **For a video signal and s-video signal**
The video format best suited for the respective input signal will be selected automatically. This function is available only when the AUTO is selected for the VIDEO FORMAT item in the INPUT Menu (📖*34*). The vertical position and horizontal position will be automatically set to the default.

❍ **For a component video signal**
The vertical position, horizontal position and horizontal phase will be automatically set to the default.

● The automatic adjustment operation requires approx. 10 seconds. Also please note that it may not function correctly with some input. When this function is performed for a video signal, a certain extra such as a line may appear outside a picture.

● The items adjusted by this function may vary when the FINE or DISABLE is selected for the AUTO ADJUST item of the SERVICE item in the OPTION Menu (📖*45*).

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Correcting the keystone distortions

1. Press **KEYSTONE** button on the remote control. A dialog will appear on the screen to aid you in correcting the distortion.

2. Use the ▲/▼ cursor buttons to adjust the keystone correction.
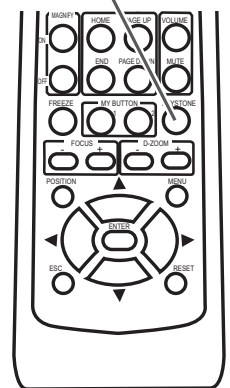
To close the dialog and complete this operation, press **KEYSTONE** button again. Even if you do not do anything, the dialog will automatically disappear after a few seconds.

● The adjustable range of this correction will vary among inputs. For some input, this function may not work well.
● This function will be unavailable when Transition Detector is on (📖*51*).

Using the magnify feature

MAGNIFY ON/OFF button

1. Press the **ON** button of **MAGNIFY** on the remote control. The "MAGNIFY" indication will appear on the screen and the projector will go into the MAGNIFY mode. When the **ON** button of **MAGNIFY** is pressed first after the projector is started, the picture will be zoomed twice. The indication will disappear in several seconds with no operation.
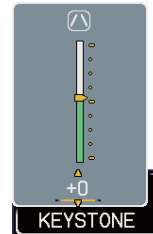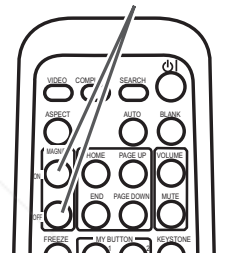
2. Use the ▲/▼ cursor buttons to adjust the zoom level. The picture of video, s-video or component video signal can be zoomed in up to 2 times, and the one of computer signal can be zoomed in up to 4 times.
To move the zoom area, press the **POSITION** button in the MAGNIFY mode, then use the ▲/▼/◄/► cursor buttons to move the area. And to finalize the zoom area, press the **POSITION** button again.
To exit from the MAGNIFY mode and restore the screen to normal, press the **OFF** button of **MAGNIFY** on the remote control.

● The projector automatically exits from the MAGNIFY mode when the input signal is changed or when the display condition is changed.
● In the MAGNIFY mode, the keystone distortion condition may vary, it will be restored when the projector exits from the MAGNIFY mode.

NOTE · The zoom level can be finely adjusted. Closely watch the screen to find the level you want.

Freezing the screen

FREEZE button

1. Press the **FREEZE** button on the remote control.
The "FREEZE" indication will appear on the screen (however,
the indication will not appear when the TURN OFF is selected
for the MESSAGE item in the SCREEN Menu (&*41*)), and
the projector will go into the FREEZE mode, which the picture
is frozen.
To exit the FREEZE mode and restore the screen to normal,
press the **FREEZE** button again.
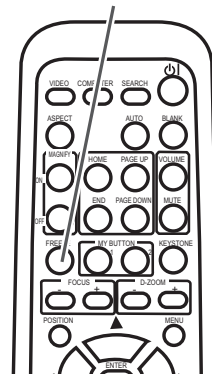
● The projector automatically exits from the FREEZE mode when one of the
projector's buttons or remote control buttons of **STANDBY/ON, SEARCH,
COMPUTER, VIDEO, BLANK, AUTO, VOLUME, MUTE, KEYSTONE,
MENU, MAGNIFY** and **MY BUTTON1/2** (except MY MEMORY or PICTURE
MODE is assigned to) (&*44*) is pressed.

● If the projector continues projecting a still image for a long time, the LCD
panel might possibly be burned in. Do not leave the projector in the FREEZE
mode for too long.

Temporarily blanking the screen

BLANK button

1. Press **BLANK** button on the remote control.
The BLANK screen will be displayed instead of the screen of
input signal. Please refer to BLANK item in SCREEN Menu
(&*38*).
To exit from the BLANK screen and return to the input signal
screen, press **BLANK** button again.
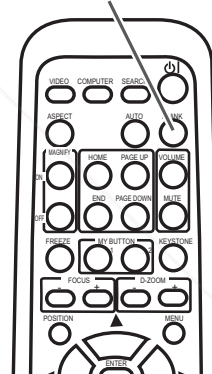
● The projector automatically returns to the input signal screen
when one of the projector's buttons or the remote control
buttons (except **ASPECT, POSITION, MAGNIFY** or **FREEZE**
button, also except MY BUTTON1/2 if MY MEMORY or
PICTURE MODE is assigned to (&*44*)) is pressed.

NOTE • The sound is not connected with the BLANK screen function.
If necessary, set the volume or mute first.
• If you want to make the screen blank and the sound muted at the same time,
use AV Mute function that is required to be assigned to one of the MY BUTTON
on the remote in advance (&*44*).

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Using the menu function

This projector has the following menus:
PICTURE, IMAGE, INPUT, SETUP, SCREEN, OPTION, NETWORK, C.C. and EASY MENU.
EASY MENU consists of functions often used, and the other menus are classified into each purpose and brought together as the Advanced Menu.
Each of these menus is operated using the same methods. The basic operations of these menus are as follows.

MENU button

LAMP
TEMP
POWER
STANDBY/ON
INPUT
MENU
FOCUS -   + FOCUS

ENTER button   **MENU** button
Cursor buttons
POSITION   MENU
ENTER
ESC   RESET
ESC button   **RESET** button
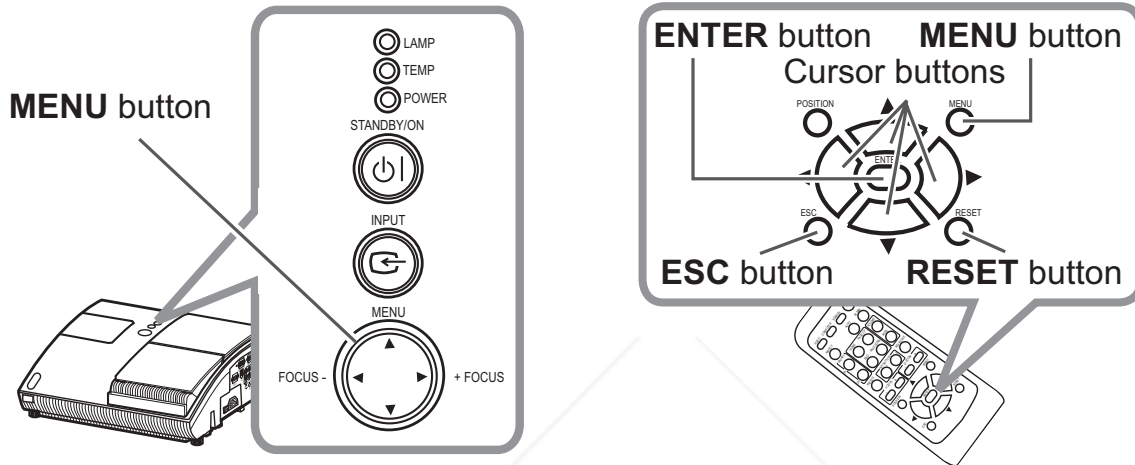
1. Press the **MENU** button on the remote control or the projector.
   The Advanced Menu or EASY MENU, which has priority just after powered on will appear.
   If you want to move the menu position, use the cursor buttons after pressing the **POSITION** button. While the projector is displaying any menu, the **MENU** button on the projector works as the cursor buttons.

In the EASY MENU

2. If you want to change it to the Advanced Menu, select the Go to Advanced Menu...

3. Use the ▲/▼ cursor buttons to select an item to operate.

4. Use the ◄/► cursor buttons to operate the item.

EASY MENU [COMPUTER 1]
ASPECT   ◄   4:3   ►
D-ZOOM   100
KEYSTONE(⛰)   +0
PICTURE MODE   NORMAL
BRIGHTNESS   +0
CONTRAST   +0
COLOR   +0
TINT   +0
SHARPNESS   4
WHISPER   NORMAL
MIRROR   NORMAL
RESET   EXECUTE
FILTER TIME   0h
LANGUAGE   ENGLISH
          Go to Advanced Menu...

EASY MENU

(continued on next page)

Using the menu function (continued)

In the Advanced Menu

MENU [COMPUTER 1]   ⊡:SELECT

PICTURE	BRIGHTNESS	+0
IMAGE	CONTRAST	+0
INPUT	GAMMA	DEFAULT-1
SETUP	COLOR TEMP	HIGH
SCREEN	COLOR	+0
OPTION	TINT	+0
NETWORK	SHARPNESS	4
C.C.	MY MEMORY	SAVE-1
EASY MENU		

Advanced Menu

2. Use the ▲/▼ cursor buttons to select a menu.
   If you want to change it to the EASY MENU, select
   EASY MENU.
   Then press the ► cursor button, or **ENTER** button to
   select an item. The lower layer menu of the selected
   item will appear.

3. Use the ▲/▼ cursor buttons to select an item to operate.
   Then press the ► cursor button, or **ENTER** button to progress. The operation
   menu of the selected item will appear.

4. Use the ▲/▼ cursor buttons to operate the item.

   ● Some functions cannot be performed when a certain input port is selected, or
     when a certain input signal is displayed.
   ● When you want to reset the operation, press **RESET** button on the remote
     control during the operation. Note that some items (ex. LANGUAGE, H
     PHASE, VOLUME) cannot be reset.
   ● In the Advanced Menu, when you want to return to the previous display, press
     the ◄ cursor button or **ESC** button on the remote control.

5. Press **MENU** button on the remote control again to close the menu and
   complete this operation. Even if you do not do anything, the dialog will
   automatically disappear after about 10 seconds.

EASY MENU

From the EASY MENU, items shown in the table below can be performed.
Select an item using the ▲/▼ cursor buttons. Then perform it according to the following table.

```
EASY MENU [COMPUTER 1]
ASPECT          ◁      4:3      ▷
D-ZOOM                         100
KEYSTONE⟋⟍                      +0
PICTURE MODE        NORMAL
BRIGHTNESS                      +0
CONTRAST                        +0
COLOR                           +0
TINT                            +0
SHARPNESS                        4
WHISPER             NORMAL
MIRROR              NORMAL
RESET               EXECUTE
FILTER TIME          0h
LANGUAGE      🌐    ENGLISH
        Go to Advanced Menu...
```

Item	Description
ASPECT	Using the ◄/► buttons switches the mode for aspect ratio. See the ASPECT item in IMAGE Menu (📖*31*).
D-ZOOM	Using the ◄/► buttons adjusts the zoom. See the D-ZOOM item in SETUP Menu (📖*36*).
KEYSTONE ⟋⟍	Using the ◄/► buttons corrects the vertical keystone distortion. See KEYSTONE ⟋⟍ item in SETUP Menu (📖*36*).
PICTURE MODE	Using the ◄/► buttons switches the picture mode. The picture modes are combinations of GAMMA and COLOR TEMP settings. Choose a suitable mode according to the projected source. ⟹ NORMAL ⟺ CINEMA ⟺ DYNAMIC ⟺ BOARD(BLACK) ⟸ ⟹ DAYTIME ⟺ WHITEBOARD ⟺ BOARD(GREEN) ⟸

	COLOR TEMP	GAMMA
NORMAL	#2 MID DEFAULT	#1 DEFAULT
CINEMA	#3 LOW DEFAULT	#2 DEFAULT
DYNAMIC	#1 HIGH DEFAULT	#3 DEFAULT
BOARD(BLACK)	#4 Hi-BRIGHT-1 DEFAULT	#4 DEFAULT
BOARD(GREEN)	#5 Hi-BRIGHT-2 DEFAULT	#4 DEFAULT
WHITEBOARD	#2 MID DEFAULT	#5 DEFAULT
DAYTIME	#6 Hi-BRIGHT-3 DEFAULT	#6 DEFAULT

• When the combination of GAMMA and COLOR TEMP differs from pre-assigned modes above, the display on the menu for the PICTURE MODE is "CUSTOM". Please refer to GAMMA (📖*28*) and COLOR TEMP (📖*29*) items in PICTURE Menu.
• When this function is performed, a certain extra such as a line may appear.

EASY MENU (continued)
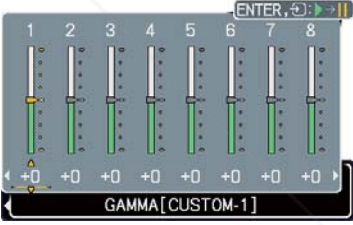
Item	Description
BRIGHTNESS	Using the ◄/► buttons adjusts the brightness. See BRIGHTNESS item in PICTURE Menu (📖*28*).
CONTRAST	Using the ◄/► buttons adjusts the contrast. See CONTRAST item in PICTURE Menu (📖*28*).
COLOR	Using the ◄/► buttons adjusts the strength of whole color. See COLOR item in PICTURE Menu (📖*29*).
TINT	Using the ◄/► buttons adjusts the tint. See TINT item in PICTURE Menu (📖*29*).
SHARPNESS	Using the ◄/► buttons adjusts the sharpness. See SHARPNESS item in PICTURE Menu (📖*30*).
WHISPER	Using the ◄/► buttons turns off/on the whisper mode. See WHISPER item in SETUP Menu (📖*36*).
MIRROR	Using the ◄/► buttons switches the mode for mirror status. See MIRROR item in SETUP Menu (📖*36*).
RESET	Performing this item resets all of EASY MENU items except FILTER TIME and LANGUAGE. Pressing the **RESET** button or the ► button displays a dialog. To reset, select RESET using the ▲ button performs resetting.
FILTER TIME	The usage time of the air-filter is shown in the menu. Performing this item resets the filter time which counts usage time of the air-filter. Pressing the **RESET** button or the ► button displays a dialog. To reset the filter time, select RESET using the ▲ button performs resetting. See FILTER TIME item in OPTION Menu (📖*43*).
LANGUAGE	Using the ◄/► buttons changes the display language. See LANGUAGE item in SCREEN Menu (📖*38*).
Go to Advanced Menu...	Select Go to Advanced Menu… on the menu, and press the ► or **ENTER** button to use the menu of PICTURE, IMAGE, INPUT, SETUP, SCREEN, OPTION, NETWORK or C.C..

PICTURE Menu

From the PICTURE Menu, items shown in the table below can be performed.
Select an item using the ▲/▼ cursor buttons, and press the ► cursor button or **ENTER** button to execute the item. Then perform it according to the following table.
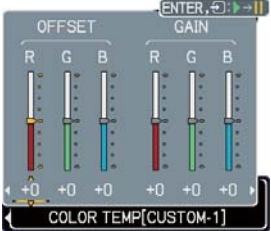
Item	Description
BRIGHTNESS	Using the ▲/▼ buttons adjusts the brightness. 　Light ⇔ Dark
CONTRAST	Using the ▲/▼ buttons adjusts the contrast. 　Strong ⇔ Weak
GAMMA	Using the ▲/▼ buttons switches the gamma mode. #1 DEFAULT ⇔ #1 CUSTOM ⇔ #2 DEFAULT ⇔ #2 CUSTOM 　⇕　　　　　　　　　　　　　　　　　　　⇕ #6 CUSTOM　　　　　　　　　　　　　#3 DEFAULT 　⇕　　　　　　　　　　　　　　　　　　　⇕ #6 DEFAULT　　　　　　　　　　　　#3 CUSTOM 　⇕　　　　　　　　　　　　　　　　　　　⇕ #5 CUSTOM ⇔ #5 DEFAULT ⇔ #4 CUSTOM ⇔ #4 DEFAULT **To adjust CUSTOM** Selecting a mode whose name includes CUSTOM and then pressing the ► button or the **ENTER** button displays a dialog to aid you in adjusting the mode. This function is useful when you want to change the brightness of particular tones. Choose an item using the ◄/► buttons, and adjust the level using the ▲/▼ buttons. You can display a test pattern for checking the effect of your adjustment by pressing the **ENTER** button. Each time you press the **ENTER** button, the pattern changes as below. 　No pattern ⇨ Gray scale of 9 steps 　　　　　Ramp ⇔ Gray scale of 15 steps The eight equalizing bars correspond to eight tone levels of the test pattern (Gray scale of 9 steps), except the darkest in the left end. If you want to adjust the 2nd tone from left end on the test pattern use the equalizing adjustment bar "1". The darkest tone at the left end of the test pattern cannot be controlled with any of equalizing adjustment bar. • When this function is performed, lines or other distortion may appear.

(continued on next page)

PICTURE Menu (continued)

Item	Description
COLOR TEMP	Using the ▲/▼ buttons switches the color temperature mode. #1 HIGH DEFAULT ⇔ #1 HIGH CUSTOM ⇔ #2 MID DEFAULT ⇕ #6 Hi-BRIGHT-3 CUSTOM ⇕ #2 MID CUSTOM ⇕ #6 Hi-BRIGHT-3 DEFAULT ⇕ #3 LOW DEFAULT ⇕ #5 Hi-BRIGHT-2 CUSTOM ⇕ #3 LOW CUSTOM ⇕ #5 Hi-BRIGHT-2 DEFAULT ⇔ #4 Hi-BRIGHT-1 CUSTOM ⇔ #4 Hi-BRIGHT-1 DEFAULT **To adjust CUSTOM** Selecting a mode whose name includes CUSTOM and then pressing the ► button or the **ENTER** button displays a dialog to aid you in adjusting the OFFSET and GAIN of the selected mode. OFFSET adjustments change the color intensity on the whole tones of the test pattern. GAIN adjustments mainly affect color intensity on the brighter tones of the test pattern. Choose an item using the ◄/► buttons, and adjust the level using the ▲/▼ buttons. You can display a test pattern for checking the effect of your adjustment by pressing the **ENTER** button. Each time you press the **ENTER** button, the pattern changes as below. No pattern ⇨ Gray scale of 9 steps Ramp ⇦ Gray scale of 15 steps • When this function is performed, lines or other distortion may appear.
COLOR	Using the ▲/▼ buttons adjusts the strength of whole color. Strong ⇔ Weak • This item can be selected only for a video signal, s-video, or component video signal.
TINT	Using the ▲/▼ buttons adjusts the tint. Greenish ⇔ Reddish • This item can be selected only for a video signal, s-video, or component video signal.

(continued on next page)

PICTURE Menu (continued)

Item	Description
SHARPNESS	Using the ▲/▼ buttons adjusts the sharpness. 　Strong ⇔ Weak • There may be some noise and/or the screen may flicker for a moment when an adjustment is made. This is not a malfunction.
MY MEMORY	This projector has 4 memories for adjustment data (for all the items of PICTURE Menu). Selecting a function using the ▲/▼ buttons and pressing the ► or **ENTER** button performs each function. 　　　┌→ LOAD-1 ⇔ LOAD-2 ⇔ LOAD-3 ⇔ LOAD-4 ←┐ 　　　└→ SAVE-4 ⇔SAVE-3 ⇔ SAVE-2 ⇔ SAVE-1 ←┘ **LOAD-1, LOAD-2, LOAD-3, LOAD-4** Performing a LOAD function loads the data from the memory linked in the number included in the function's name, and adjusts the picture automatically depending on the data. • The LOAD functions whose linked memory has no data are skipped. • Remember that the current adjusted condition will be lost by loading data. If you want to keep the current adjustment, please save it before performing a LOAD function. • There may be some noise and the screen may flicker for a moment when loading data. This is not malfunction. • You can perform the LOAD function using MY BUTTONs. Please see MY BUTTON item in OPTION Menu (📖*44*). **SAVE-1, SAVE-2, SAVE-3, SAVE-4** Performing a SAVE function saves the current adjustment data into the memory linked in the number included in the function's name. • Remember that the current data being stored of a memory will be lost by saving a new data into the memory.

IMAGE Menu

From the IMAGE Menu, items shown in the table below can be performed.
Select an item using the ▲/▼ cursor buttons, and press the ► cursor button or **ENTER** button to execute the item.
Then perform it according to the following table.

MENU [COMPUTER 1]		(▢):SELECT
PICTURE	ASPECT	4:3
IMAGE	OVER SCAN	5
INPUT	V POSITION	25
SETUP	H POSITION	142
SCREEN	H PHASE	16
OPTION	H SIZE	1344
NETWORK	AUTO ADJUST EXECUTE	
C.C.		
EASY MENU		

Item	Description

ASPECT	Using the ▲/▼ buttons switches the mode for aspect ratio.
	For a computer signal
	    NORMAL ⇔ 4:3 ⇔ 16:9
	For a Video signal, S-video signal or Component video signal
	    4:3 ⇔ 16:9 ⇔ 14:9
	For no signal
	    4:3 (fixed)
	• The NORMAL mode keeps the original aspect ratio of the signal.

OVER SCAN	Using the ▲/▼ buttons adjusts the over-scan ratio. Large (It reduces picture) ⇔ Small (It magnifies picture) • This item can be selected only for a video, s-video and component video signal. • When this adjustment is too large, certain degradation may appear at the frame area of the picture. In such a case, please adjust small.
V POSITION	Using the ▲/▼ buttons adjusts the vertical position. Up ⇔ Down • Over-adjusting the vertical position may cause noise to appear on the screen. If this occurs please reset the vertical position to the default setting. Pressing **RESET** button when V POSITION is selected will reset V POSITION to the default setting. • When this function is performed on a video signal, s-video signal, or component video signal, the range of this adjustment depends on OVER SCAN (📖*above*) setting. It is not possible to adjust when OVER SCAN is set to 10.

(continued on next page)

IMAGE Menu (continued)

Item	Description
H POSITION	Using the ▲/▼ buttons adjusts the horizontal position. Left ⇔ Right • Over-adjusting the horizontal position may cause noise to appear on the screen. If this occurs please reset the horizontal position to the default setting. Pressing **RESET** button when H POSITION is selected will reset H POSITION to the default setting. • When this function is performed on a video signal, s-video signal, or component video signal, the range of this adjustment depends on OVER SCAN (▢*31*) setting. It is not possible to adjust when OVER SCAN is set to 10.
H PHASE	Using the ▲/▼ buttons adjusts the horizontal phase to eliminate flicker. Right ⇔ Left • This item can be selected only for a computer signal or component video signal.
H SIZE	Using the ▲/▼ buttons adjusts the horizontal size. Large ⇔ Small • This item can be selected only for a computer signal. • When this adjustment is excessive, the picture may not be displayed correctly. In such a case, please reset the adjustment by pressing the **RESET** button during this operation.
AUTO ADJUST EXECUTE	Executing this item performs the automatic adjustment feature. **For a computer signal** The vertical position, the horizontal position and the horizontal phase (▢*31, 32*) will be automatically adjusted. Make sure that the application window is set to its maximum size prior to attempting to use this feature. A dark picture may still be incorrectly adjusted. Use a bright picture when adjusting. **For a video signal and s-video signal** The video format best suited for the respective input signal will be selected automatically. This function is available only when the AUTO is selected for the VIDEO FORMAT item in the INPUT Menu (▢*34*). The vertical position and horizontal position will be automatically set to the default. **For a component video signal** The vertical position, horizontal position and horizontal phase will be automatically set to the default. • The automatic adjustment operation requires approx. 10 seconds. Also please note that it may not function correctly with some input. When this function is performed for a video signal, a certain extra such as a line may appear outside a picture. • The items adjusted by this function may vary when the FINE or DISABLE is selected for the AUTO ADJUST item of the SERVICE item in the OPTION Menu (▢*45*).

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INPUT Menu

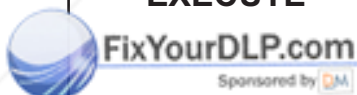From the INPUT Menu, items shown in the table below can be performed.
Select an item using the ▲/▼ cursor buttons, and press the ► cursor button or **ENTER** button to execute the item. Then perform it according to the following table.
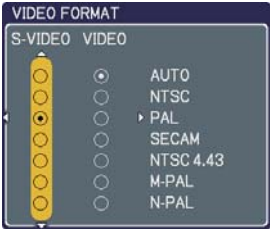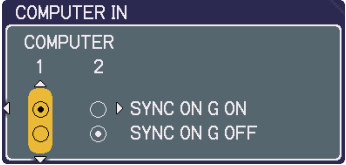
Item	Description
PROGRESSIVE	Using the ▲/▼ buttons switches the progress mode. TV ⇔ FILM ⇔ TURN OFF • This function is performed only for an interlaced signal at the VIDEO or S-VIDEO input, and for 525i (480i) or 625i(576i) signal at the COMPONENT VIDEO input. • When TV or FILM is selected, the screen image will be sharp. FILM adapts to the 2-3 Pull-Down conversion system. But these may cause a certain defect (for example, jagged line) of the picture for a quick moving object. In such a case, please select TURN OFF, even though the screen image may lose the sharpness.
VIDEO NR	Using the ▲/▼ buttons switches the noise reduction mode. HIGH ⇔ MID ⇔ LOW • This function is performed only for the VIDEO or S-VIDEO input, and for 525i (480i) or 625i(576i) signal at the COMPONENT VIDEO input. • When this function is excessive, it may cause a certain degradation of the picture.
COLOR SPACE	Using the ▲/▼ buttons switches the mode for color space. AUTO ⇔ RGB ⇔ SMPTE240 ⇔ REC709 ⇔ REC601 • This item can be selected only for a computer signal or component video signal except SCART RGB signal. • The AUTO mode automatically selects the optimum mode. • The AUTO operation may not work well at some signals. In such a case, it might be good to select a suitable mode except AUTO.
COMPONENT	Using the ▲/▼ buttons switches the function of the **COMPONENT (Y, C$_B$/P$_B$, C$_R$/P$_R$)** port. COMPONENT ⇔ SCART RGB When the SCART RGB is selected, **COMPONENT (Y, C$_B$/P$_B$, C$_R$/P$_R$)** and **VIDEO** ports will function as a **SCART RGB** port. A SCART cable is required for a SCART RGB input to the projector. For your reference, see the TECHNICAL part.

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INPUT Menu (continued)

Item	Description
VIDEO FORMAT	The video format for **S-VIDEO** port and **VIDEO** port can be set. (1) Use the ◄/► buttons to select the input port. (2) Using the ▲/▼ buttons switches the mode for video format. 　AUTO ⇔ NTSC ⇔ PAL ⇔ SECAM 　↳ N-PAL ⇔ M-PAL ⇔ NTSC4.43 ↰ • This item is performed only for a video signal from **VIDEO** port or **S-VIDEO** port. • The AUTO mode automatically selects the optimum mode. • The AUTO operation may not work well for some signals. If the picture becomes unstable (e.g. an irregular picture, lack of color), please select the mode according to the input signal.
FRAME LOCK	Set the frame lock function on/off for each port. (1) Using the ▲/▼ buttons to select one of following ports. 　COMPUTER (IN)1 ⇔ COMPUTER (IN)2 (2) Using the ◄/► buttons to turns the frame lock function on/off. 　TURN ON ⇔ TURN OFF • This item can be performed only on a signal with a vertical frequency of 50 to 60 Hz. • When the TURN ON is selected, a moving pictures are displayed more smoothly. • This function may cause a certain degradation of the picture. In such a case, please select TURN OFF.
COMPUTER IN	The computer input signal type for **COMPUTER IN1** and **IN2** ports can be set. (1) Use the ◄/► buttons to select the input port to be set. 　COMPUTER (IN)1 ⇔ COMPUTER (IN)2 (2) Use the ▲/▼ buttons to select the computer input signal type. 　SYNC ON G ON ⇔ SYNC ON G OFF Selecting SYNC ON G ON allows reception of sync on G signal. • When SYNC ON G ON is selected, the picture may be distorted with certain input signals. In such a case, remove the signal connector first and select SYNC ON G OFF on the menu, and then reconnect the signal.

(continued on next page)

INPUT Menu (continued)

Item	Description
RESOLUTION	The resolution for the **COMPUTER IN1** and **IN2** input signals can be set on this projector. (1) In the INPUT Menu select the RESOLUTION using the ▲/▼ buttons and press the ► button. The RESOLUTION menu will be displayed. (2) In the RESOLUTION menu, select the resolution you wish to display using the ▲/▼ buttons. Selecting AUTO will set a resolution appropriate to the input signal. RESOLUTION STANDARD — AUTO, 1024×768, 1280×768, 1360×768 CUSTOM — 1440×768 (3) STANDARD Pressing the ► or **ENTER** button when selecting a STANDARD resolution will automatically adjust the horizontal and vertical positions, clock phase and horizontal size and automatically select an aspect ratio. STANDARD ↓ COMPUTER 1 1280×768 @60Hz (3) CUSTOM (3)-1 To set a custom resolution use the ▲/▼ buttons to select the CUSTOM and the CUSTOM RESOLUTION box will be displayed. Set the horizontal (HORZ) and vertical (VERT) resolutions using the ▲/▼ /◄/► buttons. It is not guaranteed to work this function properly on any resolutions. CUSTOM ↓ CUSTOM RESOLUTION (HORZ) × (VERT) 0 9 9 2 × 0 7 4 4 ◄ QUIT SET ► (3)-2 To save the setting place the cursor on the right-most digit and press the ► button. The horizontal and vertical positions, clock phase and horizontal size will be automatically adjusted. COMPUTER 1 992×744 @60Hz (3)-3 To revert back to the previous resolution without saving changes place the cursor on the left-most digit and press the ◄ button. The screen will then return to the RESOLUTION menu displaying the previous resolution. RESOLUTION STANDARD — AUTO, 1024×768, 1280×768, 1360×768 CUSTOM — 992×744 • For some pictures, this function may not work well.
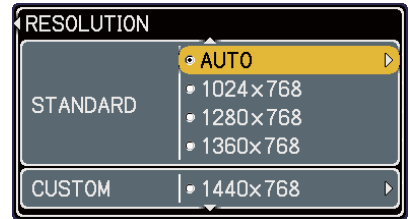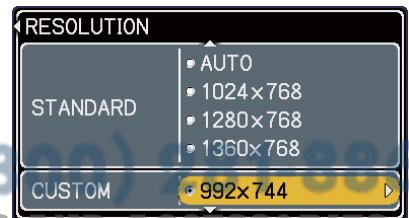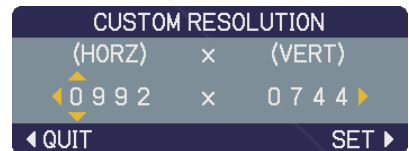
SETUP Menu

From the SETUP Menu, items shown in the table below can be performed.
Select an item using the ▲/▼ cursor buttons, and press the ► cursor button or the **ENTER** button to execute the item. Then perform it according to the following table.

