

Multimedia Projector

MODEL PLC-XU07N



Owner's Manual

INFORMATION TO THE USER

NOTE : This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

TO THE OWNER

As the owner of a new Multimedia Projector, you are probably eager to try out your new projector. Before you do, we suggest that your spend a little time reading this manual to familiarize yourself with the operating procedures, so that you will receive maximum satisfaction from the many features included in your new projector.

This owner's manual will acquaint you with your projector's features. Reading it will help us too. Through the years, we have found that many service requests were not caused by problems with our projectors. They were caused by problems that could have been prevented, if the owner had followed the instructions in the manual.

You can often correct operating problems yourself. If your projector fails to work properly, see "TROUBLESHOOTING" section on pages 36 ~ 37 and try the solution marked for each problem.

SAFETY PRECAUTIONS

WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

This Projector has a grounding-type AC line plug. This is a safety feature to be sure that the plug will fit into the power outlet. Do not try to defeat this safety feature.

This projector produces intense light from the projection lens. Do not stare directly into the lens as possible eye damage could result. Be especially careful that children do not stare directly into the beam.

This projector should be set in the way indicated. If not, It may result in fire hazard.

If the projector will not be used for an extended time, unplug the projector from the power outlet.

READ AND KEEP THIS OWNER'S MANUAL FOR LATER USE.



THIS SYMBOL INDICATES THAT DANGEROUS VOLTAGE CONSTITUTING A RISK OF ELECTRIC SHOCK IS PRESENT WITHIN THIS UNIT.



THIS SYMBOL INDICATES THAT THERE ARE IMPORTANT OPERATING AND MAINTENANCE INSTRUCTIONS IN THE OWNER'S MANUAL WITH THIS UNIT.

IMPORTANT SAFETY INSTRUCTIONS

All the safety and operating instructions should be read before the product is operated.

Read all of the instructions given here and retain them for later use. Unplug this projector from AC power supply before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.

Do not use attachments not recommended by the manufacturer as they may cause hazards.

Do not place this projector on an unstable cart, stand, or table. The projector may fall, causing serious injury to a child or adult, and serious damage to the projector. Use only with a cart or stand recommended by the manufacturer, or sold with the projector. Wall of shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturers.

Do not expose this unit to rain or use near water... for example, in a wet basement, near a swimming pool, etc...

Slots and openings in the back and bottom of the cabinet are provided for ventilation, to insure reliable operation of the equipment and to protect it from overheating.

The openings should never be covered with cloth of other materials, and the bottom opening should not be blocked by placing the projector on a bed, sofa, rug, or other similar surface. This projector should never be placed near or over a radiator or heat register.

This projector should not be placed in a built-in installation such as a book case unless proper ventilation is provided.

This projector should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied, consult your authorized dealer or local power company.

Do not overload wall outlets and extension cords as this can result in fire or electric shock. Do not allow anything to rest on the power cord. Do not locate this projector where the cord may be damaged by persons walking on it.

Never push objects of any kind into this projector through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the projector.

Do not attempt to service this projector yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Unplug this projector from wall outlet and refer servicing to qualified service personnel under the following conditions:

- a. When the power cord or plug is damaged or frayed.
- b. If liquid has been spilled into the projector.
- c. If the projector has been exposed to rain or water.

- d. If the projector does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the projector to normal operation.
- e. If the projector has been dropped or the cabinet has been damaged.
- f. When the projector exhibits a distinct change in performance-this indicates a need for service.

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or injury to persons.

Upon completion of any service or repairs to this projector, ask the service technician to perform routine safety checks to determine that the projector is in safe operating condition.



This projector is equipped with a grounding type AC line plug. Should you be unable to insert the plug into the outlet, contact your electrician. Do not defeat the safety purpose of this grounding type plug.

Follow all warnings and instructions marked on the projectors.

For added protection to the projector during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage due to lightning and power line surges.



An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

If the projector is to be built into a compartment or similarly enclosed, the minimum distances must be maintained. Do not cover the ventilation slot on the projector. Heat build-up can reduce the service life of your projector, and can also be dangerous.



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TRADEMARKS

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- IBM and PS/2 are trademarks or registered trademarks of International Business Machines, Inc.
- Each name of corporations or products in the owner's manual is a trademark or a registered trademark of its respective corporation.

This Multimedia Projector is designed with most advance technology for portability, durability, and ease for use. The projector utilizes built-in multimedia features, a palette of 16.77 million colors, and matrix liquid crystal display (LCD) technology.

Compatibility

This projector is compatible with many different types of personal computers and video devices, including;

- IBM-compatible computers, including laptops, up to 1280 x 1024 resolution.
- Apple Macintosh and PowerBook computers up to 1280 x 1024 resolution.
- Various video equipment using any of the world wide video standards, including NTSC, NTSC4.43, SECAM, PAL, and PAL-M.

Image Resolution

Picture Image is projected in the resolution of 1024×768 . The projector provides computer images just as they appear on your computer's monitor. Screen resolutions between 1024×768 and 1280×1024 are compressed to 1024×768 . The projector cannot display screen resolutions over 1280×1024 . If your computer's screen resolution is higher than 1280×1024 , reset it to a lower resolution before you connect the projector.

