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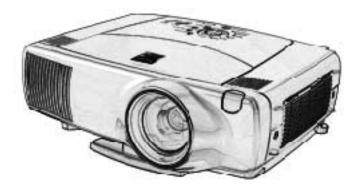
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LCD Projector Model 28A8247



USER'S MANUAL

Please read this user's manual thoroughly to ensure correct usage through understanding



BEFORE USING

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.

\wedge	Warning	This symbol indicates information that, if ignored, could possibly result in personal injury or even death due to incorrect handling.
\triangle	Caution	This symbol indicates information that, if ignored, could result possibly in personal injury or physical damage due to incorrect handling.

Typical Symbols

 \triangle

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).

NOTE : "Remote control transmitter" may be called "Remote controller" in the "USER'S MANUAL".

SAFETY PRECAUTIONS

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 is dangerous this could be dangerous.

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

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 in a bathroom.
- * Do not expose the projector to rain or moisture.
- * 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.

Never modify.

The projector contains high voltage components. Modification could result in fire or electrical shock.

- * Never open the cabinet.
- * Ask your dealer to repair and clean insider.

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.









Do not disassemble.





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 the metallic table.
- * 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 use with the ventilation opening facing downwards.
- * 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 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.

When you fix this unit with a metal tool and the like, you must connect it with ground wire; otherwise, fire or electric shock can result.

Connect the ground terminal of AC inlet of this unit with the ground terminal provided at the building using an optional three-core power-supply cord.











Connect the ground wire

A WARNING

Be careful in handling the the light source lamp.

Incorrect handling the lamp could result in explosion.

- * Since the lamp is made of glass, do not apply shock to it and not scratch it.
- * When replacing lamp, turn off and remove AC cord, waite 45 minutes to let lamp cool. High-pressure lamp when hot, may explode if improperly handled.
- * The lamp has a service life. For details, read the user's manual. Please contact your dealer or service company for replacement. Do not use old use old lamp. This could also cause explosion of the 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 transmitter.

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 user's manual.
- * 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.







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.
- * Avoid any impact or shock to the projector.
- * For carrying, use the enclosed carrying bag if provided, depending on the manual of the carrying bag.

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.

Avoid a humid or dusty place.

Placing the projector in a highly humid, dusty place, oily soot or corrosive gas could result in fire or electrical shock.

* Do not place near the kitchen, a humidifier or other place where there is oily smoke or humidity.

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 transmitter and other parts in direct sunlight or near a hot object such as heater, etc.

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.

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

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.







power outlet.







NOTE

Do not give the remote control transmitter any physical impact.

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

- * Take care not to drop the remote control transmitter.
- * Do not place the projector or heavy objects on the remote control transmitter.

Take care of the lens.

- * Close the slide lens door 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 air filter to normal ventilate.

When the air filter becomes clogged with dust, etc., the projector may display the message such as "CHECK THE AIR FLOW" or turn off the projector, to prevent the internal heat level rising.

- * Do not turn on the projector without air filter.
- * If the air filter is damaged or lost, order the air filter specified in the user's manual to your dealer.

Take care of the cabinet and the remote control transmitter.

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 transmitter. 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.

LCD Projector 28A8247 USER'S MANUAL Vol.1 (Basic)

Thank you for purchasing this projector.

MARNING • Please read the accompanying manual "SAFETY INSTRUCTIONS" and this "USER'S MANUAL" thoroughly to ensure correct usage through understanding. After reading, store this instruction manual 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
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PROJECTOR FEATURES

This liquid crystal projector is used to project various computer signals as well as NTSC / PAL / SECAM video signals onto a screen. Little space is required for installation and large images can easily be realized.

Ultra High Brightness

Crisp, ultra-bright presentations is achieved by using a UHB (ultra high brightness) lamp and a highly efficient optical system

Partial Magnification Function

Interesting parts of images can be magnified for closer viewing

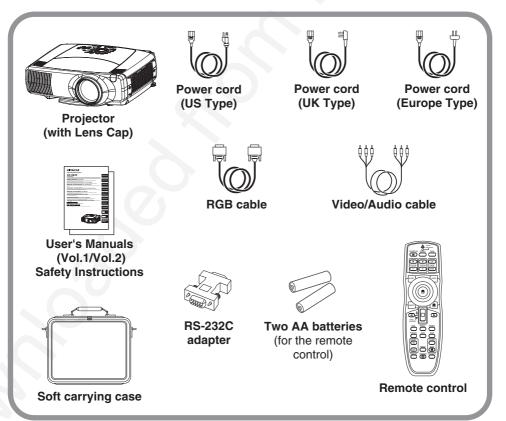
One Touch Function

Just press the ONE TOUCH button to automatically retrieve input signals, calibrate images, and correct keystone distortion

PREPARATIONS

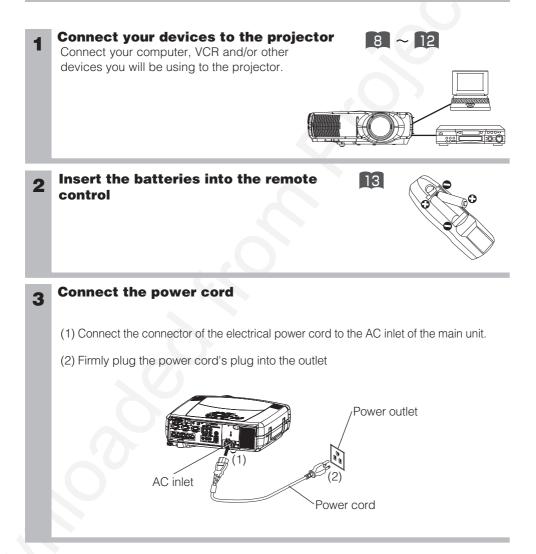
Your projector should come with the items shown below. Check to make sure that all the items are included. Contact your dealer if anything is missing.

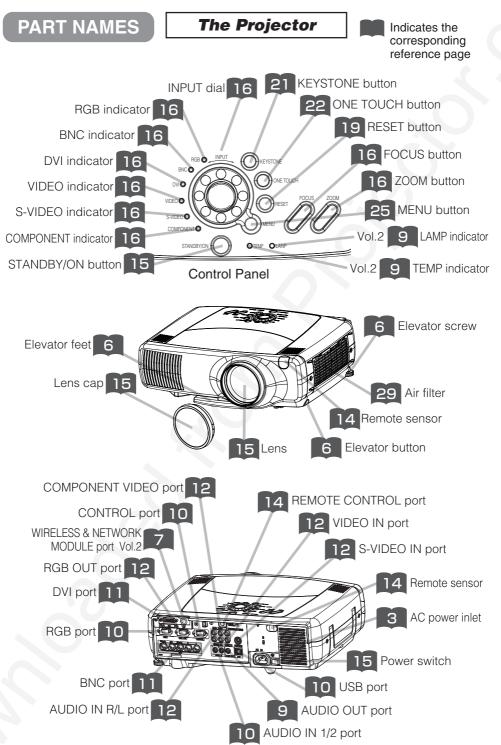
NOTE • Keep the original packing material for future reshipment.



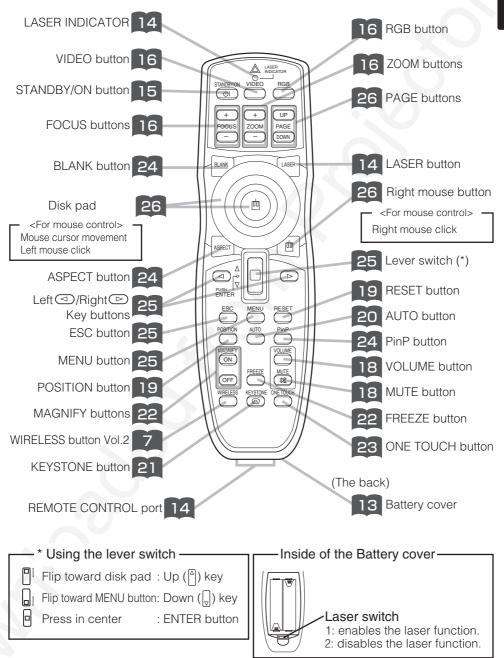
MARNING Precautions to observe in regards to the power cord: Please use extra caution when connecting the projector's power cord as incorrect or faulty connections may result in FIRE AND/OR ELECTRICAL SHOCK. Please adhere to the following safety guidelines to insure safe operation of the projector:

- Only plug the power cord into outlets rated for use with the power cord's specified voltage range.
- Only use the power cord that came with the projector.
- NEVER ATTEMPT TO DEFEAT THE GROUND CONNECTION OF THE THREE-PRONGED PLUG!
- Make sure that you firmly connect the power cord to the projector and wall outlet.





The Remote Control



SETTING UP THE PROJECTOR

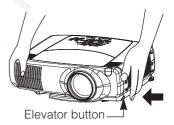
CAUTION • Install the projector in a suitable environment according to instructions of the accompanying manual "SAFETY INSTRUCTIONS" and this manual.

- If you press the elevator buttons without holding the projector, the projector might crash down, overturn, smash your fingers and possibly result in malfunction. To prevent damaging the projector and injuring yourself, ALWAYS HOLD THE PROJECTOR whenever using the elevator buttons to adjust the elevator feet.
- An installation angle should be adjusted within the specified adjustment range. The adjustment beyond the range may become the cause of shortening the lamp life.

Adjusting the Projector's Elevator Feet

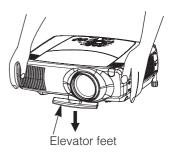
If the surface on which the projector is placed, or the screen is tilted, use the elevator feet and elevator screw to adjust the projection angle of the main unit. The adjustment range of the elevator feet is 0 to 10 degrees.



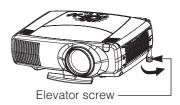


2 Raise or lower the projector to the desired height and then release the elevator buttons

When you release the elevator buttons, the elevator feet will lock into position.



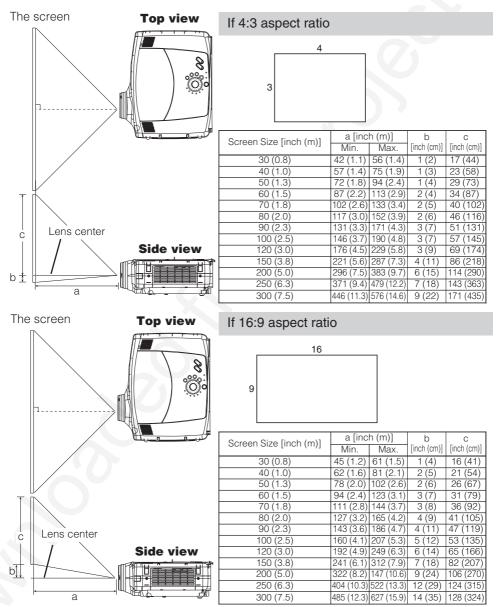
3 Turn the elevator screw to fine tune.



Adjusting the Screen Size and Projection Distance

Refer to the illustrations and tables below to determine the screen size and projection distance.

The values shown in the table are calculated for a full size screen a:Distance from the projector to the screen $(\pm 10\%)$ b:Distance from the lens center to the bottom of the screen $(\pm 10\%)$ c:Distance from the lens center to the top of the screen $(\pm 10\%)$



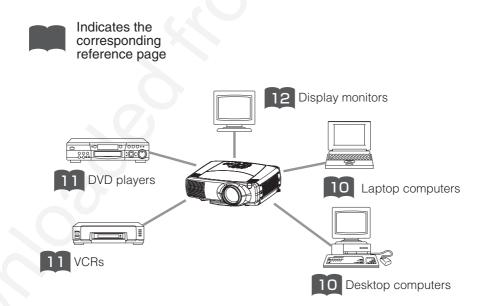
CONNECTING YOUR DEVICES

Devices You Can Connect to the Projector (Refer to this section for planning your device configuration to use for your presentation.)