MENU [COMPUTER 1]		:SELECT
PICTURE	D-ZOOM	100
IMAGE	D-SHIFT V	+0
INPUT	D-SHIFT H	+0
SETUP	KEYSTONE	+0
SCREEN	WHISPER	NORMAL
OPTION	MIRROR	NORMAL
NETWORK	VOLUME	16
C.C.	SPEAKER	TURN ON
EASY MENU	AUDIO	

Item	Description
D-ZOOM	Using the ▲/▼ buttons adjusts the zoom. Large ⇔ Small
D-SHIFT V	Using the ▲/▼ buttons adjusts the vertical picture position. Up ⇔ Down • The function is not available, if the D-ZOOM is adjusted to 100 (full screen) on its dialog.
D-SHIFT H	Using the ▲/▼ buttons adjusts the horizontal picture position. Right ⇔ Left • The function is not available, if the D-ZOOM is adjusted to 100 (full screen) on its dialog.
KEYSTONE ⟋⟍	Using the ▲/▼ buttons corrects the vertical keystone distortion. Shrink the top of the image ⇔ Shrink the bottom of the image • The adjustable range of this function will vary with the type of input signal. For some input, this function may not work well. • This function will be unavailable when the Transition Detector is on (📖*51*).
WHISPER	Using the ▲/▼ buttons turns off/on the whisper mode. BRIGHT ⇔ NORMAL • When NORMAL is selected, acoustic noise and screen brightness are reduced.
MIRROR	Using the ▲/▼ buttons switches the mode for mirror status. NORMAL ⇔ H:INVERT ⇔ V:INVERT ⇔ H&V:INVERT If the Transition Detector is TURN ON and MIRROR status is changed, Transition Detector Alarm (📖*51*) will be displayed when projector is restarted after the power switch is turned off.
VOLUME	Using the ▲/▼ buttons adjusts the volume. High ⇔ Low

(continued on next page)

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SETUP Menu (continued)

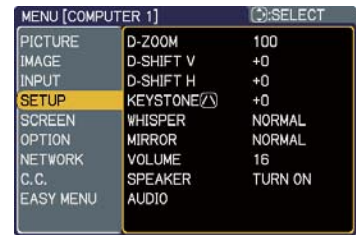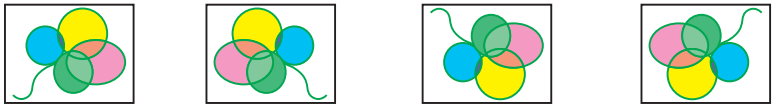| Item	Description
SPEAKER	Using the ▲/▼ buttons turns on/off the built-in speaker. TURN ON ⇔ TURN OFF When TURN OFF is selected, the built-in speaker does not work.
AUDIO	Allocates the audio ports. (1) Choose a picture input port using the ▲/▼ buttons. QUIT ⇔ COMPUTER (IN)1 ⇔ COMPUTER (IN)2 ⤴ VIDEO ⇔ S-VIDEO ⇔ COMPONENT ⤶ (2) Select the audio port to be interlocked with the input port using the ◄/► buttons. 1 ⇔ 2 ⇔ 3 ⇔ ✖ • When ✖ is selected for an input, the audio will not be output if the input is chosen as a display source. • When ✖ is selected to **VIDEO**, **S-VIDEO** or **COMPONENT** port, the C.C.(Closed Caption) is automatically activated, if the C.C. is set to AUTO in the DISPLAY menu of the C.C. Menu and the signal from the input port supports the C.C. feature (📖*60*).

SCREEN Menu

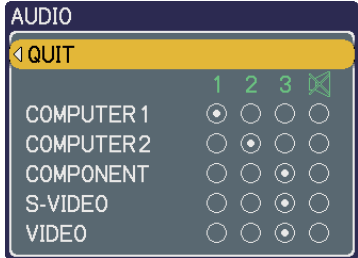From the SCREEN Menu, items shown in the table below can be performed.
Select an item using the ▲/▼ cursor buttons, and press the ► cursor button or **ENTER** button to execute the item.
Then perform it according to the following table.

Item	Description
LANGUAGE	Using the ▲/▼ buttons switches the OSD (On Screen Display) language. ENGLISH ⇔ FRANÇAIS ⇔ DEUTSCH ⇔ ESPAÑOL ⇔ ITALIANO ⇕ ⇕ TÜRKÇE NORSK ⇕ ⇕ POLSKI NEDERLANDS ⇕ ⇕ SUOMI PORTUGUÊS ⇕ ⇕ РУССКИЙ ⇔ SVENSKA ⇔ 한글 ⇔ 繁體中文 ⇔ 简体中文 ⇔ 日本語
MENU POSITION	Using the ▲/▼/◄/► buttons adjusts the menu position. To quit the operation, press **MENU** button on the remote control or keep no operation for about 10 seconds.
BLANK	Using the ▲/▼ buttons switches the mode for the BLANK screen. The BLANK screen is a screen for the temporarily blanking feature (📖*23*). It is displayed by pressing **BLANK** button. MyScreen ⇔ ORIGINAL ⇔ BLUE ⇔ WHITE ⇔ BLACK |	Feature
---	---
MyScreen	Screen can be registered by the MyScreen item (📖*40*).
ORIGINAL	Screen preset as the standard screen.
BLUE, WHITE, BLACK	Plain screens in each color. | • To avoid remaining as an afterimage, the MyScreen or ORIGINAL screen will change to the plain black screen after several minutes.

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SCREEN Menu (continued)

Item	Description
START UP	Using the ▲/▼ buttons switches the mode for the start-up screen. The start-up screen is a screen displayed when no signal or an unsuitable signal is detected. MyScreen ⇔ ORIGINAL ⇔ TURN OFF |	Feature
MyScreen	Screen can be registered by the MyScreen item (📖*40*).
ORIGINAL	Screen preset as the standard screen.
TURN OFF	Plain black screen. | • To avoid remaining as an afterimage, the MyScreen or ORIGINAL screen will change to the BLANK screen (📖*38*) after several minutes. If also the BLANK screen is the MyScreen or ORIGINAL, the plain black screen is instead used. • When the TURN ON is selected to the MyScreen PASSWORD of SECURITY item in OPTION Menu (📖*48*), the START UP is fixed to MyScreen.

SCREEN Menu (continued)

Item	Description
MyScreen	This item allows you to capture an image for use as a MyScreen image which can be used as the BLANK screen and START UP screen. Display the image you want to capture before executing the following procedure. 1. Selecting this item displays a dialog titled "MyScreen". It will ask you if you start capturing an image from the current screen. Please wait for the target image to be displayed, and press the **ENTER** button when the image is displayed. The image will freeze and the frame for capturing will appear. To stop performing, press the **RESET** or **ESC** button. 2. Using the ▲/▼/◄/► buttons adjusts the frame position. Please move the frame to the position of the image which you want to use. The frame may not be able to be moved for some input signals. To start registration, press the **ENTER** button. To restore the screen and return to the previous dialog, press the **RESET** or **ESC** button. Registration takes several minutes. When the registration is completed, the registered screen and the following message are displayed for several seconds: **"MyScreen registration is finished."** If the registration failed, the following message is displayed: **"A capturing error has occurred. Please try again."** • This function cannot be selected when the TURN ON is selected to the MyScreen Lock item (📖*below*). • This function cannot be selected when TURN ON is selected to the MyScreen PASSWORD of SECURITY item in OPTION Menu (📖*48*).
MyScreen Lock	Using the ▲/▼ buttons turns on/off the MyScreen lock function. TURN ON ⇔ TURN OFF When the TURN ON is selected, the MyScreen item is locked. Use this function for protecting the current MyScreen. • This function cannot be selected when TURN ON is selected to the MyScreen PASSWORD of SECURITY item in OPTION Menu (📖*48*).

(continued on next page)

SCREEN Menu (continued)

Item	Description
MESSAGE	Using the ▲/▼ buttons turns on/off the message function. 　TURN ON ⇔ TURN OFF When the TURN ON is selected, the following message function works. 　"AUTO IN PROGRESS" while automatically adjusting 　"NO INPUT IS DETECTED" 　"SYNC IS OUT OF RANGE" 　"Searching…" while searching for the input 　"Detecting…" while an input signal is detected 　The indication of the input signal displayed by changing 　The indication of the aspect ratio displayed by changing 　The indication of the PICTURE MODE displayed by changing 　The indication of the MY MEMORY displayed by changing 　The indication of "FREEZE" and "II" while the projector is in the FREEZE mode. • If the projector goes into the FREEZE mode while the TURN OFF is selected, the picture on screen is frozen without any messages, which is not a malfunction (&23).
SOURCE NAME	Each input port for this projector can have a name applied to it. (1) Use the ▲/▼ buttons on the SCREEN Menu to select SOURCE NAME and press the ► button. The SOURCE NAME menu will be displayed. (2) Use the ▲/▼ buttons on the SOURCE NAME menu to select the port to be named and press the ► button. Right side of the menu is blank until a name is specified. The SOURCE NAME dialog will be displayed. (3) The current name will be displayed on the first line. Use the ▲/▼/◄/► buttons and the **ENTER** or **INPUT** button to select and enter characters. The **RESET** button can be used to erase 1 character at a time. Also if you move the cursor to DELETE or ALL CLEAR on screen and push the **ENTER** or **INPUT** button, 1 character or all characters will be erased. The name can be a maximum of 16 characters. (4) To change an already inserted character, press the (▲) button to move the cursor to the first line, and use the ◄/► buttons to move the cursor on the character to be changed. After pressing the **ENTER** or **INPUT** button, the character is selected. Then, follow the same procedure as described at the item (3) above. (5) To finish entering text, move the cursor to the SAVE on screen and press the **ENTER** or **INPUT** button. To revert to the previous name without saving changes, move the cursor to the CANCEL on screen and press the **ENTER** or **INPUT** button.

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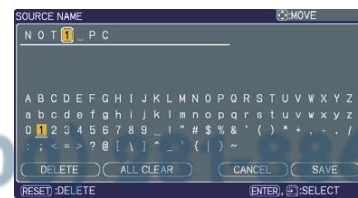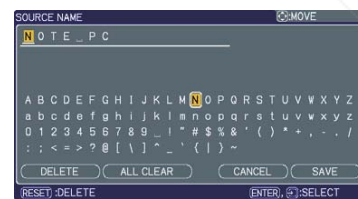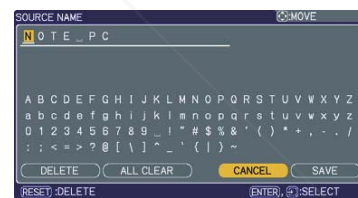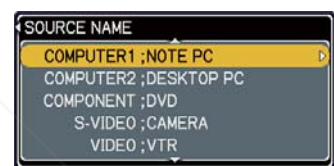
OPTION Menu

From the OPTION Menu, items shown in the table below can be performed.
Select an item using the ▲/▼ cursor buttons, and press the ► cursor button or **ENTER** button to execute the item, except for the items LAMP TIME and FILTER TIME. Then perform it according to the following table.

Item	Description
AUTO SEARCH	Using the ▲/▼ buttons turns on/off the automatic signal search function. 　TURN ON ⇔ TURN OFF When the TURN ON is selected, detecting no signal automatically cycles through input ports in the following order. The search is started from the current port. Then when an input is found, the projector will stop searching and display the image. 　↱ COMPUTER IN1 ⇨ COMPUTER IN2 ↰ 　↳ VIDEO ⇐ S-VIDEO ⇐ COMPONENT ↲
AUTO ON	Using the ▲/▼ buttons turns on/off the AUTO ON function. 　TURN ON ⇔ TURN OFF When set to the TURN ON, the lamp in projector will be automatically turned on without the usual procedure (📖*16*), only when the projector is supplied with the power after the power was cut while the lamp was on. • This function does not work as long as the power has been supplied to the projector while the lamp is off. • After turning the lamp on by the AUTO ON function, if neither input nor operation is detected for about 30 minutes, the projector is turned off, even though the AUTO OFF function (📖*43*) is disabled.

(continued on next page)

OPTION Menu (continued)

Item	Description
AUTO OFF	Using the ▲/▼ buttons adjusts the time to count down to automatically turn the projector off. Long (max. 99 minutes) ⇔ Short (min. 0 minute = DISABLE) When the time is set to 0, the projector is not turned off automatically. When the time is set to 1 to 99, and when the passed time with no-signal or an unsuitable signal reaches at the set time, the projector lamp will be turned off. If one of the projector's buttons or the remote control buttons is pressed or one of the commands (except get commands) is transmitted to the **CONTROL** port during the corresponding time, projector will not be turned off. Please refer to the section "Turning off the power" (&17).
LAMP TIME	The lamp time is the usage time of the lamp, counted after the last resetting. It is shown in the OPTION Menu. Pressing **RESET** button or the ► button displays a dialog. To reset the lamp time, select RESET using the ▲ button. RESET ⇔ CANCEL • Please reset the lamp time only when you have replaced the lamp, for a suitable indication about the lamp. • For the lamp replacement, see the section "Replacing the lamp" (&61).
FILTER TIME	The filter time is the usage time of the air-filter, counted after the last resetting. It is shown in the OPTION Menu. Pressing the **RESET** button or the ► button displays a dialog. To reset the filter time, select the RESET using the ▲ button. RESET ⇔ CANCEL • Please reset the filter time only when you have cleaned or replaced the air-filter, for a suitable indication about the air-filter. • For the air-filter cleaning, see the section "Maintaining the air-filter" (&63).

OPTION Menu (continued)
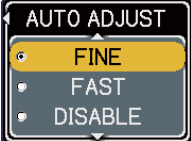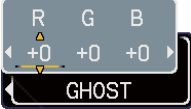
Item	Description

MY BUTTON	This item is to assign one of the following functions to **MY BUTTON 1** and **2** on the remote control (&6).
	Choose 1 or 2 on the MY BUTTON menu using the ◄/► button first. Then using the ▲/▼ buttons sets one of the following functions to the chosen button.
	• COMPUTER1: Sets port to COMPUTER IN1.
	• COMPUTER2: Sets port to COMPUTER IN2.
	• COMPONENT: Sets port to COMPONENT (Y, C$_B$/P$_B$, C$_R$/P$_R$)
	• S-VIDEO: Sets port to S-VIDEO.
	• VIDEO: Sets port to VIDEO.
	• INFORMATION: Displays the INPUT -INFORMATION- (&46) or NETWORK -INFORMATION- (&59) or nothing.
	  The displayed dialog is switched as below every time the **MY BUTTON** is pushed.
	
	  When an input signal is found:
	   INPUT -INFORMATION- ⇨ NETWORK -INFORMATION- ⇨ OFF
	
	  When an input signal is not found:
	   NETWORK -INFORMATION- ⇔ OFF
	• MY MEMORY: Loads one of adjustment data stored (&30).
	  When more than one data are saved, the adjustment changes every time the **MY BUTTON** is pushed.
	  When no data is saved in memory, the dialog "No saved data" appears.
	  When the current adjustment is not saved to memory, the dialog as shown in the right appears.
	  If you want to keep the current adjustment, please press the ◄ button to quit. Otherwise loading a data will lose the current adjusted condition.
	• PICTURE MODE: Changes the PICTURE MODE (&26).
	• FILTER RESET: Displays the filter time reset confirmation dialogue (&43).
	• VOLUME+: Set the volume up.
	• VOLUME-: Set the volume down.
	• AV MUTE: Turns the picture and audio on/off.
	• e-SHOT: Displays the e-SHOT menu (&58).

SERVICE	Selecting this item displays the SERVICE menu. Select an item using the ▲/▼ buttons, and press the ► button or the **ENTER** button to execute the item. FAN SPEED ⇔ AUTO ADJUST ⇔ GHOST ⇔ FILTER MESSAGE ⇔ KEY LOCK ⇔ FOCUS LOCK ⇨ FACTORY RESET ⇔ I NFORMATION ⇔ REMOTE FREQ. ⇔ REMOTE RECEIV. ⇐

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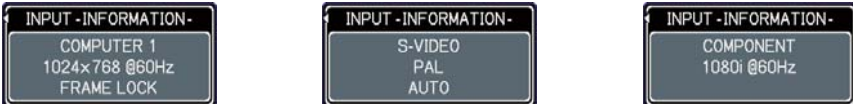
OPTION Menu (continued)

Item	Description
SERVICE (continued)	**FAN SPEED** Using the ▲/▼ buttons the rotation speed of the cooling fans. The HIGH is the mode for use at highlands etc. Note that the projector is noisier when the HIGH is selected. 　HIGH ⇔ NORMAL
	AUTO ADJUST Using the ▲/▼ buttons to select one of the mode. When the DISABLE is selected, the H/V.POSITION, H.SIZE and H.PHASE will be set to the default value if the automatic adjustment function is executed. 　FINE ⇔ FAST ⇔ DISABLE 　FINE: Finer tuning including H.SIZE adjustment. 　FAST: Faster tuning, setting H.SIZE to prearranged data for the input signal. • Depending on conditions, such as input image, signal cable to the projector, environment around the projector, etc., the automatic adjustment may not work correctly. In such a case, please choose DISABLE to disable the automatic adjustment, and make adjustment manually.
	GHOST 1. Select a color element of ghost using the ◄/► buttons. 2. Adjust the selected element using the ▲/▼ buttons to disappear ghost.
	FILTER MESSAGE Use the ▲/▼ button to set the timer for the interval to show the message for cleaning up the air-filter. 　50h ⇔ 100h ⇔ 200h ⇔ 300h ⇔ 400h ⇔ 500h 　　TURN OFF ⇔ 800h ⇔ 700h ⇔ 600h After choosing an item except TURN OFF, the message "REMINDER *** HRS PASSED AFTER THE LAST FILTER CHECK" will appear after the timer reaches the interval time set by this feature (📖*68*). When the TURN OFF is chosen, the message will not appear. Utilize this feature to keep the air-filter clean, setting the suitable time according to your environment of this projector. • Please check and clean the air-filter periodically, even if there is no message. If the air-filter becomes to be blocked by dust or others, the internal temperature will rise, which could cause malfunction, or reduce the lifetime of the projector. • Please be careful with the operating environment of the projector and the condition of the air-filter.

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OPTION Menu (continued)

Item	Description
SERVICE (continued)	**KEY LOCK** Using the ▲/▼ buttons turns on/off the key lock feature. When TURN ON is selected, the buttons on the projector except the **STANDBY/ON** button are locked. 　TURN ON ⇔ TURN OFF • Please use to avoid a mischief and touching accidentally. This function does not have any effect on the remote control.
	FOCUS LOCK Use the ▲/▼ buttons turns on/off the focus lock feature. When TURN ON is selected, the **FOCUS +/-** buttons on the remote and projector are disabled. 　TURN ON ⇔ TURN OFF • Please use the function to avoid a mischief and touching accidentally.
	REMOTE RECEIV. (1) Select a remote sensor using ▲/▼ buttons. 　1:FRONT ⇔ 2:TOP (2) Switch it using the **ENTER** or **INPUT** button. 　☐ (off) ⇔ ☑ (on) • A sensor cannot be turned off when the other one is off. Always at least one sensor is on.
	REMOTE FREQ. Use the ▲/▼ button to change the projector's remote sensor setting. 　1:NORMAL ⇔ 2:HIGH Items with a checkmark are on. The factory default setting is for both 1:NORMAL and 2:HIGH to be on. If the remote control does not function correctly set this to either only 1 or only 2 (📖*15*). Neither can be turned off at the same time.
	INFORMATION Selecting this item displays a dialog titled "INPUT -INFORMATION-". It shows the information about the current input. • The "FRAME LOCK" message on the dialog means the frame lock function is working (📖*34*). • This item can't be selected for no signal and sync out.
	FACTORY RESET Selecting RESET using the button ▲ performs this function. By this function, all the items in all of menus will collectively return to the initial setting. Note that the items LAMP TIME, FILTER TIME, LANGUAGE, SECURITY and NETWORK settings are not reset. 　RESET ⇔ CANCEL

(continued on next page)

OPTION Menu (continued)

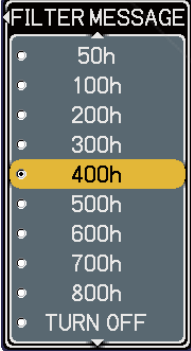| Item	Description
	This projector is equipped with security functions. User registration is required before using the security functions. Please contact your local dealer.
SECURITY	**1. Using Security Features** **1.1 Inputting the PASSWORD** 1.1-1 Use the ▲/▼ buttons on the OPTION Menu to select SECURITY and press the ► button. The ENTER PASSWORD box will be displayed. The factory default PASSWORD is **4910**. This PASSWORD can be changed (1.2 Changing the PASSWORD (▢*below*)). • It is strongly recommended the factory default PASSWORD to be changed as soon as possible. 1.1-2 Use the ▲/▼/◄/► buttons to enter the registered PASSWORD. Move the cursor to the right side of the ENTER PASSWORD box and press the ► button to display the SECURITY menu. If an incorrect PASSWORD is input the ENTER PASSWORD box will be displayed again. If incorrect PASSWORD is input 3 times the projector will turn off. Afterwards the projector will turn off every time an incorrect PASSWORD is input. **1.2 Changing the PASSWORD** 1.2-1 Use the ▲/▼ buttons on the SECURITY menu to select SECURITY PASSWORD CHANGE and press the ► button to display the ENTER NEW PASSWORD box. 1.2-2 Use the ▲/▼/◄/► buttons to enter the new PASSWORD. 1.2-3 Move the cursor to the right side of the ENTER NEW PASSWORD box and press the ► button to display the NEW PASSWORD AGAIN box, enter the same PASSWORD again. 1.2-4 Move the cursor to the right side of the NEW PASSWORD AGAIN box and press the ► button and the NOTE NEW PASSWORD box will be displayed for about 20 seconds, please make note of the PASSWORD during this time. Pressing the **ENTER** button will close the NOTE NEW PASSWORD box. • Please do not forget your PASSWORD.

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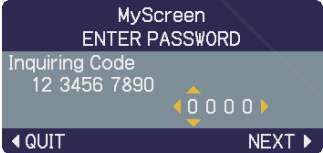
OPTION Menu (continued)

Item	Description
SECURITY (continued)	**1.3 If you have forgotten your PASSWORD** 1.3-1 Follow the procedure in 1.1-1 to display the ENTER PASSWORD box. 1.3-2 While the ENTER PASSWORD box is displayed, press and hold the **RESET** button for about 3 seconds or press and hold the **INPUT** and ► buttons on the projector for about 3 seconds. The 10-digit Inquiring Code will be displayed. • If there is no key input for about 55 seconds while the Inquiring Code is displayed the menu will close. If necessary repeat the process from 1.3-1. 1.3-3 Contact your dealer with the 10-digit Inquiring Code. Your PASSWORD will be sent after your user registration information is confirmed.
	2. Using the MyScreen PASSWORD Function The MyScreen PASSWORD function can be used to prohibit access to the MyScreen function and prevent the currently registered MyScreen image from being overwritten. **2.1 Turning on the MyScreen PASSWORD Function** 2.1-1 Use the ▲/▼ buttons on the SECURITY menu to select MyScreen PASSWORD and press the ► button to display the MyScreen PASSWORD on/off menu. **2.2 Setting the PASSWORD** 2.2-1 Display the MyScreen PASSWORD on/off menu using the procedure in 2.1-1. 2.2-2 Use the ▲/▼ buttons on the MyScreen PASSWORD on/off menu to select TURN ON. The ENTER PASSWORD box (small) will be displayed. 2.2-3 Use the ▲/▼/◄/► buttons to enter the PASSWORD. Move the cursor to the right side of the ENTER PASSWORD box (small) and press the ► button to display the PASSWORD AGAIN box, enter the same PASSWORD again.

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OPTION Menu (continued)

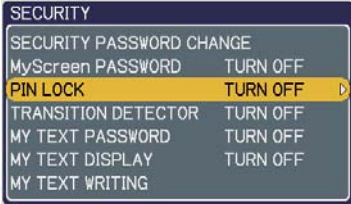| Item	Description
SECURITY (continued)	2.2-4 Move the cursor to the right side of the PASSWORD AGAIN box and press the ► button to display the PASSWORD for about 20 seconds, please make note of the PASSWORD during this time. MyScreen NOTE PASSWORD 0 0 0 0 ENTER, ⊡;EXIT Pressing the **ENTER** button will return to MyScreen PASSWORD on/off menu. When a PASSWORD is set for MyScreen: • The MyScreen registration function (and menu) will be unavailable. • The MyScreen Lock menu will be unavailable. • The START UP setting will be locked on MyScreen (and the menu will be unavailable). Turning the MyScreen PASSWORD off will allow normal operation of these functions. • Please do not forget your MyScreen PASSWORD. ### 2.3 Turning the PASSWORD off 2.3-1 Follow the procedure in 2.1-1 to display the MyScreen PASSWORD on/off menu. 2.3-2 Select TURN OFF to display the ENTER PASSWORD box (large). Enter the registered PASSWORD and the screen will return to the MyScreen on/off menu. If an incorrect PASSWORD is input the menu will close. If necessary repeat the process from 2.3-1. ### 2.4 If you have forgotten your PASSWORD 2.4-1 Follow the procedure in 2.1-1 to display the MyScreen PASSWORD on/off menu. 2.4-2 Select TURN OFF to display the ENTER PASSWORD box (large). The 10-digit Inquiring Code will be displayed inside the box. MyScreen ENTER PASSWORD Inquiring Code 12 3456 7890 ◀ 0 0 0 0 ▶ ◀ QUIT NEXT ▶ 2.4-3 Contact your dealer with the 10-digit Inquiring Code. Your PASSWORD will be sent after your user registration information is confirmed.
	## 3. Using the PIN LOCK Function PIN LOCK is a function which prevents the projector from being used unless a registered Code is input. ### 3.1 Registering the PIN Code 3.1-1 Use the ▲/▼ buttons on the SECURITY menu to select PIN LOCK and press the ► button or the **ENTER** button to display the PIN LOCK on/off menu. PIN LOCK TURN ON TURN OFF
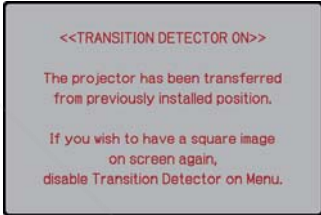
(continued on next page)

OPTION Menu (continued)

Item	Description
SECURITY (continued)	3.1-2 Use the ▲/▼ buttons on the PIN LOCK on/off menu to select TURN ON and the PIN BOX will be displayed. 3.1-3 Input a 4 part PIN Code using the ▲, ▼, ◄, ►, **COMPUTER** and **INPUT** buttons. A PIN Code again box will appear. Reenter the same PIN Code. This will complete the PIN Code registration. • If there is no key input for about 55 seconds while the PIN BOX or the PIN Code again box are displayed the menu will close. If necessary repeat the process from 3.1-1. Afterwards, anytime the projector is restarted after AC power is turned off the PIN BOX will be displayed. Enter the registered PIN Code. The projector can be used after entering the registered PIN Code. If an incorrect PIN Code is input the PIN BOX will be displayed again. If an incorrect PIN Code is input 3 times the projector will turn off. Afterwards the projector will turn off every time an incorrect PIN Code is input. The projector will also turn off if there is no key input for about 5 minutes while the PIN BOX is displayed. This function will activate only when the projector is started after AC power is turned off. • Please do not forget your PIN Code. ### 3.2 Turning Off the PIN LOCK Function 3.2-1 Follow the procedure in 3.1-1 to display the PIN LOCK on/off menu. Use the ▲/▼ buttons to select TURN OFF and the PIN BOX will be displayed. Enter the registered PIN Code to turn the PIN LOCK function off. If an incorrect PASSWORD is input 3 times, the projector will be shut down. ### 3.3 If you have forgotten your PIN Code 3.3-1 While the PIN BOX is displayed, press and hold the **RESET** button for 3 seconds or press and hold the INPUT and ► buttons for 3 seconds. The 10-digit Inquiring Code will be displayed. • If it passes for about 5 minutes after the PIN BOX is displayed the projector will turn off. 3.3-2 Contact your dealer with the 10-digit Inquiring Code. Your PASSWORD will be sent after your user registration information is confirmed.

(continued on next page)

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OPTION Menu (continued)

Item	Description
SECURITY (continued)	**4. Using the Transition Detector Function** While the Transition Detector function is ON, when power switch is started to supply to the projector, it might react as below. • Transition Detector alarm shown below might appear on screen, if the projector has been moved or re-installed. • Transition Detector alarm might appear on screen, if the MIRROR setting has been changed. • Keystone adjustment feature has been prohibited as long as the Transition Detector function is ON. **4.1 Turning On the Transition Detector Function** 4.1-1 Use the ▲/▼ buttons on the SECURITY menu to select TRANSITION DETECTOR and press the ► or the **ENTER** button to display the TRANSITION DETECTOR on/off menu. Select TURN ON and the current angle and mirror setting will be recorded. • This feature may not function properly if the projector is not in a stable position when TURN ON is selected. 4.1-2 When the projector is turned on, if this function is set to TURN ON and if the setting condition of the projector (normal use or ceiling mounted or tabletop use) or mirror setting is changed from previous record, the Transition Detector alarm will be displayed and the projector will not display the input image. Set the Transition Detector off in the SECURITY menu to display the input signal. If the Transition Detector alarm is displayed for about 5 minutes the lamp will turn off. This function will activate only when the projector is started after turning off the AC power. **4.2 Setting the Transition Detector PASSWORD** 4.2-1 Use the ▲/▼ buttons on the SECURITY menu to select TRANSITION DETECTOR and press the ► or the **ENTER** button to display the TRANSITION DETECTOR on/off menu. 4.2-2 Use the ▲/▼ buttons on the TRANSITION DETECTOR on/off menu to select TURN ON. The ENTER PASSWORD box (small) will be displayed. 4.2-3 Use the ▲/▼/◄/► buttons to enter a PASSWORD. Move the cursor to the right side of the ENTER PASSWORD box (small) and press the ► button to display the PASSWORD AGAIN box, enter the same PASSWORD again.
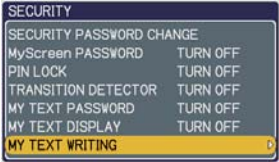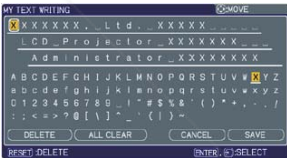
(continued on next page)

OPTION Menu (continued)

Item	Description

SECURITY (continued)	4.2-4 Move the cursor to the right side of the PASSWORD AGAIN box and press the ► button to display the PASSWORD for about 20 seconds, please make note of the PASSWORD during this time.
	