Portability

This projector is extremely compact in size and weight. Having a sophisticated shape like an attaché case with a retractable carrying handle, the projector will help you make powerful presentation wherever you go.

Automatic Multiscanning System

This projector can detect output signals from most personal computers currently distributed. It is free from complicated adjustments to project picture images from PC.

Multilanguage Menu Display

Operation menu is displayed in; English, Deutsch, Français, Italiano, Español, or Japanese.

• Other Features

This projector has No show, Digital zoom and Mute functions, and Air Pad Remote Control.

Accessories

This projector comes with the parts listed below. Check to make sure all are included. If any part is missing, contact to a sales dealer.

- Owner's Manual.
- AC Power Cord.
- Wireless Remote Control Unit.
- Batteries for Remote Control Unit.
- VGA Cable.
- Control Cable for PS/2 port.
- Lens Cover.
- Carrying Bag.

PREPARATION

NAME OF EACH PART OF THE PROJECTOR



BACK OF THE CABINET

EXHAUST VENT





SETTING-UP THE PROJECTOR

POSITIONING THE PROJECTOR

- This projector is basically designed to project on a flat projection surface.
- The projector can be focused from $4.6'(1.4m) \sim 35.4'(10.8m)$.
- Refer to the figure below to adjust the screen size.



Screen Size	30"	60"	100"	150"	200"	300"
(W x H) mm	609 x 457	1219 x 914	2032 x 1524	3048 x 2286	4064 x 3048	6096 x 4572
Height (H1)	17.1"(435mm)	34.3"(870mm)	57.1"(1451mm)	85.7"(2177mm)	114.3"(2903mm)	171.4"(4354mm)
Height (H2)	0.9"(22mm)	1.7"(44mm)	2.9"(73mm)	4.3"(109mm)	5.7"(145mm)	8.6"(218mm)

ROOM LIGHT

The brightness in the room has a great influence on the picture quality. It is recommended to limit ambient lighting in order to provide the best image.

ADJUSTABLE FEET

Picture tilt and projection angle can be adjusted by twisting ADJUSTABLE FEET. Projection angle can be adjusted 0 to 2 degrees by rotating Adjustable Feet.





VENTILATION

This projector is equipped cooling fans for protection from overheating. Pay attention to the following to ensure the ventilation and avoid a possible risk of fire and malfunction.

- Do not cover the vent slot.
- Keep the rear grill at least one meter away from any object.
- Make sure that there is no object under the projector. An obstacle under the projector may prevent the projector from taking the cooling air through the bottom vent slot.

MOVING THE PROJECTOR

Use the Carry Handle when moving the Projector.

• Replace the lens cover and rotate the feet fully clockwise (to shorten the feet) when moving the projector to prevent damage to the cabinet.

NOTE

The carrying bag (supplied) is intended for protection from dust and scratches on the surface of the cabinet, and it is not designed to protect the LCD projector from external shock.

Do not drop the projector, subject it to strong forces, or put other things on the cabinet when carrying the projector with this bag. Do not transport the projector through a courier or transport services with this bag. The projector can be damaged.





CAUTION IN CARRYING OR TRANSPORTING THE PROJECTOR

- Do not drop or give a shock to the projector, otherwise damages or malfunctions may result.
- When carrying the projector, use a carrying case recommended by Sanyo.
- Do not transport the projector by using a courier or transport service in an unsuitable transport case. This
 may cause damage to the projector. To transport the projector through a courier or transport service, use
 a case recommended by Sanyo.
- For carrying or transportation cases, contact a Sanyo authorized dealer.

CONNECTING THE PROJECTOR



COMPUTER INPUT / MONITOR OUTPUT TERMINAL

Terminal : HDB15-PIN

Connect the display output terminal of the computer to this COMPUTER INPUT with the VGA Cable (supplied), and connect the monitor to this MONITOR OUTPUT with the monitor cable (not supplied). When connecting the Macintosh computer, the MAC/VGA Adapter is required (not supplied).

CONTROL PORT CONNECTOR

Terminal : MULTI-POLE 12-PIN

When controlling the computer with the projector's Wireless Remote Control Unit, connect control port (PS/2, Serial or ADB port) on your computer to this connector. (Control Cable for PS/2 Port is supplied.)

SERIAL PORT CONNECTOR

Terminal : DIN 8-PIN

This connector is used to connect a computer to control the projector with the PC. For this connection, the Serial Cable is required (This cable is not supplied).

Pin Configuration



Pin Configuration



Pin Configuration



1	Red Input	9	Non Connect
2	Green Input	10	Ground (Vert.sync.)
3	Blue Input	11	Sense 0
4	Sense 2	12	Sense 1
5	Ground (Horiz.sync.)	13	Horiz. sync.
6	Ground (Red)	14	Vert. sync.
7	Ground (Green)	15	Reserved
8	Ground (Blue)		

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	PS/2	Serial	ADB
1		TXD	
2	CLK		ADB
3	DATA		
4			
5		RXD	
6			
7		READY	
8			
9	GND	GND	GND
10			
11			
12			

1	R x D	5	MUXTTL
2	ADB	6	ТхD
3	MUX232	7	
4	GND	8	

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CONNECTING TO THE VIDEO EQUIPMENT



CONNECTING TO THE IBM-COMPATIBLE COMPUTER

To connect with the IBM-compatible computer, refer to the figure below.