▲ CAUTION • Incorrect connecting could result in fire or electrical shock. Please read this manual and the separate "SAFETY INSTRUCTIONS".

ATTENTION Precautions to observe when connecting other devices to the projector

- Whenever attempting to connect other devices to the projector, please thoroughly read the manual of each device to be connected.
- TURN OFF ALL DEVICES prior to connecting them to the projector. Attempting to connect a live device to the projector may generate extremely loud noises or other abnormalities that may result in malfunction and/or damage to the device and/or projector. Refer to the "TECHNICAL" of the USER'S MANUAL (Vol.2) for the pin assignment of connectors and RS-232C communication data.
- Make sure that you connect devices to the correct port. Incorrect connection may result in malfunction and/or damage to the device and/or projector.
- Some cables have to be used with 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.
- Secure the screws on the connectors and tighten.



Ports and Cables

Refer to the table below to find out which projector port and cable to use for connecting a given device. Use this table for determining which cables to prepare.

Function	Projector Port	Connection Cables	
Analog RGB input	RGB	RGB cable (With D-sub 15-pin shrink jack and inch thread screws)	
	BNC(R/C _B /P _B)(G/Y)(B/C _B /P _B)(H)(V) • When BNC (RGB) is selected (*)	BNC cable	
Analog output	RGB OUT	RGB cable (With D-sub 15-pin shrink jack and inch thread screws)	
DVI input	DVI	DVI cable	
Audio input from computer	AUDIO IN 1 • Linked to RGB or DVI port input	- Audio/video cable (Stereo mini)	
	AUDIO IN 2 • Linked to BNC (RGB) port input (*)		
USB mouse control	USB	USB cable	
PS/2 mouse control		PS/2 mouse cable	
ADB mouse control	CONTROL	ADB mouse cable	
Serial mouse control		Serial mouse cable	
RS-232C communications		RS-232C adapter + RS-232C cable	
S video input	S-VIDEO IN	S-video cable (mini DIN 4-pin jack)	
Video input	VIDEO IN	Audio/video cable	
	$COMPONENT(C_B/P_B)(C_B/P_B)(Y)$	Component video cable	
Component video input	$\begin{array}{l} BNC(R/C_{\scriptscriptstyle B}/P_{\scriptscriptstyle B})(G/Y)(B/C_{\scriptscriptstyle B}/P_{\scriptscriptstyle B})\\ \bullet \mbox{ When BNC (COMPONENT) is selected (*)} \end{array}$		
Audio input from video equipment	AUDIO IN R,L	Audio/video cable or audio cable (RCA jack)	
Audio output	AUDIO OUT	Audio cable (Stereo mini)	
Wired remote control signal input	REMOTE CONTROL	Audio cable (Stereo mini)	

* Before using the BNC port, change RGB input to component video input on the BNC menu item of the INPUT menu.

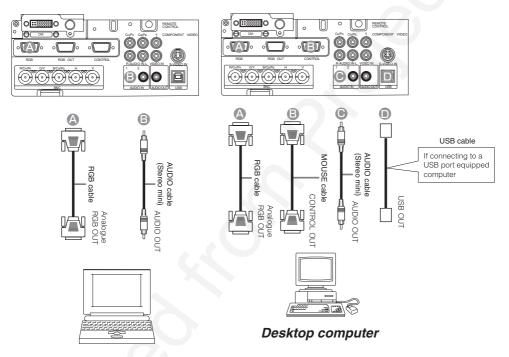
NOTE About Plug-and-Play Capability

- This projector is compatible with VESA DDC 1/2B. Plug-and-Play can be achieved by connecting this projector to computers that are VESA DDC (display data channel) compatible. Please take advantage of this function by connecting the accessory RGB cable to the RGB port (DDC 1/2B compatible). Plug-and-Play may not work properly if any other type of connection is attempted.
- Plug-and-Play is a system composed of the computer, its operating system and peripheral equipment (i.e. display devices).
- Please use the standard drivers as this projector is a Plug-and-Play monitor.

CONNECTING YOUR DEVICES (continued)

Connecting to a Computer

ATTENTION Whenever attempting to connect a laptop computer to the projector, be sure to activate the laptop's RGB external image output (set the laptop 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 computer.



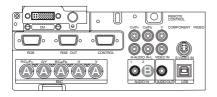
Laptop computer

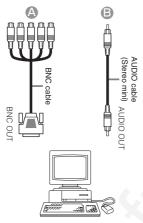
NOTE

- Some computers may have multiple display screen modes. Use of some of these modes will not be possible with this projector.
- For some RGB input modes, the optional Mac adapter is necessary.

Connecting to a Computer (continued)

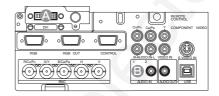
BNC Input

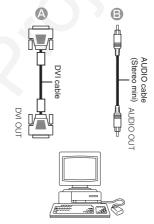




Desktop computer

DVI Input



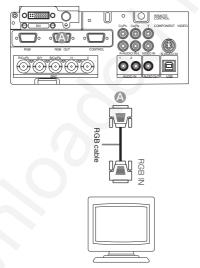


Desktop computer

CONNECTING YOUR DEVICES (continued)

Connecting to a VCR Connecting to a DVD Player C O BEMPRE 0 Ē C 0 CONTROL с 0 A 0 ſe 00 lē ÂÂÂ ÖÖÖ AAA A • BBB $(\mathbb{C}$ (B) $\overline{0}\overline{0}\overline{0}\overline{0}$ O 000 000 (\bigcirc) (\bigcirc) (\bigcirc) (\bigcirc) (\bigcirc) 60 6 Α Θ B B Ê đ COMPONENT VIDEO cable AUDIO/VIDEO cable AUDIO/VIDEO cable S-VIDEO cable S-VIDEO cable If using a S-video If using a S-video connection connection COMPONENT AUDIO/VIDEO OUT AUDIO/VIDEO OUT S-VIDEO OU S-VIDEO OUT -TDO If using a component If using an audio/video video connection connection VCR <u>,°°°°, °í</u> ⊐¦©:© DVD player

Connecting to a Display Monitor



Display monitor

Putting batteries into the remote control unit

CAUTION Precautions to observe in regards to the batteries

Always handle the batteries with care and use them only as directed. Improper use may result in battery cracking or leakage, which could result in fire, injury and/or pollution of the surrounding environment.

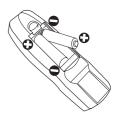
- Keep the battery away from children and pets.
- Be sure to use only the batteries specified for use with the remote control. Do not mix new batteries with used ones.
- When inserting batteries, verify that the plus and minus terminals are aligned correctly (as indicated in the remote control).
- When you dispose the battery, you should obey the law in the relative area or country.

1 Remove the battery cover

Slide back and remove the battery cover in the direction of the arrow.

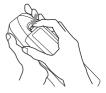
2 Insert the batteries

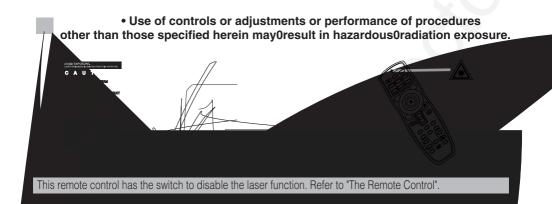
Align and insert the two AA batteries (that came with the projector) according to their plus and minus terminals (as indicated in the remote control).



3 Close the battery cover

Replace the battery cover in the direction of the arrow and snap it back into place.





-1

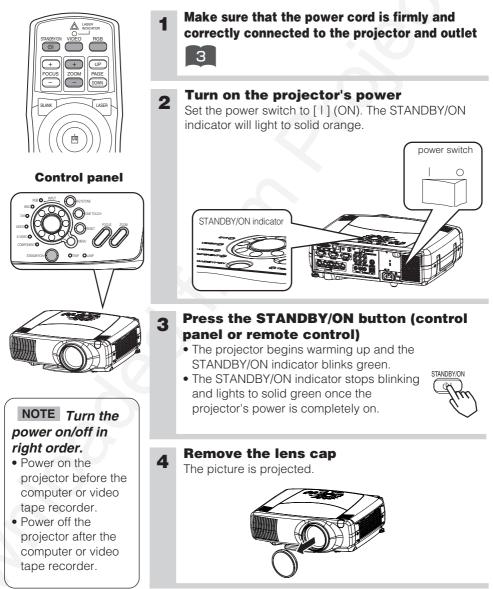
TURNING ON THE POWER

Precautions

Connect all devices to be used to the projector prior to turning on the power.



MARNING When the power is ON, a strong light is emitted. Do not look into the lens.



TURNING ON THE POWER (continued)

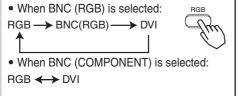
Selecting an Input Signal



Using the remote control

If selecting RGB input Press the RGB button

Press this button to toggle between the devices connected to RGB IN 1 and 2. As illustrated below, each time you press the RGB button, the projector switches between RGB IN 1 and 2. Select the signal you wish to project.



If selecting video input Press the VIDEO button

Press this button to toggle between the VIDEO devices connected to VIDEO IN. S-VIDEO (IN and COMPONENT VIDEO. As illustrated below, each time you press the VIDEO button, the projector switches between VIDEO IN S-VIDEO IN and COMPONENT VIDEO. Select the signal you wish to project.

• When BNC (RGB) is selected: VIDEO IN \rightarrow S-VIDEO IN \rightarrow COMPONENT VIDEO

• When BNC (COMPONENT) is selected: VIDEO IN→S-VIDEO IN→COMPONENT VIDEO

- BNC(COMPONENT) -

Use the ZOOM (-) / (-) buttons to adjust 6 the screen size





(Control panel)

(Remote control)

Use the FOCUS (-) / (-) buttons to adjust 7 the focus





(Control panel)

Using the projector's control panel terminal to which the signal you want to project is input.

• When BNC (RGB) is selected: RGB ← → BNC(RGB) ← DVI COMPONENT VIDEO ← S-VIDEO ← VIDEO When BNC (COMPONENT) is selected: RGB ← → BNC(COMPONENT) ← → DVI COMPONENT VIDEO ← S-VIDEO ← VIDEO

Turn the INPUT dial

Turning the dial cycles

shown below. Select the

through the inputs as

NOTE

Turn the INPUT dial and set it at the click point, otherwise input signal selection may be incorrect.

TURNING OFF THE POWER



Press the STANDBY/ON button (control panel or remote control)

The message "Power off?" will appear on the screen for approximately 5 seconds.

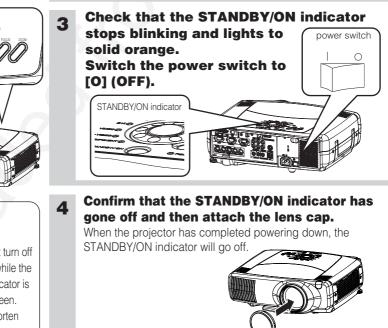


2 Press the STANDBY/ON button again (control panel or remote control)

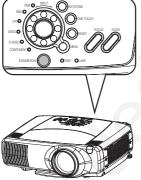
Press the STANDBY/ON button again while the "Power off?" message is visible. The projector lamp goes off and starts cooling down. While cooling, the STANDBY/ON indicator flashes orange. When in this state, pressing the STANDBY/ON button has no effect.