	TRANSITION DETECTOR
	NOTE PASSWORD
	0 0 0 0
	(ENTER), (↩);EXIT
	
	  Pressing the **ENTER** button will return to the TRANSITION DETECTOR on/off menu.
	  • Please do not forget your Transition Detector PASSWORD.
	
	4.3 Setting the Transition Detector off
	4.3-1 Follow the procedure in 4.1-1 to display the TRANSITION DETECTOR on/off menu.
	
	4.3-2 Select TURN OFF to display the ENTER PASSWORD box (large). Enter the registered PASSWORD and the screen will return to the TRANSITION DETECTOR on/off menu. If an incorrect PASSWORD is input the menu will close. If necessary repeat the process from 4.3-1.
	
	4.4 If you have forgotten your PASSWORD
	4.4-1 Follow the procedure in 4.1-1 to display the TRANSITION DETECTOR on/off menu.
	
	4.4-2 Select TURN OFF to display the ENTER PASSWORD box (large). The 10-digit Inquiring Code will be displayed inside the box.
	
	TRANSITION DETECTOR
	ENTER PASSWORD
	Inquiring Code
	12 3456 7890
	(0 0 0 0)
	◀ QUIT NEXT ▶
	
	4.4-3 Contact your dealer with the 10-digit Inquiring Code. Your PASSWORD will be sent after your user registration information is confirmed.
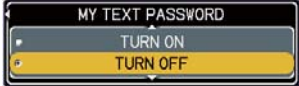
(continued on next page)

OPTION Menu (continued)

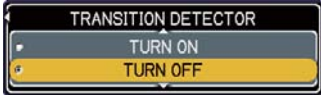| Item	Description
SECURITY (continued)	### 5. Using the MY TEXT PASSWORD function This item allows you to display your own message (MY TEXT) on the START UP screen and INPUT-INFORMATION. It can be protected by a password to prevent it from being overwritten. ### 5.1 Writing the MY TEXT (1) Use the ▲/▼ buttons on the SECURITY menu to select the MY TEXT WRITING menu and press the ► button. The MY TEXT WRITING dialog will be displayed. (2) The current MY TEXT will be displayed on the first 3 lines. If not yet written, the lines will be blank. Use the ▲/▼/◄/► buttons and the **ENTER** or **INPUT** button to select and enter characters. The **RESET** button can be used to erase 1 character at a time. Also if you move the cursor to DELETE or ALL CLEAR on screen and push the **ENTER** or **INPUT** button, 1 character or all characters will be erased. The MY TEXT can be input up to 24 characters on each line. (3) To change an already inserted character, press the ▲/▼ button to move the cursor to one of the first 3 lines, and use the ◄/► buttons to move the cursor on the character to be changed. After pressing the **ENTER** or **INPUT** button, the character is selected. Then, follow the same procedure as described at the item (2) above. (4) To finish entering text, move the cursor to the SAVE on screen and press the **ENTER** or **INPUT** button. To revert to the previous MY TEXT without saving changes, move the cursor to the CANCEL on screen and press the **ENTER** or **INPUT** button. • The MY TEXT WRITING function is available only when the MY TEXT PASSWORD function is set to TURN OFF. ### 5.2 Displaying the MY TEXT (1) Use the ▲/▼ buttons on the SECURITY menu to select the MY TEXT DISPLAY menu and press the ► button to display the MY TEXT DISPLAY on/off menu. MY TEXT DISPLAY on/off menu (2) Use the ▲/▼ buttons on the MY TEXT DISPLAY on/off menu to select on or off. TURN ON ⇔ TURN OFF When it is set TURN ON, the MY TEXT will be displayed on the START UP screen. Whichever is selected, the MY TEXT will be displayed on the INPUT-INFORMATION- when the INFORMATION on the SERVICE menu is chosen. • This function is available only when the MY TEXT PASSWORD function is set to the TURN OFF.

(continued on next page)

OPTION Menu (continued)

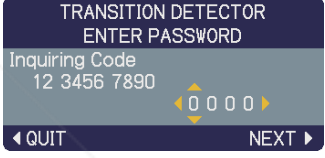| Item	Description
SECURITY (continued)	**5.3 Turning on the MY TEXT PASSWORD** The MY TEXT PASSWORD function can prevent the MY TEXT from being overwritten. 5.3-1 Turning on the MY TEXT PASSWORD function (1) Use the ▲/▼ buttons on the SECURITY menu to select the MY TEXT PASSWORD menu and press the ► button to display the MY TEXT PASSWORD on/off menu. MY TEXT PASSWORD 5.3-2 Setting the MY TEXT PASSWORD (1) Display the MY TEXT PASSWORD on/off menu using the procedure in 5.3-1 (2) Use the ▲/▼ buttons on the MY TEXT PASSWORD menu to select TURN ON. The ENTER PASSWORD BOX (small) will be displayed. ENTER PASSWORD BOX (small) (3) Use the ▲/▼/◄/► buttons to enter the PASSWORD. Move the cursor to the right side of the ENTER PASSWORD BOX (small) and press the ► button to display the PASSWORD AGAIN BOX, and then enter the same PASSWORD again. PASSWORD AGAIN BOX (4) Move the cursor to the right side of the PASSWORD AGAIN BOX and press ► button to display the PASSWORD for about 20 seconds, then please make note of the PASSWORD during this time. NOTE PASSWORD BOX Pressing the **ENTER** button on the remote control or **INPUT** button on the projector will return to the MY TEXT PASSWORD on/off menu. When the PASSWORD is set for the MY TEXT; • The MY TEXT DISPLAY menu will be unavailable, which can prohibit changing the DISPLAY setting. • The MY TEXT WRITING menu will be unavailable, which can prevent the MY TEXT from being overwritten. 5.3-3 Turning the MY TEXT PASSWORD off (1) Follow the procedure in 5.3-1 to display the MY TEXT PASSWORD on/off menu. (2) Select TURN OFF to display the ENTER PASSWORD BOX (large). Enter the registered PASSWORD and the screen will return to the MY TEXT PASSWORD on/off menu. ENTER PASSWORD BOX (large) If an incorrect PASSWORD is input, the menu will close. If necessary, repeat the process from 5.3-3(1) 5.3-4 If you have forgotten your PASSWORD. (1) Follow the procedure in 5.3-1 to display the MY TEXT PASSWORD on/off menu. (2) Select TURN OFF to display the ENTER PASSWORD BOX (large). The 10 digit inquiring code will be displayed inside the box. (3) Contact your dealer with the 10 digit inquiring code. Your PASSWORD will be sent after your user registration information is confirmed.

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NETWORK Menu

Remember that incorrect network settings on this projector may cause trouble on the network. Be sure to consult with your network administrator before connecting to an existing access point on your network.

Select "NETWORK" from the main menu to access the following functions.
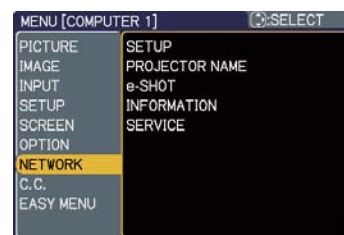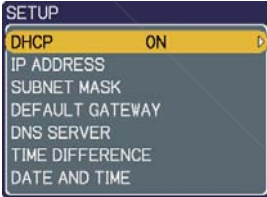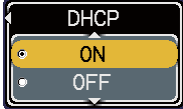
Select an item using the ▲/▼ cursor buttons on the projector or remote control, and press the ► cursor button on the projector or remote control, or **ENTER** button on the remote control to execute the item. Then perform it according to the following table.

See the User's Manual - Network Guide for details of NETWORK operation.

NOTE • The factory default setting for DHCP is OFF. If your network has DHCP enabled, and needs to set IP ADDRESS, SUBNET MASK and DEFAULT GATEWAY automatically, please set DHCP to ON. **(Network Settings of the User's Manual - Network Guide)**
• If you are not utilizing SNTP **(Date/Time Settings of the User's Manual - Network Guide)**, then you must set the DATE AND TIME (*56*) during the initial installation.
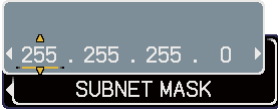
Item	Description	
SETUP	Selecting this item displays the SETUP Menu for the network. Use the ▲/▼ buttons to select an item, and the ► or **ENTER** button on the remote control to perform the item.	
	DHCP **(Dynamic Host Configuration Protocol)**	Use the ▲/▼ buttons to turn DHCP on/off. ON ⇔ OFF Select OFF when the network does not have DHCP enabled. • When the "DHCP" setting changes to "ON", it takes a little time to obtain IP address from DHCP server. • Auto IP function will be assigned an IP address if the projector could not obtain an IP address from server even if DHCP is "ON".

(continued on next page)

NETWORK Menu (continued)

Item	Description	
SETUP (continued)	**IP ADDRESS**	Use the ▲/▼/◄/► buttons to enter the IP ADDRESS. This function can only be used when DHCP is set to OFF. • The IP ADDRESS is the number that identifies this projector on the network. You cannot have two devices with the same IP ADDRESS on the same network. • The IP ADDRESS "0.0.0.0" is prohibited.
	SUBNET MASK	Use the ▲/▼/◄/► buttons to enter the same SUBNET MASK used by your PC. This function can only be used when DHCP is set to OFF. • The SUBNET MASK "0.0.0.0" is prohibited.
	DEFAULT GATEWAY	Use the ▲/▼/◄/► buttons to enter the DEFAULT GATEWAY (a node on a computer network that serves as an access point to another network) address. This function can only be used when DHCP is set to OFF.
	DNS SERVER	Use the ▲/▼/◄/► buttons to input the DNS SERVER address. The DNS SERVER is a system to control domain names and IP addresses on the Network.
	TIME DIFFERENCE	Use the ▲/▼ buttons to enter the TIME DIFFERENCE. Set the same TIME DIFFERENCE as the one set on your PC. If unsure, consult your IT manager. Use the ◄ button to return to the menu after setting the TIME DIFFERENCE.
	DATE AND TIME	Use the ▲/▼/◄/► buttons to enter the Year (last two digits), Month, Date, Hour and Minute. • The projector will override this setting and retrieve DATE AND TIME information from the Time server when SNTP is enabled. (📖 **Date/Time Settings of the User's Manual - Network Guide**)

(continued on next page)

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NETWORK Menu (continued)

Item	Description
PROJECTOR NAME	(1) Use the ▲/▼ buttons on the NETWORK Menu to select the PROJECTOR NAME menu and press the ► button. The PROJECTOR NAME dialog will be displayed. (2) The current PROJECTOR NAME will be displayed on the first 3 lines. If not yet written, the lines will be blank. Use the ▲/▼/◄/► buttons and the **ENTER** or **INPUT** button to select and enter characters. The **RESET** button can be used to erase 1 character at a time. Also if you move the cursor to DELETE or ALL CLEAR on screen and push the **ENTER** or **INPUT** button, 1 character or all characters will be erased. The PROJECTOR NAME can be input up to 64 characters. (3) To change an already inserted character, press the ▲/▼ button to move the cursor to one of the first 3 lines, and use the ◄/► buttons to move the cursor on the character to be changed. After pressing the **ENTER** or **INPUT** button, the character is selected. Then, follow the same procedure as described at the item (2) above. (4) To finish entering text, move the cursor to the SAVE on screen and press the **ENTER** or **INPUT** button. To revert to the previous PROJECTOR NAME without saving changes, move the cursor to the CANCEL on screen and press the **ENTER** or **INPUT** button.

(continued on next page)

NETWORK Menu (continued)

Item	Description
e-SHOT	Selecting this item displays the e-SHOT menu. The application software "PJTransfer" is required to store image(s) into the projector. Use the ▲/▼ buttons to select an item which is a still image by the e-SHOT (📖 **e-SHOT (Still Image Transfer) Display of the User's Manual - Network Guide)** and the ► or **ENTER** button to display the image. • The item without image stored cannot be selected. • The image names are each displayed in 16 characters or less. **To switch the image displayed** Use the ▲/▼ buttons. **To return to the menu** Press the ◄ or **ESC** button on the remote control. **To erase the image displayed and its source file in the projector.** (1) Press the **RESET** button on the remote control while displaying an image to display the e-SHOT - RESET menu. (2) Press the **ENTER** button on the remote control or the **INPUT** button on the projector to perform to erase. To stop erasing, press the **ESC** button on the remote control or the ◄ button on the projector.

(continued on next page)

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NETWORK Menu (continued)

Item	Description
INFORMATION	Selecting this item displays the NETWORK -INFORMATION- dialog for confirming the network settings. NETWORK -INFORMATION- PROJECTOR NAME IP ADDRESS 192.168.1.254 SUBNET MASK 255.255.255.0 DEFAULT GATEWAY 0.0.0.0 DNS SERVER 0.0.0.0 MAC ADDRESS 00-00-87-56-AC-7C TIME DIFFERENCE GMT 00:00 DATE AND TIME 2000/1/1 8:15 • The PROJECTOR NAME is displayed. • Nothing (blank) is shown in the "PROJECTOR NAME" field until you setup the item (📖*57*). • When the voltage level of the battery for the built in clock decreases, the set time may become incorrect even though accurate date and time are input. Replace the battery suitably (📖*65*). • IP ADDRESS, SUBNET MASK and DEFAULT GATEWAY indicate "0.0.0.0" when DHCP is ON and the projector has not gotten address from DHCP server.
SERVICE	Executing this item restarts and initializes the network functions. Choose the RESTART using the button ►. SERVICE RESTART ▷ Then use the button ▲ to execute. RESTART ▲ EXECUTE CANCEL ▼ Network will be once cut off when choose restart. If DHCP is selected on, IP address may be changed. After selecting RESTART, NETWORK Menu may not be controlled approx. 30 seconds.

C.C. (Closed Caption) Menu

The closed caption setting can be changed through C.C. Menu in the advance menu. Please select the item that you will change using ▲/▼ cursor buttons.
• The C.C. (Closed Caption) is the function that displays a transcript or dialog of the audio portion of a video, files or other presentation or other relevant sounds. It is required to have NTSC format video or 525i(480i) Component video source supporting C.C. feature to utilize this function.

Item	Description
DISPLAY	Select Closed Caption DISPLAY setting from following options using ▲/▼buttons. TURN OFF ⇔ TURN ON ⇔ AUTO TURN OFF: Closed Caption is OFF TURN ON: Closed Caption is ON AUTO: Closed Caption automatically displays when the volume is muted. • The caption is not displayed when the OSD menu is active. • The Closed Caption is the function to display the dialogue, narration, and / or sound effects of a television program or other video sources. The Closed Caption availability is depending upon broadcaster and/or content. • The caption is available if the video source is NTSC format and the video format selection is AUTO or NTSC on the INPUT Menu, when either VIDEO or S-VIDEO is selected as input port. • The caption is also available if 525i(480i) video signal is input from **COMPONENT** port, when it is selected as input port. • It may not work properly, depending on equipment or signal source. In this case, please turn off the Closed Caption.
MODE	Select Closed Caption MODE setting from following options using ▲/▼buttons. CAPTIONS ⇔ TEXT CAPTIONS: Display Closed Caption TEXT: Display Text data, which is for additional information such as news reports or a TV program guide. The information covers the entire screen. Not all of the C.C. program has Text information.
CHANNEL	Select Closed Caption CHANNEL from following options using ▲/▼buttons. 1 ⇔ 2 ⇔ 3 ⇔ 4 1: Channel 1, primary channel / language 2: Channel 2 3: Channel 3 4: Channel 4 The channel data may vary, depending on the content. Some channel might be used for secondary language or empty.

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Replacing the lamp

The projection lamp has finite product life that is different in each lamp. Please replace the lamp as soon as possible when the pictures appear dark, or when the color tone is poor. Using the lamp for long periods of time may make the lamp burned out or broken. Preparation of a spare lamp and early replacement are recommended. To prepare the new lamp, call your dealer and tell the type number: **DT00891**

1. Turn the projector off and unplug the power cord from the power outlet.
   And cool the projector down by leaving it for about 45 minutes as it is.

When the projector is mounted on a ceiling or somewhere over your head, or when the lamp may have been broken, be sure to refer replacement to your dealer or service person, since it may be dangerous.
Only in case of replacement by yourself, follow the following procedure.

2. Loosen the screw (marked by arrow) of the lamp cover, and then slide the lamp cover to the side to remove it.

Lamp cover

3. Loosen the 2 screws (marked by arrows) of the lamp, and slowly pick up the lamp by the handles.

4. Insert the new lamp, with cautions not to touch the inside of the lamp house. When inserting, pay attention to the socket position first, and to the pins for positioning next.

Screw

5. Tighten firmly the 2 screws of the lamp that are loosened in the previous process to lock it in place.

Pin for positioning

6. Slide the lamp cover into place and firmly tighten the screw of the lamp cover.

Socket

7. Plug in and restart the projector (*12, 16*). Then, reset the lamp time (which is the time counter for the lamp use).
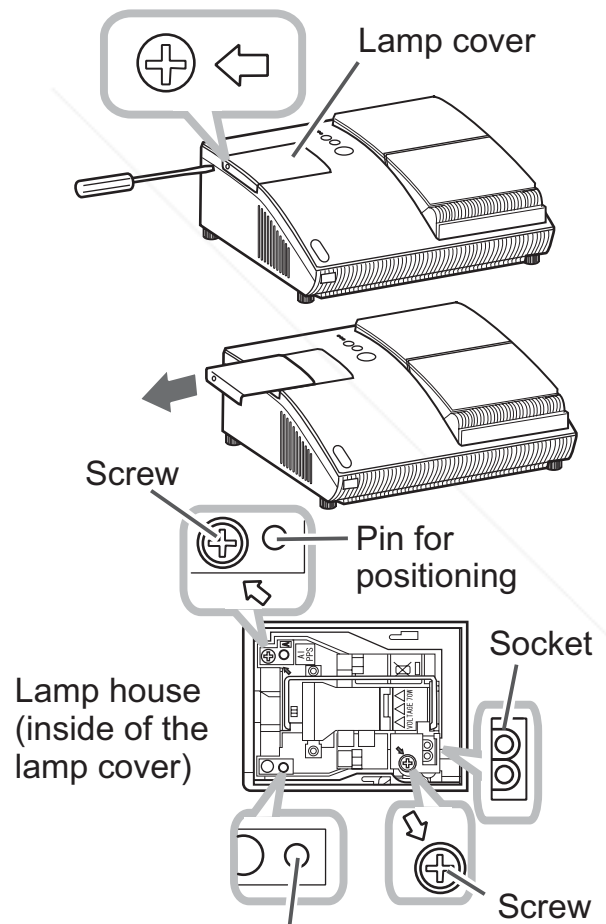
Lamp house (inside of the lamp cover)

(1) Press the ▲ or ▼ button on the projector or the **MENU** button on the remote control. The "EASY MENU" appears.

Screw

(2) Point at the "Go to Advanced Menu …" in the menu using the ▲ or ▼ button, then press the ► button. "MENU" appears.

Pin for positioning

(3) Pointed at the "OPTION" in the left column using the ▲ or ▼ button, then press the ► button. The cursor moves to the right column.

(4) Pointed at the "LAMP TIME" using the ▲ or ▼ button, then press the ► button. A dialog appears.

(5) Press the ▲ button to select the "RESET" on the dialog. It performs resetting the lamp time.

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Replacing the lamp (continued)

> **NOTE** • Please reset the lamp time only when you have replaced the lamp, for a suitable indication about the lamp.

⚡ **HIGH VOLTAGE**   ♨ **HIGH TEMPERATURE**   ⚠ **HIGH PRESSURE**

⚠ **WARNING** ►The projector uses a high-pressure mercury glass lamp. The lamp can break with a loud bang, or burn out, if jolted or scratched, handled while hot, or worn over time. Note that each lamp has a different lifetime, and some may burst or burn out soon after you start using them. In addition, when the bulb bursts, it is possible for shards of glass to fly into the lamp housing, and for gas containing mercury to escape from the projector's vent holes.

About disposal of a lamp: This product contains a mercury lamp; do not put it in a trash. Dispose of it in accordance with environmental laws.

• For lamp recycling, go to **www.lamprecycle.org** (in the US).

• For product disposal, contact your local government agency or **www.eiae.org** (in the US) or **www.epsc.ca** (in Canada).

For more information, call your dealer.

🔌	• If the lamp should break (it will male a loud bang when it does), unplug the power cord from the outlet, and make sure to request a replacement lamp from your dealer. Note that shards of glass could damage the projector's internals, or cause injury during handling, so please do not try to clean the projector or replace the lamp yourself. • If the lamp should break (it will male a loud bang when it does), ventilate the room well, and make sure not to breathe the gas that comes out of the projector vents or get it in your eyes or mouth. • Before replacing the lamp, turn the projector off and unplug the power cord, then wait for at least 45 minutes for the lamp to cool sufficiently. Handling the lamp while hot can cause burns, as well as damaging the lamp.
🚫	• Never unscrew except the appointed (marked by an arrow) screw. • Do not open the lamp cover while the projector is suspended from a ceiling or somewhere over your head. This is dangerous, since if the lamp's bulb has broken, the shards will fall out when the cover is opened. In addition, working in high places is dangerous, so ask your local dealer to have the lamp replaced even if the bulb is not broken. • Do not use the projector with the lamp cover removed. At the lamp replacing, make sure that the screws are screwed in firmly. Loose screws could result in damage or injury.
❗	• Use only the lamp of the specified type. • If the lamp breaks soon after the first time it is used, it is possible that there are electrical problems elsewhere besides the lamp. If this happens, contact your local dealer or service representative. • Handle with care: jolting or scratching could cause the lamp bulb to burst during use. • Using the lamp for long periods of time, could cause it dark, not to light up or to burst. When the pictures appear dark, or when the color tone is poor, please replace the lamp as soon as possible. Do not use old (used) lamps; this is a cause of breakage.

Maintaining the air-filter

Please check and clean the air-filter periodically, for keeping normal ventilation. When the indicators or a message prompts you to clean the air-filter, comply with it as soon as possible.
When it is damaged or too soiled, replace the filter unit. To prepare the new filter unit, call your dealer and tell the type number: **QD60122**

1. Turn the projector off and unplug the power cord from the power outlet. And cool the projector down by leaving it for a while as it is.

2. Use the vacuum cleaner on and around the filter unit.

3. Slide the filter unit upward to take it off from the projector.

Filter unit

4. Use the vacuum cleaner on the intake vents of the projector.

5. Use the vacuum cleaner on the cover side of the filter unit. Do not vacuum the air-filter directly, since the cleaner may inhale the air-filter. When the air-filter is damaged or too soiled, prepare the new filter unit.

Intake vents

6. Make sure that there is the air-filter inside, then slide the filter cover into place.

7. Plug in and restart the projector (*12, 16*).
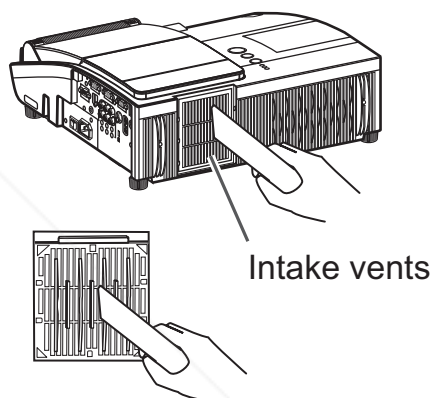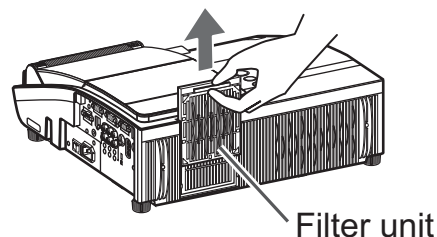
   Then, reset the filter time (which is the time counter for the air-filter use).
   (1) Press the ▲ or ▼ button on the projector or the **MENU** button on the remote control. The "EASY MENU" appears.
   (2) Point at the "FILTER TIME" in the menu using the ▲ or ▼ button, then press the ► button. A dialog appears.
   (3) Press the ▲ button to select the "RESET" on the dialog. It performs resetting the filter time.

Maintaining the air-filter (continued)

NOTE • A filter unit of specified type will come with the replacement lamp for this projector. Replacing the filter unit at the same time with the lamp is recommended.
• Please reset the filter time only when you have cleaned the air-filter, for a suitable indication about the air-filter.
• The projector may display the message such as "CHECK THE AIR FLOW" or turn off the projector, to prevent the internal heat level rising.

⚠ **WARNING** ►Before taking care of the air-filter, make sure the power switch is off and the power cable is not plugged in, then allow the projector to cool sufficiently. Taking care of the air-filter in a high temperature state of the projector could cause an electric shock, a burn or malfunction to the projector.
►Use only the air-filter unit of the specified type. Do not use the projector without the air-filter or the filter cover. It could result in a fire or malfunction to the projector.
►Clean the air-filter periodically. If the air-filter becomes clogged by dust or the like, internal temperatures rise and could cause a fire, a burn or malfunction to the projector.

Replacing the clock battery

This projector has internal clock that uses a battery. When the clock of the network function does not work correctly, please try solution by replacement of the battery: **HITACHI MAXELL**, part number **CR2032.**

Battery cover

1. Turn the projector off and unplug the power cord from the power outlet. And cool the projector down by leaving it for a while as it is.

2. Place gently the projector upside down.

Close

3. Remove the battery cover.
Turn the battery cover in the direction indicated as "**OPEN**" till it unlocks using a coin or something similar. When finishing turning the battery cover, pick its knob to remove it.

Open

4. Take the old battery out.
Press the metal claw of the battery holder. Then the battery will come up. Remove it.

Metal claw

5. Put the new battery into the battery holder, according to the polarity markings (-) inside the holder, so that the side marked (+) of the battery is facing upward. Push the battery into the battery holder fully to fix.

6. Put the battery cover into place, then turn it in the direction indicated as "**CLOSE**" until it fixed, using a coin or something similar.
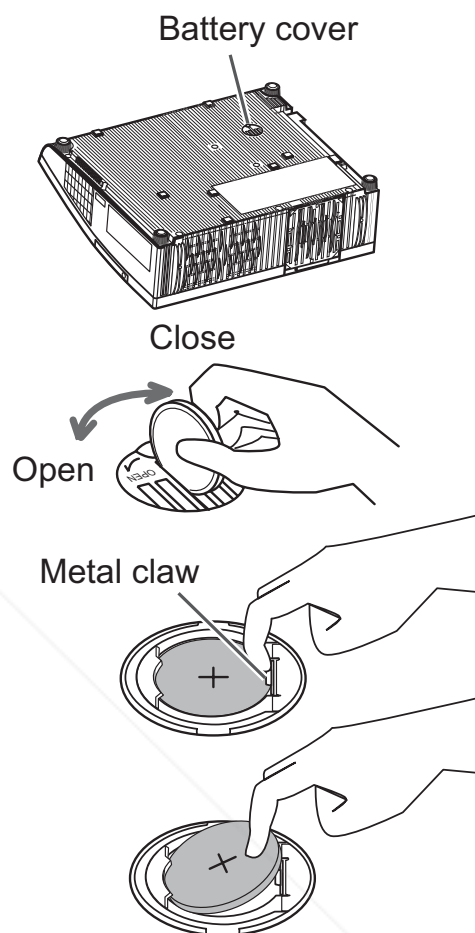
NOTE • The internal clock will be initialized by removing the battery. For setting the clock, see the User's Manual - Network Guide.

⚠**WARNING** ►Be careful of handling a battery, as a battery can cause explosion, cracking or leakage, which could result in a fire, an injury, and environment pollution.
• Use only the specified and perfect battery. Do not use a battery with damage, such as a scratch, a dent, rust or leakage.
• When a battery leaked, wipe the leakage out well with a waste cloth. If the leakage adhered to your body, immediately rinse it well with water. When a battery leaked in the battery holder, replace the batteries after wiping the leakage out.
• Make sure the plus and minus terminals are correctly aligned when loading a battery.
• Do not work on a battery; for example recharging or soldering.
• Keep a battery in a dark, cool and dry place. Never expose a battery to a fire or water.
• Obey the local laws on disposing a battery.

Caring for the mirror and lens

If the projection mirror or lens is flawed, soiled or fogged, it could cause deterioration of display quality. Please take care of the mirror and lens, being cautious of handling.

1. Turn the projector off and unplug the power cord from the power outlet. And cool the projector down by leaving it for a while as it is.

2. The lens door can be opened manually. Please hold both side of the lens door and slowly open it until it is locked with clicking sound.

3. Wipe softly the mirror and lens with a cleaning cloth for lens on the market, being careful not to give any damage on the mirror and lens. For around edge of the mirror and lens where might be difficult to be wiped out, please use an air blower for cameras on the market to clean up.

4. To close the lens door properly, please take the following procedure.
   (1) Plug in the projector.
   (2) Turn on the power switch.
   Even though the lens door starts to close, it might not be closed properly.
   (3) Press the **STANDBY/ON** button, so that the lamp starts to light up.
   (4) After the **POWER** indicator turns to steady green, press the **STANDBY/ON** button twice to turn off the projector.
   The lens door will close properly.
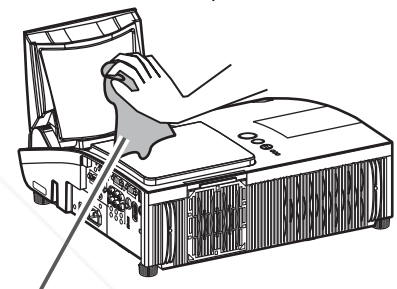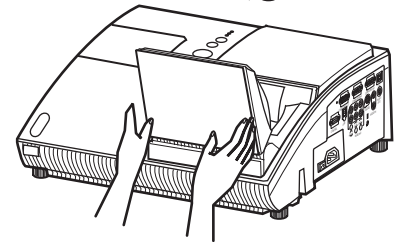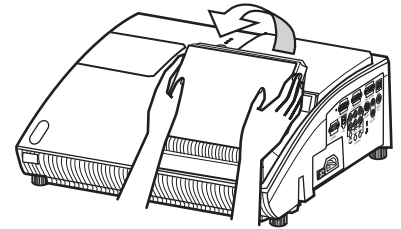
Cleaning cloth
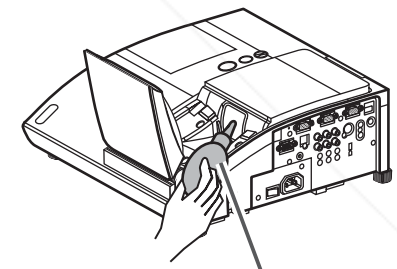
Blower

NOTE • When the lens door is closed manually, it may not shut properly.