Used cables for connection

- VGA CABLE
- CONTROL CABLE FOR PS/2 PORT
- CONTROL CABLE FOR SERIAL PORT *
- MONITOR CABLE *
- PC AUDIO CABLE (stereo) *
- * These cables are not supplied with this projector.



NOTE :

When connecting the cable, the power cords of both the projector and the external equipment should be disconnected from AC outlet. Turn the projector and peripheral equipment on before the computer is switched on.

IBM-COMPATIBLE COMPUTERS (VGA / SVGA / XGA / SXGA)





CONNECTION TO THE MACINTOSH COMPUTER

To connect with the Macintosh computer, refer to the figure below.

Used cables for connection

- VGA CABLE
- CONTROL CABLE FOR ADB PORT *
- MAC ADAPTER *
- MONITOR CABLE *
- PC AUDIO CABLE (stereo) *

NOTE :

* These cables are not supplied with this projector.



When connecting the cable, the power cords of both the projector and the external equipment should be disconnected from AC outlet. Turn the projector and peripheral equipment on before the computer is switched on.

MACINTOSH COMPUTERS (VGA / SVGA / XGA / SXGA)





OPERATION OF THE REMOTE CONTROL

This remote control unit is not only able to operate the projector but also usable as a wireless mouse for a PC. POINT button and two CLICK buttons are used for wireless mouse operation. (Refer to page 33.) Wireless mouse is usable when PC mouse pointer is displayed on the screen, the wireless mouse cannot be used when the On-Screen Menu is displayed.





Used to execute the item selected, to increase or decrease the values in certain items such as CONTRAST or BRIGHTNESS, or to expand the image in DIGITAL ZOOM mode. And it is also used as left button of PC

mouse in wireless mouse operation.



- Replace two batteries at the same time.
- Do not use a new battery with a used battery.
- Avoid contact with water or liquid.
- Do not drop the remote control unit.
- If batteries have leaked on the remote control, carefully wipe the case clean and load new batteries.

Operating Range of the Remote Control

Point the remote control toward the projector (Receiver Window) whenever pressing the buttons. Maximum operating range for the remote control is about 16.4' (5m) and 60° front and rear of the projector





TOP CONTROLS AND INDICATORS



OPERATING ON-SCREEN MENU

HOW TO OPERATE ON-SCREEN MENU

You can control and adjust this projector through ON-SCREEN MENU. Refer to the following pages to operate the each adjustment on the ON-SCREEN MENU.

1 MOVING THE POINTER

Move the pointer (see the NOTE below) by pressing POINT button(s) on the Top Control or on the Remote Control Unit.

2 SELECT THE ITEM

Select the item by pressing SELECT button.

NOTE : Pointer is the icon on the ON-SCREEN Menu to select the item. See the figures on the section "FLOW OF ON-SCREEN MENU" below.



Used to move the Pointer to UP/ DOWN/ RIGHT/ LEFT.

FLOW OF ON-SCREEN MENU

Display ON-SCREEN MENU

I Press MENU button to display the ON-SCREEN MENU (MENU BAR). The red frame is the POINTER.

Select the MENU

- 2 Move the POINTER (red frame) to the ITEM ICON that you want to select by pressing POINT RIGHT/ LEFT buttons.
- 3 Select the ITEM by pressing SELECT button. The dialog box of the ITEM appears.

Control and adjust through ON-SCREEN MENU

- 4 Move the POINTER downward by pressing POINT DOWN button. (The shape of POINTER become an arrow.)
- 5 Move the POINTER to the ITEM that you want to adjust and adjust the ITEM by pressing SELECT button. Refer to the following pages for details of respective adjustments.



MENU BAR

MENU BAR IN COMPUTER MODE Press MENU BUTTON while being in Computer mode.



MENU BAR IN VIDEO MODE

Press MENU BUTTON while being in Video mode.



TURNING ON / OFF THE PROJECTOR

Turning on the Projector

- Complete the peripheral connections (with Computer, VCR, and etc.) before turning on the projector. (Refer to "CONNECTING TO THE PROJECTOR" on Pages 10~15 for connecting those equipment.
- 2 Connect the projector's AC power cord into a wall outlet. The LAMP POWER indicator lights RED, and the READY indicator lights GREEN.
- **3** Press the power ON-OFF button on the Remote Control Unit or on the Top Control to ON. The LAMP POWER indicator dims, and the Cooling Fans start to operate. The Preparation Display appears on the screen and the count-down starts. The signal from the source appears after 30 seconds.

Turning off the Projector

- Press the power ON-OFF button on the Remote Control Unit or on the Top Control, and the message "Power off?" appears on the screen.
- Press again the power ON-OFF button to turn off the projector. The LAMP POWER indicator lights bright and the READY indicator turns off. The Cooling Fans operate for 90 seconds after the projector is turned off. (During this "Cooling Down" period, this appliance cannot be turned on.)
- 3 When the cooling the projector has finished, the READY indicator turns to green again and you can turn the projector on. To power down completely, disconnect the AC power cord.