When lamp cooling is complete, the STANDBY/ON indicator stops flashing, and turning solid orange.





Control panel



NOTE

 Except in cases of emergency, do not turn off the power switch while the STANDBY/ON indicator is solid or flashing green.
 Doing so could shorten the lamp lifetime.

ADJUSTING THE VOLUME



Press the VOLUME button

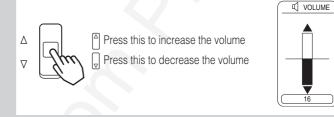
As illustrated on the right, a dialog will appear on the screen to aid you in adjusting the volume.





2 Use the lever switch $\begin{bmatrix} \triangle \\ \neg \end{bmatrix}$ / $\begin{bmatrix} \neg \\ \neg \end{bmatrix}$ to adjust the volume

Press the VOLUME button again to close the dialog and complete this operation. (Even if you don't do anything, the dialog will automatically disappear after a few seconds.)



TEMPORARILY MUTING THE SOUND



Press the MUTE button

As illustrated on the right, a dialog will appear on the screen indicating that you have muted the sound. Press the VOLUME button to close the dialog. (Even if you don't do anything, the dialog will automatically disappear after a few seconds.)

Press the MUTE button again to restore the sound.





ADJUSTING THE POSITION

1



Press the POSITION button

As illustrated on the right, a dialog will appear on the screen to aid you in adjusting the position.

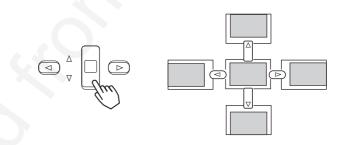




2 Use the \bigcirc , \bigcirc , \bigcirc , [], \bigtriangledown buttons to adjust the position

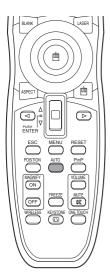
When you want to initialize the position, press the RESET button during adjustment.

Press the POSITION button again to close the dialog and complete this operation. (Even if you don't do anything, the dialog will automatically disappear after a few seconds.) This function is only available for RGB/BNC (RGB) input.



USING THE AUTOMATIC ADJUSTMENT FEATURE

1



Press the AUTO button



Automatic Adjustment for RGB Input

Horizontal position (H. POSIT), vertical position (V. POSIT), clock phase (H. PHASE) and horizontal size (H. SIZE) are automatically adjusted.

Make sure that the application window is set to its maximum size prior to attempting to use this feature. Dark pictures may still be incorrectly adjusted. Use a bright screen when adjusting.

Automatic Adjustment for Video Input

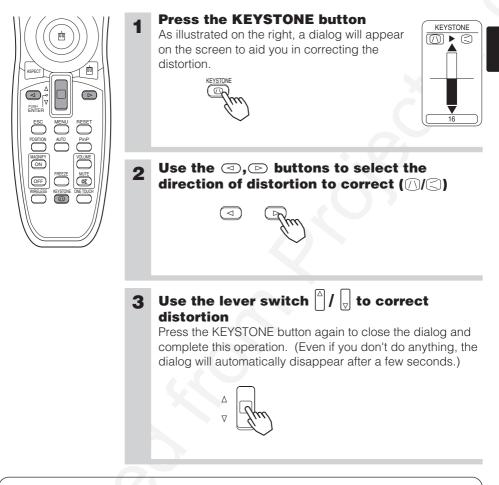
The signal type best suited for the respective input signal is selected automatically.

This feature is available only if VIDEO is set to AUTO in the INPUT menu.

NOTE

The automatic adjustment operation requires approximately 10 seconds. Also, please note that it may not function correctly with some input signals.

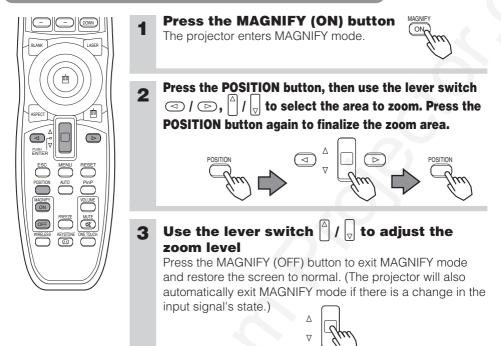
CORRECTING KEYSTONE DISTORTIONS



NOTE

- This function may not be work well with some types of input signals.
- The adjustable range for correcting keystone distortions will vary with the type of input signal.

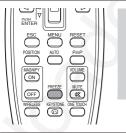
USING THE MAGNIFY FEATURE



NOTE

The projector will automatically exit from MAGNIFY mode if either the INPUT SELECT, AUTO, ASPECT or VIDEO feature is used, or, if there is a change in the input signal's state.

FREEZING THE SCREEN



Press the FREEZE button

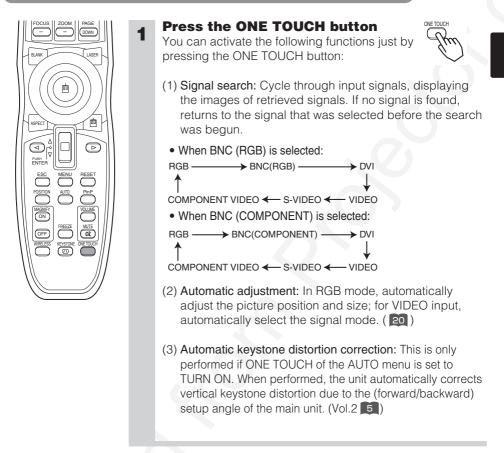
The [II] icon appears and the screen will freeze at the current image. Press the FREEZE button again and the $[\blacktriangleright]$ appears as the projector exits FREEZE mode.



NOTE

- The projector will automatically exit from FREEZE mode if either the POSITION, VOLUME, MUTE, AUTO, BLANK ON/OFF or MENU ON/OFF feature is used, or, if there is a change in the input signal's state.
- If the projector continues projecting the same image for a long time (i.e. you forget to exit FREEZE mode), the image might possibly remain as an afterimage. Do not leave the projector in FREEZE mode for too long.

ADJUSTING SCREEN WITH ONE-TOUCH



NOTES

- May not function properly with some input signals.
- This function takes about 10 seconds to display an image.

SELECTING THE ASPECT RATIO



Press the ASPECT button

 RGB, DVI, COMPONENT VIDEO

 (HDTV signals : 1125i (1035i/1080i), 750p)

 4:3
 ▲ 16:9

 VIDEO IN, S-VIDEO IN, COMPONENT VIDEO

 (Non-HDTV signals : 525i, 525p,625i)

4:3 → 16:9 → SMALL

TEMPORARILY BLANKING THE SCREEN

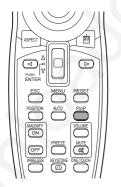


Press the BLANK button

The input signal screen is shut off, and a blank screen appears. You can set the blank screen using the menu (from the SCREEN menu, select BLANK). Press the BLANK button again to remove the blank screen, and return to the input signal screen.

BLANK

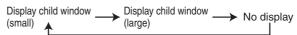
DISPLAYING CHILD WINDOW (P. IN. P: Picture in Picture)



1

Press the P. in P. Button

You can display the video input in a child window while displaying RGB, BNC, or DVI input.



You can select the video input to display in the child window, and the position of the child window, from the INPUT menu. (Vol.2 4)

USING THE MENU FUNCTIONS



Press the MENU button

The menu display appears on the screen. The projector has the following menus: MAIN, PICTURE-1, PICTURE-2, INPUT, AUTO, SCREEN, and OPTION, WIRELESS. When you select a menu name using the lever switch \bigcap / \Box , the current settings of items that can be manipulated from that menu are displayed.



Use the lever switch [] / \bigtriangledown to select a menu, then 2

press the 🕑 or ENTER button

The display of the selected menu appears. [ex. Adjusting SHARPNESS]

Use the lever switch [] / [] to select PICTURE-1, then press the \bigcirc or ENTER button.



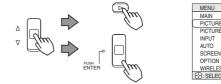
MENU		
MAIN	COLOR BAL R	-1
PICTURE-1	COLOR BAL B	+1
PICTURE-2	SHARPNESS	-1
INPUT	COLOR	+1
AUTO	TINT	-1
SCREEN		
OPTION		
WIRELESS	l	
: SELECT		

Use the lever switch \bigtriangleup / \bigtriangledown to select SHARPNESS, 3 then press the \bigcirc or ENTER button

The operation display of the selected item appears. To adjust a numerical value, press the D or ENTER button again to switch to the single menu (small display showing only the operation display area).

[ex. Adjusting SHARPNESS]

Use the lever switch $\left| \right| / \left| \right|$ to select SHARPNESS, then press the (>) or ENTER button.



MENU		
MAIN	COLOR BAL R	
PICTURE-1	COLOR BAL B	
PICTURE-2	(SHARPNESS)	
INPUT	COLOR	
AUTO	TINT	
SCREEN		
OPTION		
WIRELESS		
: SELECT		-

NOTE

 For details about menu. operations, see the separate "MULTI FUNCTIONAL SETTINGS" (Vol. 2).

Δ

Use the lever switch $|^{\triangle} / |_{\nabla}$ to adjust the level Press the MENU button to hide the menu and finish your

operation. Alternatively, press the <a> or ESC button to return to the previous display.

[ex. Adjusting SHARPNESS]

Use the lever switch $\left| \stackrel{\scriptscriptstyle \Delta}{} \right| / \left| \stackrel{\scriptscriptstyle \Delta}{} \right|$ to adjust the sharpness.



OPERATING THE PC SCREEN

You can use the remote control as a simplified mouse or keyboard.

A CAUTION Caution: Mistaken use of the mouse/keyboard control could damage your equipment.

- Only connect to a PC.
- Before connecting, read the manuals of the device you will connect.
- Do not unplug the connector cables while the computer is operating.



PS/2, ADB, Serial Mouse Control

- 1. Turn off the projector and PC power, and connect the projector's CONTROL terminal to the computer via the mouse cable.
- If a USB cable is connected, disconnect it. If a USB cable is connected, the USB control function is given priority, and mouse control from the CONTROL terminal will not function.
- 3. Turn on the projector power, then the computer. The functions in the table below can be controlled. If you have difficulty with control, restart the computer (either from the software or by pressing the restart button).

Available Functions	Remote Control Operation
Move Pointer	Move using $\left(\stackrel{a}{\P} \right)$ on the disk pad
Left click with mouse	Press the center 👜 of the disk pad
Right click with mouse	Press the right mouse button 🔞

USB Mouse/Keyboard Control

1. Connect the projector's USB terminal to a PC using a USB cable. The functions in the table below can be controlled.

Available Functions	Remote Control Operation
Move Pointer	Move using 💮 on the disk pad
Left click with mouse	Press the center 👜 of the disk pad
Right click with mouse	Press the right mouse button 👜
Press the keyboard's 🗲 🄿 🗈 😾 keys	Press ()
Press the keyboard's ENTER key	Press the ENTER button
Press keyboard's PAGE UP key	Press PAGE UP button
Press keyboard's PAGE DOWN key	Press PAGE DOWN button
Press keyboard's ESC key	Press ESC button

NOTES

- It may not be possible to control notebook PCs, and other computers with built-in pointing devices (e.g. track balls), using this remote control. In this case, before connecting go into BIOS (system setup) and select external mouse, and disable the pointing devices. In addition, the mouse may not function if the computer does not have the needed utility program. See your computer's hardware manual for details.
- The USB control can be used with Windows 95 OSR 2.1 or higher. It may not be possible to use the remote control, depending on the computer's configurations and mouse drivers.
- The USB control can only be used for the functions listed above. 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 not available while the lamp is warming up (the POWER indicator flashes green), while adjusting the volume and display, correcting for trapezoidal distortion, zooming in on the screen, using the BLANK function, or displaying the menu screen.

$$\land \land \land \land \land \land$$

HIGH VOLTAGE HIGH TEMPERATURE HIGH PRESSURE

To replace the lamp, check the model number of the replacement lamp (sold separately) and contact your local dealer.