⚠**WARNING** ►Before caring for the projection mirror and lens, turn the projector off and unplug the power cord, then cool the projector sufficiently.
►Do not use a vacuum cleaner to clean the projection mirror or lens, since it might give some damage.
►Do not use cleaners or chemicals other than those specified in this manual. Especially the mirror has to be paid special attention, since these materials might give serious damage on the mirror.

⚠**CAUTION** ►Be careful not to pinch your finger with the lens door, to prevent an injury.

Other care

Inside of the projector

In order to ensure the safe use of your projector, please have it cleaned and inspected by your dealer about once every year.

Caring for the cabinet and remote control

Incorrect care could have adverse influence such as discoloration, peeling paint, etc.

1. Turn the projector off, and unplug the power cord. Allow the projector to cool sufficiently.

2. After making sure that the projector is cool adequately, lightly wipe with gauze or a soft cloth.
If the projector is extremely dirty, dip soft cloth in water or a neutral cleaner diluted in water, and wipe lightly after wringing well. Then, wipe lightly with a soft, dry cloth.

⚠**WARNING** ►Before caring, make sure the power cord is not plugged in, and then allow the projector to cool sufficiently. The care in a high temperature state of the projector could cause a burn and/or malfunction to the projector.
►Never try to care for the inside of the projector personally. Doing is so dangerous.
►Avoid wetting the projector or inserting liquids in the projector. It could result in a fire, an electric shock, and/or malfunction to the projector.
• Do not put anything containing water, cleaners or chemicals near the projector.
• Do not use aerosols or sprays.

⚠**CAUTION** ►Please take right care of the projector according to the following. Incorrect care could cause not only an injury but adverse influence such as discoloration, peeling paint, etc.
►Do not use cleaners or chemicals other than those specified in this manual.
►Do not polish or wipe with hard objects.

Troubleshooting

If an abnormal operation should occur, stop using the projector immediately.

⚠ **WARNING** ►Never use the projector if abnormal operations such as smoke, strange odor, excessive sound, damaged casing or elements or cables, penetration of liquids or foreign matter, etc. should occur. In such cases, immediately turn off the power switch and then disconnect the power plug from the power outlet. After making sure that the smoke or odor has stopped, contact to your dealer or service company.

Otherwise if a problem occurs with the projector, the following checks and measures are recommended before requesting repair.
If this does not resolve the problem, please contact your dealer or service company. They will tell you what warranty condition is applied.

Related messages

When some message appears, check and cope with it according to the following table. Although these messages will be automatically disappeared around several minutes, it will be reappeared every time the power is turned on.

Message	Description
NO INPUT IS DETECTED ***	**There is no input signal.** Please confirm the signal input connection, and the status of the signal source.
SYNC IS OUT OF RANGE *** fн **kHz fv **Hz	**The horizontal or vertical frequency of the input signal is not within the specified range.** Please confirm the specs for your projector or the signal source specs.
CHECK THE AIR FLOW FixYourDLP.com Sponsored by DM	**The internal temperature is rising.** Please turn the power off, and allow the projector to cool down at least 20 minutes. After having confirmed the following items, please turn the power ON again. • Is there blockage of the air passage aperture? • Is the air-filter dirty? • Does the peripheral temperature exceed 35°C? If the same indication is displayed after the remedy, please set FAN SPEED of the SERVICE item in the OPTION Menu to HIGH.
REMINDER **HRS PASSED AFTER THE LAST FILTER CHECK. FILTER MAINTENANCE IS ESSENTIAL TO REMOVE WARNING MESSAGE, RESET FILTER TIMER. SEE MANUAL FURTHER INFO.	**A note of precaution when cleaning the air-filter.** Please immediately turn the power off, and clean or change the air-filter referring to the "Maintaining the air-filter" section of this manual. After you have cleaned or changed the air-filter, please be sure to reset the filter time (📖*43, 63*).

Regarding the indicator lamps

When operation of the **LAMP**, **TEMP** and **POWER** indicators differs from usual, check and cope with it according to the following table.

POWER indicator	LAMP indicator	TEMP indicator	Description
Lighting In **Orange**	*Turned off*	*Turned off*	**The projector is in a standby state.** Please refer to the section "Power on/off".
Blinking In **Green**	*Turned off*	*Turned off*	**The projector is warming up.** Please wait.
Lighting In **Green**	*Turned off*	*Turned off*	**The projector is in an on state.** Ordinary operations may be performed.
Blinking In **Orange**	*Turned off*	*Turned off*	**The projector is cooling down.** Please wait.
Blinking In **Red**	*(discretionary)*	*(discretionary)*	**The projector is cooling down. A certain error has been detected.** Please wait until **POWER** indicator finishes blinking, and then perform the proper measure using the item descriptions below.
Blinking In **Red** or *Lighting* In **Red**	*Lighting* In **Red**	*Turned off*	**The lamp does not light, and there is a possibility that interior portion has become heated.** Please turn the power off, and allow the projector to cool down at least 20 minutes. After the projector has sufficiently cooled down, please make confirmation of the following items, and then turn the power on again. • Is there blockage of the air passage aperture? • Is the air-filter dirty? • Does the peripheral temperature exceed 35°C? If the same indication is displayed after the remedy, please change the lamp referring to the section "Lamp".
Blinking In **Red** or *Lighting* In **Red**	*Blinking* In **Red**	*Turned off*	**The lamp cover has not been properly fixed.** Please turn the power off, and allow the projector to cool down at least 45 minutes. After the projector has sufficiently cooled down, please make confirmation of the attachment state of the lamp cover. After performing any needed maintenance, turn the power on again. If the same indication is displayed after the remedy, please contact your dealer or service company.
Blinking In **Red** or *Lighting* In **Red**	*Turned off*	*Blinking* In **Red**	**The cooling fan is not operating.** Please turn the power off, and allow the projector to cool down at least 20 minutes. After the projector has sufficiently cooled down, please make confirmation that no foreign matter has become caught in the fan, etc., and then turn the power on again. If the same indication is displayed after the remedy, please contact your dealer or service company.
Lighting In **Red**	*Turned off*	*Turned off*	**The lens door is not opened or closed properly.** One of the followings has been happened. • The lens door is not opened properly, when the projector is turned on. • The lens door is not closed properly, when the projector is turned off. • The lens door position is shifted, while the projector is working. Restart the projector, after confirming that there is nothing that the lens door hits while opening or closing.

(continued on next page)

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Regarding the indicator lamps (continued)

POWER indicator	LAMP indicator	TEMP indicator	Description
Blinking In Red or Lighting In Red	*Turned off*	*Lighting In Red*	**There is a possibility that the interior portion has become heated.** Please turn the power off, and allow the projector to cool down at least 20 minutes. After the projector has sufficiently cooled down, please make confirmation of the following items, and then turn the power on again. • Is there blockage of the air passage aperture? • Is the air-filter dirty? • Does the peripheral temperature exceed 35°C? If the same indication is displayed after the remedy, please set FAN SPEED of SERVICE item in OPTION menu to HIGH (&*45*).
Lighting In Green	*Simultaneous blinking in Red*		**It is time to clean the air-filter.** Please immediately turn the power off, and clean or change the air-filter referring to the section "Maintaining the air-filter". After cleaning or changing the air-filter, please be sure to reset the filter timer. After the remedy, reset the power to ON.
Lighting In Green	*Alternative blinking in Red*		**There is a possibility that the interior portion has become overcooled.** Please use the unit within the usage temperature parameters (5°C to 35°C). After the treatment, reset the power to ON.
Blinking in Green for approx. 3 seconds	*Turned off*	*Turned off*	**At least 1 Power ON schedule is saved to the projector.** Please refer to **"Schedule Settings" section of User's Manual-Network Guide.**

NOTE • When the interior portion has become overheated, for safety purposes, the projector is automatically shut down, and the indicator lamps may also be turned off. In such a case, disconnect the power cord, and wait at least 45 minutes. After the projector has sufficiently cooled down, please make confirmation of the attachment state of the lamp and lamp cover, and then turn the power on again.

Shutting the projector down

Only when the projector can not be turned off by usual procedure (&*17*), please push the shutdown switch using a pin or similar, and disconnect the power plug from the power outlet. Before turning it on again, wait at least 10 minutes to make the projector cool down enough.

Shutdown switch

MONITOR OUT
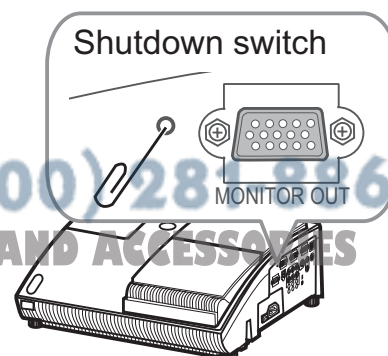
Resetting all settings

When it is hard to correct some wrong settings, the FACTORY RESET function of SERVICE item in OPTION Menu (&*46*) can reset all settings(except LANGUAGE, FILTER TIME, LAMP TIME, FILTER MESSAGE, NETWORK settings and etc.) to the factory default.

Phenomena that may be easy to be mistaken for machine defects

About the phenomenon confused with a machine defect, check and cope with it according to the following table.

Phenomenon	Cases not involving a machine defect	Reference page
Power does not come on.	**The electrical power cord is not plugged in.** Correctly connect the power cord.	12
	The main power source has been interrupted during operation such as by a power outage (blackout), etc. Please disconnect the power plug from the power outlet, and allow the projector to cool down at least 10 minutes, then turn the power on again.	12, 16
	Either there is no lamp and/or lamp cover, or either of these has not been properly fixed. Please turn the power off and disconnect the power plug from the power outlet, and allow the projector to cool down at least 45 minutes. After the projector has sufficiently cooled down, please make confirmation of the attachment state of the lamp and lamp cover, and then turn the power on again.	61
Neither sounds nor pictures are outputted.	**The signal cables are not correctly connected.** Correctly connect the connection cables.	10
	Signal source does not correctly work. Correctly set up the signal source device by referring to the manual of the source device.	–
	The input changeover settings are mismatched. Select the input signal, and correct the settings.	18, 19
	The BLANK function for pictures and the MUTE function for sounds are working. The BLANK and MUTE, or AV Mute may be active. Refer to the item "Sound does not come out" and "No pictures are displayed" on the next page to turn off the MUTE and BLANK functions.	18, 23

Phenomena that may be easy to be mistaken for machine defects (continued)

Phenomenon	Cases not involving a machine defect	Reference page
Sound does not come out.	**The signal cables are not correctly connected.** Correctly connect the audio cables.	10
	The MUTE function is working. Restore the sound pressing **MUTE** or **VOLUME** button on the remote control.	18
	The volume is adjusted to an extremely low level. Adjust the volume to a higher level using the menu function or the remote control.	18
	The AUDIO/SPEAKER setting is not correct. Correctly set the AUDIO/SPEAKER in SETUP Menu.	37
No pictures are displayed.	**The lens door is not fully opened.** Turn the projector off, and then turn it on again to make sure that the door is opened correctly.	16, 66
	The signal cables are not correctly connected. Correctly connect the connection cables.	10
	The brightness is adjusted to an extremely low level. Adjust BRIGHTNESS to a higher level using the menu function.	27, 28
	The computer cannot detect the projector as a plug and play monitor. Make sure that the computer can detect a plug and play monitor using another plug and play monitor.	11
	The BLANK screen is displayed. Press **BLANK** button on the remote control.	23

Phenomena that may be easy to be mistaken for machine defects (continued)

Phenomenon	Cases not involving a machine defect	Reference page
Video screen display freezes.	**The FREEZE function is working.** Press **FREEZE** button to restore the screen to normal.	23
Colors have a faded- out appearance, or Color tone is poor.	**Color settings are not correctly adjusted.** Perform picture adjustments by changing the COLOR TEMP, COLOR, TINT and/or COLOR SPACE settings, using the menu functions.	27, 29, 33
	COLOR SPACE setting is not suitable. Change the COLOR SPACE setting to AUTO, RGB, SMPTE240, REC709 or REC601.	33
Pictures appear dark.	**The brightness and/or contrast are adjusted to an extremely low level.** Adjust BRIGHTNESS and/or CONTRAST settings to a higher level using the menu function.	27, 28
	The whisper function is working. Select BRIGHT for WHISPER item in the SETUP Menu.	27, 36
	The lamp is approaching the end of its product lifetime. Replace the lamp.	61, 62
Pictures appear blurry.	**Either the focus and/or horizontal phase settings are not properly adjusted.** Adjust the focus using the focus ring, and/or H PHASE using the menu function.	21, 32
	The lens or mirror is dirty or misty. Clean the lens or mirror referring to the section "Caring for the lens".	66

NOTE • Although bright spots or dark spots may appear on the screen, this is a unique characteristic of liquid crystal displays, and it does not constitute or imply a machine defect.
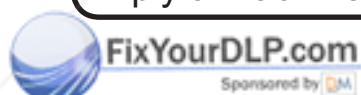
Specifications

Item		Specifications
Product name		Liquid crystal projector
Liquid Crystal Panel	Panel size	1.6 cm (0.63 type)
	Drive system	TFT active matrix
	Pixels	786,432 pixels (1024 horizontal x 768 vertical)
Lens		F=2.1 f=5.1 mm
Lamp		220 W UHB
Audio output		7 W
Power supply		AC 100-120V/3.6A, AC 220-240V/1.5A
Power consumption		340W
Temperature range		5~35°C (operating)
Ports		COMPUTER IN1 .... D-sub 15 pin mini x 1 COMPUTER IN2 .... D-sub 15 pin mini x 1 Y, C$_B$/P$_B$, C$_R$/P$_R$ (Component video) .... RCA x 3 S-VIDEO...mini DIN 4 pin x 1 VIDEO .... RCA x 1 MONITOR OUT .... D-sub 15 pin mini x 1 AUDIO IN1.. Stereo mini x 1 AUDIO IN2.. Stereo mini x 1 AUDIO IN3 (L, R) ....RCA x 2 AUDIO OUT.. Stereo mini x 1 CONTROL ....D-sub 9 pin x 1 USB .... USB-B x 1 LAN.. RJ45 x 1
Optional parts		Lamp: DT00891 Filter unit: QD60122 Tabletop use kit: TT100 Soft case: CA100 * For more information, contact to your dealer.
Weight (mass)		5.8 kg (approx.)
Size		397 (W) x 131 (H) x 356 (D) mm *Excluding protrusions. Please refer to the following figure.
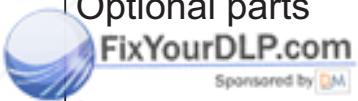
Specifications (continued)

366

356

378

397

225

113

131

139

[unit: mm]

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THE TRUSTED SOURCE FOR PROJECTOR LAMPS AND ACCESSORIES
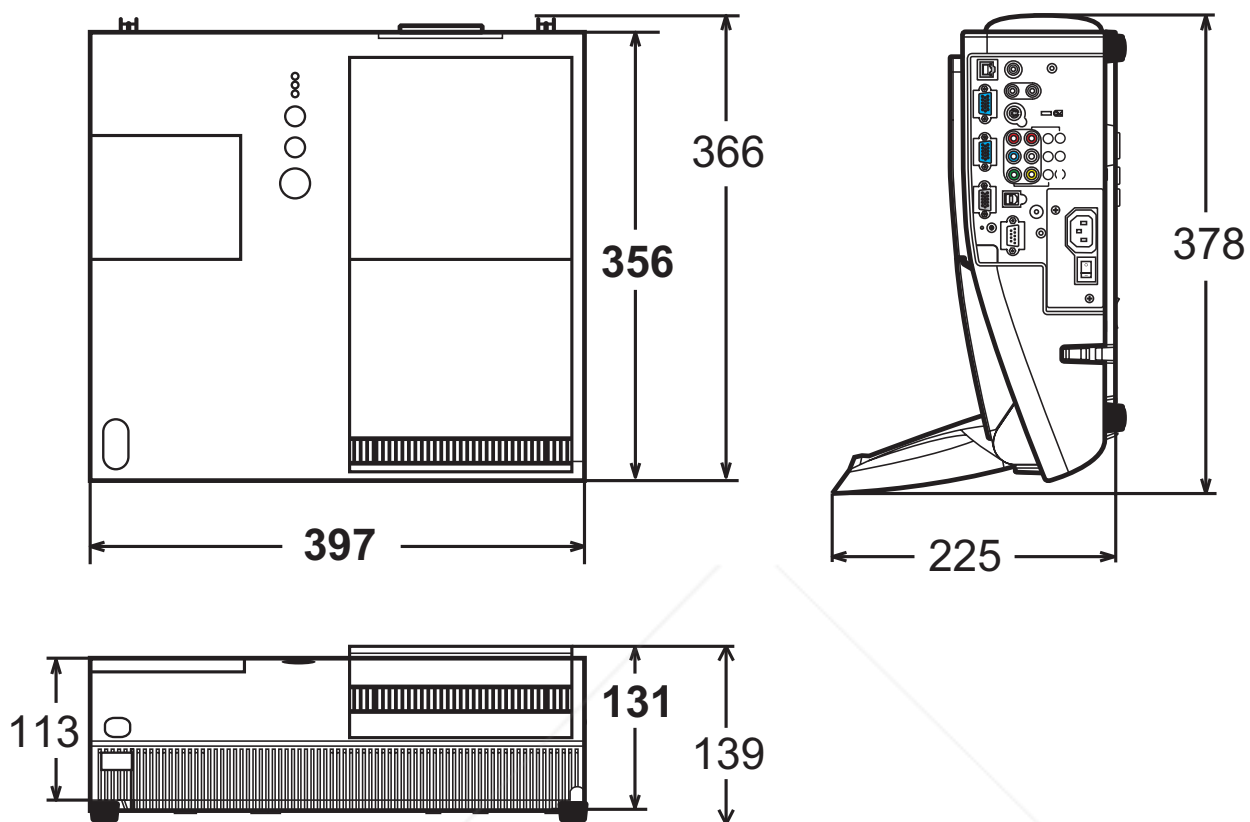
Projector

ED-A100/ED-A110/CP-A100W
User's Manual (detailed)
Network Guide
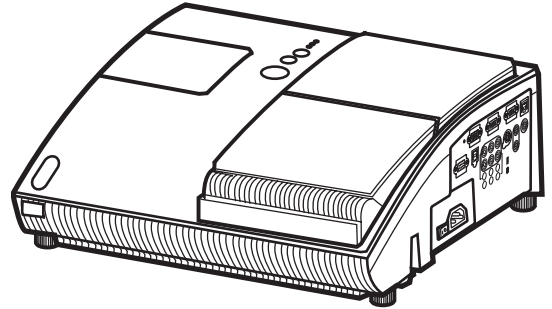
Thank you for purchasing this projector.
This projector has the network function that brings you the following main features.

✓ **Web control**
   The projector can be controlled and monitored by a web browser software on
   your PC, which can help you to setup and maintain the projector.
✓ **e-SHOT (Still Image Transfer) Display**
   The projector can display still images that are transferred via the network.

This manual is only intended to explain Network function only.
For safety, operations or any other issues, refer to the Safety Guide and User's
Manual (concise and detailed).

⚠ **WARNING**   ►Before using this product, be sure to read all manuals for this
product.
After reading them, store them in a safe place for future reference.

NOTE • The information in this manual is subject to change without notice.
• The manufacturer assumes no responsibility for any errors that may appear in
this manual.
• The reproduction, transfer or copy of all or any part of this document is not
permitted without express written consent.

Trademark acknowledgment
   Windows is a registered trademark of Microsoft Corporation.
   All other trademarks are the properties of their respective owners.

1

Content

📖

1.1 Configuring and controlling via a web browser

You can adjust or control the projector via a network from a web browser on a PC that is connected to the same network.
Logon the network from the web browser and it offers the menus to configure the network settings, monitor the projector and so on.
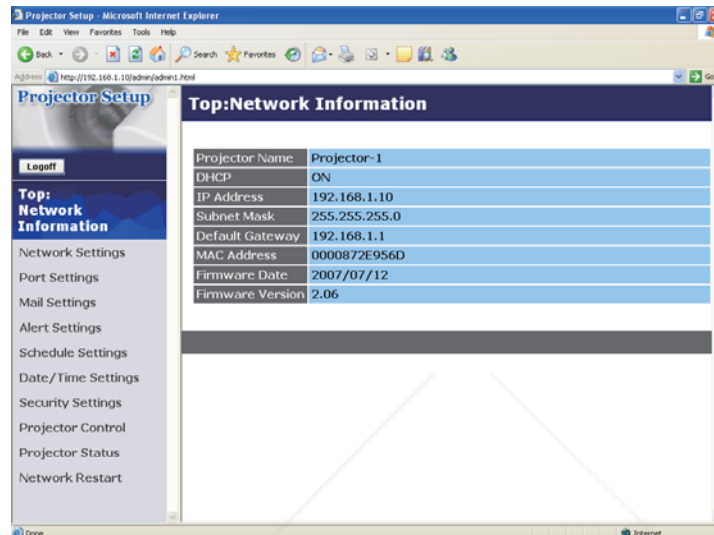
1.2 e-SHOT (Still image Transfer) Display

Image files can be sent via the network, and up to 4 image data can be stored in the projector and displayed on screen one by one. (📖*38*)

Transfer image data

Display image data (1 - 4)

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3
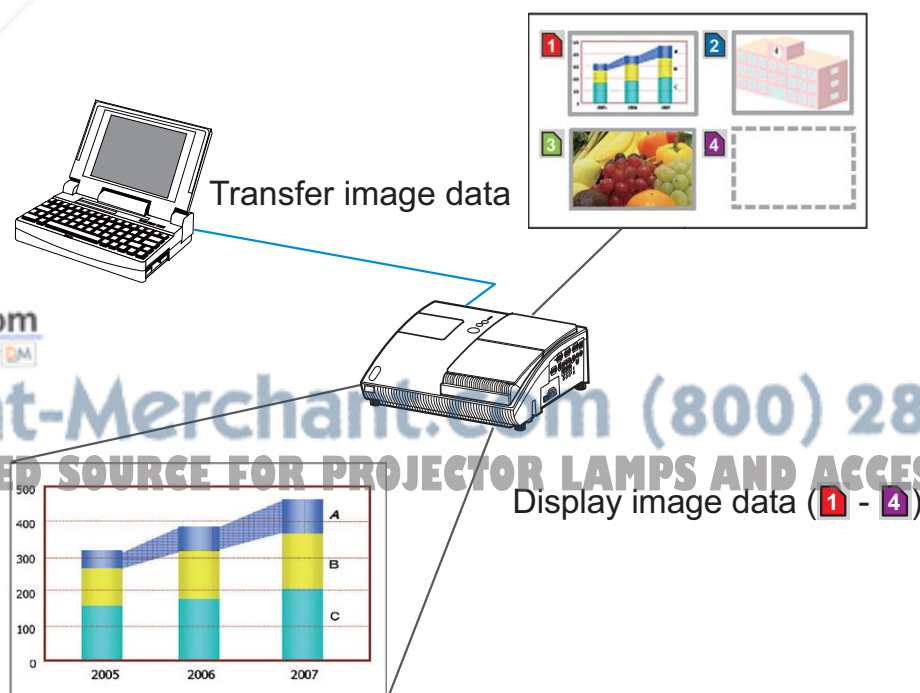
2. Equipment connection and network setting

2.1 Required equipment preparation

The following equipments are required to connect the projector to your PC through the network.

      PC : 1) equipped with the network feature
            2) installed a web browser software (📖*11*)

      LAN cable : CAT-5 or greater

4

2.2 Manual network connection setting

2.2.1 Equipments connection

Connect the projector and PC with a LAN cable.
* Before connecting with an existing network, contact the network administrator.

Next, please check the PC setting as explained below.

2.2.2 Network settings

This is the explanation of network connection settings for Windows XP and Internet Explorer.
1) Log on to Windows XP as administrator authority. (*)
2) Open "Control Panel" from "Start" menu.
3) Open "Network and Internet Connections" in "Control Panel". (Fig. 2.2.2.a)
* Administrator authority is the account, which can access to all functions.
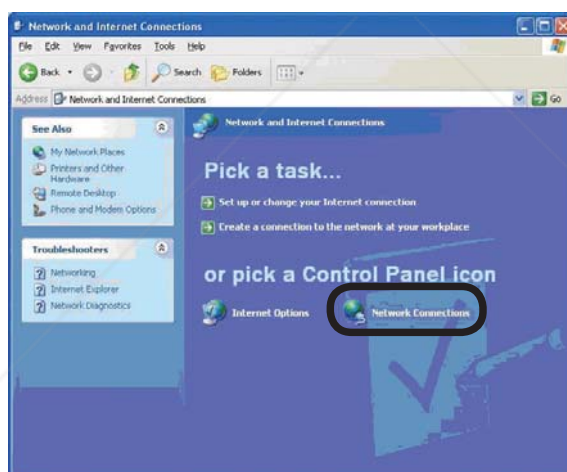
Fig. 2.2.2.a "Network and Internet Connections" window

4) Open "Network Connections". (Fig.2.2.2.b)
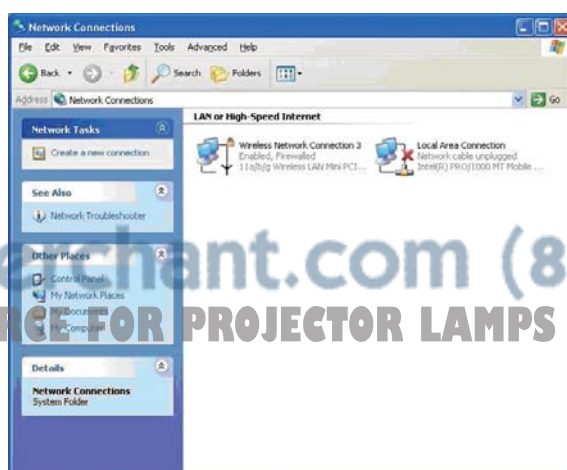
Fig. 2.2.2.b "Network Connections" window

5

2.2 Manual network connection setting (continued)

5) Open "Local Area Connection Properties" window you use for network device.
   (Fig. 2.2.2.c)
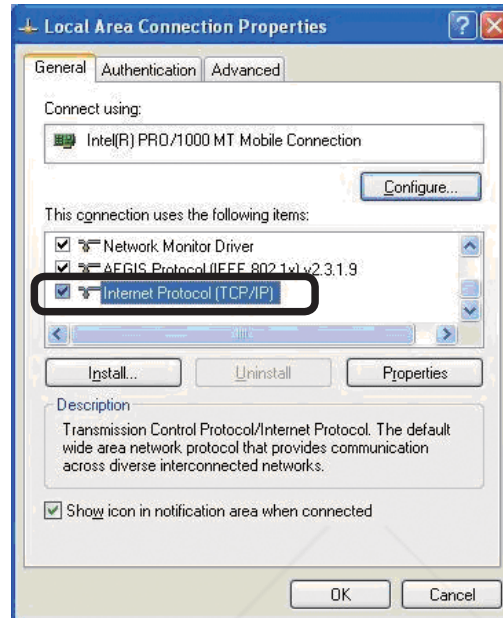
Fig. 2.2.2.c "Local Area Connection Properties" window

6) Set used protocol as "TCP/IP" and open "Internet Protocol (TCP/IP) Properties" window.
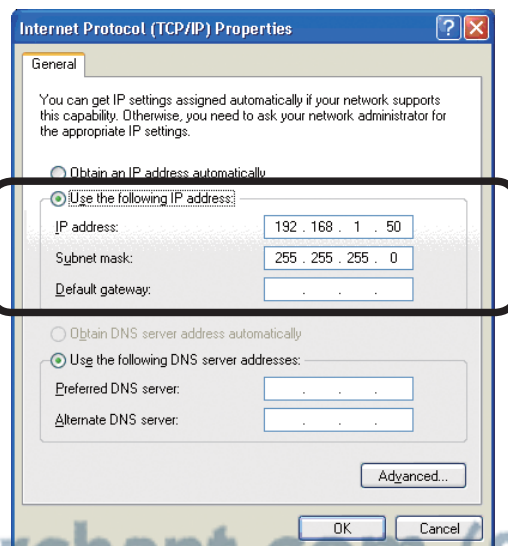
Fig. 2.2.2.d "Internet Protocol (TCP/IP) Properties" window

7) Set IP address, subnet mask and default gateway for PC.

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2.2 Manual network connection setting (continued)

[About IP address]
■ Setting manually
The Network address portion included in the IP address set into your PC should be common with projector's one. And the entire IP address in the PC should not be overlapped with other equipments in the same network, including the projector.

For example
The projector's initial settings are as follows.

IP address: 192.168.1.10
Subnet mask: 255.255.255.0
(Network address: 192.168.1 in this case)

Therefore, specify PC's IP address as follows.

IP address: 192.168.1.xxx (xxx shows decimal number.)
Subnet mask: 255.255.255.0
(Network address: 192.168.1 in this case)

Select from 1 to 254 for "xxx" not duplicating with any other equipments.
In this case, projector has "192.168.1.10" IP address, specify from 1 to 254 except 10 for PC.

NOTE • "0.0.0.0" cannot be set to the IP address.
• The projector's IP address can be changed by using the configuration utility via a web browser. (*11*)
• If the projector and PC exist in the same network (i.e. network address is common), default gateway can be blank.
• When the projector and PC exist in different networks, default gateway setting is necessary. Contact the network administrator in detail.

■ Setting automatically
When DHCP server exists in network, it is possible to assign IP address to the projector and PC automatically.
DHCP is abbreviation for "Dynamic Host Configuration Protocol" and has the function to provide necessary setting for network like IP address from server to client. A server that has DHCP function is called DHCP server.