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The Preparation Display disappears after 30 seconds.

The message disappears after 4 seconds.



TO MAINTAIN THE LIFE OF THE LAMP, ONCE YOU TURN IT ON, WAIT AT LEAST 5 MINUTES BEFORE TURNING IT OFF.

When the TEMPERATURE WARNING indicator flashes red, the projector is automatically turned off. Wait at least 5 minutes before turning the projector on again.

If the TEMPERATURE WARNING indicator continues to flash, follow procedures below:

- 1. Disconnect the AC power cord from the AC outlet.
- 2. Check the air filters for dust accumulation.
- 3. Clean the Air Filter. (See "AIR FILTER CARE AND CLEANING" section on page 33.)
- 4. Press the power ON-OFF button to ON.

If the TEMPERATURE WARNING indicator still continues to flash, call your authorized dealer or service station.

NOTE : The Cooling Fan may work for cooling while the projector is turned off. When the Cooling Fan is working, TEMPERATURE WARNING INDICATOR flashes red.

ADJUSTING THE PICTURE

ZOOM Adjustment

- Press ZOOM ^ / ✓ button on the Remote Control Unit or ZOOM ▲/▼ button on the Top Control to turn into the ZOOM mode.

Zoo	-		

The message disappears after 4 seconds.

FOCUS Adjustment

- **1** Press FOCUS $^{/\vee}$ button on the Remote Control Unit or FOCUS $^{/\vee}$ on the Top Control to turn into the FOCUS mode.
- 2 Adjust the focus of the image by pressing FOCUS $^{/\vee}$ or FOCUS $^{/\vee}$ buttons.



The message disappears after 4 seconds.

NO SHOW FUNCTION

Press the NO SHOW button on the Remote Control Unit to turn the picture into black image. These function is cancelled when the NO SHOW button is pressed again or any other function button is pressed.



The message disappears after 4 seconds.

SOUND ADJUSTMENT

Direct Operation

Sound Volume Adjustment

Press the VOLUME (+/–) buttons (located on the Top Control or on the Remote Control Unit) to adjust the volume. The Volume dialog box appears on the screen for a few seconds.

(+) button to increase the volume, and (-) button decreasing.

Sound Mute Setting

Press the MUTE button on the Remote Control Unit to cut off the sound. To restore the sound to its previous level, press the MUTE button again or press VOLUME (+/–) buttons.

Menu Operation

- I Press the MENU button and the ON-SCREEN MENU will appear.
 Press the POINT LEFT/RIGHT buttons to select SOUND ◄)) and press the SELECT button. Another dialog box SOUND ADJUST Menu will appear.
- 2 Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to the item that you want to select by pressing the POINT UP/DOWN buttons.
- **Volume** Move the arrow to \blacktriangle or \checkmark of "Volume" by pressing the POINT UP/ DOWN buttons. To increase the volume, point the arrow to \blacktriangle and then press the SELECT button. To decrease the volume point the arrow to \checkmark and then press the SELECT button.
- Mute To cut off the audio sound, point the arrow to "Mute" and then press the SELECT button. The Mute display is changed On from Off and the sound is cut off. To restore the sound to its previous volume level, set the Mute to Off.



Press the MUTE button to set the Mute function On or Off.

The display disappears after 4 seconds.



SELECTING COMPUTER MODE

Direct Operation

Press the MODE button on the Top Control or the Remote Control Unit. The input source is selected among COMPUTER or VIDEO. The "Computer" or "Video" display will appear on the screen for a few seconds.





Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select Computer and press the SELECT button.

CURRENT MODE DISPLAY

When selecting the Computer Mode, the Current Mode display appears. It shows the information of the computer of the mode selected.



Providing the information of the computer detected by the projector.

SELECTING COMPUTER SYSTEM

Automatic Multiscanning system

This projector automatically adapt to most different types of computer based on VGA, SVGA or XGA (refer to "COMPATIBLE COMPUTER SPECIFICATION" on page 26). When selecting Computer, this projector become automatically suited to the incoming signal and projectors the proper image without any special setting. (Setting of the Computer System may be required when connecting some computers.)

Note : The projector may provides the messages below.

Go PC adj. The projector cannot discriminate or detect the input signal from the computer. Adjust and set the computer system manually. (Refer to page 25.)

No signal There is no signal input from the computer. Make sure the connection of the computer and the projector is set correctly. (Refer to TROUBLESHOOTING on page 36.)

Selecting Computer System Manually

To set the Computer system manually, select the mode on the ON-SCREEN MENU.

Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select SYSTEM and press the SELECT button. Another dialog box COMPUTER MODE Menu will appear. (The COMPUTER MODE Menu also appears by pressing the SYSTEM button on the Top Control or the Remote Control Unit.)

2 Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to the system that you want to set, and then press SELECT button. Video Computer SVGA 1 SVGA 1 SYSTEM BOX It displays the SYSTEM being selected.