Replacement lamp model number: DT00571

If the projector is mounted on the ceiling, or if the lamp has broken, ask your dealer to replace the lamp. Lamp replacement is hazardous and should not be attempted by the user.

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.

WARNING The LCD projector uses a glass lamp bulb. It is a mercury lamp with high internal pressure. High-pressure mercury lamps can break with a loud bang, or burn out, if jolted or scratched, or through wear over time. 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.

- 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.
- Handle with care: jolting or scratching could cause the lamp bulb to burst during use.
- If the replace lamp indicator (see "Regarding the indicator Lamps" (Vol.2)) comes on, replace the lamp as soon as possible. Using the lamp for long periods of time, or past the replacement date, could cause it to burst. Do not use old (used) lamps; this is a cause of breakage.
- 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.
- 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.
- 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.
- Obey local ordinances when disposing of used lamps. In most cases, it is possible to dispose of used bulbs in the same manner as used glass bottles, but in some cases, bulbs are sorted separately.
- Do not use the projector with the lamp cover removed.

THE LAMP (continued)

Replacing the lamp

All projector lamps will wear out eventually. If used for long periods of time, the image could become darkened, and the color contrast could be impacted as well. We recommend that you replace your lamps early. If the LAMP indicator turns red, the lamp needs to be replaced. (See "Regarding the Indicator Lamps" (Vol.2) for details.)

- Turn off the projector, and unplug the Insert the new lamp, and 1 power cord. Allow the lamp bulb to cool tighten the 3 screws firmly to for at least 45 minutes, and prepare a lock it in place new lamp (serial number: DT00571) Interlocking the 2 tabs of the 5 After making sure that the projector has 2 lamp cover to the projector. cooled adequately, slide the knob of a put the lamp cover on the lamp cover lock as shown in the figure. projector. Then, one side of the lamp cover is Then push the point of the raised. Pull up the lamp cover and lamp cover to fix it, as shown remove it. as shown in the figure in the figure. Make sure that the lamp Knob of Lamp cover does't come up Cover Lock Tabs Unscrew the 3 screws, and slowly pull 3 Push out the lamp by the handle • Be careful not to touch the inside of the lamp case. Turn on the projector power, 6 and reset the lamp timer • To reset the lamp timer, from the OPTION menu, select the LAMP TIME. (Vol.2 7) ATTENTION • Make sure that the screws are screwed in firmly. Loose screws could result in damage or injury.
- Do not use with lamp cover removed.
- Do not reset the lamp timer without replacing the lamp. Reset the lamp timer always when replacing the lamp.

NOTE • The LAMP indicator is also red when the lamp unit reaches high temperature. Before replacing the lamp, switch power off, wait approximately 20 minutes, and switch power on again. If the LAMP indicator is still red, replace the lamp.

THE AIR FILTER

1

Caring for the air filter

The air filter should be cleaned about every 100 hours. If the LAMP indicator and TEMP indicator blink red simultaneously, or a message prompts you to clean the air filter when you turn on the unit, the filter needs to be cleaned. (See "Related Messages" (Vol.2) and "Regarding the Indicator Lamps" (Vol.2) for details.)

- Turn off the projector, and unplug the power cord
- **2** Apply a vacuum cleaner to the top of the air filter cover to clean the air filter



- **3** Turn on the projector, and use the menu to reset the filter timer
 - To reset the air filter timer, from the OPTION menu, select FILTER TIME.

THE AIR FILTER (continued)

Replacing the air filter

If the soiling will not come off the air filter, or it becomes damaged, then it needs to be replaced. Please contact your local dealer, after confirming the model of your separately sold replacement air filter.

Replacement air filter model: NJ07081

1 Turn off the projector, and unplug the power cord. Prepare a new air filter (one specified for your projector)

2 Remove the air filter cover and air filter

3 Insert the new filter, and replace the filter cover

4 Turn on the projector power, and using the menu, reset the filter timer

• To reset the filter timer, from the OPTION menu, select FILTER TIME.

ATTENTION • Make sure to turn off the power and unplug the power cord before caring for the unit. Please carefully read "Safety Instructions", in order to care for your projector correctly.

- Do not use with air filter cover removed.
- If the air filter becomes clogged by dust or the like, internal temperature rises and could cause malfunction. The power is automatically turned off in order to prevent the unit from overheating internally.

OTHER CARE

Caring for the inside of the projector :

In order to ensure the safe use of your projector, please have it cleaned and inspected by your local dealer about once every 2 years. Never try to care for the inside of the unit yourself. Doing so is dangerous.

Caring for the lens :

Lightly wipe the lens with a commercially available lens-cleaning wipe. Do not touch the lens directly with your hand.

Caring for the cabinet and remote control transmitter :

Wipe lightly with gauze or a soft cloth. If soiling is severe, dip a soft cloth in water or a neutral cleanser diluted in water, and wipe lightly after wringing well. Then, wipe lightly with a soft, dry cloth.

ATTENTION • Make sure to turn off the power and unplug the power cord before caring for the unit. Please carefully read "Safety Instructions" in this manual, in order to care for your projector correctly.

- Do not use cleaners or chemicals other than those listed above, including benzene and paint thinner.
- Do not use aerosols or sprays.
- Do not polish or wipe with hard objects.

LCD Projector 28A8247 USER'S MANUAL Vol.2 (Extended)

Thank you for purchasing this projector.

MARNING • Please read the accompanying manual "SAFETY INSTRUCTIONS" and this "USER'S MANUAL" thoroughly to ensure correct usage through understanding. After reading, store this instruction manual 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
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For "TECHNICAL" see the end of this manual.

MULTIFUNCTIONAL SETTINGS

This device has 8 separate menus: MAIN, PICTURE-1, PICTURE-2, INPUT, AUTO, SCREEN, OPTION, WIRELESS. Each of these menus is operated using the same methods. The basic operations of these menus are as follows.

 Menu screen display : Press the MENU button.

 Menu selection
 : Use the lever switch

 : Use the lever switch
 : Use the nor environment of the normal science of the normal science

Return menu to last previous screen: Press the button or the ESC button.

Execution of settings and/or adjustments: Perform the operation using the lever switch $||/|_{\Box}$.

(For further details, read the explanation for each separate menu.)

Initialization of settings and/or adjustments: During operation, press the RESET button.

(Functions that are executed at the same time as a selection, including H PHASE, LANGUAGE selection, and ADJUST, will not be reset.)

End menu operations: Press the MENU button, or do not perform any operation for several seconds.

MAIN Menu

With the MAIN menu, the seven items shown in the Table below can be performed.

Perform each operation in accordance with the instructions in the Table.

MENU		
(MAIN	BRIGHT	
PICTURE-1	CONTRAST	
PICTURE-2	ASPECT	
INPUT	PICT. POSIT.	1 - 1 - 1
AUTO	GAMMA	
SCREEN	MIRROR	
OPTION	LANGUAGE	
WIRELESS	l	12
: SELECT		

Example : MAIN Menu (BRIGHT)

MAIN Menu

Item	Description
BRIGHT	Adjust Brightness: Light 🗍 🚽 Dark
CONTRAST	Adjust Contrast: Strong 🛆 🚽 Weak
ASPECT	Select Aspect Ratio: At RGB Input or Hi-Vision 1125i(1035i/1080i)/750p of COMPONENT VIDEO Input: 4:3 4:16:9 At VIDEO Input, S-VIDEO Input or 525i/525p/625i of COMPONENT VIDEO Input: 4:3 4:3 4:16:9 5 At VIDEO Input, S-VIDEO Input or 525i/525p/625i of COMPONENT VIDEO Input: 4:3 4:3 6 16:9 At SMALL 6 16:9
PICT.POSIT.	Select Picture Position (for 16:9/SMALL Picture): TOP CENTER BOTTOM
GAMMA	Select Gamma Mode: NORMAL U CINEMA U DYNAMIC
MIRROR	Select Mirror Status: NORMAL 🚽 🖞 H:INVERT 🚽 ڭ V:INVERT 🚽 🗳 H&V:INVERT
LANGUAGE	Select Menu Language: ENGLISH 0 FRANÇAIS 0 DEUTSCH 0 ESPAÑOL 0 0 ITALIANO 0 0 NORSK 0 0 NEDERLANDS 0 0 0 0 POTUGUÊS 0 0 0 0 0 0 0 0

PICTURE-1 Menu

With the PICTURE-1 menu, the five items shown in the Table below can be performed.

Perform each operation in accordance with the instructions in the Table.

MENU		
MAIN	COLOR BAL R)-	
(PICTURE-1	COLOR BAL B	
PICTURE-2	SHARPNESS	
INPUT	COLOR	
AUTO	TINT	
SCREEN		
OPTION		
WIRELESS	L I	12
SELECT		
Example : PICTURE1 Menu		
(co)	LOR BAL	R)
(00)	D/ (_	,

PICTURE-1 Menu

COLOR BAL R Adjust Red Color Balance: Dark 🖺 🚽 Light
COLOR BAL B Adjust Blue Color Balance: Dark 🗍 🚽 Light
SHARPNESS Adjust Sharpness (for VIDEO/S-VIDEO): Clear
COLOR Adjust COLOR (for VIDEO/S-VIDEO/COMPONENT VIDEO): Dark
TINT Adjust Tint (for VIDEO/S-VIDEO): Green

PICTURE-2 Menu

With the PICTURE-2 menu, the five items shown in the Table below can be performed.

Perform each operation in accordance with the instructions in the Table.



Example : PICTURE2 Menu (V POSITION)

PICTURE-2 Menu

Item	Description
V POSITION	Adjust Vertical Position (for RGB): Up 🗍 🚽 Down
H POSITION	Adjust Horizontal Position (for RGB): Left 🗍 🚽 Right
H PHASE	Adjust Horizontal Phase (for RGB/COMPONENT VIDEO): Right A U Left Adjust to eliminate flicker.
H SIZE	 Adjust Horizontal Size (for RGB): Large Small If the horizontal size adjustment is excessive, the image may not be displayed correctly. In such a case, initialize H SIZE with the RESET button.
OVER SCAN	Select Over-scan Ratio (for VIDEO/S-VIDEO/COMPONENT VIDEO): LARGE Image: Middle image: Mid

MULTIFUNCTIONAL SETTINGS (continued)

INPUT Menu

The three Input menu items listed in the table below can be manipulated. For RGB input, the reception signal's horizontal and vertical frequency is displayed on the initial menu screen. Use the table below as a guide for operation.