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2.2 Manual network connection setting (continued)

2.2.3 "Internet Option" setting

1) Click "Internet Options" in "Network and Internet Connections" window
   (Fig. 2.2.3.a) to open "Internet Properties" window. (Fig.2.2.3.b)
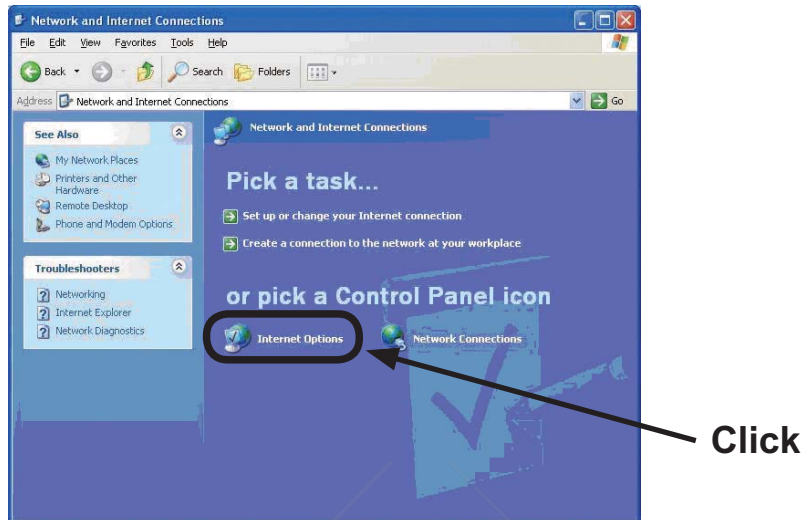
Fig. 2.2.3.a "Network and Internet Connections" window
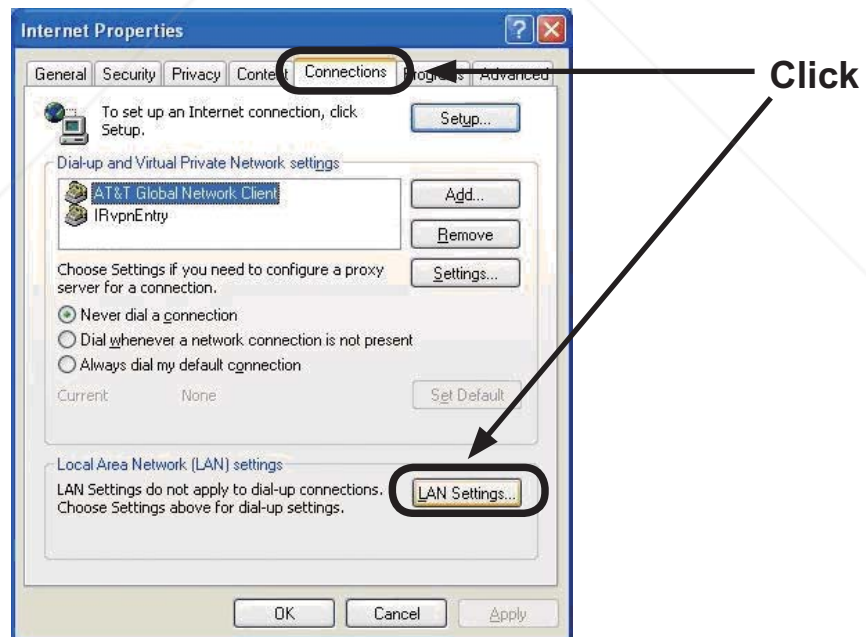
Fig. 2.2.3.b "Internet Properties" window

2) Click "Connections" tab and then click [LAN Settings] button to open "Local
   Area Network (LAN) settings". (Fig. 2.2.3.c)

2.2 Manual network connection setting (continued)
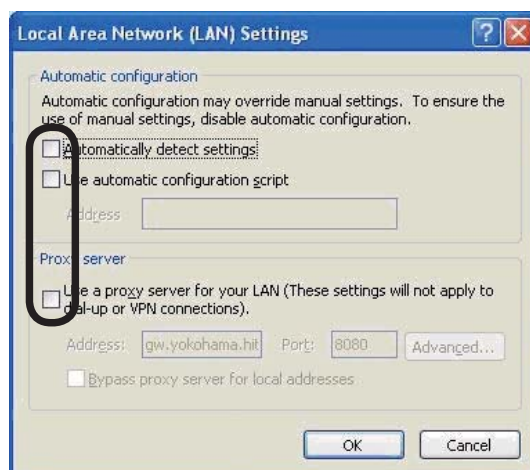
Fig. 2.2.3.c "Local Area Network (LAN) Settings" window

3) Uncheck all boxes in "Local Area Network (LAN) Settings" window. (Fig. 2.2.3.c)

2.2.4 Check connection

Check PC and projector are connected properly here. If it is not connected, check cable connections and settings are properly or not.
1) Start browser in PC and specify following URL, then click "Go" button.

URL: http://(Projector IP address)/

For example, if projector IP address is 192.168.1.10, specify

URL: http://192.168.1.10/

2) If Fig. 2.2.4 appears, it succeeds.

Fig. 2.2.4 "Logon Menu"

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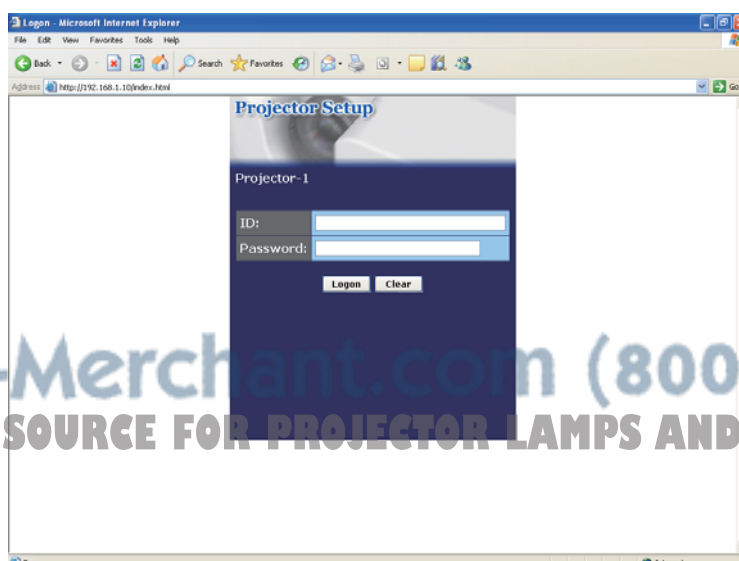
3. Management with Web browser software

This projector is equipped with the following network functions by using a web browser software.

Configuring and Controlling the Projector via a Web Browser

You can change the settings of or control the projector via a network by using a web browser from a PC that is connected to the same network.
(&*11*)

E-mail Alerts

The projector can automatically send an alert to specified e-mail addresses when the projector requires maintenance or has encountered an error.
(&*32*)

Projector Management using SNMP

This projector is SNMP (Simple Network Management Protocol) compliant, allowing you to monitor it from a remote location using SNMP software. In addition, the projector is able to send failure & warning alerts to a specified PC.
(&*34*)

Event Scheduling

You can schedule the projector to perform various functions according to the date and time.
(&*35*)

e-SHOT (Still Image Transfer) Display

The projector can display still images that are transferred via the network.
(&*38*)

Command Control via the Network

The projector can be controlled using RS-232C commands over a network.
(&*40*)

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3.1 Configuring and controlling the projector via a web browser

You can adjust or control the projector via a network from a web browser on a PC that is connected to the same network.

NOTE • Internet Explorer 5.5 or later is required.
• If JavaScript is disabled in your web browser configuration, you must enable JavaScript in order to use the projector web pages properly. See the Help files for your web browser for details on how to enable JavaScript.
• You can communicate using SSL (Secure Socket Layer) if you are using Windows XP Service Pack 2 or earlier versions of Microsoft Windows. Please specify "https://" when you enter the IP address of the projector on the web browser. You can't communicate the projector using SSL on Windows Vista.
• It is recommended that all web browser updates are installed. It is especially recommended that all users running Internet Explorer on a Microsoft Windows version prior to Windows XP Service Pack 2 install security update Q832894 (MS04-004) or the web browser interface may not be displayed correctly.
And when using an earlier version of Internet Explorer, during operations the browser will log out after 50 seconds.

3.1 Configuring and controlling the projector via a web browser (continued)

When configuring or controlling the projector via a web browser, an ID and password are required. There are two types of IDs, Administrator ID and User ID. The following chart describes the differences between Administrator and User IDs.

Item	Description	Administrator	User
Network Information	Displays the projector's current network configuration settings.	√	√
Network Settings	Displays and configures network settings.	√	N/A
Port Settings	Displays and configures communication port settings.	√	N/A
Mail Settings	Displays and configures e-mail addressing settings.	√	N/A
Alert Settings	Displays and configures failure & warning alerts.	√	N/A
Schedule Settings	Displays and configures schedule settings.	√	N/A
Date/Time Settings	Displays and configures the date and time settings.	√	N/A
Security Settings	Displays and configures passwords and other security settings.	√	N/A
Projector Control	Controls the projector.	√	√
Projector Status	Displays and configures the current projector status.	√	√
Network Restart	Restarts the projector's network connection.	√	N/A

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3.1 Configuring and controlling the projector via a web browser (continued)

3.1.1 Logon

Refer to the following for configuring or controlling the projector via a web browser.

Example: If the IP address of the projector is set to **192.168.1.10**:

1) Enter **"http://192.168.1.10/"** into the address bar of the web browser and press "Enter" key or click "Go" button. The screen in Fig. 3.1.1a will be displayed.

2) Enter your ID and password and click **[Logon]**.
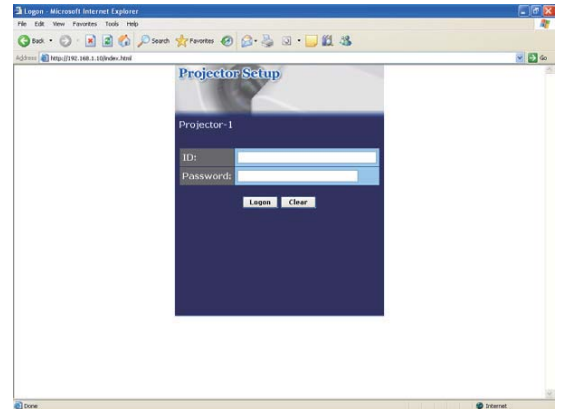
Fig. 3.1.1 a "Logon Menu"

Below are the factory default settings for administrator ID, user ID and passwords.

Item	ID	Password
Administrator	Administrator	<blank>
User	User	<blank>

If the logon is successful, either the Fig. 3.1.1 b or Fig. 3.1.1 c screen will be displayed.

Main menu
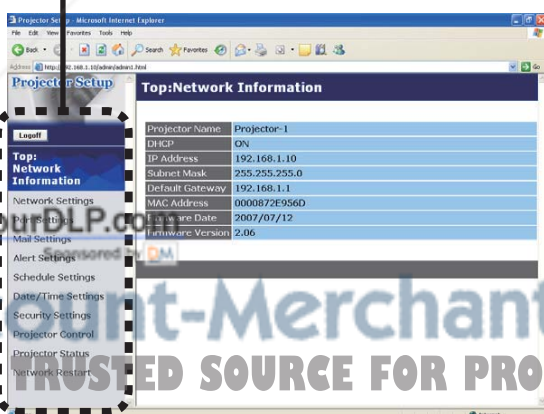
Main menu

Fig. 3.1.1 b "Logon with Administrator ID"   Fig. 3.1.1 c "Logon with User ID"
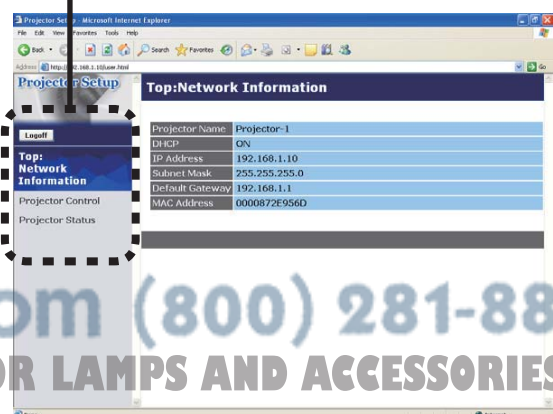
3) Click the desired operation or configuration item on the main menu located on the left-hand side of the screen.

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3.1 Configuring and controlling the projector via a web browser (continued)

3.1.2 Network Information
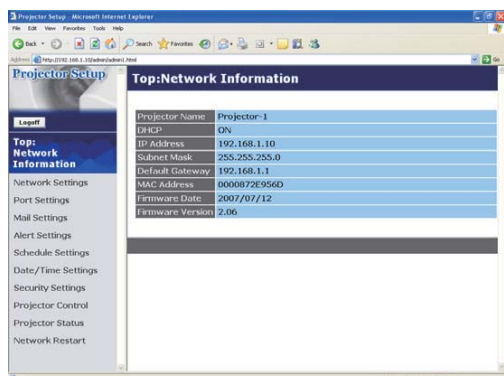
All screen drawings in this manual are shown when you logon with the Administrator ID.
Any functions that are available only for the Administrator will not be shown when you logon with the User ID. Refer to the table. (📖*13*)

Displays the projector's current network configuration settings.

Item	Description
Projector Name	Displays the projector name settings.
DHCP	Displays the DHCP configuration settings.
IP Address	Displays the current IP address.
Subnet Mask	Displays the subnet mask.
Default Gateway	Displays the default gateway.
MAC Address	Displays the ethernet MAC address.
Firmware Date	Displays the network firmware time stamp. This information is only displayed when logged on using an Administrator ID.
Firmware Version	Displays the network firmware version number. This information is only displayed when logged on using an Administrator ID.

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3.1 Configuring and controlling the projector via a web browser (continued)

3.1.3 Network Settings
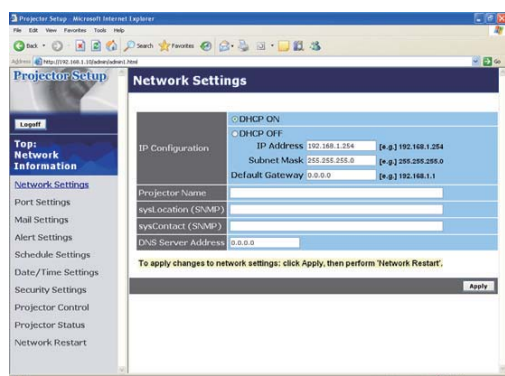
Displays and configures network settings.

Item	Description
IP Configuration	Configures network settings.
DHCP ON	Enables DHCP.
DHCP OFF	Disables DHCP.
IP Address	Configures the IP address when DHCP is disabled.
Subnet Mask	Configures the subnet mask when DHCP is disabled.
Default Gateway	Configures the default gateway when DHCP is disabled.
Projector Name	Configures the name of the projector. The length of the Projector Name can be up to 64 alphanumeric characters. Only alphabets, numbers and following symbols can be used. !"#$%&'()*+,-./:;<=>?@[\]^_`{ |}~ and space
sysLocation (SNMP)	Configures the location to be referred to when using SNMP. The length of the sysLocation can be up to 255 alphanumeric characters. Only numbers '0-9' and alphabet 'a-z', 'A-Z' can be used.
sysContact (SNMP)	Configures the contact information to be referred to when using SNMP. The length of the sysContact can be up to 255 alphanumeric characters. Only numbers '0-9' and alphabet 'a-z', 'A-Z' can be used.
DNS Server Address	Configures the DNS server address.

Click **[Apply]** button to save the settings.

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3.1 Configuring and controlling the projector via a web browser (continued)

NOTE • The new configuration settings are activated after restarting the network connection. When the configuration settings are changed, you must restart the network connection. You can restart the network connection by clicking **[Network Restart]** on the main menu.
• If you connect the projector to an existing network, consult a network administrator before setting server addresses.

3.1 Configuring and controlling the projector via a web browser (continued)

3.1.4 Port Settings
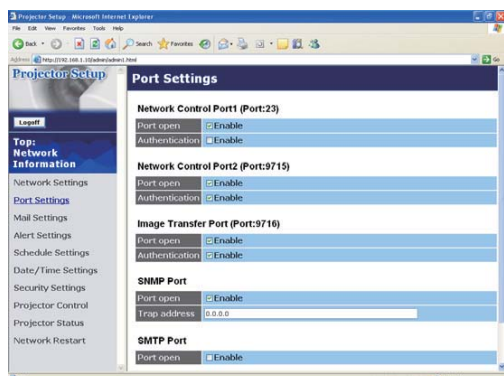
Displays and configures communication port settings.

Item	Description
Network Control Port1 (Port:23)	Configures command control port 1 (Port:23).
Port open	Click **[Enable]** check box to use port 23.
Authentication	Click **[Enable]** check box when authentication is required for this port.
Network Control Port2 (Port:9715)	Configures command control port 2 (Port:9715).
Port open	Click **[Enable]** check box to use port 9715.
Authentication	Click **[Enable]** check box when authentication is required for this port.
Image Transfer Port (Port:9716)	Configures the image transfer port (Port:9716).
Port open	Click the **[Enable]** check box to use port 9716.
Authentication	Click the **[Enable]** check box when authentication is required for this port.
SNMP Port	Configures the SNMP port.
Port open	Click **[Enable]** check box to use SNMP.
Trap address	Configures the destination of the SNMP Trap in IP format.
SMTP Port	Configures the SMTP port.
Port open	Click **[Enable]** check box to use the e-mail function.

Click **[Apply]** button to save the settings.

NOTE • The new configuration settings are activated after restarting the network connection. When the configuration settings are changed, you must restart the network connection. You can restart the network connection by clicking **[Network Restart]** on the main menu.

3.1 Configuring and controlling the projector via a web browser (continued)

3.1.5 Mail Settings
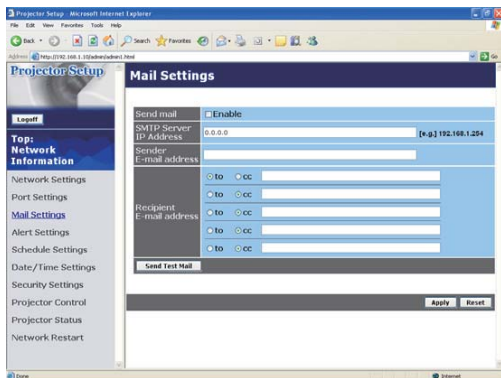
Displays and configures e-mail addressing settings.

Item	Description
Send mail	Click **[Enable]** check box to use the e-mail function. Configure the conditions for sending e-mail under the Alert Settings.
SMTP Server IP Address	Configures the address of the mail server in IP format. • The address allows not only IP address but also domain name if the valid DNS server is setup in the **Network Settings**. The maximum length of host or domain name is up to 255 characters.
Sender E-mail address	Configures the sender e-mail address. The length of the sender e-mail address can be up to 255 alphanumeric characters.
Recipient E-mail address	Configures the e-mail address of up to five recipients. You can also specify **[TO]** or **[CC]** for each address. The length of the recipient e-mail address can be up to 255 alphanumeric characters.

Click **[Apply]** button to save the settings.

NOTE • You can confirm whether the mail settings work correctly using **[Send Test Mail]** button. Please enable Send mail setting before clicking **[Send Test Mail]**.
• If you connect the projector to an existing network, consult a network administrator before setting server addresses.

3.1 Configuring and controlling the projector via a web browser (continued)

3.1.6 Alert Settings
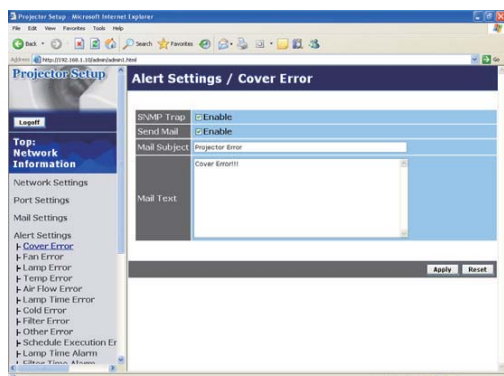
Displays and configures failure & alert settings.

Alert Item	Description
Cover Error	The lamp cover has not been properly fixed.
Fan Error	The cooling fan is not operating.
Lamp Error	The lamp does not light, and there is a possibility that interior portion has become heated.
Temp Error	There is a possibility that the interior portion has become heated.
Lens Door Error	The lens door is not opened or closed properly.
Air Flow Error	The internal temperature is rising.
Lamp Time Error	Lamp time over.
Cold Error	There is a possibility that the interior portion has become overcooled.
Filter Error	Filter time over.
Other Error	Other error. If displaying this error, please contact your dealer.
Schedule Execution Error	Schedule Execution error. (📖*21*)
Lamp Time Alarm	Lamp time over Alarm Time setting.
Filter Time Alarm	Filter time over Alarm Time setting.
Transition Detector Alarm	Transition Detector Alarm. (📖*OPTION Menu in the User's Manual (detailed) – Operating Guide*)
"CHANGE THE LAMP" is displayed.	"CHANGE THE LAMP" is displayed.
Cold Start	The Power switch is turned on. (Off → standby mode)
Authentication Failure	The SNMP access is detected from the invalid SNMP community.

Refer to *"Troubleshooting" in the User's Manual (detailed) – Operating Guide* for further detailed explanation of Error except Other Error and Schedule Execution Error.

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3.1 Configuring and controlling the projector via a web browser (continued)

The Alert Items are shown below.

Setting Item	Description
Alarm Time	Configures the time to alert. (Only Lamp Time Alarm and Filter Time Alarm.)
SNMP Trap	Click **[Enable]** check box to enable SNMP Trap alerts.
Send Mail	Click **[Enable]** check box to enable e-mail alerts. (Except **Cold Start** and **Authentication Failure**.)
Mail Subject	Configures the subject line of the e-mail to be sent. The length of the subject line can be up to 255 alphanumeric characters. (Except **Cold Start** and **Authentication Failure**.)
Mail Text	Configures the text of the e-mail to be sent. The length of the text can be up to 1024 alphanumeric characters. (Except **Cold Start** and **Authentication Failure**.)

Click **[Apply]** button to save the settings.

> **NOTE** • The trigger of Filter Error e-mail is depending on the FILTER MESSAGE setting in the SERVICE item of the OPTION Menu which defines the period until the filter message is displayed on the projector screen. The e-mail will be sent when the filter timer exceeds 50, 100, 200, 300, 400, 500, 600, 700 or 800 hours based on the configuration. No notification e-mail will be sent if the FILTER MESSAGE is set to TURN OFF. (*OPTION Menu in the User's Manual (detailed) – Operating Guide*)
> • Lamp Time Alarm is defined as a threshold for e-mail notification (reminder) of the lamp timer. When the lamp hour exceeds this threshold that is configured through the Web page, the e-mail will be sent out.
> • Filter Time Alarm is defined as a threshold for e-mail notification (reminder) of the filter timer. When the filter hour exceeds this threshold, the e-mail will be sent out.

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3.1 Configuring and controlling the projector via a web browser (continued)

3.1.7 Schedule Settings
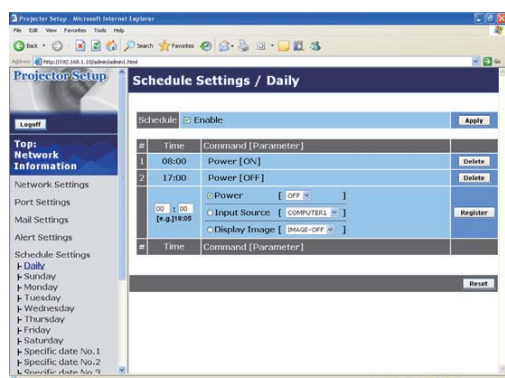
Displays and configures schedule settings.

Item	Description
Daily	Configures the daily schedule.
Sunday	Configures the Sunday schedule.
Monday	Configures the Monday schedule.
Tuesday	Configures the Tuesday schedule.
Wednesday	Configures the Wednesday schedule.
Thursday	Configures the Thursday schedule.
Friday	Configures the Friday schedule.
Saturday	Configures the Saturday schedule.
Specific date No.1	Configures the specific date (No.1) schedule.
Specific date No.2	Configures the specific date (No.2) schedule.
Specific date No.3	Configures the specific date (No.3) schedule.
Specific date No.4	Configures the specific date (No.4) schedule.
Specific date No.5	Configures the specific date (No.5) schedule.

3.1 Configuring and controlling the projector via a web browser (continued)

The daily and weekly event items are shown below.

Item	Daily & Weekly Description
Schedule	Click **[Enable]** check box to enable the schedule.
Schedule List	Displays the current schedule.

The specific date event items are shown below.

Item	Specific date (No.1-5) Description
Schedule	Click **[Enable]** check box to enable specific date (No.1-5) schedule.
Date (Month/Day)	Configures the month and date.
Schedule List	Displays the current specific date (No.1-5) schedule.

Click **[Apply]** button to save the settings.

To add additional functions and events, click **[Add]** button and set the following items.

Item		Description
Time		Configures the time to execute commands.
Command [Parameter]		Configures the commands to be executed.
	Power	Configures the parameters for power control.
	Input Source	Configures the parameters for input switching.
	Display Image	Configures the parameters for display of transfer image data.

Click **[Register]** button to add new commands to the Schedule List.

Click **[Delete]** button to delete commands from the Schedule List.

Click **[Reset]** button to delete all commands from the Schedule List.

> **NOTE** • After the projector is moved, check the date and time set for the projector before configuring the schedules. Strong shock may make the date and time settings (📖*23*) get out of tune.

3.1 Configuring and controlling the projector via a web browser (continued)

3.1.8 Date/Time Settings
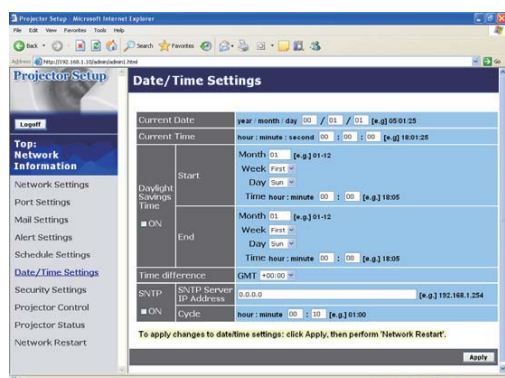
Displays and configures the date and time settings.

Item				Description
Current Date				Configures the current date in **year/month/day** format.
Current Time				Configures the current time in **hour:minute:second** format.
Daylight Savings Time				Click **[ON]** check box to enable daylight savings time and set the following items.
	Start			Configures the date and time daylight savings time begins.
		Month		Configures the month daylight savings time begins (1~12).
		Week		Configures the week of the month daylight savings time begins (First, 2, 3, 4, Last).
		Day		Configures the day of the week daylight savings time begins (Sun, Mon, Tue, Wed, Thu, Fri, Sat).
		Time	**hour**	Configures the hour daylight savings time begins (0 ~ 23).
			minute	Configures the minute daylight savings time begins (0 ~ 59).
	End			Configures the date and time daylight savings time ends.
		Month		Configures the month daylight savings time ends (1 ~ 12).
		Week		Configures the week of the month daylight savings time ends (First, 2, 3, 4, Last).
		Day		Configures the day of the week daylight savings time ends (Sun, Mon, Tue, Wed, Thu, Fri, Sat).
		Time	**hour**	Configures the hour daylight savings time ends (0 ~ 23).
			minute	Configures the minute daylight savings time ends (0 ~ 59).

3.1 Configuring and controlling the projector via a web browser (continued)

Item	Description
Time difference	Configures the time difference. Set the same time difference as the one set on your PC. If unsure, consult your IT manager.
SNTP	Click the **[ON]** check box to retrieve Date and Time information from the SNTP server and set the following items.
SNTP Server IP Address	Configures the SNTP server address in IP format. • The address allows not only IP address but also domain name if the valid DNS server is setup in the **Network Settings**. The maximum length of host or domain name is up to 255 characters.
Cycle	Configures the interval at which to retrieve Date and Time information from the SNTP server (**hours:minutes**).

Click **[Apply]** button to save the settings.

NOTE • The new configuration settings are activated after restarting the network connection. When the configuration settings are changed, you must restart the network connection. You can restart the network connection by clicking **[Network Restart]** on the main menu.
• If you connect the projector to an existing network, consult a network administrator before setting server addresses.
• To enable the SNTP function, the time difference must be set.
• The projector will retrieve Date and Time information from the time server and override time settings when SNTP is enabled.
• The internal clock's time may not remain accurate. Using SNTP is recommended to maintain accurate time.

3.1 Configuring and controlling the projector via a web browser (continued)

3.1.9 Security Settings
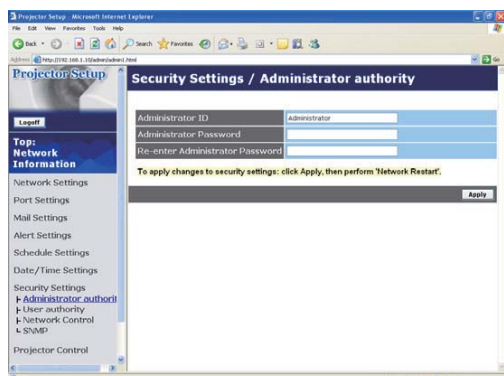
Displays and configures passwords and other security settings.

Item	Description
Administrator authority	Configures the Administrator ID and password.
Administrator ID	Configures the Administrator ID. The length of the text can be up to 32 alphanumeric characters.
Administrator Password	Configures the Administrator password. The length of the text can be up to 255 alphanumeric characters.
Re-enter Administrator Password	Reenter the above password for verification.
User authority	Configures the User ID and password.
User ID	Configures the User ID. The length of the text can be up to 32 alphanumeric characters.
User Password	Configures the User password. The length of the text can be up to 255 alphanumeric characters.
Re-enter User Password	Reenter the above password for verification.

3.1 Configuring and controlling the projector via a web browser (continued)

Item		Description
Network Control		Configures the Authentication password for the command control.
	Authentication Password	Configures the Authentication password. The length of the text can be up to 32 alphanumeric characters.
	Re-enter Authentication Password	Reenter the above password for verification.
SNMP		Configures the community name if SNMP is used.
	Community name	Configures the community name. The length of the text can be up to 64 alphanumeric characters.

Click **[Apply]** button to save the settings.

> **NOTE** • The new configuration settings are activated after restarting the network connection. When the configuration settings are changed, you must restart the network connection. You can restart the network connection by clicking **[Network Restart]** on the main menu.
> • Only numbers '0-9' and alphabet 'a-z', 'A-Z' can be used.

3.1 Configuring and controlling the projector via a web browser (continued)

3.1.10 Projector Control
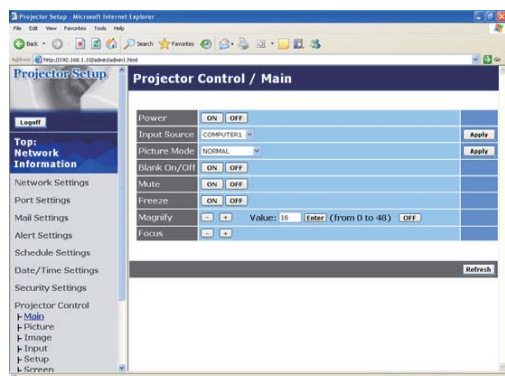
The items shown in the table below can be performed using the Projector Control menu. Select an item using the up and down arrow keys on the PC.