The system being selected.



PC ADJUSTMENT

This Projector can automatically detect display signals from most personal computers currently distributed. However, some computers employ special signal formats which are different from the standard ones and may not be detected by this projector. If this happens, the projector cannot reproduce a proper image and the image is recognized as a flickering picture, a non-synchronized picture, a non-centered picture or a skewed picture.

This projector has PC ADJUSTMENT function, to enable you to precisely adjust several parameters to match with the input signal format. The projector has eight independent memory areas where you can store the parameter you have set. This enables you to recall the setting for a specific computer whenever you need it.

- Press the MENU button and the ON-SCREEN MENU will appear. 1 Press the POINT LEFT/RIGHT buttons to select PC ADJUST 归 **4**))) and press the SELECT button. Another dialog box "Where to reserve" Menu will appear. Where to reserve selected. In this dialog box, you can store the parameter into the area from 2 Mode 1 Stored ✐ "Mode 1" to "Mode 8." When memorizing the new computer Mode 2 Stored parameter, select the Mode with the message of "Free" by Mode 3 Free pressing the POINT UP/DOWN buttons and SELECT button. To change the parameters of the Mode previously set, select the Mode 4 Free ۲ Mode with "Stored." stored. Mode 5 Fin Mode 6 Free When the Mode is selected, Parameter adjustment dialog box 3 appears. Adjust the each item to match with your computer. Mode 7 Free ٠ ۲ Mode 8 Free The number of the total vertical lines. Adjust the number to **Total lines** match your PC image. Quit The number of the total dots in one horizontal period. Adjust Total dots the number to match your PC image. Menu. Adjustment of the horizontal picture position. When the image Horizontal is not centered on the screen, adjust this item. Adjustment of the vertical picture position. When the image is Vertical not centered on the screen, adjust this item. Mode 1 Free ۵ Adjustment of the clamp level. When the image has a dark **Total lines** Clamp bar(s), try this adjustment. Total dots Adjustment of the display area to match your PC. The data of Horizontal Display area the selected mode is displayed in "H" and "V" boxes. Vertical ۵ Adjusting the height of the picture image. Horiz. scale Adjusting the width of the picture image. Vert. scale free
 - When the parameter data adjustment finishes to be set, select "Stored" and press the SELECT button. "OK?" dialog box is displayed for confirmation.

Each of the keys operates as follow.

Reset	It recall the parameter data that previously adjusted.
Mode free	It clear the parameter data previously set the selected Mode.
Stored	It stores the parameters in the memory.
Quit	It closes the PC ADJUST Menu.

To select the Mode manually adjusted in PC ADJUSTMENT 5 Menu, select the mode at the SYSTEM SELECT Menu. (Refer to page 24.)



COMPATIBLE COMPUTER SPECIFICATIONS

Basically this projector can accept the signal from all computers with the V, H-Frequency below mentioned and less than 165 MHz of Dot Clock.

ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (kHz)	V-Freq. (Hz)	ON-SCREEN DISPLAY	RESOLUTION	H-Freq. (kHz)	V-Freq. (Hz)
VGA 1	640 x 480	31.47	59.88	XGA 5	1024 x 768	60.31	74.92
VGA 2	720 x 400	31.47	70.09	XGA 6	1024 x 768	48.50	60.02
VGA 3	640 x 400	31.47	70.09	XGA 7	1024 x 768	44.00	54.58
VGA 4	640 x 480	37.86	74.38	XGA 8	1024 x 768	63.48	79.35
VGA 5	640 x 480	37.86	72.81	XGA 9	1024 x 768 (Interlace)	36.00	43.59
VGA 6	640 x 480	37.50	75.00	XGA 10	1024 x 768	62.04	77.07
VGA 7	640 x 480	43.269	85.00	XGA 11	1024 x 768	61.00	75.70
MAC LC13	640 x 480	34.97	66.60	XGA 12	1024 x 768 (Interlace)	35.522	43.48
MAC 13	640 x 480	35.00	66.67	XGA 13	1024 x 768	46.90	58.20
MAC1 6	832 x 624	49.72	74.55	XGA 14	1024 x 768	47.00	58.30
MAC 19	1024 x 768	60.24	75.08	XGA15	1024 x 768	58.03	72.0
MAC21	1152 x 870	68.68	75.06	SXGA 1	1152 x 864	64.20	70.40
MAC	1280 x 960	75.00	75.08	SXGA 2	1280 x 1024	62.50	58.60
MAC	1280 x 1024	80.00	75.08	SXGA 3	1280 x 1024	63.90	60.00
RGB	768 x 576 (Interlace)	15.625	25	SXGA 4	1280 x 1024	63.34	59.98
RGB	640 x 480 (Interlace)	15.734	30	SXGA 5	1280 x 1024	63.74	60.01
SVGA 1	800 x 600	35.156	56.25	SXGA 6	1280 x 1024	71.69	67.19
SVGA 2	800 x 600	37.88	60.32	SXGA 7	1280 x 1024	81.13	76.107
SVGA 3	800 x 600	46.875	75.00	SXGA 8	1280 x 1024	63.98	60.02
SVGA 4	800 x 600	53.674	85.06	SXGA 9	1280 x 1024	79.976	75.025
SVGA 5	800 x 600	48.08	72.19	SXGA 10	1280 x 960	60.00	60.00
SVGA 6	800 x 600	37.90	61.03	SXGA 11	1152 x 900	61.20	65.20
SVGA 7	800 x 600	34.50	55.38	SXGA 12	1152 x 900	71.40	75.60
SVGA 8	800 x 600	38.00	60.51	SXGA 13	1280 x 1024 (Interlace)	50.00	43.00
SVGA 9	800 x 600	38.60	60.31	SXGA 14	1280 x 1024 (Interlace)	50.00	47.00
SVGA 10	800 x 600	32.70	51.09	SXGA 15	1280 x 1024	63.37	60.01
SVGA 11	800 x 600	38.00	60.51	SXGA 16	1280 x 1024	76.97	72.00
XGA 1	1024 x 768	48.36	60.00	SXGA 17	1152 x 900	61.85	66.00
XGA 2	1024 x 768	68.677	84.997	SXGA 18	1280 x 1024 (Interlace)	46.43	43.35
XGA 3	1024 x 768	60.023	75.03	SXGA 19	1280 x 1024	63.79	60.18
XGA 4	1024 x 768	56.47	70.07	SXGA 20	1280 x 1024	91.146	85.024