MENU		
MAIN	(BNC	H ► RGB
PICTURE-1	VIDEO	COMPONENT
PICTURE-2	HDTV	
(INPUT	SYNC ON G	
AUTO	P. IN P. INPUT	
SCREEN	P. IN P. POSIT	
OPTION		
WIRELESS		
: SELECT	-	
Example · INPUT Menu		

(BNC)

INPUT Menu

Item	Description
BNC	$\begin{array}{c} \textbf{BNC Pin (R/C_{R}/P_{R}, G/Y, B/C_{B}/P_{B}, H, V) function selection:} \\ & \text{BNC (RGB) } \\ \hline \textbf{BNC (RGB) } \\ \hline \textbf{BNC (COMPONENT)} \\ \hline \textbf{(R) (G) (B) (H) (V)} \\ \hline \textbf{(C_{R}/P_{R}) (Y) (C_{B}/P_{B}) (-) (-)} \\ \hline \textbf{(Pins for RGB)} \\ \hline \textbf{(Pins for COMPONENT)} \\ \hline \textbf{Selecting BNC (RGB) allows the 5 RGB2 pins (R/C_{R}/P_{R}, G/Y, B/C_{B}/P_{B}, H, V) to be used as RGB signal BNC input as-is. \\ \hline \textbf{Selecting BNC (COMPONENT) allows the 3 leftmost RGB2 pins (R/C_{R}/P_{R}, G/Y, B/C_{B}/P_{B}, M, V) to be used as the COMPONENT VIDEO input C_{R}/P_{R}, Y, and C_{B}/P_{B} pins. \\ \hline \textbf{B}/C_{B}/P_{B}) to be used as the COMPONENT VIDEO input C_{R}/P_{R}, Y, and C_{B}/P_{B} pins. \\ \hline \textbf{B}/C_{B}/P_{B}) to be used as the COMPONENT VIDEO input C_{R}/P_{R}, Y, and C_{B}/P_{B} pins. \\ \hline \textbf{B}/C_{B}/P_{B}) to be used as the COMPONENT VIDEO input C_{R}/P_{R}, Y, and C_{B}/P_{B} pins. \\ \hline \textbf{B}/C_{B}/P_{B}) to be used as the COMPONENT VIDEO input C_{R}/P_{R}, Y, and C_{B}/P_{B} pins. \\ \hline \textbf{B}/C_{B}/P_{B}) to be used as the COMPONENT VIDEO input C_{R}/P_{R}, Y, and C_{B}/P_{B} pins. \\ \hline \textbf{B}/C_{B}/P_{B}) to be used as the COMPONENT VIDEO input C_{R}/P_{R}, Y, and C_{B}/P_{B} pins. \\ \hline \textbf{B}/C_{B}/P_{B}) to be used as the COMPONENT VIDEO input C_{R}/P_{R}, Y, and C_{B}/P_{B} pins. \\ \hline \textbf{B}/C_{B}/P_{B}) to be used as the COMPONENT VIDEO input C_{R}/P_{R}, Y, and C_{B}/P_{B} pins. \\ \hline \textbf{B}/C_{B}/P_{B}) to be used as the COMPONENT VIDEO input C_{R}/P_{R}, Y, and C_{B}/P_{B} pins. \\ \hline \textbf{B}/C_{B}/P_{B}) to be used as the COMPONENT VIDEO input C_{R}/P_{R}, Y, and C_{B}/P_{B} pins. \\ \hline \textbf{B}/C_{B}/P_{B}) to be used as the COMPONENT VIDEO input C_{R}/P_{R}, Y, and C_{B}/P_{B} pins. \\ \hline \textbf{B}/C_{B}/P_{B}) to be used as the COMPONENT VIDEO input C_{R}/P_{R} pins. \\ \hline \textbf{B}/C_{B}/P_{B}) to be used as the COMPONENT VIDEO input C_{R}/P_{R} pins. \\ \hline \textbf{B}/C_{B}/P_{B}) to be used as the COMPONENT VIDEO input C_{R}/P_{R} pins. \\ \hline \textbf{B}/C_{R}/P_{R}) to be used as the COMPONENT pincent pincent pincent pincen pincent pincen pincent pincen $
VIDEO	Select Mode of Signal Type (for VIDEO/S-VIDEO): AUTO NTSC PAL SECAM NTSC4.43 A M-PAL N-PAL N-PAL SECAM NTSC4.43 A A When AUTO is selected, the video/S-video input function under ADJUST (NTSC4.43 A A A When AUTO is selected, the video/S-video input function under ADJUST (NTSC4.43 A A A Use this function if the image becomes unstable with VIDEO/S-VIDEO. (e.g. The image becomes irregular, or lacks color.) AUTO mode may not function correctly with a PAL60 signal and certain other signals. • The AUTO mode operation requires approximately 10 seconds. • For COMPONENT VIDEO, the signal type is identified automatically even if this function is inactive. For a HDTV signal, refer to the item HDTV below.
HDTV	Select HDTV Signal Mode: 1080i 🖉 🐴 1035i • If the selected HDTV mode is incompatible with the input signal, the picture may be distorted.
SYNC ON G	 On/Off SYNC ON G Mode: TURN ON TURN OFF Selecting TURN ON turns on the SYNC ON G mode. The SYNC ON G mode allows reception of SYNC on G. In the SYNC ON G mode, the picture may be distorted with certain input signals. In such a case, remove the signal connector so that no signal is received and turn SYNC ON G off, and then reconnect the signal.
P. IN P. INPUT	P. IN P. screen (*) input signal selection: VIDEO → ▲ S-VIDEO Selects the signal displayed on the P. IN P. subscreen.
P. IN P. POSIT	P. IN P. screen (*) display position selection:

(*) The P. IN P. (picture-in-picture) function displays the video signal image in a subscreen (P. IN P. screen) on top of the screen on which the RGB signal image is being displayed. (See "Displaying Child Window" Vol.1 24.)

AUTO Menu

With the AUTO menu, the four items shown in the Table below can be performed.

Please perform each operation in accordance with the instructions in the Table.

MENU	
MAIN	(ADJUST) EXECUTE
PICTURE-1	KEYSTONE (7)
PICTURE-2	POWER OFF
INPUT	ONE TOUCH D
(AUTO	
SCREEN	
OPTION	
WIRELESS	
SELECT	
Examp	le : AUTO Menu
(ADJUST)

AUTO Menu

Item	Description
ADJUST	 Auto Adjust (for RGB): Automatically adjusts H POSITION, V POSITION, H PHASE, and H SIZE. Use this function with the maximum window size. Auto Adjust (for VIDEO/S-VIDEO): This function automatically selects the appropriate signal mode depending on input signals. This is only performed if AUTO is selected on the VIDEO menu item () of the INPUT menu. This function may not be available with a PAL60 signal and certain other signals. The AUTO mode operation requires approximately 10 seconds. For COMPONENT VIDEO, the signal type is identified automatically even if this function is inactive. For more information on HDTV signals, see HDTV. ()
	 Automatic keystone distortion correction: You can automatically correct vertical keystone distortion corresponding to the angle (forward/backward tilt) at which the unit is set up. If the projection screen is inclined, or if the projector is angled downwards, it may not be possible to make the correct adjustment when V: INVERT or H&V: INVERT is selected under the MIRROR item of the MAIN menu. When the zoom adjustment is set to the TELE side, automatic correction may be excessive. The automatic correction function should be used with zoom set to WIDE whenever possible.
POWER OFF	Adjust POWER OFF Time: Long (MAX. 99 min.) () () Short (Min. 1 min.) () () (DISABLE: 0 min.) If the time set here passes without valid signal input (there is no signal input, or signal input is out of specifications), the standby mode is set (see "TURNING ON THE POWER" Vol.1 (1). This function is inactive when DISABLE (0 min.) is selected.
	Enabling/disabling the KEYSTONE () function using the ONE TOUCH () button: TURN ON () () TURN OFF Pressing the ONE TOUCH button will automatically retrieve pictures and automatically adjust the screen (see "ADJUSTING SCREEN WITH ONE- TOUCH" Vol.1 (23), and you can also set the function to execute KEYSTONE () (see above in this table) simultaneously when pressed. KEYSTONE will be executed if TURN ON is selected.

MULTIFUNCTIONAL SETTINGS (continued)

SCREEN Menu

With the SCREEN menu, the five items shown in the Table below can be performed. Please perform each operation in accordance with the instructions in the Table.

MENU		
MAIN PICTURE-1 PICTURE-2 INPUT AUTO SCREEN OPTION WIRELESS	BLANK START UP MyScreen MyScreen Size MyScreen Lock	► MyScreen ORIGINAL
: SELECT		
Example	: SCREEN	N Menu

(BLANK)

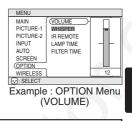
SCREEN Menu

Item	Description	
BLANK	Selection of BLANK Screen: MyScreen ORIGINAL Image: Control of the separate booklet, Vol. 1 (Basic)). The BLANK Screen may be voluntarily selected. The BLANK Screen is displayed when the screen has been erased (i.e., made to vanish) by manipulating the BLANK button (please refer to the "Temporarily Blanking the Screen" section of the separate booklet, Vol. 1 (Basic)). MyScreen: Using the MyScreen category (see this Table, below), one can register a desired screen (or screens). At the time of factory shipment, this is set as a non-patterned (plain) blue color screen. ORIGINAL: Existing standard screens. Please make confirmation using the actual screen(s). Option screens: Various colored non-patterned (plain) screens displayed within the Menus. • The MyScreen and the ORIGINAL Screen will each change to a non-patterned (plain) black color screen several minutes after being displayed.	
START UP	Selection of START UP Screen: MyScreen My	
MyScreen	 Registration of MyScreen: When this item is executed, the MyScreen Menu for registration of MyScreen for the BLANK Screen and the START UP Screen is displayed. When operations are performed in accordance with this Menu, one can "cut" and register desired screens from among the received images within the display. 1. After the "Do you start capturing this picture?" message has been displayed, pressing the ESC (or RESET) button interrupts execution of the MyScreen. When the ENTER button is pressed, the picture becomes static (no longer moves), and a frame for picture cutting, as well as the message that follows below, appear. Please press the button when the screen you want to register is currently being displayed. 2. When the "Move the capture area as you want." message has been displayed, pressing the ESC (or RESET) button will eliminate the static state of the picture, and operations can be performed again from operation 1. The frame can be moved using the Core (a) button will initiate screen registration. The registration process takes approximately 1 minute to complete. 3. When the registration has been completed, the screen of the registered MyScreen, plus the message, "MyScreen registration is finished," will be displayed for several seconds, after which the operation is terminated. 	
MyScreen Size	Selection of MyScreen display size: x1 🚽 🕒 FULL	
MyScreen Lock	Invalidation of MyScreen registration function: TURN ON When TURN ON is selected, the MyScreen category (see this Table, above) cannot be executed; in this way, one can prohibit rewrites ("writeovers") of the MyScreen.	

OPTION Menu

With the OPTION menu, the five items shown in the Table below can be performed.

Please perform each operation in accordance with the instructions in the Table.



OPTION Menu

Item	Description						
VOLUME	Adjust Volume: High 🖞 🚽 Low						
IR REMOTE	 Selecting the remote control receiver: The unit has 3 remote control receivers, as shown in the figure to the right (1, 2, and 3). You can select which of them to activate ("v" in the figure), and which to disable. The ambient lighting and other factors may prevent the remote control operation from functioning properly. If this happens, use this function to disable receivers being impacted by unneeded light. 						
LAMP TIME	 Refer to LAMP TIME: When set, this function displays the total time the projector lamp has been used since new. Reset LAMP TIME [Use this function only when the lamp has been replaced!]: Depress the RESET button for at least 3 seconds while lamp time is being displayed. The reset menu will then appear. After you replace the lamp with a new lamp, select RESET on the menu with the ^(a) button. Do not reset the lamp time unless you have replaced the lamp. And, always reset the lamp time when replacing the lamp. Before replacing the lamp, carefully read the descriptions headed "THE LAMP". 						
FILTER TIME	Refer to FILTER TIME: This function displays the total time the air-filter has been used since new. Reset FILTER TIME [Use this function only when the filter is cleaned or replaced!]: Depress the RESET button for at least 3 seconds while lamp time is being displayed. The reset menu will then appear. After you replace the filter, select						

WIRELESS Menu

The WIRELESS menu is only enabled if the wireless function is enabled. Using the wireless function requires a Wireless & Network Module Terminal (sold separately). See the Wireless & Network Module Terminal user's manual for more information about the WIRELESS menu. Contact your local dealer for more information about the wireless function and Wireless & Network Module Terminal.