Most of the items have a submenu. Refer to the table below for details.

NOTE • The setting value may not match with the actual value if the user changes the value manually. In that case, please refresh the page by clicking **[Refresh]** button.

Controls the projector.

Item		Description
Main		
	Power	Turns the power on/off.
	Input Source	Selects the input source.
	Picture Mode	Selects the picture mode setting.
	Blank On/Off	Turns Blank on/off.
	Mute	Turns Mute on/off.
	Freeze	Turns Freeze on/off.
	Magnify	Controls the magnify setting. In some input signal sources, it might stop "Magnify" even though it does not reach to maximum setting value. The variable range: • For a Computer signal 0-48 • For a video, component or s-video signal 0-16
	Focus	Adjusts the focus.
Picture		
	Brightness	Adjusts the brightness setting.
	Contrast	Adjusts the contrast setting.
	Gamma	Selects the gamma setting.
	Color Temp	Selects the color temperature setting.
	Color	Adjusts the color setting.
	Tint	Adjusts the tint setting.
	Sharpness	Adjusts the sharpness setting.
	MyMemory Save	Saves the MyMemory data.
	MyMemory Recall	Recalls the MyMemory data.

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3.1 Configuring and controlling the projector via a web browser (continued)

Item	Description
Image	
Aspect	Selects the aspect setting.
Over Scan	Adjusts the over scan setting.
V Position	Adjusts the vertical position.
H Position	Adjusts the horizontal position.
H Phase	Adjusts the horizontal phase.
H Size	Adjusts the horizontal size.
Auto Adjust Execute	Performs the automatic adjustment.
Input	
Progressive	Selects the progressive setting.
Video NR	Selects the video noise reduction setting.
Color Space	Selects the color space.
Component	Selects the component terminal setting.
C-Video Format	Selects the video format setting.
S-Video Format	Selects the s-video format setting.
Frame Lock-Computer1	Turns the frame lock-Computer1 function on/off.
Frame Lock-Computer2	Turns the frame lock-Computer2 function on/off.
Computer in-1	Selects the Computer1 input signal type.
Computer in-2	Selects the Computer2 input signal type.
Setup	
D-Zoom	Adjusts the zoom.
D-Shift V	Adjust the vertical picture position.
D-Shift H	Adjust the horizontal picture position.
Keystone V	Adjusts the vertical keystone distortion setting.
Whisper	Selects the whisper mode.
Mirror	Selects the mirror status.
Volume	Adjusts the volume setting.
Speaker	Turns the built-in speaker on/off.
Audio-Computer1	Assigns the AUDIO-COMPUTER IN1 input port.
Audio-Computer2	Assigns the AUDIO-COMPUTER IN2 input port.
Audio-Component	Assigns the AUDIO-COMPONENT input port.
Audio-S-Video	Assigns the AUDIO-S-VIDEO input port.
Audio-Video	Assigns the AUDIO-VIDEO input port.

3.1 Configuring and controlling the projector via a web browser (continued)

Item	Description
Screen	
Language	Selects the language for the OSD.
Menu Position V	Adjusts the vertical Menu position.
Menu Position H	Adjusts the horizontal Menu position.
Blank	Selects the Blank mode.
Startup	Selects the startup screen mode.
MyScreen Lock	Turns MyScreen lock function on/off.
Message	Turns the message function on/off.
Option	
Auto Search	Turns the automatic signal search function on/off.
Auto on	Turns the auto on function on/off.
Auto off	Configures the timer to shut off the projector when no signal is detected.
My Button-1	Assigns the functions for the MY BUTTON1 buttons on the included remote control.
My Button-2	Assigns the functions for the MY BUTTON2 buttons on the included remote control.
Focus Lock	Turns the focus lock function on/off.
Remote Receiv. Front	Enable/Disable remote receiv. front.
Remote Receiv. Top	Enable/Disable remote receiv. top.
Remote Freq. Normal	Enables/Disables the remote control signal frequency normal.
Remote Freq. High	Enables/Disables the remote control signal frequency high.
Closed Caption	
Display	Selects Closed Caption DISPLAY setting.
Mode	Selects Closed Caption MODE setting.
Channel	Selects Closed Caption CHANNEL setting.

3.1 Configuring and controlling the projector via a web browser (continued)

3.1.11 Projector Status
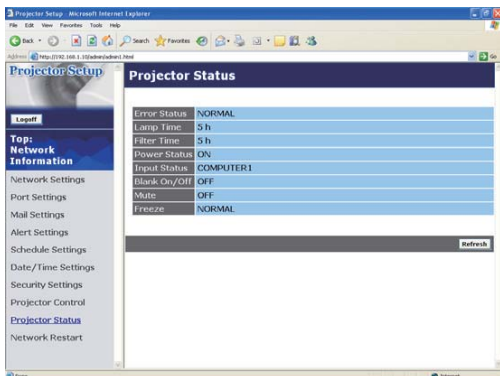
Displays and configures the current projector status.

Item	Description
Error Status	Displays the current error status
Lamp Time	Displays the usage time for the current lamp.
Filter Time	Displays the usage time for the current filter.
Power Status	Displays the current power status.
Input Status	Displays the current input signal source.
Blank On/Off	Displays the current Blank on/off status.
Mute	Displays the current Mute on/off status.
Freeze	Displays the current Freeze status.

3.1 Configuring and controlling the projector via a web browser (continued)

3.1.12 Network Restart
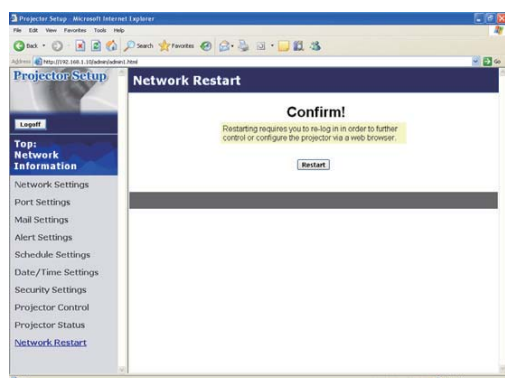
Restarts the projector's network connection.

Item	Description
Restart	Restarts the projector's network connection in order to activate new configuration settings.

NOTE • Restarting requires you to re-log on in order to further control or configure the projector via a web browser. Wait 1 minute or more after clicking **[Restart]** button to log on again.
• The Logon menu (&13) is displayed after restarting the projector's network connection if the DHCP is set to ON.

3.1.13 Logoff

When **[Logoff]** is clicked, the Logon menu is displayed. (&13)

3.2 E-mail Alerts

The projector can automatically send an alert message to the specified e-mail addresses when the projector detects a certain condition that is requiring maintenance or detected an error.

> **NOTE** • Up to five e-mail addresses can be specified.
> • The projector may be not able to send e-mail if the projector suddenly loses power.

Mail Settings (&*18*)

To use the projector's e-mail alert function, please configure the following items through a web browser.
Example: If the IP address of the projector is set to 192.168.1.10:

1) Enter **"http://192.168.1.10/"** into the address bar of the web browser.
2) Enter the Administrator ID and password and click **[Logon]**.
3) Click **[Port Settings]** on the main menu.
4) Click **[Enable]** check box to open the SMTP Port.
5) Click **[Apply]** button to save the settings.

> **NOTE** • A Network Restart is required after the **SMTP Port** configuration settings have changed. Click **[Network Restart]** and configure the following items.

6) Click **[Mail Settings]** and configure each item. Refer to **the item 3.1.5 Mail Settings** (&*18*) for further information.
7) Click **[Apply]** button to save the settings.

> **NOTE** • Click **[Send Test Mail]** button in **[Mail Settings]** to confirm that the e-mail settings are correct. The following mail will be delivered to the specified addresses.

Subject line : Test Mail   <Projector name>
Text   :Send Test Mail
      Date   <Testing date>
      Time   <Testing time>
      IP Address   <Projector IP address>
      MAC Address   <Projector MAC address>

3.2 E-mail Alerts *(continued)*

8) Click **[Alert Settings]** on the main menu to configure the E-mail Alerts settings.
9) Select and configure each alert item. Refer to the item 3.1.6 Alert Setting (📖*19*)
   for further information.
10) Click **[Apply]** button to save the settings.

Failure/Warning e-mails are formatted as follows:

Subject line	: <Mail title>	<Projector name>
Text	: <Mail text>	
	Date	<Failure/Warning date>
	Time	<Failure/Warning time>
	IP Address	<Projector IP address>
	MAC Address	<Projector MAC address>

3.3 Projector Management using SNMP

The SNMP (Simple Network Management Protocol) enables to manage the projector information, which is a failure or warning status, from the computer on the network. The SNMP management software will be required on the computer to use this function.

> **NOTE** • It is recommended that SNMP functions be carried out by a network administrator.
> • SNMP management software must be installed on the computer to monitor the projector via SNMP.

SNMP Settings (📖*17*)

Configure the following items via a web browser to use SNMP.
Example: If the IP address of the projector is set to 192.168.1.10:

1) Enter **"http://192.168.1.10/"** into the address bar of the web browser.
2) Enter the Administrator ID and Password and click **[Logon]**.
3) Click **[Port Settings]** on the main menu.
4) Click **[Enable]** check box to open the **SNMP Port**. Set the IP address to send the SNMP trap to when a Failure/Warning occurs.

> **NOTE** • A Network Restart is required after the **SNMP Port** configuration settings have been changed. Click **[Network Restart]** and configure the following items.

5) Click **[Security Settings]** on the main menu.
6) Click **[SNMP]** and set the community name on the screen that is displayed.

> **NOTE** • A Network Restart is required after the **Community Name** has been changed. Click **[Network Restart]** and configure the following items.

7) Configure the settings for Trap transmission of Failures/Warnings. Click **[Alert Settings]** on the main menu and select the Failure/Warning item to be configured.
8) Click **[Enable]** check box to send out the SNMP trap for Failures/Warnings. Clear **[Enable]** check box when SNMP trap transmission is not required.
9) Click **[Apply]** button to save the settings.

3.4 Event Scheduling

The scheduling function enables to setup scheduled events including power on / power off. It enables to be "self-management" projector.
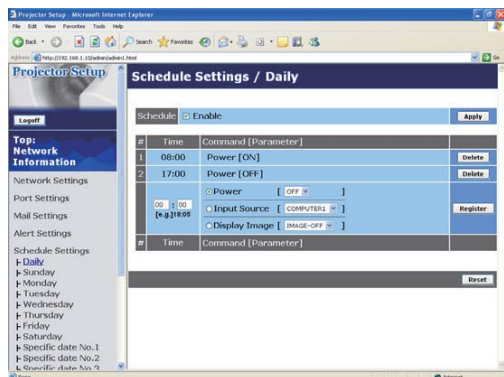
NOTE   • You can schedule the following control events: Power ON/OFF, Input Source and Transferred Image Display.
• The power on / off event has the lowest priority among the all events that are defined at the same time.
• There are 3 types of Scheduling, 1) daily 2) weekly 3) specific date. (&21)
• The priority for scheduled events is as follows 1) specific date 2) weekly 3) daily.
• Up to five specific dates are available for scheduled events. Priority is given to those with the lower numbers when more than one event has been scheduled for the same date and time (e.g., 'Specific day No. 1' has priority over 'Specific day No. 2' and so on.
• Be sure to set the date and time before enabling scheduled events. (&23)

3.4 Event Scheduling (continued)

Schedule Settings (📖21)

Schedule settings can be configured from a web browser.
Example: If the IP address of the projector is set to 192.168.1.10:

1) Enter **"http://192.168.1.10/"** into the address bar of the web browser.
2) Enter the Administrator ID and password and click **[Logon]**.
3) Click **[Schedule Settings]** on the main menu and select the required schedule item. For example, if you want to perform the command every Sunday, please select **[Sunday]**.
4) Click **[Enable]** check box to enable scheduling.
5) Enter the date (month/day) for specific date scheduling.
6) Click **[Apply]** button to save the settings.
7) Click **[Add]** to create new event. After configure the time, command and parameters, click **[Register]** to add the new event. To return the previous page, click **[Cancel]** button.
8) Click **[Delete]** button when you want to delete a schedule.

There are three types of scheduling.
1) Daily: Perform the specified operation at a specified time every day.
2) Sunday ~ Saturday: Perform the specified operation at the specified time on a specified day of the week.
3) Specific Date: Perform the specified operation on the specified date and time.

NOTE • In Standby mode the power indicator will flash green for approx. 3 seconds when at least 1 "Power ON" schedule is saved.
• When the schedule function is used, the power cord must be connected to the projector and the outlet and the power switch must be turned on, [|]. The schedule function does not work when the power switch is turned off, [O] or the breaker in a room is tripped. The power indicator will lights orange or green when the projector gets is receiving the power.

3.4 Event Scheduling (continued)

Date/Time Settings (&23)

The Date/Time setting can be adjusted via a web browser.
Example: If the IP address of the projector is set to 192.168.1.10:

1) Enter **"http://192.168.1.10/"** into the address bar of the web browser. Enter the Administrator ID and Password and click **[Logon]**.
2) Click **[Date/Time Settings]** on the main menu and configure each item. Refer to the item 3.1.8 Data/Time Settings for further information.
3) Click **[Apply]** button to save the settings.
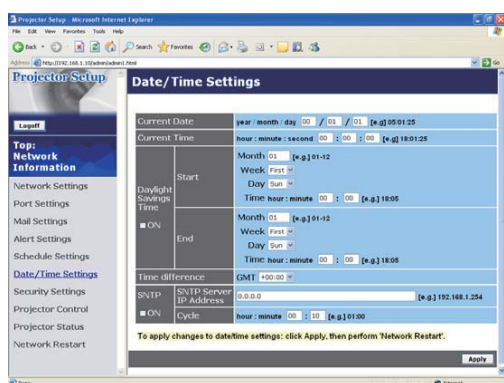
NOTE • A Network Restart is required after the **Daylight Savings Time** or **SNTP** configuration settings have been changed.
• The battery for the built in clock may be dead if the clock loses time even when the date and time have been set correctly. Replace the battery by following the instructions on replacing the battery.
(&*Internal clock battery in the User's Manual (concise)*)
• The internal clock's time may not remain accurate. Using SNTP is recommended to maintain accurate time.

3.5 e-SHOT (Still Image Transfer) Display

The projector can display still images that are transferred via the network.

Transfer image data

Display image data (🔴 - 🟣)
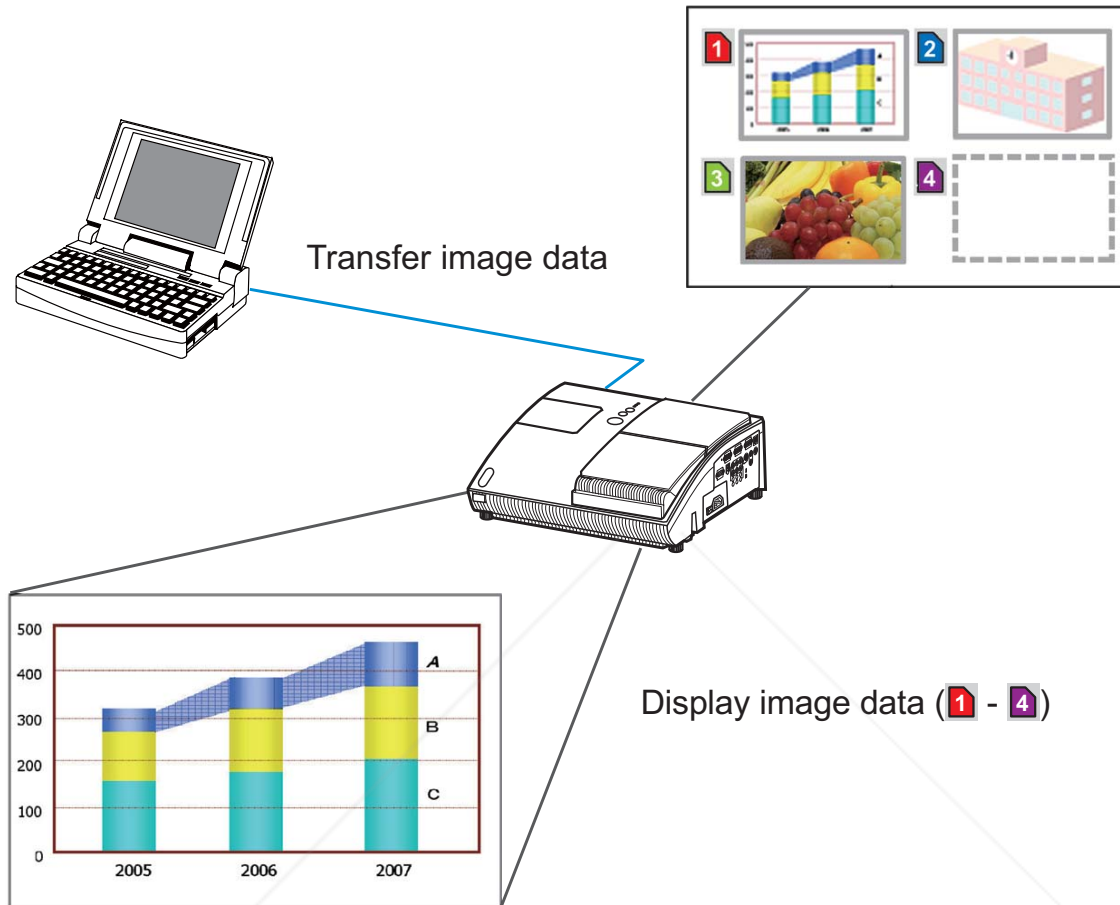
Fig. 3.5 Still Image Transfer

e-SHOT transmission requires an exclusive application for your PC. You can download it from the Hitachi web site (http://hitachi.us/digitalmedia or http://www.hitachidigitalmedia.com). Refer to the manual for the application for instructions.

To display the transferred image, select the e-SHOT item in the NETWORK Menu. For more information, please see the description of the e-SHOT item of the NETWORK Menu. (📖 *NETWORK Menu in User's Manual (detailed) – Operating Guide*)

NOTE • It is possible to allocate the image file up to 4 in the maximum.
• The image file also can be displayed by using schedule function from the web browser. Refer to *the item 3.4 Event Scheduling* (📖*35*) in detail.

3.5 e-SHOT (Still Image Transfer) Display (continued)

Configure the following items from a web browser when e-SHOT is used.
Example: If the IP address of the projector is set to 192.168.1.10:

1) Enter **"http://192.168.1.10/"** into the address bar of the web browser.
2) Enter the Administrator ID and password and click **[Logon]**.
3) Click **[Port Settings]** on the main menu.
4) Click the **[Enable]** check box to open the **Image Transfer Port (Port: 9716)**. Click the **[Enable]** check box for the **[Authentication]** setting when authentication is required, otherwise clear the check box.
5) Click the **[Apply]** button to save the settings.
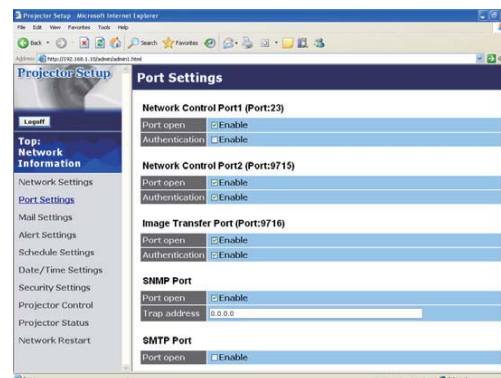
When the authentication setting is enabled, the following settings are required.

6) Click **[Security Settings]** on the main menu.
7) Select **[Network Control]** and enter the desired authentication password.
8) Click the **[Apply]** button to save the settings.

NOTE • The Authentication Password will be the same for **Network Control Port1 (Port: 23)**, **Network Control Port2 (Port: 9715)**, and **Image Transfer Port (Port: 9716)**.

• The new configuration settings are activated after restarting the network connection. When the configuration settings are changed, you must restart the network connection. You can restart the network connection by clicking **[Network Restart]** on the main menu.

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3.6 Command Control via the Network

You can configure and control the projector via the network using RS-232C commands.

Communication Port

The following two ports are assigned for the command control.
    TCP #23
    TCP #9715

NOTE • Command control is not available via communication port (TCP #9716) (&17) that is used for the e-SHOT transmission function.

Command Control Settings (&17)

Configure the following items from a web browser when command control is used. Example: If the IP address of the projector is set to 192.168.1.10:

1) Enter **"http://192.168.1.10/"** into the address bar of the web browser.
2) Enter the Administrator ID and password and click **[Logon]**.
3) Click **[Port Settings]** on the main menu.
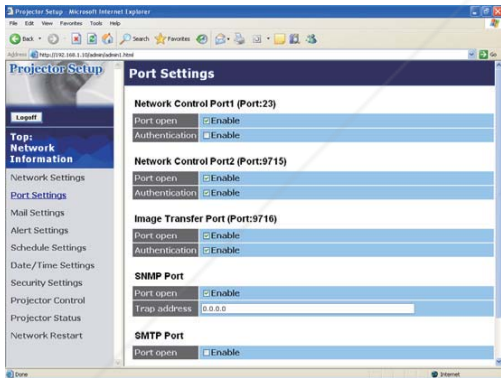
4) Click **[Enable]** check box to open **Network Control Port1 (Port: 23)** to use TCP #23. Click **[Enable]** check box for **[Authentication]** setting when authentication is required, otherwise clear the check box.
5) Click **[Enable]** check box to open **Network Control Port2 (Port: 9715)** to use TCP #9715. Click **[Enable]** check box for **[Authentication]** setting when authentication is required, otherwise clear the check box.
6) Click **[Apply]** button to save the settings.

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3.6 Command Control via the Network (continued)

When the authentication setting is enabled, the following settings are required.
(📖*25*)

7) Click **[Security Settings]** on the main menu.
8) Click **[Network Control]** and enter the desired authentication password.
   * See NOTE.
9) Click **[Apply]** button to save the settings.

NOTE • The Authentication Password will be the same for **Network Control Port1 (Port: 23), Network Control Port2 (Port: 9715)**, and **Image Transfer Port (Port: 9716)**.
• The new configuration settings are activated after restarting the network connection. When the configuration settings are changed, you must restart the network connection. You can restart the network connection by clicking **[Network Restart]** on the main menu.

3.6 Command Control via the Network (continued)

Command Format

Command formats differ among the different communication ports.

● TCP #23

You can use the RS-232C commands without any changes. The reply data format is the same as the RS-232C commands. However, the following reply will be sent back in the event of authentication failure when authentication is enabled.

<Reply in the event of an authentication error>

Reply	Error code	
0x1F	0x04	0x00

● TCP #9715

Send Data format

The following formatting is added to the header (0x02), Data length (0x0D), Checksum (1byte) and Connection ID (1 byte) of the RS-232C commands.

Header	Data length	RS-232C command	Check Sum	Connection ID
0x02	0x0D	13 bytes	1 byte	1 byte

Header	→	0x02, Fixed
Data length	→	RS-232C commands byte length (0x0D, Fixed)
RS-232C commands	→	RS-232C commands that start with 0xBE 0xEF (13 bytes)
Check Sum	→	This is the value to make zero on the addition of the lower 8 bits from the header to the checksum.
Connection ID	→	Random value from 0 to 255 (This value is attached to the reply data)

3.6 Command Control via the Network (continued)

Reply Data format

The connection ID (the data is same as the connection ID data on the sending data format) is attached to the RS-232C commands reply data.

<ACK reply>

Reply	Connection ID
0x06	1 byte

<NAK reply>

Reply	Connection ID
0x15	1 byte

<Error reply>

Reply	Error code	Connection ID
0x1C	2 bytes	1 byte

<Data reply>

Reply	Data	Connection ID
0x1D	2 bytes	1 byte

<Projector busy reply>

Reply	Status code	Connection ID
0x1F	2 bytes	1 byte

<Authentication error reply>

Reply	Authentication Error code		Connection ID
0x1F	0x04	0x00	1 byte

3.6 Command Control via the Network (continued)

Automatic Connection Break

The TCP connection will be automatically disconnected after there is no communication for 30 seconds after being established.

Authentication

The projector does not accept commands without authentication success when authentication is enabled. The projector uses a challenge response type authentication with an MD5 (Message Digest 5) algorithm.
When the projector is using a LAN, a random 8 bytes will be returned if authentication is enabled. Bind this received 8 bytes and the Authentication Password and digest this data with the MD5 algorithm and add this in front of the commands to send.

Following is a sample if the Authentication Password is set to "password" and the random 8 bytes are "a572f60c".

1) Select the projector.
2) Receive the random 8 bytes "a572f60c" from the projector.
3) Bind the random 8 bytes "a572f60c" and the Authentication Password "password" and it becomes "a572f60cpassword".
4) Digest this bind "a572f60cpassword" with MD5 algorithm.
   It will be "e3d97429adffa11bce1f7275813d4bde".
5) Add this "e3d97429adffa11bce1f7275813d4bde" in front of the commands and send the data.
   Send "e3d97429adffa11bce1f7275813d4bde"+command.
6) When the sending data is correct, the command will be performed and the reply data will be returned. Otherwise, an authentication error will be returned.

> **NOTE** • As for the transmission of the second or subsequent commands, the authentication data can be omitted when the same connection.

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ED-A100/ED-A110/CP-A100W
User's Manual (detailed)
Technical

Example of PC signal

Resolution (H x V)	H. frequency (kHz)	V. frequency (Hz)	Rating	Signal mode
720 x 400	37.9	85.0	VESA	TEXT
640 x 480	31.5	59.9	VESA	VGA (60Hz)
640 x 480	37.9	72.8	VESA	VGA (72Hz)
640 x 480	37.5	75.0	VESA	VGA (75Hz)
640 x 480	43.3	85.0	VESA	VGA (85Hz)
800 x 600	35.2	56.3	VESA	SVGA (56Hz)
800 x 600	37.9	60.3	VESA	SVGA (60Hz)
800 x 600	48.1	72.2	VESA	SVGA (72Hz)
800 x 600	46.9	75.0	VESA	SVGA (75Hz)
800 x 600	53.7	85.1	VESA	SVGA (85Hz)
832 x 624	49.7	74.5		Mac 16" mode
1024 x 768	48.4	60.0	VESA	XGA (60Hz)
1024 x 768	56.5	70.1	VESA	XGA (70Hz)
1024 x 768	60.0	75.0	VESA	XGA (75Hz)
1024 x 768	68.7	85.0	VESA	XGA (85Hz)
1152 x 864	67.5	75.0	VESA	1152 x 864 (75Hz)
1280 x 960	60.0	60.0	VESA	1280 x 960 (60Hz)
1280 x 1024	64.0	60.0	VESA	SXGA (60Hz)
1280 x 1024	80.0	75.0	VESA	SXGA (75Hz)
1280 x 1024	91.1	85.0	VESA	SXGA (85Hz)
1600 x 1200	75.0	60.0	VESA	UXGA (60Hz)
1280 x 768	47.7	60.0	VESA	W-XGA (60Hz)
1400 x 1050	65.2	60.0	VESA	SXGA+ (60Hz)

NOTE • Be sure to check jack type, signal level, timing and resolution before connecting this projector to a PC.
• Some PCs may have multiple display screen modes. Use of some of these modes will not be possible with this projector.
• Depending on the input signal, full-size display may not be possible in some cases. Refer to the number of display pixels above.
• Although the projector can display signals with resolution up to UXGA (1600x1200), the signal will be converted to the projector's panel resolution before being displayed. The best display performance will be achieved if the resolutions of the input signal and projector panel are identical.
• Automatic adjustment may not function correctly with some input signals.
• The image may not be displayed correctly when the input sync signal is a composite sync or a sync on G.