NOTE : Specifications are subject to change without notice.

PICTURE IMAGE ADJUSTMENT

Adjust Picture Image Manually

- Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select IMAGE and press the SELECT button. Another dialog box PICTURE IMAGE ADJUSTMENT Menu will appear.
- Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to ▲ or ▼ of the item that you want to change by pressing the POINT UP/DOWN buttons. To increase the value, point the arrow to ▲ and then press the SELECT button. To decrease the value point the arrow to ▼ and then press the SELECT button.

Fine sync

Adjust the picture as necessary to eliminate flicker from the display. (From 0 to 127.)

Total dots

The number of the total dots in one horizontal period. Adjust the number to match your PC image.

White balance (Red / Green / Blue)

Point to \checkmark to adjust the color of image lighter, and select \blacktriangle to adjust the image deeper. (From 0 to 63.)

Contrast

Point to \blacksquare to adjust the image lighter, and select \blacktriangle to adjust the image deeper. (From 0 to 63.)

Brightness

Point to $\mathbf{\nabla}$ to adjust the image darker, and select \mathbf{A} to adjust the image brighter. (From 0 to 63.)

Each of the keys operates as follow.

Reset

•••• It recalls the data previously adjusted.



•••• It stores the adjusted data in the memory.

Quit It closes the PICTURE IMAGE ADJUSTMENT Menu.



Auto Image Function

The Auto Image function is provided to automatically adjust Fine sync., Total dots, and Picture Position for most computers.

- Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select AUTO IMAGE and press the SELECT button. Another dialog box AUTO IMAGE Menu will appear.
- 2 Move the arrow to an item that you want to adjust by pressing the POINT UP/DOWN button. Change the setting On or Off by pressing the SELECT button.
 - **Fine sync** Adjust the picture as necessary to eliminate flicker from the display. This item can be adjusted manually. (Refer to page 27.)
 - Total Dots The number of the total dots in one horizontal period. This item can be adjusted manually. (Refer to page 27.)
- Position

Adjustment of the position of the image. This item can be adjusted manually. (Refer to page 29.)

- 3 Move the arrow to "Go!" and press the SELECT button to start the Auto Image function. This adjustment can be executed by pressing AUTO IMAGE button on the Top Control and the Remote Control.
- NOTE : The Fine sync., Total dots, and Picture Position of some computers may not be fully adjusted with the Auto Image Function. In that case, manually adjustments is required to make fine image. (Refer to PICTURE IMAGE ADJUSTMENT on page 27 to adjust "Fine sync." or "Total dots" and PICTURE POSITION ADJUSTMENT on page 29 to adjust Picture Position.)



Normal Function

The normal picture level is preset on this projector by the factory and can be restored anytime by pressing the NORMAL button (located on the Top Control or on the Remote Control Unit). The "Normal" display will be displayed on the screen for a few seconds.

Normal

PICTURE POSITION ADJUSTMENT

The position of the image can be adjusted vertically and horizontally through PICTURE POSITION ADJUSTMENT.

- Press the MENU button and the ON-SCREEN MENU will appear.
 Press the POINT LEFT/RIGHT buttons to select POSITION and press the SELECT button. Another dialog box PICTURE POSITION Menu will appear.
- 2 Select the arrow to the direction (described as ⇔, ⇔, î or ↓) that you want to adjust by pressing the POINT UP/DOWN buttons, and then press the SELECT button.

Each of the keys operates as follow.

- **Reset** •••• It recalls the setting data previously set.
 - **Stored** It stores the setting data in the memory.
 - Quit It closes the PICTURE POSITION Menu.



PICTURE SCREEN ADJUSTMENT

This projector has a picture screen resize function, which enables you to display the image in desirable size.

- Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select SCREEN and press the SELECT button. Another dialog box PICTURE SCREEN Menu will appear.
- 2 To adjust the image size or pan the image, move the arrow to Digital zoom by pressing POINT UP/DOWN buttons and then press SELECT button. The ON-SCREEN menu and SCREEN ADJUST menu will disappear. The magnifying glass icon and the message "D. Zoom" is displayed to indicate Digital Zoom mode.
- 3 To cancel Digital Zoom mode, press the other buttons except SELECT / FRONT CLICK / POINT buttons. To adjust the image to the screen size (1024 x 768), press NORMAL button.
- **4** To turn the image into its original size select True in the dialog box. When the original image size is larger than the screen size (1024 x 768), this projector becomes Digital Zoom mode automatically.

Expand function

To expand the image size, press SELECT button. The image is magnified by degrees. The maximum size of the projected image in expand mode is 4 times as large as the screen size (1024 x 768).

Compress function

To compress the image size, press FRONT CLICK button. The size of image is reduced by degrees. The minimum size of the projected image in compress mode is 640 x 480 in VGA, 800 x 600 in SVGA, or 800 x 600 in XGA / SXGA.

Panning function

To pan the image, press POINT UP/DOWN/LEFT/RIGHT buttons. Panning function can work only when the image is larger than the screen size.

- This projector cannot display in the resolution over than 1240 X 1024. If your computer's screen resolution is higher than 1240 X 1024, reset the resolution to the lower before connecting the projector.
- The image data in other than XGA (1024 x 768) is modified to fit the screen size in the initial mode.
- The normal "Panning Operation" may not function properly if the computer system prepared with the "PC Adjust" is used.



SELECTING VIDEO MODE

Direct Operation

Press the MODE button on the Top Control or the Remote Control Unit. The input source is selected among VIDEO or COMPUTER. The "Video" or "Computer" display will appear on the screen for a few seconds.



Menu Operation

Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select Video and press the SELECT button.



SELECTING COLOR SYSTEM

- Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select SYSTEM and press the SELECT button. Another dialog box VIDEO SYSTEM Menu will appear. (The display also appears by pressing the SYSTEM button on the Top Control or the Remote Control Unit.)
- 2 Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to "Auto", and then press the SELECT button.

<u>Auto</u>

The projector automatically detects the incoming Video system, and adjusts itself to optimize its performance. When the Video System is PAL-M select the system manually.

PAL / SECAM / NTSC / NTSC4.43 / PAL-M

If the projector cannot reproduce the proper video image, it is required to select a specific broadcast signal format among PAL, SECAM, NTSC, NTSC 4.43, or PAL-M.



PICTURE IMAGE ADJUSTMENT

Adjusting the Picture Image

- Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select IMAGE and press the SELECT button. Another dialog box PICTURE IMAGE ADJUSTMENT Menu will appear.
- Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to ▲ or ▼ of the item that you want to change by pressing the POINT UP/DOWN buttons. To increase the value, point the arrow to ▲ and then press the SELECT button. To decrease the value point the arrow to ▼ and then press the SELECT button.

Color	Point to $\mathbf{\nabla}$ to adjust the image lighter, and select \mathbf{A} to adjust the image deeper. (From 0 to 63.)		
Tint	Point to \checkmark to adjust the color more purple, and select \blacktriangle to adjust more green. (From 0 to 63.)		
Contrast	Point to $\mathbf{\nabla}$ to adjust the image lighter, and select $\mathbf{\Delta}$ to adjust the image deeper. (From 0 to 63.)		
Brightness	Point to $\mathbf{\nabla}$ to adjust the image darker, and select $\mathbf{\Delta}$ to adjust the image brighter. (From 0 to 63.)		
Sharpness	Point to $\mathbf{\nabla}$ to adjust the image softer, and select $\mathbf{\Delta}$ to adjust the image sharper. (From 0 to 63.)		
Each of the keys operates as follow.			
Pacat	It recalls the data providually adjusted		



 Reset
 ••••• It recalls the data previously adjusted.

 Stored
 ••••• It stores the data in the memory.

Quit It closes the PICTURE IMAGE ADJUSTMENT Menu.

Normal Function

The normal picture level is preset on this projector by the factory and can be restored anytime by pressing the NORMAL button (located on the Top Control or on the Remote Control). The "Normal" display will be displayed on the screen for a few seconds.



PICTURE SCREEN ADJUSTMENT

This projector has a picture screen resize function, which enables you to display the image in desirable size.

- Press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select SCREEN and press the SELECT button. Another dialog box PICTURE SCREEN ADJUSTMENT DISPLAY will appear.
- Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to the screen size that you want to set, and then press the SELECT button.



Regular Wide Normal Video Image size with 4 x 3 aspect ratio.

It compresses the image vertically to Wider Video Image size with 16 x 9 aspect ratio.

SETTING MENU

- Press the MENU button and the ON-SCREEN MENU will appear.
 Press the POINT LEFT/RIGHT buttons to select SETTING
 and press the SELECT button. Another dialog box SETTING Menu will appear.
- Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to the item that you want to set, and then press the SELECT button to set it "On" or "Off".
- Blue back

When this function is in the "On" position, this projector will produce a blue image without video noise on the screen when the video source is unplugged or turned off.