Related Messages

When the unit's power is ON, messages such as those shown below may be displayed. When any such message is displayed on the screen, please respond as described below.

Message	Description
CLEAN THE AIR FILTER AFTER CLEANING AIR FILTER, RESET THE FILTER TIMER.	A note of precaution when cleaning the air filter. After cleaning the filter, operate FILTER TIME of the OPTION Menu (2011), and perform reset of the filter timer.
NO INPUT IS DETECTED ON	There is no input signal. Please confirm the signal input connection, and the status of the signal source.
SYNC IS OUT OF RANGE ON fH kHz fV Hz	The horizontal or vertical wavelength of the inputted signal is outside of the response parameters of this unit. Please confirm the specs for this unit or the signal source specs.
CHECK THE AIR FLOW	The internal portion temperature is rising. Please turn the power OFF, and allow the unit to cool down for approximately 20 minutes. After having confirmed the following items, then please resent the power to ON. • Is there blockage of the air passage aperture? • Is the air filter dirty? • Does the peripheral temperature exceed 35°C?

Regarding the Indicator Lamps

Lighting and flashing of the POWER indicator, the LAMP indicator, and the TEMP indicator have the meanings as described in the Table below. Please respond in accordance with the instructions within the Table.

POWER indicator	LAMP indicator	TEMP indicator	Description
The orange lamp is lighted	Turned OFF (Not lighted)	Turned OFF (Not lighted)	The STANDBY mode is set
Flashing of the green lamp	Turned OFF	Turned OFF	The unit is warming up. Please wait.
The green lamp is lighted	Turned OFF	Turned OFF	The unit is in an ON state. Ordinary operations may be performed.
Flashing of the orange lamp	Turned OFF	Turned OFF	The unit is cooling down. Please wait.
Blinking of the red lamp	-	-	The unit is cooling down. Please wait. A certain error has been detected. Wait until the POWER indicator lamp has finished flashing, and then perform the proper response measure using the item descriptions below as reference.
The red lamp is lighted, or blinks	The red lamp is lighted	Turned OFF	The lamp does not light. There is a possibility that the interior portion has become heated. Turn the power OFF and wait approximately 20 minutes. After the main unit has cooled down, please confirm whether or not there is blockage of the air passage aperture, whether or not the filter is dirty, and/or whether or not the peripheral temperature exceeds 35°C, etc. After performing any needed maintenance, turn the power ON again; if the same display is displayed, then please change the lamp.
The red lamp is lighted, or blinks	Blinking of the red lamp	Turned OFF	Either there is no lamp and/or lamp cover, or either of these has not been properly fixed (attached). Turn the power OFF and wait approximately 45 minutes. After the main unit has sufficiently cooled down, please make confirmation of the attachment state of the lamp and lamp cover. After performing any needed maintenance, turn the power ON again; if the same display is displayed, then please contact a sales store or a service company.
The red lamp is lighted, or blinks	Turned OFF	Blinking of the red lamp	The cooling fan is not operating. Turn the power OFF and wait approximately 20 minutes. After the main unit has cooled down, please make confirmation that no foreign matter has become caught in the fan, etc. After performing any needed maintenance, turn the power ON again; if the same display is displayed, then please contact a sales store or a service company.
The red lamp is lighted, or blinks	Turned OFF	The red lamp is lighted	There is a possibility that the interior portion has become heated. Turn the power OFF and wait approximately 20 minutes. After the main unit has cooled down, please confirm whether or not there is blockage of the air passage aperture, whether or not the filter is dirty, and/or whether or not the peripheral temperature exceeds 35°C, etc. After performing any needed maintenance, turn the power ON again; if the same display is displayed, then please contact a sales store or a service company.
The green lamp is lighted	Alternative blinking with the red lamp		There is a possibility that the interior portion has become overcooled. Please use the unit within the usage temperature parameters (0°C to 35°C). After performing any needed maintenance, turn the power ON again; if the same display is displayed, then please contact a sales store or a service company.
The green lamp is lighted	Simultaneous blinking with the red lamp		This is a notification that it is time to clean the filter. After cleaning the filter, operate the FILTER TIME portion of the OPTION Menu, and perform reset of the FILTER TIME.

NOTE

When the interior portion has become overheated, for safety purposes, the power source is automatically turned OFF, and the indicator lamps may also be turned OFF. Press the " " (power OFF) side of the main power switch, and wait for approximately 20 minutes. Please then use the unit only after having first confirmed that the unit has sufficiently cooled down.

Phenomena That May Easily Be Mistaken for Machine Defects

Before requesting repair, check in accordance with the following chart. If the situation cannot be corrected, then contact your dealer.

Phenomenon	Cases not involving a machine defect	Items to be confirmed	Reference Page(s)	
	The main power source is not ON.	Turn on the main power.	- Vol. 1-3, 15	
	The electrical power cord is not plugged in.	Correctly connect the power cord.	1 101.1-0, 10	
Power does not come ON	The main power source has been interrupted during operation, such as by a power outage (blackout), etc.	Be sure to press the "O" (power OFF) side of the main power switch, and leave this OFF for approximately 20 minutes. After the unit has sufficiently cooled down, turn ON the power source.	Vol.1-15	
No sound or pictures are	The input changeover settings are mismatched.	Select the input signal, and correct the settings.	Vol.1-16	
outputted	No signal is being inputted.	Correctly connect the connection cord.	Vol.1-8-12	
Disturs	The electrical wiring to this unit is not correctly connected.	Correctly connect the connection cord.	Vol.1-8-12	
Pictures are displayed, but no sounds are heard	The volume setting has been set at (or adjusted to) an extremely low level.	Adjust the VOLUME setting to a higher level.	Vol.1-18	
sounds are neard	The MUTE mode is the current setting.	Press the MUTE button to release (change) the MUTE mode setting.	Vol.1-18	
Sounds are	The electrical wiring to this unit is not correctly connected.	Correctly connect the connection cord.	Vol.1-8-12	
heard, but no pictures are	The brightness setting has been set at (or adjusted to) an extremely low level.	Adjust the BRIGHT setting to a brighter level.	Vol.2-2	
displayed	The lens cap has not been removed.	Remove the lens cap.	Vol.1-15	
Colors have a faded- out appearance Color tone is poor	Color depth setting or color tone setting	Perform picture adjustments by changing the COLOR BAL R, the COLOR BAL B, and/or the TINT settings, etc.	Vol.2-3	
Pictures appear	The brightness setting and/or contrast setting has not been properly adjusted.	Perform picture adjustments by changing the BRIGHT and/or CONTRAST settings, etc.	Vol.2-2	
dark	Lamp is approaching the end of its product lifetime.	Exchange the old lamp with a new lamp.	Vol.1-27, 28	
Pictures appear blurry	Either the FOCUS setting or the H PHASE is not properly adjusted.	Adjust the FOCUS and H PHASE settings.	Vol.1-16 Vol.2-3	
Input signal changes with no-operation.	INPUT dial is set between the click points.	Turn the INPUT dial and set it at the click point.	Vol.1-16	

NOTE

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.

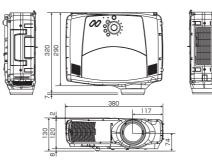
SPECIFICATIONS

NOTE • This specifications are subject to change without notice.

Item		Spec	ification		
Product name		Liquid crystal projector			
Liquid	Panel size	3.3 cm (1.3 type)			
crystal	Drive system	TFT active matrix			
panel	Pixels	786,432 pixels (1024 horizonta	al x 768 vertical)		
Lens		Zoom lens F=1.7 ~ 2.3 f=49 ~	~ 64 mm		
Lamp		150 W UHB			
Speaker		1.0W+1.0W (Stereo)			
Power sup	oply	AC100 ~ 120V, 3.0A / AC220	~ 240V, 1.4A		
Power consumption		270W			
Temperature range		0 ~ 35°C (Operating)			
Size		380 (W) x 120 (H) x 290 (D) m	380 (W) x 120 (H) x 290 (D) mm (Not including protruding parts)		
Weight (m	nass)	6.0 kg	6.0 kg		
Ports		RGB Input Ports RGB 1 BNC (when RGB selected) - - (R.G.B.H.V) 1 DVI 1 VIDEO Input Ports 1 VIDEO IN 1 S-VIDEO IN 1 COMPONENT VIDEO 1 COMPONENT VIDEO - (CR/PR, CB/PB, Y) 1 BNC (when COMPONENT selected) - (CR/PR, Y, CB/PB) 1	AUDIO Ports AUDIO IN 1 1 AUDIO IN 2 1 AUDIO IN (R, L) 1 RGB Output Port 1 RGB OUT 1 AUDIO Output Port 1 AUDIO OUT 1 CONTROL Ports 1 CONTROL 1 USB 1 Other Ports 1 WIRELESS & NETWORK MODULE 1 REMOTE CONTROL 1		
		Lamp: DT00571 Air Filter: NJC * For others, consult your deal			

Dimension Diagram





Unit : mm

TECHNICAL

SIGNAL CONNECTOR PIN ASSIGNMENT

RGB RGB OUT



D-sub 15-pin Shrink

Pin No	Signal	Pin No	Signal
1	Video input Red	9	-
2	Video input Green	10	Ground
3	Video input Blue	11	-
4	-	12	RGB IN: SDA (DDC)
6	Ground Red	12	RGB OUT : -
7	Ground Green	13	H. sync./ Composite sync.
8	Ground Blue	14	Vertical sync
		15	RGB IN : SCL (DDC)
		15	RGB OUT : -

S-VIDEO



Mini Din 4-pin

Mini Din 4-pin					
Pin No	Signal				
1	Color: 0.286Vp-p (NTSC, burst signal), 75Ω terminator 0.3Vp-p (PAL/SECAM, burst signal), 75Ω terminator				
2	Brightness: 1.0Vp-p, 75Ω terminator				
3	Ground				
4	Ground				
_					

signal	Terminal	Specification
	RGB	Video: RGB separate, Analog, 0.7Vp-p, 75Ω terminator (positive) H/V. sync.: TTL level (positive/negative) Composite sync.: TTL level D-sub 15-pin shrink jack
RGB signal input	BNC (RGB) (R,G,B,H,V)	Video: RGB separate, Analog 0.7Vp-p, 75Ω terminator (positive) H/V. sync.: TTL level (positive/negative) Composite sync.: TTL level BNC connector x 5
	DVI	TMDS, DC 150-1200 mV/AC 1.56 Vp-p, TTL Level (Positive/Negative) DVI connector
	AUDIO IN 1 AUDIO IN 2	200mVrms, 57 kΩ (max. 3.0Vp-p) Stereo mini jack
	VIDEO IN	1.0Vp-p, 75Ω terminator, RCA jack
	S-VIDEO IN	Brightness signal: 1.0Vp-p, 75Ω terminator Color signal: 0.286Vp-p (NTSC, burst signal),75Ω terminator Color signal: 0.300Vp-p (PAL/SECAM, burst signal),75Ω terminator Mini DIN 4-pin jack
Video signal input	COMPONENT VIDEO (Св/Рв, Св/Рв, Ү)	Y signal: 1.0 Vp-p, 75 Ω terminator Cr//Pr signal: 0.7 Vp-p, 75 Ω terminator —Ca//Ps signal: 0.7 Vp-p, 75 Ω terminator
	BNC (COMPONENT) (Cr/Pr, Cb/Pb, Y)	RCA jack x 3 (BNC connector x 5)
	AUDIO IN R L	200mVrms, 57 kΩ (max. 3.0Vp-p) RCA jack
Signal output	RGB OUT	Video: RGB separate, Analog 0.7Vp-p, 75Ω (positive) Sync.: H,V separate, TTL level (positive/negative) Composite sync.: TTL level D-sub 15-pin shrink jack
	AUDIO OUT	0~200mV(rms), output impedance 1kΩ (max. 3.0Vp-p) Stereo mini jack
Control	CONTROL	D-sub 15pin shrink plug
functions	USB	USB jack (B type)