Initial set signals

The following signals are used for the initial settings. The signal timing of some PC models may be different. In such case, adjust the items V POSITION and H POSITION in IMAGE Menu.
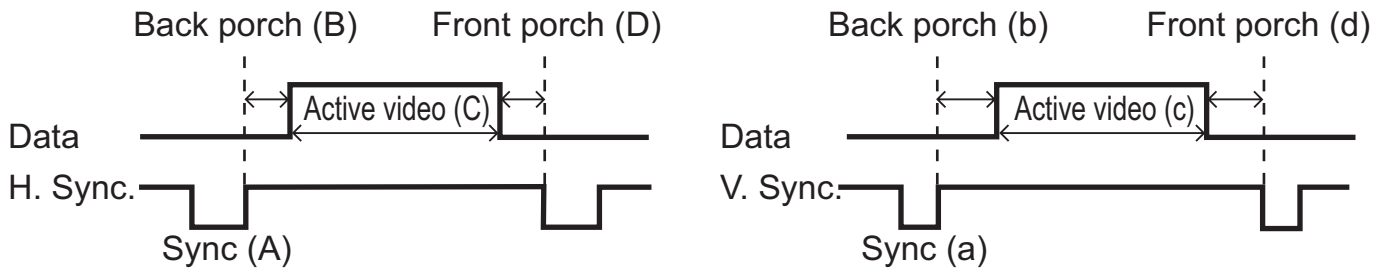
computer Signal	Horizontal signal timing (µs)			
	(A)	(B)	(C)	(D)
TEXT	2.0	3.0	20.3	1.0
VGA (60Hz)	3.8	1.9	25.4	0.6
VGA (72Hz)	1.3	4.1	20.3	0.8
VGA (75Hz)	2.0	3.8	20.3	0.5
VGA (85Hz)	1.6	2.2	17.8	1.6
SVGA (56Hz)	2.0	3.6	22.2	0.7
SVGA (60Hz)	3.2	2.2	20.0	1.0
SVGA (72Hz)	2.4	1.3	16.0	1.1
SVGA (75Hz)	1.6	3.2	16.2	0.3
SVGA (85Hz)	1.1	2.7	14.2	0.6
Mac 16" mode	1.1	3.9	14.5	0.6
XGA (60Hz)	2.1	2.5	15.8	0.4
XGA (70Hz)	1.8	1.9	13.7	0.3
XGA (75Hz)	1.2	2.2	13.0	0.2
XGA (85Hz)	1.0	2.2	10.8	0.5
1152 x 864 (75Hz)	1.2	2.4	10.7	0.6
1280 x 960 (60Hz)	1.0	2.9	11.9	0.9
SXGA (60Hz)	1.0	2.3	11.9	0.4
SXGA (75Hz)	1.1	1.8	9.5	0.1
SXGA (85Hz)	1.0	1.4	8.1	0.4
UXGA (60Hz)	1.2	1.9	9.9	0.4
W-XGA (60Hz)	1.7	2.5	16.0	0.8
SXGA+ (60Hz)	1.2	2.0	11.4	0.7

computer Signal	Vertical signal timing (lines)			
	(a)	(b)	(c)	(d)
TEXT	3	42	400	1
VGA (60Hz)	2	33	480	10
VGA (72Hz)	3	28	480	9
VGA (75Hz)	3	16	480	1
VGA (85Hz)	3	25	480	1
SVGA (56Hz)	2	22	600	1
SVGA (60Hz)	4	23	600	1
SVGA (72Hz)	6	23	600	37
SVGA (75Hz)	3	21	600	1
SVGA (85Hz)	3	27	600	1
Mac 16" mode	3	39	624	1
XGA (60Hz)	6	29	768	3
XGA (70Hz)	6	29	768	3
XGA (75Hz)	3	28	768	1
XGA (85Hz)	3	36	768	1
1152 x 864 (75Hz)	3	32	864	1
1280 x 960 (60Hz)	3	36	960	1
SXGA(60Hz)	3	38	1024	1
SXGA (75Hz)	3	38	1024	1
SXGA (85Hz)	3	44	1024	1
UXGA (60Hz)	3	46	1200	1
W-XGA (60Hz)	3	23	768	1
SXGA+ (60Hz)	3	33	1050	1

2

Connection to the ports
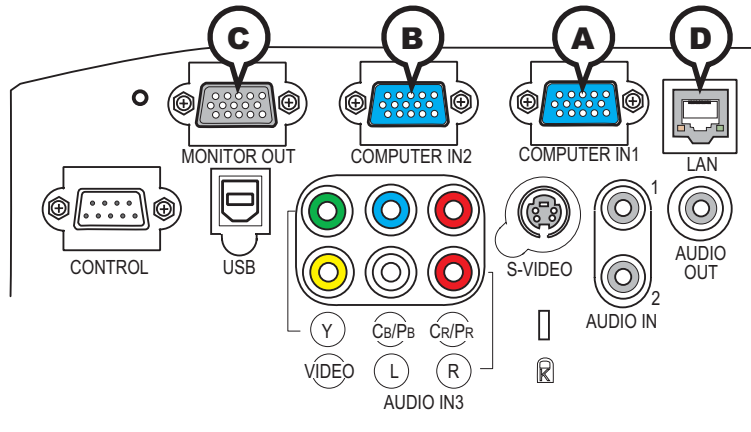
Ⓐ**COMPUTER IN1,** Ⓑ**COMPUTER IN2,** Ⓒ**MONITOR OUT**

D-sub 15pin mini shrink jack

• Video signal: RGB separate, Analog, 0.7Vp-p, 75Ω
  terminated (positive)
• H/V. sync. signal: TTL level (positive/negative)
• Composite sync. signal: TTL level
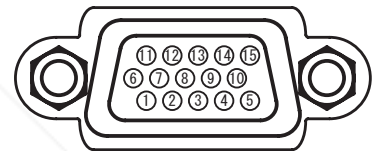
Pin	Signal	Pin	Signal
1	Video Red	10	Ground
2	Video Green	11	(No connection)
3	Video Blue	12	Ⓐ: SDA (DDC data)
4	(No connection)		Ⓑ, Ⓒ: (No connection)
5	Ground	13	H. sync / Composite sync.
6	Ground Red	14	V. sync.
7	Ground Green	15	Ⓐ: SCL (DDC clock)
8	Ground Blue		Ⓑ, Ⓒ: (No connection)
9	(No connection)	-	-

Ⓓ**LAN**

J-45 jack
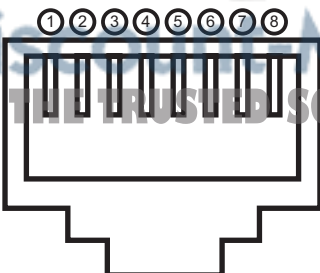
Pin	Signal	Pin	Signal	Pin	Signal
1	TX +	4	-	7	-
2	TX -	5	-	8	-
3	RX +	6	RX -	-	-

3

E Y, F Cʙ/Pʙ, G Cʀ/Pʀ (component video)

RCA jack x3

• System: 525i(480i), 525p(480p), 625i(576i), 750p(720p),1125i(1080i)

Port	Signal
Y	Component video Y, 1.0±0.1Vp-p, 75Ω terminator with composite sync
Cʙ/Pʙ	Component video Cʙ/Pʙ, 0.7±0.1Vp-p, 75Ω terminator
Cʀ/Pʀ	Component video Cʀ/Pʀ, 0.7±0.1Vp-p, 75Ω terminator

H S-VIDEO

Mini DIN 4pin jack

Pin	Signal
1	Color signal 0.286Vp-p (NTSC, burst), 75Ω terminator Color signal 0.300Vp-p (PAL/SECAM, burst) 75Ω terminator
2	Brightness signal, 1.0Vp-p, 75Ω terminator
3	Ground
4	Ground

I VIDEO

RCA jack

• System: NTSC, PAL, SECAM, PAL-M, PAL-N, NTSC4.43

• 1.0±0.1Vp-p, 75Ω terminator

4
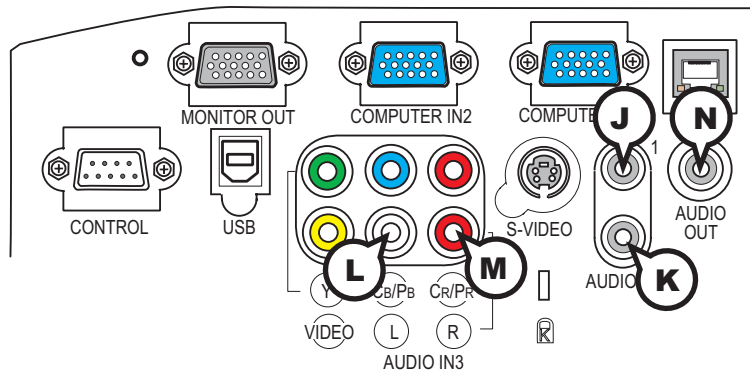
ⒿAUDIO IN1, ⓀAUDIO IN2

Ø3.5 stereo mini jack

• 200 mVrms 47kΩ terminator

AUDIO IN3 ⓁL, ⓂR

RCA jack x2

• 200 mVrms 47kΩ terminator

ⓃAUDIO OUT

Ø3.5 stereo mini jack

• 200 mVrms 1kΩ output impedance

To input SCART RGB signal;

ex.:

SCART connector
(jack)

SCART cable
(plug)

R
B
G
Video

Audio L
Audio R

RCA plugs
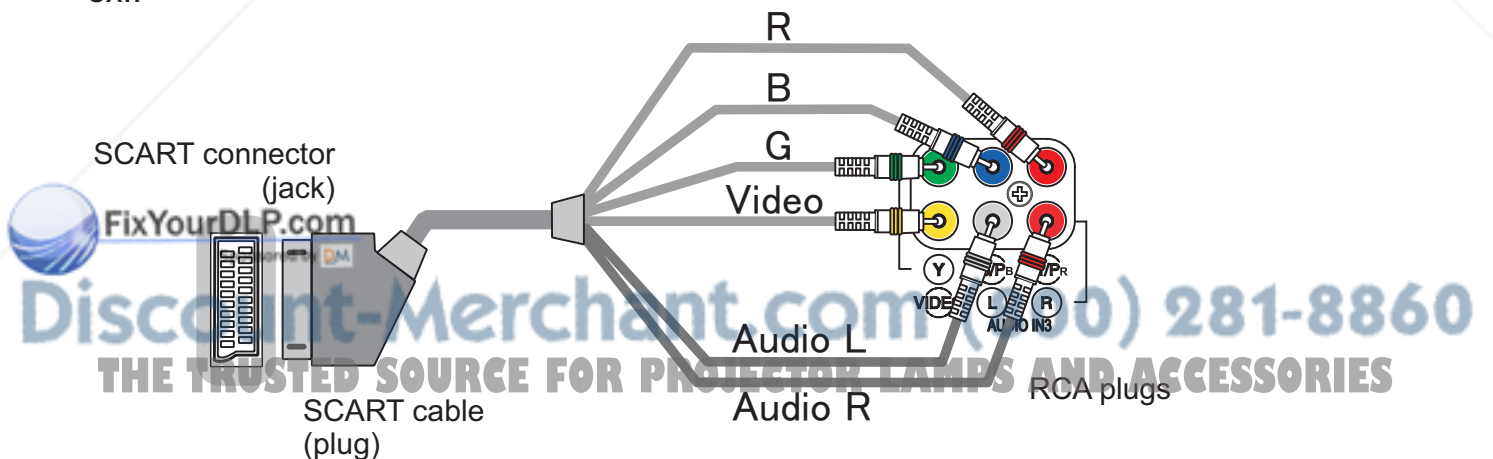
To input SCART RGB signal to the projector, use a SCART to RCA cable.
Connect the plugs refer to above ex.. For more reference, please consult your dealer.

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Ⓞ USB

USB B type jack

Pin	Signal
1	+5V
2	- Data
3	+ Data
4	Ground

Ⓟ CONTROL

D-sub 9pin plug

• About the details of RS-232C communication, please refer to the following page.
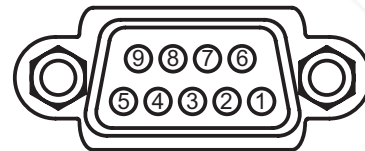
Pin	Signal	Pin	Signal	Pin	Signal
1	(No connection)	4	(No connection)	7	RTS
2	RD	5	Ground	8	CTS
3	TD	6	(No connection)	9	(No connection)

6

CONTROL port
of the projector

RS-232C cable (cross)

RS-232C port
of the computer

```
     - (1)              (1) CD
  RD (2)                (2) RD
  TD (3)                (3) TD
     - (4)              (4) DTR
 GND (5)                (5) GND
     - (6)              (6) DSR
 RTS (7)                (7) RTS
 CTS (8)                (8) DTS
     - (9)              (9) RI
```
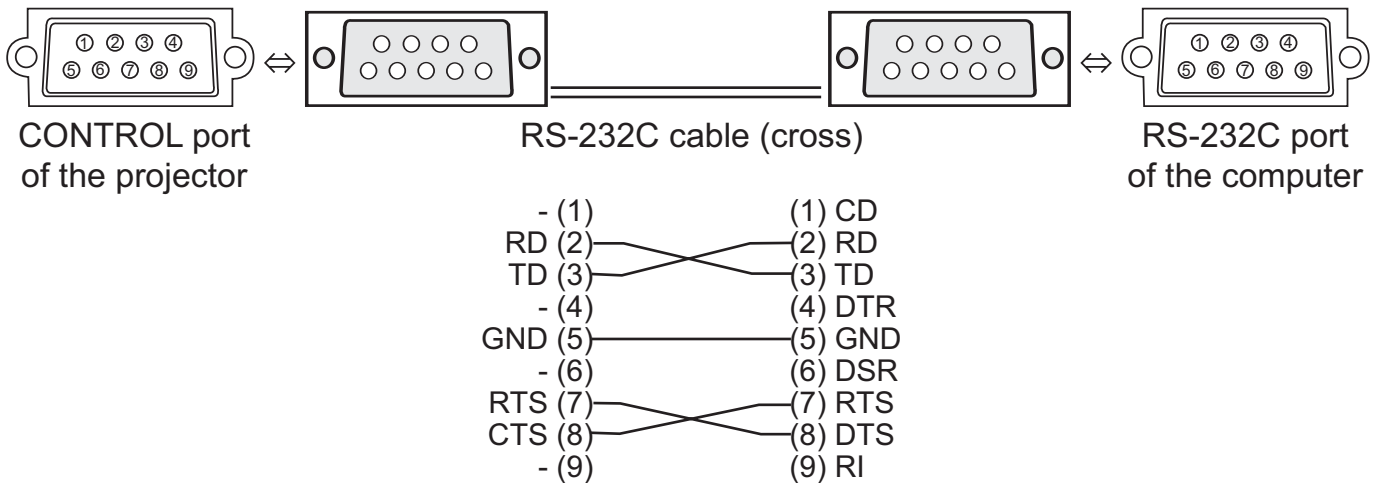
Connecting the cable

1. Turn off the projector and the computer.

2. Connect the CONTROL port of the projector with a RS-232C port of the computer by a RS-232C cable (cross). Use the cable that fulfills the specification shown in the previous page.

3. Turn the computer on, and after the computer has started up turn the projector on.

Communications setting

19200bps, 8N1

1. Protocol
Consist of header (7 bytes) + command data (6 bytes)

2. Header
BE + EF + 03 + 06 + 00 + CRC_low + CRC_high
CRC_low: Lower byte of CRC flag for command data
CRC_high: Upper byte of CRC flag for command data

3. Command data
Command data chart

byte_0	byte_1	byte_2	byte_3	byte_4	byte_5
Action		Type		Setting code	
low	high	low	high	low	high

Action (byte_0 - 1)

Action	Classification	Content
1	Set	Change setting to desired value.
2	Get	Read projector internal setup value.
4	Increment	Increment setup value by 1.
5	Decrement	Decrement setup value by 1.
6	Execute	Run a command.

Requesting projector status (Get command)

(1) Send the following request code from the PC to the projector.
  Header + Command data ('02H' + '00H' + type (2 bytes) + '00H' + '00H')
(2) The projector returns the response code *'1DH' + data (2 bytes)* to the PC.

Changing the projector settings (Set command)

(1) Send the following setting code from the PC to the projector.
  Header + Command data ('01H' + '00H' + type (2 bytes) + setting code (2 bytes))
(2) The projector changes the setting based on the above setting code.
(3) The projector returns the response code *'06H'* to the PC.

Using the projector default settings (Reset Command)

(1) The PC sends the following default setting code to the projector.
  Header + Command data ('06H' + '00H' + type (2 bytes) + '00H' + '00H')
(2) The projector changes the specified setting to the default value.
(3) The projector returns the response code *'06H'* to the PC.

Increasing the projector setting value (Increment command)

(1) The PC sends the following increment code to the projector.
  Header + Command data ('04H' + '00H' + type (2 bytes) + '00H' + '00H')
(2) The projector increases the setting value on the above setting code.
(3) The projector returns the response code *'06H'* to the PC.

Decreasing the projector setting value (Decrement command)

(1) The PC sends the following decrement code to the projector.
  Header + Command data ('05H' + '00H' + type (2 bytes) + '00H' + '00H')
(2) The projector decreases the setting value on the above setting code.
(3) The projector returns the response code *'06H'* to the PC.

When the projector cannot understand the received command

When the projector cannot understand the received command, the error code *'15H'* is sent back to the PC.

Sometimes the projector cannot properly receive the command. In such a case, the command is not executed and the error code *'15H'* is sent back to the PC. If this error code is returned, send the same command again.

When the projector cannot execute the received command.

When the projector cannot execute the received command, the error code *'1CH'* + *'xxxxH'* is sent back to the PC.

When the data length is greater than indicated by the data length code, the projector ignore the excess data code. Conversely when the data length is shorter than indicated by the data length code, an error code will be returned to the PC.

> **NOTE** • Operation cannot be guaranteed when the projector receives an undefined command or data.
> • Provide an interval of at least 40ms between the response code and any other code.
> • The projector outputs test data when the power supply is switched ON, and when the lamp is lit. Ignore this data.
> • Commands are not accepted during warm-up.

Command Control via the Network

Communication Port

The following two ports are assigned for the command control.

> TCP #23
> TCP #9715

Command Control Settings

Configure the following items form a web browser when command control is used.

Port Settings			
Netowrk Control Port1 (Port: 23)	Port open	Click the **[Enable]** check box to open **[Network Control Port1 (Port: 23)]** to use TCP #23. Default setting is "Enable".
	Authentication	Click the **[Enable]** check box for the **[Authentication]** setting when authentication is required. Default setting is "Disable".
Network Control Port2 (Port: 9715)	Port open	Click the **[Enable]** check box to open **[Network Control Port2 (Port: 9715)]** to use TCP #9715. Default setting is "Enable".
	Authentication	Click the **[Enable]** check box for the **[Authentication]** setting when authentication is required. Default setting is "Enable".

When the authentication setting is enabled, the following settings are required.

Security Settings		
Network Control	Authentication Password	Enter the desired authentication password. This setting will be the same for **[Network Control Port1 (Port: 23)]** and **[Network Control Port2 (Port: 9715)]**. Default setting is blank.
	Re-enter Authentication Password	

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Command Format

[TCP #23]

1. Protocol

Consist of header (7 bytes) + command data (6 bytes)

2. Header

BE + EF + 03 + 06 + 00 + CRC_low + CRC_high
CRC_low: Lower byte of CRC flag for command data
CRC_high: Upper byte of CRC flag for command data

3. Command data

Command data chart

byte_0	byte_1	byte_2	byte_3	byte_4	byte_5
Action		Type		Setting code	
low	high	low	high	low	high

Action (byte_0 - 1)

Action	Classification	Content
1	Set	Change setting to desired value.
2	Get	Read projector internal setup value.
4	Increment	Increment setup value by 1.
5	Decrement	Decrement setup value by 1.
6	Execute	Run a command.

Requesting projector status (Get command)
(1) Send the following request code from the PC to the projector.
   Header + Command data ('02H' + '00H' + type (2 bytes) + '00H' + '00H')
(2) The projector returns the response code *'1DH' + data (2 bytes)* to the PC.

Changing the projector settings (Set command)
(1) Send the following setting code from the PC to the projector.
   Header + Command data ('01H' + '00H' + type (2 bytes) + setting code (2 bytes))
(2) The projector changes the setting based on the above setting code.
(3) The projector returns the response code *'06H'* to the PC.

Using the projector default settings (Reset Command)
(1) The PC sends the following default setting code to the projector.
   Header + Command data ('06H' + '00H' + type (2 bytes) + '00H' + '00H')
(2) The projector changes the specified setting to the default value.
(3) The projector returns the response code *'06H'* to the PC.

Increasing the projector setting value (Increment command)
(1) The PC sends the following increment code to the projector.
   Header + Command data ('04H' + '00H' + type (2 bytes) + '00H' + '00H')
(2) The projector increases the setting value on the above setting code.
(3) The projector returns the response code *'06H'* to the PC.

Decreasing the projector setting value (Decrement command)
(1) The PC sends the following decrement code to the projector.
  Header + Command data ('05H' + '00H' + type (2 bytes) + '00H' + '00H')
(2) The projector decreases the setting value on the above setting code.
(3) The projector returns the response code *'06H'* to the PC.

When the projector cannot understand the received command
When the projector cannot understand the received command, the error code *'15H'* is sent back to the PC.
Sometimes the projector cannot properly receive the command. In such a case, the command is not executed and the error code *'15H'* is sent back to the PC. If this error code is returned, send the same command again.

When the projector cannot execute the received command.
When the projector cannot execute the received command, the error code *'1CH'* + *'xxxxH'* is sent back to the PC.
When the data length is greater than indicated by the data length code, the projector ignore the excess data code. Conversely when the data length is shorter than indicated by the data length code, an error code will be returned to the PC.

When authentication error occurred.
When authentication errorr occurred, the error code the *'1FH'* + *'0400H'* is sent back to the PC.

> **NOTE** • Operation cannot be guaranteed when the projector receives an undefined command or data.
> • Provide an interval of at least 40ms between the response code and any other code.
> • Commands are not accepted during warm-up.

[TCP #9715]

1. Protocol
Consist of header (1 byte) + data length (1 byte) + command data (13 bytes) + check sum (1 bytes) + connection ID (1 byte).

2. Header
02, Fixed

3. Data Length
Network control commands byte length (0D, Fixed)

4. Command data
Network control commands that start with BE EF (13bytes).

5. Check Sum
This is the value to make zero on the addition of the lower 8 bits from the header to the check sum.

6. Connection ID
Random value from 0 to 255 (This value is attached to the reply data).

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7. Reply Data

The connection ID (the data is same as the connection ID data on the sending data format) is attached to the Network control commands reply data.

ACK reply: *'06H'* + *'xxH'*
NAK reply: *'15H'* + *'xxH'*
Error reply: *'1CH'* + *'xxxxH'* + *'xxH'*
Data reply: *'1DH'* + *'xxxxH'* + *'xxH'*
Projector busy reply: *'1FH'* + *'xxxxH'* + *'xxH'*
Authentication error reply: *'1FH'* + *'0400H'* + *'xxH'*
(*'xxH'* : connection ID)

Automatic Connection Break

The TCP connection will be automatically disconnected after there is no communication for 30 seconds after being established.

Authentication

The projector does not accept commands without authentication success when authentication is enabled. The projector uses a challenge response type authentication with an MD5 (Message Digest 5) algorithm. When the projector is using a LAN, a random 8 bytes will be returned if authentication is enabled. Bind this received 8 bytes and the authentication password and digest this data with the MD5 algorithm and add this in front of the commands to send.

Following is a sample if the authentication password is set to "password" and the random 8 bytes are "a572f60c".

1) Select the projector.
2) Receive the random 8 bytes "a572f60c" from the projector.
3) Bind the random 8 bytes "a572f60c" and the authentication password "password" and it becomes "a572f60cpassword".
4) Digest this bind "a572f60cpassword" with MD5 algorithm.
   It will be "e3d97429adffa11bce1f7275813d4bde".
5) Add this "e3d97429adffa11bce1f7275813d4bde" in front of the commands and send the data.
   Send "e3d97429adffa11bce1f7275813d4bde"+command.
6) When the sending data is correct, the command will be performed and the reply data will be returned. Otherwise, an authentication error will be returned.

> **NOTE** • As for the transmission of the second or subsequent commands, the authentication data can be omitted when the same connection.

RS-232C communication / Network command table

Names	Operation Type		Header			Command Data		
					CRC	Action	Type	Setting Code
Power	Set	Turn off	BE EF	03 06 00	2A D3	01 00	00 60	00 00
		Turn on	BE EF	03 06 00	BA D2	01 00	00 60	01 00
	Get		BE EF	03 06 00	19 D3	02 00	00 60	00 00
			[Example return] 00 00 _[Off]_	01 00 _[On]_		02 00 _[Cool down]_		
Input Source	Set	COMPUTER1	BE EF	03 06 00	FE D2	01 00	00 20	00 00
		COMPUTER2	BE EF	03 06 00	3E D0	01 00	00 20	04 00
		COMPONENT	BE EF	03 06 00	AE D1	01 00	00 20	05 00
		S-VIDEO	BE EF	03 06 00	9E D3	01 00	00 20	02 00
		VIDEO	BE EF	03 06 00	6E D3	01 00	00 20	01 00
	Get		BE EF	03 06 00	CD D2	02 00	00 20	00 00
Error Status	Get		BE EF	03 06 00	D9 D8	02 00	20 60	00 00
			[Example return] 00 00 [Normal] 04 00 [Temp error] 08 00 [Filter error]	01 00 [Cover error] 05 00 [Air flow error] 0C 00 [Lens door error]	02 00 [Fan error] 06 00 [Lamp time error]	03 00 [Lamp error] 07 00 [Cold error]		
BRIGHTNESS	Get		BE EF	03 06 00	89 D2	02 00	03 20	00 00
	Increment		BE EF	03 06 00	EF D2	04 00	03 20	00 00
	Decrement		BE EF	03 06 00	3E D3	05 00	03 20	00 00
BRIGHTNESS Reset	Execute		BE EF	03 06 00	58 D3	06 00	00 70	00 00
CONTRAST	Get		BE EF	03 06 00	FD D3	02 00	04 20	00 00
	Increment		BE EF	03 06 00	9B D3	04 00	04 20	00 00
	Decrement		BE EF	03 06 00	4A D2	05 00	04 20	00 00
CONTRAST Reset	Execute		BE EF	03 06 00	A4 D2	06 00	01 70	00 00
PICTURE MODE	Set	NORMAL	BE EF	03 06 00	23 F6	01 00	BA 30	00 00
		CINEMA	BE EF	03 06 00	B3 F7	01 00	BA 30	01 00
		DYNAMIC	BE EF	03 06 00	E3 F4	01 00	BA 30	04 00
		BOARD(BLACK)	BE EF	03 06 00	E3 EF	01 00	BA 30	20 00
		BOARD(GREEN)	BE EF	03 06 00	73 EE	01 00	BA 30	21 00
		WHITEBOARD	BE EF	03 06 00	83 EE	01 00	BA 30	22 00
		DAYTIME	BE EF	03 06 00	E3 C7	01 00	BA 30	40 00
	Get		BE EF	03 06 00	10 F6	02 00	BA 30	00 00
			[Example return] 00 00 [NORMAL] 20 00 [BOARD(BLACK)]	01 00 [CINEMA] 21 00 [BOARD(GREEN)]	04 00 [DYNAMIC] 22 00 [WHITEBOARD]	10 00 [CUSTOM] 40 00 [DAY TIME]		
GAMMA	Set	#1 DEFAULT	BE EF	03 06 00	07 E9	01 00	A1 30	20 00
		#1 CUSTOM	BE EF	03 06 00	07 FD	01 00	A1 30	10 00
		#2 DEFAULT	BE EF	03 06 00	97 E8	01 00	A1 30	21 00
		#2 CUSTOM	BE EF	03 06 00	97 FC	01 00	A1 30	11 00
		#3 DEFAULT	BE EF	03 06 00	67 E8	01 00	A1 30	22 00
		#3 CUSTOM	BE EF	03 06 00	67 FC	01 00	A1 30	12 00
		#4 DEFAULT	BE EF	03 06 00	F7 E9	01 00	A1 30	23 00
		#4 CUSTOM	BE EF	03 06 00	F7 FD	01 00	A1 30	13 00
		#5 DEFAULT	BE EF	03 06 00	C7 EB	01 00	A1 30	24 00
		#5 CUSTOM	BE EF	03 06 00	C7 FF	01 00	A1 30	14 00
		#6 DEFAULT	BE EF	03 06 00	57 EA	01 00	A1 30	25 00
		#6 CUSTOM	BE EF	03 06 00	57 FE	01 00	A1 30	15 00
	Get		BE EF	03 06 00	F4 F0	02 00	A1 30	00 00

(continued on next page)

RS-232C communication / Network command table (continued)

Names	Operation Type		Header			CRC	Command Data		
							Action	Type	Setting Code
User Gamma Pattern	Set	Off	BE EF	03	06 00	FB FA	01 00	80 30	00 00
		9 steps gray scale	BE EF	03	06 00	6B FB	01 00	80 30	01 00
		15 steps gray scale	BE EF	03	06 00	9B FB	01 00	80 30	02 00
		Ramp	BE EF	03	06 00	0B FA	01 00	80 30	03 00
	Get		BE EF	03	06 00	C8 FA	02 00	80 30	00 00
User Gamma Point 1	Get		BE EF	03	06 00	08 FE	02 00	90 30	00 00
	Increment		BE EF	03	06 00	6E FE	04 00	90 30	00 00
	Decrement		BE EF	03	06 00	BF FF	05 00	90 30	00 00
User Gamma Point 2	Get		BE EF	03	06 00	F4 FF	02 00	91 30	00 00
	Increment		BE EF	03	06 00	92 FF	04 00	91 30	00 00
	Decrement		BE EF	03	06 00	43 FE	05 00	91 30	00 00
User Gamma Point 3	Get		BE EF	03	06 00	B0 FF	02 00	92 30	00 00
	Increment		BE EF	03	06 00	D6 FF	04 00	92 30	00 00
	Decrement		BE EF	03	06 00	07 FE	05 00	92 30	00 00
User Gamma Point 4	Get		BE EF	03	06 00	4C FE	02 00	93 30	00 00
	Increment		BE EF	03	06 00	2A FE	04 00	93 30	00 00
	Decrement		BE EF	03	06 00	FB FF	05 00	93 30	00 00
User Gamma Point 5	Get		BE EF	03	06 00	38 FF	02 00	94 30	00 00
	Increment		BE EF	03	06 00	5E FF	04 00	94 30	00 00
	Decrement		BE EF	03	06 00	8F FE	05 00	94 30	00 00
User Gamma Point 6	Get		BE EF	03	06 00	C4 FE	02 00	95 30	00 00
	Increment		BE EF	03	06 00	A2 FE	04 00	95 30	00 00
	Decrement		BE EF	03	06 00	73 FF	05 00	95 30	00 00
User Gamma Point 7	Get		BE EF	03	06 00	80 FE	02 00	96 30	00 00
	Increment		BE EF	03	06 00	E6 FE	04 00	96 30	00 00
	Decrement		BE EF	03	06 00	37 FF	05 00	96 30	00 00
User Gamma Point 8	Get		BE EF	03	06 00	7C FF	02 00	97 30	00 00
	Increment		BE EF	03	06 00	1A FF	04 00	97 30	00 00
	Decrement		BE EF	03	06 00	CB FE	05 00	97 30	00 00
COLOR TEMP	Set	HIGH	BE EF	03	06 00	0B F5	01 00	B0 30	03 00
		CUSTOM-1 (HIGH)	BE EF	03	06 00	CB F8	01 00	B0 30	13 00
		MID	BE EF	03	06 00	9B F4	01 00	B0 30	02 00
		CUSTOM-2 (MID)	BE EF	03	06 00	5B F9	01 00	B0 30	12 00
		LOW	BE EF	03	06 00	6B F4	01 00	B0 30	01 00
		CUSTOM-3 (LOW)	BE EF	03	06 00	AB F9	01 00	B0 30	11 00
		Hi-BRIGHT-1	BE EF	03	06 00	3B F2	01 00	B0 30	08 00
		CUSTOM-4 (Hi-BRIGHT-1)	BE EF	03	06 00	FB FF	01 00	B0 30	18 00
		Hi-BRIGHT-2	BE EF	03	06 00	AB F3	01 00	B0 30	09 00
		CUSTOM-5 (Hi-BRIGHT-2)	BE EF	03	06 00	6B FE	01 00	B0 30	19 00
		Hi-BRIGHT-3	BE EF	03	06 00	5B F3	01 00	B0 30	0A 00
		CUSTOM-6 (Hi-BRIGHT-3)	BE EF	03	06 00	9B FE	01 00	B0 30	1A 00
	Get		BE EF	03	06 00	C8 F5	02 00	B0 30	00 00
COLOR TEMP GAIN R	Get		BE EF	03	06 00	34 F4	02 00	B1 30	00 00
	Increment		BE EF	03	06 00	52 F4	04 00	B1 30	00 00
	Decrement		BE EF	03	06 00	83 F5	05 00	B1 30	00 00
COLOR TEMP GAIN G	Get		BE EF	03	06 00	70 F4	02 00	B2 30	00 00
	Increment		BE EF	03	06 00	16 F4	04 00	B2 30	00 00
	Decrement		BE EF	03	06 00	C7 F5	05 00	B2 30	00 00