EXAMPLE OF COMPUTER SIGNAL

Resolution H × V	fH (kHz)	fV (Hz)	Rating	Signal mode	Display mode
720 × 400	37.9	85.0	VESA	TEXT	Zoom in
640 × 480	31.5	59.9	VESA	VGA (60Hz)	Zoom in
640 × 480	35.0	66.7		Mac13"mode	Zoom in
640×480	37.9	72.8	VESA	VGA (72Hz)	Zoom in
640×480	37.5	75.0	VESA	VGA (75Hz)	Zoom in
640×480	43.3	85.0	VESA	VGA (85Hz)	Zoom in
800 × 600	35.2	56.3	VESA	SVGA (56Hz)	Zoom in
800 × 600	37.9	60.3	VESA	SVGA (60Hz)	Zoom in
800 × 600	48.1	72.2	VESA	SVGA (72Hz)	Zoom in
800 × 600	46.9	75.0	VESA	SVGA (75Hz)	Zoom in
800 × 600	53.7	85.1	VESA	SVGA (85Hz)	Zoom in
832 × 624	49.7	74.5		Mac16"mode	Zoom in
1024 imes 768	48.4	60.0	VESA	XGA (60Hz)	
1024 imes 768	56.5	70.1	VESA	XGA (70Hz)	
1024 imes 768	60.0	75.0	VESA	XGA (75Hz)	
1024 imes 768	68.7	85.0	VESA	XGA (85Hz)	
1152 × 864	67.5	75.0	VESA	SXGA (75Hz)	Zoom out
1280 × 960	60.0	60.0	VESA	SXGA (60Hz)	Zoom out
1280 × 1024	64.0	60.0	VESA	SXGA (60Hz)	Zoom out
1280 × 1024	80.0	75.0	VESA	SXGA (75Hz)	Zoom out
1280 × 1024	91.2	85.0	VESA	SXGA (85Hz)	Zoom out
1600 × 1200	75.0	60.0	VESA	UXGA (60Hz)	Zoom out

NOTE • Some computers may have multiple display screen modes. Use of some of these modes will not be possible with this projector.

- Be sure to check jack type, signal level, timing and resolution before connecting this projector to a computer.
- 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 (except DVI input) with resolution up to UXGA (1,600 x 1,200), 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.
- The image may not be displayed correctly when the input sync. signal is "Composite Sync." or "Sync. on G".
- UXGA (1,600 x 1,200) signals cannot be displayed with DVI input.

INITIAL SET SIGNALS

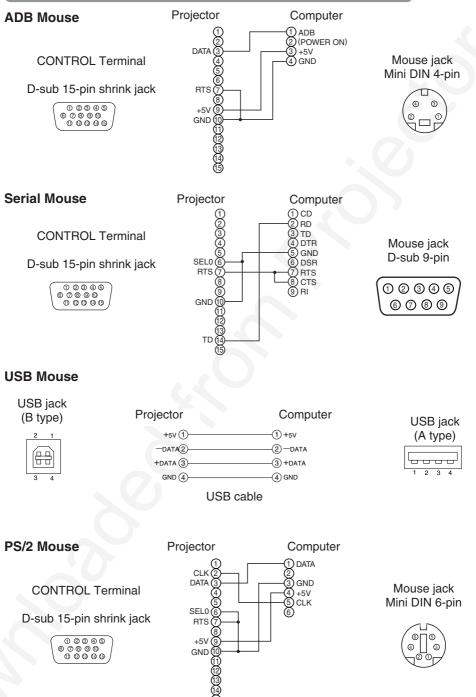
The following signals are used for the initial settings.

The signal timing of some computer models may be different. In such case, refer to adjust the V.POSIT and H.POSIT of the menu.



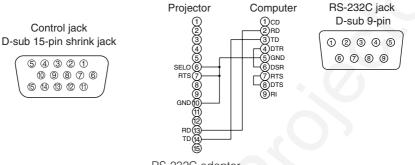
Computer / Horizontal signal timing (µs)			, , , , , , , , , , , , , , , , , , , ,		l timimg	timimg (lines)			
Signal	а	b	С	d	Signal	а	b	с	d
TEXT	2.0	3.0	20.3	1.0	TEXT	3	42	400	1
VGA (60Hz)	3.8	1.6	25.4	0.6	VGA (60Hz)	2	25	480	2
Mac 13"mode	2.1	3.2	21.2	2.1	Mac 13"mode	3	39	480	3
VGA (72Hz)	1.3	3.8	20.3	0.5	VGA (72Hz)	3	20	480	1
VGA (75Hz)	2.0	3.8	20.3	0.5	VGA (75Hz)	3	16	480	1
VGA (85Hz)	1.6	2.2	17.8	1.6	VGA (85Hz)	3	25	480	1
SVGA (56Hz)	2.0	3.6	22.2	0.7	SVGA (56Hz)	2	22	600	1
SVGA (60Hz)	3.2	2.2	20.0	1.0	SVGA (60Hz)	4	23	600	1
SVGA (72Hz)	2.4	1.3	16.0	1.1	SVGA (72Hz)	6	23	600	37
SVGA (75Hz)	1.6	3.2	16.2	0.3	SVGA (75Hz)	3	21	600	1
SVGA (85Hz)	1.1	2.7	14.2	0.6	SVGA (85Hz)	3	27	600	1
Mac 16"mode	1.1	3.9	14.5	0.6	Mac 16"mode	3	39	624	1
XGA (60Hz)	2.1	2.5	15.8	0.4	XGA (60Hz)	6	29	768	3
XGA (70Hz)	1.8	1.9	13.7	0.3	XGA (70Hz)	6	29	768	3
XGA (75Hz)	1.2	2.2	13.0	0.2	XGA (75Hz)	3	28	768	1
XGA (85Hz)	1.0	2.2	10.8	0.5	XGA (85Hz)	3	36	768	1
1152×864 (75Hz)	1.2	2.4	10.7	0.6	1152×864 (75Hz)	3	32	864	1
1280×960 (60Hz)	1.0	2.9	11.9	0.9	1280×960 (60Hz)	3	36	960	1
1280×1024 (60Hz)	1.0	2.3	11.9	0.4	1280×1024 (60Hz)	3	38	1024	1
1280×1024 (75Hz)	1.1	1.8	9.5	0.1	1280×1024 (75Hz)	3	38	1024	1
1280×1024 (85Hz)	1.0	1.4	8.1	0.4	1280×1024 (85Hz)	3	44	1024	1
1600×1200 (60Hz)	1.2	1.9	9.9	0.4	1600×1200 (60Hz)	3	46	1200	1

CONNECTION TO THE MOUSE CONTROL



RS-232C COMMUNICATION

- (1) Turn off the projector and computer power supplies, and connect with the RS-232C adapter via the RS-232C cable.
- (2) Turn on the computer power supply and after the computer has started up, turn on the projector power supply.



RS-232C adapter

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

1	byte_0	byte_1 byte_2 byte_3		byte_4	byte_5		
	Action		Ту	ре	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.

RS-232C COMMUNICATION (continued)

Requesting projector status (Get command)

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

Changing the projector settings (Set command)

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

Using the projector default settings (Reset Command)

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

Increasing the projector setting value (Increment command)

- (1) The computer sends the increment code Header + Command data ('04H'+'00H'+ type (2 bytes) +'00H'+'00H') to the projector.
- (2) The projector in creases the setting value on the above setting code.
- (3) The projector returns the response code '06H' to the computer.

Decreasing the projector setting value (Decrement command)

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

When a command sent by the projector cannot be understood by the computer

When the command sent by the projector cannot be understood, the error command '15H' is returned by the computer. Some times, the projector ignores RS-232C commands during other works. If the error command '15H' is returned, please send the same command again.

When data sent by the projector cannot be practice

When the command sent by the projector cannot be practiced, the the error code '1cH' +'xxxxH' is returned.

When the data length is greater than indicated by the data length code, the projector will 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 projector.

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 data chart

Names		peration type		laadar			Command data		
Names		peration type	Header			CRC	Action	Туре	Setting code
Blank Color		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
	Set	Black	BE EF	03	06 00	9B D0	01 00	00 30	06 00
		MyScreen	BE EF	03	06 00	FB CA	01 00	00 30	20 00
		ORIGNAL	BE EF	03	06 00	FB E2	01 00	00 30	40 00
		Get	BE EF	03	06 00	08 D3	02 00	00 30	00 00
		Normal	BE EF	03	06 00	C7 D2	01 00	01 30	00 00
	Set	H Inverse	BE EF	03	06 00	57 D3	01 00	01 30	01 00
Mirror	Sel	V Inverse	BE EF	03	06 00	A7 D3	01 00	01 30	02 00
		H&V Inverse	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
	Set	Normal	BE EF	03	06 00	83 D2	01 00	02 30	00 00
Freeze	Set	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
		ORIGNAL	BE EF	03	06 00	0B D2	01 00	04 30	00 00
Startup	Set	OFF	BE EF	03	06 00	9B D3	01 00	04 30	01 00
		MyScreen	BE EF	03	06 00	CB CB	01 00	04 30	20 00
	Get		BE EF	03	06 00	38 D2	02 00	04 30	00 00
	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
Language		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
			BE EF	03	06 00	37 D4	01 00	05 30	08 00
			BE EF	03	06 00	A7 D5	01 00	05 30	09 00
		한글	BE EF	03	06 00	57 D5	01 00	05 30	0A 00
	Get		BE EF	03	06 00	C4 D3	02 00	05 30	00 00
	Get		BE EF	03	06 00	7C D2	02 00	07 30	00 00
Magnify	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
	Get		BE EF	03	06 00	08 86	02 00	10 31	00 00
Auto off									
	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
Brightness Reset		Execute	BE EF	03	06 00	58 D3	06 00	00 70	00 00
Contrast Reset		Execute	BE EF	03	06 00	A4 D2	06 00	01 70	00 00
V.Position Reset		Execute	BE EF	03	06 00	E0 D2	06 00	02 70	00 00

Command data chart (continued)

Names	Operation type		Header					Comman		
						CRC	Action	Туре	Setting cod	
H.Position Reset	Execute		BE	EF	03	06 00	IC D3	06 00	03 70	00 00
H.Size Reset		Execute		EF	03	06 00	68 D2	06 00	04 70	00 00
Color Balance R Reset	Execute		BE	EF	03	06 00	94 D3	06 00	05 70	00 00
Color Balance B Reset	Execute		BE	EF	03	06 00	D0 D3	06 00	06 70	00 00
Sharpness Reset		Execute	BE	EF	03	06 00	C4 D0	06 00	09 70	00 00
Color Reset		Execute	BE	EF	03	06 00	80 D0	06 00	0A 70	00 00
Tint Reset		Execute	BE	EF	03	06 00	7C D1	06 00	0B 70	00 00
Keystone_V Reset		Execute	BE	EF	03	06 00	08 D0	06 00	0C 70	00 00
Keystone_H Reset		Execute	BE	EF	03	06 00	98 D8	06 00	20 70	00 00
Auto Adjust		Execute	BE	EF	03	06 00	91 D0	06 00	0A 20	00 00
Auto Keystone_V		Execute	BE	EF	03	06 00	E5 D1	06 00	0D 20	00 00
Lamp Time Reset		Execute	BE	EF	03	06 00	58 DC	06 00	30 70	00 00
Filter Time Reset		Execute	BE		03	06 00	98 C6	06 00	40 70	00 00
	Set	off	BE		03	06 00	FB D8	01 00	20 30	00 00
Blank on/off		on	BE		03	06 00	6B D9	01 00	20 30	01 00
		Get	BE		03	06 00	C8 D8	02 00	20 30	00 00
	Get		BE EF 03 06 00				D9 D8	02 00	20 60	00 00
Error Status			00 00 (Norn	o nal)) er-error)	02 00 (Fan-erro	or) (La	00 amp-error)	
			04 00 (Temp) -error)	05 0 (Air flo	0 w-error)	06 00 (Lamp-Time		7 00 Cool-error)	08 00 (Filter-Error)
	Set	OFF	BE		03	06 00	2A D3	01 00	00 60	00 00
Power		ON	BE		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
		RGB	BE	EF	03	06 00	FE D2	01 00	00 20	00 00
		BNC (RGB)	BE	EF	03	06 00	3E D0	01 00	00 20	04 00
		Video	BE	EF	03	06 00	6E D3	01 00	00 20	01 00
Input Source	Set	S-Video	BE	EF	03	06 00	9E D3	01 00	00 20	02 00
input Source		Component	BE	EF	03	06 00	AE D1	01 00	00 20	05 00
		DVI	BE	EF	03	06 00	0E D2	01 00	00 20	03 00
		BNC (Component)	BE	EF	03	06 00	5E D1	01 00	00 20	06 00
	Get		BE	EF	03	06 00	CD D2	02 00	00 20	00 00
	Get		BE	EF	03	06 00	31 D3	02 00	01 20	00 00
Volume	Increment		BE	EF	03	06 00	57 D3	04 00	01 20	00 00
	D	Decrement		EF	03	06 00	86 D2	05 00	01 20	00 00
	Set	Normal	BE	EF	03	06 00	46 D3	01 00	02 20	00 00
Mute		Mute	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
	Get		BE	EF	03	06 00	89 D2	02 00	03 20	00 00
Brightness	Increment		BE	EF	03	06 00	EF D2	04 00	03 20	00 00
	Decrement		BE		03	06 00	3E D3	05 00	03 20	00 00
	Get		BE	EF	03	06 00	FD D3	02 00	04 20	00 00
Contrast	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
		Get	BE	EF	03	06 00	01 D2	02 00	05 20	00 00
Color Balance R	Increment		BE	EF	03	06 00	67 D2	04 00	05 20	00 00
COIDI Dalance H	Decrement									

Names Color Balance B Keystone_V		eration type		leader			Command data			
						CRC	Action	Туре	Setting cod	
	Get		BE EF	03	06 00	45 D2	02 00	06 20	00 00	
Keystone V	Increment		BE EF	03	06 00	23 D2	04 00	06 20	00 00	
Keystone V	Decrement		BE EF	03	06 00	F2 D3	05 00	06 20	00 00	
Keystone V	Get		BE EF	03	06 00	B9 D3	02 00	07 20	00 00	
iceystone_v	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	
		Get	BE EF	03	06 00	E9 D0	02 00	0B 20	00 00	
Keystone_H	Increment		BE EF	03	06 00	8F D0	04 00	0B 20	00 00	
	D	ecrement	BE EF	03	06 00	5E D1	05 00	0B 20	00 00	
		4:3	BE EF	03	06 00	9E D0	01 00	08 20	00 00	
Aspect	Set	16:9	BE EF	03	06 00	0E D1	01 00	08 20	01 00	
Азресс		Small	BE EF	03	06 00	FE D1	01 00	08 20	02 00	
		Get	BE EF	03	06 00	AD D0	02 00	08 20	00 00	
Disture		Default	BE EF	03	06 00	62 D1	01 00	09 20	00 00	
Picture Position at	Set	Bottom	BE EF	03	06 00	F2 D0	01 00	09 20	01 00	
16 : 9 or Small		Тор	BE EF	03	06 00	02 D0	01 00	09 20	02 00	
		Get	BE EF	03	06 00	51 D1	02 00	09 20	00 00	
	Get		BE EF	03	06 00	0D 83	02 00	00 21	00 00	
V.Position	lr	ocrement	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	
		Get	BE EF	03	06 00	F1 82	02 00	01 21	00 00	
H.Position	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	
	Get		BE EF	03	06 00	B5 82	02 00	02 21	00 00	
H.Size	Increment Decrement		BE EF	03	06 00	D3 82	04 00	02 21	00 00	
			BE EF	03	06 00	02 83	05 00	02 21	00 00	
	Get		BE EF	03	06 00	49 83	02 00	03 21	00 00	
H.Phase	Increment Decrement		BE EF	03	06 00	2F 83	04 00	03 21	00 00	
			BE EF	03	06 00	FE 82	05 00	03 21	00 00	
	Get		BE EF	03	06 00	F1 72	02 00	01 22	00 00	
Sharpness	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	
	Get Increment Decrement		BE EF	03	06 00	B5 72	02 00	02 22	00 00	
Color			BE EF	03	06 00	D3 72	04 00	02 22	00 00	
			BE EF	03	06 00	02 73	05 00	02 22	00 00	
	Get		BE EF	03	06 00	49 73	02 00	03 22	00 00	
Tint	Increment Decrement		BE EF	03	06 00	2F 73	04 00	03 22	00 00	
			BE EF	03	06 00	FE 72	05 00	03 22	00 00	
		RGB	BE EF	03	06 00	C2 D7	01 00	11 20	00 00	
BNC	Set	Component	BE EF	03	06 00	52 D6	01 00	11 20	01 00	
Divo	<u> </u>	Get	BE EF	03	06 00	F1 D7	02 00	11 20	00 00	
		Auto	BE EF	03	06 00	9E 75	01 00	00 22	00 00 0A 00	
	rmat	NTSC	BE EF	03	06 00	FE 71	01 00	00 22	04 00	
		PAL	BE EF	03	06 00	6E 70	01 00	00 22	04 00	
		SECAM	BE EF	03	06 00	6E 70	01 00	00 22	05 00	
Video Format		NTSC 4.43	BE EF	03	06 00	5E 72	01 00	00 22	03 00	
		M-PAL	BE EF	03	06 00	5E 72 FE 74	01 00	00 22	02 00	
		N-PAL								
			BE EF	03	06 00	0E 71	01 00	00 22	07 00	
		Get	BE EF	03	06 00	0D 73	02 00	00 22	00 00	
	Set	1080i	BE EF BE EF	03	06 00	F2 73	01 00	05 22	00 00	
HDTV		1035i Get	BE EF	03	06 00	62 72 C1 73	01 00	05 22	01 00	

Command data chart (continued)

Names	00	eration type	L	leader			Command data			
Names		eration type		icauci		CRC	Action	Туре	Setting code	
Sync on G	Set	off	BE EF	03	06 00	CB D0	01 00	08 30	01 00	
	Set	on	BE EF	03	06 00	5B D1	01 00	08 30	00 00	
		Get	BE EF	03	06 00	68 D1	02 00	08 30	00 00	
		off	BE EF	03	06 00	FE 22	01 00	00 23	00 00	
PinP Size	Set	Large	BE EF	03	06 00	6E 23	01 00	00 23	01 00	
		Small	BE EF	03	06 00	9E 23	01 00	00 23	02 00	
		Get	BE EF	03	06 00	CD 22	02 00	00 23	00 00	
		Upper left	BE EF	03	06 00	02 23	01 00	01 23	00 00	
	Set	Upper right	BE EF	03	06 00	92 22	01 00	01 23	01 00	
PinP Position	Jei	Bottom left	BE EF	03	06 00	62 22	01 00	01 23	02 00	
		Bottom right	BE EF	03	06 00	F2 23	01 00	01 23	03 00	
		Get	BE EF	03	06 00	31 23	02 00	01 23	00 00	
	Cat	RGB	BE EF	03	06 00	BA 22	01 00	03 23	00 00	
PinP Audio ch	Set	Video	BE EF	03	06 00	2A 23	01 00	03 23	01 00	
		Get	BE EF	03	06 00	89 22	02 00	03 23	00 00	
	0	Video	BE EF	03	06 00	D6 22	01 00	02 23	01 00	
PinP Input	Set	S-Video	BE EF	03	06 00	26 22	01 00	02 23	02 00	
		Get	BE EF	03	06 00	75 23	02 00	02 23	00 00	
	Set	NORMAL	BE EF	03	06 00	C7 F0	01 00	A1 30	00 00	
o		CINEMA	BE EF	03	06 00	57 F1	01 00	A1 30	01 00	
GAMMA		DYNAMIC	BE EF	03	06 00	A7 F1	01 00	A1 30	02 00	
		Get	BE EF	03	06 00	F4 F0	02 00	A1 30	00 00	
	Set	Large	BE EF	03	06 00	C2 71	01 00	09 22	02 00	
		Middle	BE EF	03	06 00	32 71	01 00	09 22	01 00	
Over Scan		Small	BE EF	03	06 00	A2 70	01 00	09 22	00 00	
		Get	BE EF	03	06 00	91 70	02 00	09 22	00 00	
		Full	BE EF	03	06 00	43 D6	01 00	12 30	00 00	
MyScreen Size	Set	X1	BE EF	03	06 00	D3 D7	01 00	12 30	01 00	
		Get	BE EF	03	06 00	70 D6	02 00	12 30	00 00	
		off	BE EF	03	06 00	3B EF	01 00	C0 30	00 00	
MyScreen Lock	Set	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	
Lamp Time		Get	BE EF	03	06 00	C2 FF	02 00	90 10	00 00	
Filter Time		Get	BE EF	03	06 00	C2 F0	02 00	A0 10	00 00	
		off	BE EF	03	06 00	FF 32	01 00	00 26	00 00	
IR Remote Front	Set	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	
	Set	off	BE EF	03	06 00	03 33	01 00	01 26	00 00	
IR Remote Rear		on	BE EF	03	06 00	93 32	01 00	01 26	01 00	
		Get	BE EF	03	06 00	30 32	02 00	01 20	00 00	
		off	BE EF	03	06 00	47 33	01 00	02 26	00 00	
IR Remote Top	Set	on	BE EF	03	06 00	D7 32	01 00	02 20	00 00	
in nomote rop		Get	BE EF	03	06 00	74 33	02 00	02 20	00 00	
		Gei		03	00 00	14 33	02 00	02 20	00 00	

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Audio Visual Products



Dukane Corporation Audio Visual Products Division 2900 Dukane Drive St. Charles, IL 60174-3395 E-mail: avsales@dukane.com Phone: (630) 762-4040 Orders: (800) 676-2485 Information: (800) 676-2486 Fax: (630) 584-5156 Parts & Service: (800) 676-2487 Fax: (630) 584-0984

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