14   (continued on next page)

RS-232C communication / Network command table (continued)

Names	Operation Type		Header		CRC	Command Data		
						Action	Type	Setting Code
COLOR TEMP GAIN B	Get		BE EF	03	06 00	8C F5	02 00	B3 30	00 00
	Increment		BE EF	03	06 00	EA F5	04 00	B3 30	00 00
	Decrement		BE EF	03	06 00	3B F4	05 00	B3 30	00 00
COLOR TEMP OFFSET R	Get		BE EF	03	06 00	04 F5	02 00	B5 30	00 00
	Increment		BE EF	03	06 00	62 F5	04 00	B5 30	00 00
	Decrement		BE EF	03	06 00	B3 F4	05 00	B5 30	00 00
COLOR TEMP OFFSET G	Get		BE EF	03	06 00	40 F5	02 00	B6 30	00 00
	Increment		BE EF	03	06 00	26 F5	04 00	B6 30	00 00
	Decrement		BE EF	03	06 00	F7 F4	05 00	B6 30	00 00
COLOR TEMP OFFSET B	Get		BE EF	03	06 00	BC F4	02 00	B7 30	00 00
	Increment		BE EF	03	06 00	DA F4	04 00	B7 30	00 00
	Decrement		BE EF	03	06 00	0B F5	05 00	B7 30	00 00
COLOR	Get		BE EF	03	06 00	B5 72	02 00	02 22	00 00
	Increment		BE EF	03	06 00	D3 72	04 00	02 22	00 00
	Decrement		BE EF	03	06 00	02 73	05 00	02 22	00 00
COLOR Reset	Execute		BE EF	03	06 00	80 D0	06 00	0A 70	00 00
TINT	Get		BE EF	03	06 00	49 73	02 00	03 22	00 00
	Increment		BE EF	03	06 00	2F 73	04 00	03 22	00 00
	Decrement		BE EF	03	06 00	FE 72	05 00	03 22	00 00
TINT Reset	Execute		BE EF	03	06 00	7C D1	06 00	0B 70	00 00
SHARPNESS	Get		BE EF	03	06 00	F1 72	02 00	01 22	00 00
	Increment		BE EF	03	06 00	97 72	04 00	01 22	00 00
	Decrement		BE EF	03	06 00	46 73	05 00	01 22	00 00
SHARPNESS Reset	Execute		BE EF	03	06 00	C4 D0	06 00	09 70	00 00
MY MEMORY Load	Set	1	BE EF	03	06 00	0E D7	01 00	14 20	00 00
		2	BE EF	03	06 00	9E D6	01 00	14 20	01 00
		3	BE EF	03	06 00	6E D6	01 00	14 20	02 00
		4	BE EF	03	06 00	FE D7	01 00	14 20	03 00
MY MEMORY Save	Set	1	BE EF	03	06 00	F2 D6	01 00	15 20	00 00
		2	BE EF	03	06 00	62 D7	01 00	15 20	01 00
		3	BE EF	03	06 00	92 D7	01 00	15 20	02 00
		4	BE EF	03	06 00	02 D6	01 00	15 20	03 00
PROGRESSIVE	Set	TURN OFF	BE EF	03	06 00	4A 72	01 00	07 22	00 00
		TV	BE EF	03	06 00	DA 73	01 00	07 22	01 00
		FILM	BE EF	03	06 00	2A 73	01 00	07 22	02 00
	Get		BE EF	03	06 00	79 72	02 00	07 22	00 00
VIDEO NR	Set	LOW	BE EF	03	06 00	26 72	01 00	06 22	01 00
		MID	BE EF	03	06 00	D6 72	01 00	06 22	02 00
		HIGH	BE EF	03	06 00	46 73	01 00	06 22	03 00
	Get		BE EF	03	06 00	85 73	02 00	06 22	00 00
ASPECT	Set	4:3	BE EF	03	06 00	9E D0	01 00	08 20	00 00
		16:9	BE EF	03	06 00	0E D1	01 00	08 20	01 00
		14:9	BE EF	03	06 00	CE D6	01 00	08 20	09 00
		NORMAL	BE EF	03	06 00	5E DD	01 00	08 20	10 00
	Get		BE EF	03	06 00	AD D0	02 00	08 20	00 00

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RS-232C communication / Network command table (continued)

Names	Operation Type		Header			CRC	Command Data		
							Action	Type	Setting Code
OVER SCAN	Get		BE EF	03	06 00	91 70	02 00	09 22	00 00
	Increment		BE EF	03	06 00	F7 70	04 00	09 22	00 00
	Decrement		BE EF	03	06 00	26 71	05 00	09 22	00 00
OVER SCAN Reset	Execute		BE EF	03	06 00	EC D9	06 00	27 70	00 00
V POSITION	Get		BE EF	03	06 00	0D 83	02 00	00 21	00 00
	Increment		BE EF	03	06 00	6B 83	04 00	00 21	00 00
	Decrement		BE EF	03	06 00	BA 82	05 00	00 21	00 00
V POSITION Reset	Execute		BE EF	03	06 00	E0 D2	06 00	02 70	00 00
H POSITION	Get		BE EF	03	06 00	F1 82	02 00	01 21	00 00
	Increment		BE EF	03	06 00	97 82	04 00	01 21	00 00
	Decrement		BE EF	03	06 00	46 83	05 00	01 21	00 00
H POSITION Reset	Execute		BE EF	03	06 00	1C D3	06 00	03 70	00 00
H PHASE	Get		BE EF	03	06 00	49 83	02 00	03 21	00 00
	Increment		BE EF	03	06 00	2F 83	04 00	03 21	00 00
	Decrement		BE EF	03	06 00	FE 82	05 00	03 21	00 00
H SIZE	Get		BE EF	03	06 00	B5 82	02 00	02 21	00 00
	Increment		BE EF	03	06 00	D3 82	04 00	02 21	00 00
	Decrement		BE EF	03	06 00	02 83	05 00	02 21	00 00
H SIZE Reset	Execute		BE EF	03	06 00	68 D2	06 00	04 70	00 00
AUTO ADJUST	Execute		BE EF	03	06 00	91 D0	06 00	0A 20	00 00
COLOR SPACE	Set	AUTO	BE EF	03	06 00	0E 72	01 00	04 22	00 00
		RGB	BE EF	03	06 00	9E 73	01 00	04 22	01 00
		SMPTE240	BE EF	03	06 00	6E 73	01 00	04 22	02 00
		REC709	BE EF	03	06 00	FE 72	01 00	04 22	03 00
		REC601	BE EF	03	06 00	CE 70	01 00	04 22	04 00
	Get		BE EF	03	06 00	3D 72	02 00	04 22	00 00
COMPONENT	Set	COMPONENT	BE EF	03	06 00	4A D7	01 00	17 20	00 00
		SCART RGB	BE EF	03	06 00	DA D6	01 00	17 20	01 00
	Get		BE EF	03	06 00	79 D7	02 00	17 20	00 00
C-VIDEO FORMAT	Set	AUTO	BE EF	03	06 00	A2 70	01 00	11 22	0A 00
		NTSC	BE EF	03	06 00	C2 74	01 00	11 22	04 00
		PAL	BE EF	03	06 00	52 75	01 00	11 22	05 00
		SECAM	BE EF	03	06 00	52 70	01 00	11 22	09 00
		NTSC4.43	BE EF	03	06 00	62 77	01 00	11 22	02 00
		M-PAL	BE EF	03	06 00	C2 71	01 00	11 22	08 00
		N-PAL	BE EF	03	06 00	32 74	01 00	11 22	07 00
	Get		BE EF	03	06 00	31 76	02 00	11 22	00 00
S-VIDEO FORMAT	Set	AUTO	BE EF	03	06 00	E6 70	01 00	12 22	0A 00
		NTSC	BE EF	03	06 00	86 74	01 00	12 22	04 00
		PAL	BE EF	03	06 00	16 75	01 00	12 22	05 00
		SECAM	BE EF	03	06 00	16 70	01 00	12 22	09 00
		NTSC4.43	BE EF	03	06 00	26 77	01 00	12 22	02 00
		M-PAL	BE EF	03	06 00	86 71	01 00	12 22	08 00
		N-PAL	BE EF	03	06 00	76 74	01 00	12 22	07 00
	Get		BE EF	03	06 00	75 76	02 00	12 22	00 00

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RS-232C communication / Network command table (continued)

Names	Operation Type		Header			CRC	Command Data		
							Action	Type	Setting Code
FRAME LOCK – COMPUTER1	Set	TURN OFF	BE EF	03	06 00	3B C2	01 00	50 30	00 00
		TURN ON	BE EF	03	06 00	AB C3	01 00	50 30	01 00
	Get		BE EF	03	06 00	08 C2	02 00	50 30	00 00
FRAME LOCK – COMPUTER2	Set	TURN OFF	BE EF	03	06 00	0B C3	01 00	54 30	00 00
		TURN ON	BE EF	03	06 00	9B C2	01 00	54 30	01 00
	Get		BE EF	03	06 00	38 C3	02 00	54 30	00 00
COMPUTER IN1	Set	SYNC ON G ON	BE EF	03	06 00	CE D6	01 00	10 20	03 00
		SYNC ON G OFF	BE EF	03	06 00	5E D7	01 00	10 20	02 00
	Get		BE EF	03	06 00	0D D6	02 00	10 20	00 00
COMPUTER IN2	Set	SYNC ON G ON	BE EF	03	06 00	32 D7	01 00	11 20	03 00
		SYNC ON G OFF	BE EF	03	06 00	A2 D6	01 00	11 20	02 00
	Get		BE EF	03	06 00	F1 D7	02 00	11 20	00 00
D-ZOOM	Get		BE EF	03	06 00	D0 D0	02 00	0A 30	00 00
	Increment		BE EF	03	06 00	B6 D0	04 00	0A 30	00 00
	Decrement		BE EF	03	06 00	67 D1	05 00	0A 30	00 00
D-ZOOM Reset	Execute		BE EF	03	06 00	98 C9	06 00	70 70	00 00
D-SHIFT V	Get		BE EF	03	06 00	2C D1	02 00	0B 30	00 00
	Increment		BE EF	03	06 00	4A D1	04 00	0B 30	00 00
	Decrement		BE EF	03	06 00	9B D0	05 00	0B 30	00 00
D-SHIFT V Reset	Execute		BE EF	03	06 00	A8 C8	06 00	74 70	00 00
D-SHIFT H	Get		BE EF	03	06 00	58 D0	02 00	0C 30	00 00
	Increment		BE EF	03	06 00	3E D0	04 00	0C 30	00 00
	Decrement		BE EF	03	06 00	EF D1	05 00	0C 30	00 00
D-SHIFT H Reset	Execute		BE EF	03	06 00	54 C9	06 00	75 70	00 00
KEYSTONE V	Get		BE EF	03	06 00	B9 D3	02 00	07 20	00 00
	Increment		BE EF	03	06 00	DF D3	04 00	07 20	00 00
	Decrement		BE EF	03	06 00	0E D2	05 00	07 20	00 00
KEYSTONE V Reset	Execute		BE EF	03	06 00	08 D0	06 00	0C 70	00 00
WHISPER	Set	BRIGHT	BE EF	03	06 00	3B 23	01 00	00 33	00 00
		NORMAL	BE EF	03	06 00	AB 22	01 00	00 33	01 00
	Get		BE EF	03	06 00	08 23	02 00	00 33	00 00
MIRROR	Set	NORMAL	BE EF	03	06 00	C7 D2	01 00	01 30	00 00
		H:INVERT	BE EF	03	06 00	57 D3	01 00	01 30	01 00
		V:INVERT	BE EF	03	06 00	A7 D3	01 00	01 30	02 00
		H&V:INVERT	BE EF	03	06 00	37 D2	01 00	01 30	03 00
	Get		BE EF	03	06 00	F4 D2	02 00	01 30	00 00
VOLUME-COMPUTER1	Get		BE EF	03	06 00	CD CC	02 00	60 20	00 00
	Increment		BE EF	03	06 00	AB CC	04 00	60 20	00 00
	Decrement		BE EF	03	06 00	7A CD	05 00	60 20	00 00
VOLUME-COMPUTER2	Get		BE EF	03	06 00	FD CD	02 00	64 20	00 00
	Increment		BE EF	03	06 00	9B CD	04 00	64 20	00 00
	Decrement		BE EF	03	06 00	4A CC	05 00	64 20	00 00
VOLUME-COMPONENT	Get		BE EF	03	06 00	01 CC	02 00	65 20	00 00
	Increment		BE EF	03	06 00	67 CC	04 00	65 20	00 00
	Decrement		BE EF	03	06 00	B6 CD	05 00	65 20	00 00
VOLUME-S-VIDEO	Get		BE EF	03	06 00	75 CD	02 00	62 20	00 00
	Increment		BE EF	03	06 00	13 CD	04 00	62 20	00 00
	Decrement		BE EF	03	06 00	C2 CC	05 00	62 20	00 00

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RS-232C communication / Network command table (continued)

Names	Operation Type		Header			CRC	Command Data		
							Action	Type	Setting Code
VOLUME-VIDEO	Get		BE EF	03	06 00	31 CD	02 00	61 20	00 00
	Increment		BE EF	03	06 00	57 CD	04 00	61 20	00 00
	Decrement		BE EF	03	06 00	86 CC	05 00	61 20	00 00
MUTE	Set	TURN OFF	BE EF	03	06 00	46 D3	01 00	02 20	00 00
		TURN ON	BE EF	03	06 00	D6 D2	01 00	02 20	01 00
	Get		BE EF	03	06 00	75 D3	02 00	02 20	00 00
SPEAKER	Set	TURN ON	BE EF	03	06 00	FE D4	01 00	1C 20	01 00
		TURN OFF	BE EF	03	06 00	6E D5	01 00	1C 20	00 00
	Get		BE EF	03	06 00	5D D5	02 00	1C 20	00 00
AUDIO-COMPUTER1	Set	AUDIO1	BE EF	03	06 00	6E DC	01 00	30 20	01 00
		AUDIO2	BE EF	03	06 00	9E DC	01 00	30 20	02 00
		AUDIO3	BE EF	03	06 00	0E DD	01 00	30 20	03 00
		Turn off	BE EF	03	06 00	FE DD	01 00	30 20	00 00
	Get		BE EF	03	06 00	CD DD	02 00	30 20	00 00
AUDIO-COMPUTER2	Set	AUDIO1	BE EF	03	06 00	5E DD	01 00	34 20	01 00
		AUDIO2	BE EF	03	06 00	AE DD	01 00	34 20	02 00
		AUDIO3	BE EF	03	06 00	3E DC	01 00	34 20	03 00
		Turn off	BE EF	03	06 00	CE DC	01 00	34 20	00 00
	Get		BE EF	03	06 00	FD DC	02 00	34 20	00 00
AUDIO-COMPONENT	Set	AUDIO1	BE EF	03	06 00	A2 DC	01 00	35 20	01 00
		AUDIO2	BE EF	03	06 00	52 DC	01 00	35 20	02 00
		AUDIO3	BE EF	03	06 00	C2 DD	01 00	35 20	03 00
		Turn off	BE EF	03	06 00	32 DD	01 00	35 20	00 00
	Get		BE EF	03	06 00	01 DD	02 00	35 20	00 00
AUDIO-S-VIDEO	Set	AUDIO1	BE EF	03	06 00	D6 DD	01 00	32 20	01 00
		AUDIO2	BE EF	03	06 00	26 DD	01 00	32 20	02 00
		AUDIO3	BE EF	03	06 00	B6 DC	01 00	32 20	03 00
		Turn off	BE EF	03	06 00	46 DC	01 00	32 20	00 00
	Get		BE EF	03	06 00	75 DC	02 00	32 20	00 00
AUDIO-VIDEO	Set	AUDIO1	BE EF	03	06 00	92 DD	01 00	31 20	01 00
		AUDIO2	BE EF	03	06 00	62 DD	01 00	31 20	02 00
		AUDIO3	BE EF	03	06 00	F2 DC	01 00	31 20	03 00
		Turn off	BE EF	03	06 00	02 DC	01 00	31 20	00 00
	Get		BE EF	03	06 00	31 DC	02 00	31 20	00 00
REMOTE RECEIVE. FRONT	Set	Off	BE EF	03	06 00	FF 32	01 00	00 26	00 00
		On	BE EF	03	06 00	6F 33	01 00	00 26	01 00
	Get		BE EF	03	06 00	CC 32	02 00	00 26	00 00
REMOTE RECEIVE. TOP	Set	Off	BE EF	03	06 00	47 33	01 00	02 26	00 00
		On	BE EF	03	06 00	D7 32	01 00	02 26	01 00
	Get		BE EF	03	06 00	74 33	02 00	02 26	00 00
REMOTE FREQ. NORMAL	Set	Off	BE EF	03	06 00	FF 3D	01 00	30 26	00 00
		On	BE EF	03	06 00	6F 3C	01 00	30 26	01 00
	Get		BE EF	03	06 00	CC 3D	02 00	30 26	00 00
REMOTE FREQ. HIGH	Set	Off	BE EF	03	06 00	03 3C	01 00	31 26	00 00
		On	BE EF	03	06 00	93 3D	01 00	31 26	01 00
	Get		BE EF	03	06 00	30 3C	02 00	31 26	00 00

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RS-232C communication / Network command table (continued)

Names	Operation Type		Header			CRC	Command Data		
							Action	Type	Setting Code
LANGUAGE	Set	ENGLISH	BE EF	03	06 00	F7 D3	01 00	05 30	00 00
		FRANÇAIS	BE EF	03	06 00	67 D2	01 00	05 30	01 00
		DEUTSCH	BE EF	03	06 00	97 D2	01 00	05 30	02 00
		ESPAÑOL	BE EF	03	06 00	07 D3	01 00	05 30	03 00
		ITALIANO	BE EF	03	06 00	37 D1	01 00	05 30	04 00
		NORSK	BE EF	03	06 00	A7 D0	01 00	05 30	05 00
		NEDERLANDS	BE EF	03	06 00	57 D0	01 00	05 30	06 00
		PORTUGUÊS	BE EF	03	06 00	C7 D1	01 00	05 30	07 00
		日本語	BE EF	03	06 00	37 D4	01 00	05 30	08 00
		简体中文	BE EF	03	06 00	A7 D5	01 00	05 30	09 00
		繁體中文	BE EF	03	06 00	37 DE	01 00	05 30	10 00
		한글	BE EF	03	06 00	57 D5	01 00	05 30	0A 00
		SVENSKA	BE EF	03	06 00	C7 D4	01 00	05 30	0B 00
		РУССКИЙ	BE EF	03	06 00	F7 D6	01 00	05 30	0C 00
		SUOMI	BE EF	03	06 00	67 D7	01 00	05 30	0D 00
		POLSKI	BE EF	03	06 00	97 D7	01 00	05 30	0E 00
		TÜRKÇE	BE EF	03	06 00	07 D6	01 00	05 30	0F 00
	Get		BE EF	03	06 00	C4 D3	02 00	05 30	00 00
MENU POSITION H	Get		BE EF	03	06 00	04 D7	02 00	15 30	00 00
	Increment		BE EF	03	06 00	62 D7	04 00	15 30	00 00
	Decrement		BE EF	03	06 00	B3 D6	05 00	15 30	00 00
MENU POSITION H Reset	Execute		BE EF	03	06 00	DC C6	06 00	43 70	00 00
MENU POSITION V	Get		BE EF	03	06 00	40 D7	02 00	16 30	00 00
	Increment		BE EF	03	06 00	26 D7	04 00	16 30	00 00
	Decrement		BE EF	03	06 00	F7 D6	05 00	16 30	00 00
MENU POSITION V Reset	Execute		BE EF	03	06 00	A8 C7	06 00	44 70	00 00
BLANK	Set	MyScreen	BE EF	03	06 00	FB CA	01 00	00 30	20 00
		ORIGINAL	BE EF	03	06 00	FB E2	01 00	00 30	40 00
		BLUE	BE EF	03	06 00	CB D3	01 00	00 30	03 00
		WHITE	BE EF	03	06 00	6B D0	01 00	00 30	05 00
		BLACK	BE EF	03	06 00	9B D0	01 00	00 30	06 00
	Get		BE EF	03	06 00	08 D3	02 00	00 30	00 00
BLANK On/Off	Set	TURN OFF	BE EF	03	06 00	FB D8	01 00	20 30	00 00
		TURN ON	BE EF	03	06 00	6B D9	01 00	20 30	01 00
	Get		BE EF	03	06 00	C8 D8	02 00	20 30	00 00
START UP	Set	MyScreen	BE EF	03	06 00	CB CB	01 00	04 30	20 00
		ORIGINAL	BE EF	03	06 00	0B D2	01 00	04 30	00 00
		TURN OFF	BE EF	03	06 00	9B D3	01 00	04 30	01 00
	Get		BE EF	03	06 00	38 D2	02 00	04 30	00 00

RS-232C communication / Network command table (continued)

Names	Operation Type		Header			CRC	Command Data		
							Action	Type	Setting Code
MyScreen LOCK	Set	TURN OFF	BE EF	03	06 00	3B EF	01 00	C0 30	00 00
		TURN ON	BE EF	03	06 00	AB EE	01 00	C0 30	01 00
		Get	BE EF	03	06 00	08 EF	02 00	C0 30	00 00
MESSAGE	Set	TURN OFF	BE EF	03	06 00	8F D6	01 00	17 30	00 00
		TURN ON	BE EF	03	06 00	1F D7	01 00	17 30	01 00
		Get	BE EF	03	06 00	BC D6	02 00	17 30	00 00
AUTO SEARCH	Set	TURN OFF	BE EF	03	06 00	B6 D6	01 00	16 20	00 00
		TURN ON	BE EF	03	06 00	26 D7	01 00	16 20	01 00
		Get	BE EF	03	06 00	85 D6	02 00	16 20	00 00
AUTO ON	Set	TURN OFF	BE EF	03	06 00	3B 89	01 00	20 31	00 00
		TURN ON	BE EF	03	06 00	AB 88	01 00	20 31	01 00
		Get	BE EF	03	06 00	08 89	02 00	20 31	00 00
AUTO OFF		Get	BE EF	03	06 00	08 86	02 00	10 31	00 00
		Increment	BE EF	03	06 00	6E 86	04 00	10 31	00 00
		Decrement	BE EF	03	06 00	BF 87	05 00	10 31	00 00
LAMP TIME		Get	BE EF	03	06 00	C2 FF	02 00	90 10	00 00
LAMP TIME Reset		Execute	BE EF	03	06 00	58 DC	06 00	30 70	00 00
FILTER TIME		Get	BE EF	03	06 00	C2 F0	02 00	A0 10	00 00
FILER TIME Reset		Execute	BE EF	03	06 00	98 C6	06 00	40 70	00 00
MY BUTTON-1		COMPUTER1	BE EF	03	06 00	3A 33	01 00	00 36	00 00
		COMPUTER2	BE EF	03	06 00	FA 31	01 00	00 36	04 00
		COMPONENT	BE EF	03	06 00	6A 30	01 00	00 36	05 00
		S-VIDEO	BE EF	03	06 00	5A 32	01 00	00 36	02 00
		VIDEO	BE EF	03	06 00	AA 32	01 00	00 36	01 00
		INFORMATION	BE EF	03	06 00	FA 3E	01 00	00 36	10 00
		MY MEMORY	BE EF	03	06 00	9A 3F	01 00	00 36	12 00
		PICTURE MODE	BE EF	03	06 00	0A 3E	01 00	00 36	13 00
		FILTER RESET	BE EF	03	06 00	3A 3C	01 00	00 36	14 00
		e-SHOT	BE EF	03	06 00	5A 3D	01 00	00 36	16 00
		VOLUME +	BE EF	03	06 00	CA 3C	01 00	00 36	17 00
		VOLUME -	BE EF	03	06 00	3A 39	01 00	00 36	18 00
		AV MUTE	BE EF	03	06 00	AA 38	01 00	00 36	19 00
		Get	BE EF	03	06 00	09 33	02 00	00 36	00 00

RS-232C communication / Network command table (continued)

Names	Operation Type		Header			Command Data		
					CRC	Action	Type	Setting Code
MY BUTTON-2	COMPUTER1		BE EF	03	06 00	C6 32	01 00	01 36	00 00
	COMPUTER2		BE EF	03	06 00	06 30	01 00	01 36	04 00
	COMPONENT		BE EF	03	06 00	96 31	01 00	01 36	05 00
	S-VIDEO		BE EF	03	06 00	A6 33	01 00	01 36	02 00
	VIDEO		BE EF	03	06 00	56 33	01 00	01 36	01 00
	INFORMATION		BE EF	03	06 00	06 3F	01 00	01 36	10 00
	MY MEMORY		BE EF	03	06 00	66 3E	01 00	01 36	12 00
	PICTURE MODE		BE EF	03	06 00	F6 3F	01 00	01 36	13 00
	FILTER RESET		BE EF	03	06 00	C6 3D	01 00	01 36	14 00
	e-SHOT		BE EF	03	06 00	A6 3C	01 00	01 36	16 00
	VOLUME +		BE EF	03	06 00	36 3D	01 00	01 36	17 00
	VOLUME -		BE EF	03	06 00	C6 38	01 00	01 36	18 00
	AV MUTE		BE EF	03	06 00	56 39	01 00	01 36	19 00
	Get		BE EF	03	06 00	F5 32	02 00	01 36	00 00
MAGNIFY	Get		BE EF	03	06 00	7C D2	02 00	07 30	00 00
	Increment		BE EF	03	06 00	1A D2	04 00	07 30	00 00
	Decrement		BE EF	03	06 00	CB D3	05 00	07 30	00 00
FREEZE	Set	NORMAL	BE EF	03	06 00	83 D2	01 00	02 30	00 00
		FREEZE	BE EF	03	06 00	13 D3	01 00	02 30	01 00
	Get		BE EF	03	06 00	B0 D2	02 00	02 30	00 00
e-SHOT	Set	OFF	BE EF	03	06 00	3A C3	01 00	00 35	00 00
		IMAGE1	BE EF	03	06 00	AA C2	01 00	00 35	01 00
		IMAGE2	BE EF	03	06 00	5A C2	01 00	00 35	02 00
		IMAGE3	BE EF	03	06 00	CA C3	01 00	00 35	03 00
		IMAGE4	BE EF	03	06 00	FA C1	01 00	00 35	04 00
	Get		BE EF	03	06 00	09 C3	02 00	00 35	00 00
e-SHOT IMAGE1 Delete	Execute		BE EF	03	06 00	71 C3	06 00	01 35	00 00
e-SHOT IMAGE2 Delete	Execute		BE EF	03	06 00	35 C3	06 00	02 35	00 00
e-SHOT IMAGE3 Delete	Execute		BE EF	03	06 00	C9 C2	06 00	03 35	00 00
e-SHOT IMAGE4 Delete	Execute		BE EF	03	06 00	BD C3	06 00	04 35	00 00
CLOSED CAPTION DISPLAY	Set	TURN OFF	BE EF	03	06 00	FA 62	01 00	00 37	00 00
		TURN ON	BE EF	03	06 00	6A 63	01 00	00 37	01 00
		AUTO	BE EF	03	06 00	9A 63	01 00	00 37	02 00
	Get		BE EF	03	06 00	C9 62	02 00	00 37	00 00
CLOSED CAPTION MODE	Set	CAPTIONS	BE EF	03	06 00	06 63	01 00	01 37	00 00
		TEXT	BE EF	03	06 00	96 62	01 00	01 37	01 00
	Get		BE EF	03	06 00	35 63	02 00	01 37	00 00
CLOSED CAPTION CHANNEL	Set	1	BE EF	03	06 00	D2 62	01 00	02 37	01 00
		2	BE EF	03	06 00	22 62	01 00	02 37	02 00
		3	BE EF	03	06 00	B2 63	01 00	02 37	03 00
		4	BE EF	03	06 00	82 61	01 00	02 37	04 00
	Get		BE EF	03	06 00	71 63	02 00	02 37	00 00

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Hitachi, Ltd.
Consumer Business Group
Shin-Otemachi Bldg 5f, 2-1, Otemachi 2-Chome,
Chiyoda-Ku, Tokyo 100-0004 Japan

HITACHI EUROPE LTD.
Consumer Affairs Department
PO Box 3007
Maidenhead
Berkshire SL6 8ZE
UNITED KINGDOM
Tel: 0870 405 4405
Email: consumer.mail@hitachi-eu.com

HITACHI EUROPE S.A.
364, Kifissias Ave. & 1, Delfon Str.
152 33 Chalandri
Athens
GREECE
Tel: 1-6837200
Fax: 1-6835694
Email: service.hellas@hitachi-eu.com

HITACHI EUROPE GmbH
Munich Office
Dornacher Strasse 3
D-85622 Feldkirchen bei München
GERMANY
Tel: 089-991 80-0
Fax: 089 - 991 80 -224
Hotline: 0180 - 551 25 51 (12ct/min.)
Email: HSE-DUS.Service@Hitachi-eu.com

HITACHI EUROPE S.A.
Gran Via Carles III, 86 Planta 5ª
Edificios Trade - Torre Este
08028 Barcelona
SPAIN
Tel: 93 409 2550
Fax: 93 491 3513
Email: rplan@hitachi-eu.com

HITACHI EUROPE S.r.l.
Via T. Gulli n.39
20147 MILAN
ITALY
Tel: 02 487861
Fax: 02 48786381
Servizio Clienti
Tel. 02 38073415
Email: customerservice.italy@hitachi-eu.com

HITACHI EUROPE AB
Box 77
S-164 94 KISTA
SWEDEN
Tel: 08 562 711 00
Fax: 08 562 711 11
Email: csgswe@hitachi-eu.com

HITACHI EUROPE LTD.
Norwegian Branch Office
Strandveien 18
1366 Dysaker
NORWAY
Tel: 02205 9060
Fax: 02205 9061
Email csgnor@hitachi-eu.com

HITACHI EUROPE S.A.S
Lyon Office
B.P. 45, 69671 Bron Cedex
FRANCE
Tel: 04 72 14 29 70
Fax: 04 72 14 29 99
Email: france.consommateur@hitachi-eu.com

HITACHI EUROPE LTD.
Benelux Branche Office
Bergensesteenweg 421
1600 Sint-Pieters-Leeuw
BELGIUM
TEL : 0032/2 363 99 01
FAX: 0032/2 363 99 00
Email : info@hitachi.be

www.hitachidigitalmedia.com

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