- **Display** When this function is in the "On" position, the On-Screen Displays always appear when adjustments are made. (The following displays disappear by switching this function "Off.")
 - Preparation Display
 (The Number count
 - (The Number-counting down Display)
 - Mode Display
 - Volume Display
 - Mute Display
 - Normal Display
- **Ceiling** When this function is in the "On" position, the top / bottom and the left / right reversed picture is provided to project the image from a ceiling mounted projector.
 - Rear When this function is in the "On" position, the left / right reversed picture is provided to project the image to a rear projection screen.
- Split wipe Turn this function "On" position in the SETTING menu. The picture will change into next one by sliding black image side ways like drawing the black curtains when the input source is turned into another one.
- Lamp age The Lamp age function is designed to reset the lamp replacement monitor timer. When replacing the lamp, reset the lamp replacement monitor timer by using this function. (Refer to page 35.)



Set the Pointer to the item, and then press the SELECT button.

Ceiling function



Rear function



SELECTING LANGUAGE

The language used in the ON-SCREEN MENU is selectable from among English, German, French, Italian, Spanish and Japanese.

- Press the MENU button and the ON-SCREEN MENU will appear. Press POINT LEFT/RIGHT buttons to select LANGUAGE and press the SELECT button. Another dialog box LANGUAGE Menu will appear.
- 2 Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to the language that you want to set, and then press the SELECT button.



Move the Pointer to the language that you want to set, and then press the SELECT button.

OPERATING WIRELESS MOUSE

The Wireless Remote Control Unit is not only able to operate the projector but also usable as a wireless mouse for a PC. POINT buttons and two CLICK buttons are used for wireless mouse operation.

Wireless mouse is usable when PC mouse pointer is displayed on the screen. When the menu or indicator of the projector is displayed on the screen instead of the PC mouse pointer, the wireless mouse cannot be used.

Installation

To use the Wireless Remote Control Unit as the Wireless Mouse for a PC, installation of the mouse driver (not supplied) is required. Make sure that the mouse driver is properly installed in your computer. And make sure that the mouse port of the computer connected to Control Port is activated.

- 1 Connect the mouse port of your computer to the Control Port of the projector with the Control Cable. (Refer to page 12 to 15 for connection.)
- 2 Turn the projector on first, and then turn on your computer. When the computer is switched on first, the Wireless Mouse may not work properly.

Note : When the computer has no mouse port, connect the Serial Port of the computer to Control Port of the projector with the Control Cable for Serial Port.

Controlling Wireless Mouse

When controlling the pointer of the computer, operate the Wireless Mouse with POINT button, SELECT button, and FRONT CLICK button on the Wireless Remote Control Unit.

POINT button

Used to move the pointer. The pointer is moved according to the direction you are pressing.

SELECT (REAR CLICK) button

This button has the same function as the left button in a PC mouse.

FRONT CLICK

This button has the same function as the right button in a PC mouse. Pressing this button does not affect any operation when in Menu mode.





MAINTENANCE

TEMPERATURE WARNING INDICATOR

The TEMPERATURE WARNING Indicator flashes red when the internal temperature of the projector exceeds the normal temperature. The Indicator stops to flash when the temperature of the projector become normal. When the TEMPERATURE WARNING Indicator continues to flash, make sure the matters below.

- *1* The Ventilation slots of the projector are blocked. In such an event, reposition the appliance so that the ventilation slots are not obstructed.
- 2 Air filter is clogged with dust particles. Remove dust from the air filter by following instruction in the AIR FILTER CARE AND CLEANING section below.
- **3** If the TEMPERATURE WARNING Indicator remains on after performing the above checks, the Cooling Fans or the Internal Circuits may be malfunctioning. Request service from an authorized dealer or service station.

AIR FILTER CARE AND CLEANING

The Removable Air Filter prevents dust from accumulating on the surface of the Projection Lens and the Projection Mirror. Should the Air Filter become clogged with dust particles, it will reduce the Cooling Fans' effectiveness and may result in internal heat build up and effect on the life of the projector. To clean the Air Filter, follow the cleaning procedures below:

- 1 Turn the power off, and disconnect the AC power cord from the AC outlet.
- 2 Remove the Air Filter Cover. Press the cover latch sideway and lift the cover.
- **3** Remove the Air Filter from the Air Filter Cover and clean it with a vacuum cleaner.
- **4** Replace the Air Filter. Make sure that Air Filter Cover is fully inserted.



CAUTION

Do not operate the projector with the Air Filter removed. The dust is stuck on the LCD Panel and the Mirror, and it may spoil the fine picture image.

RECOMMENDATION

We recommend to avoid dusty/smoky place for operating the projector. Using in dusty place may cause the picture of poor quality.

When using under the dusty or smoky conditions, dust may accumulate on the liquid crystal panel and lens inside it, and may resultantly be projected on the screen together with the picture.

When the above symptoms are noticed contact your authorized dealer or service station for the cleaning.

CLEANING THE PROJECTION LENS

Follow these steps to clean the projection lens:

- 1 Apply a non-abrasive camera lens cleaner to a soft, dry cleaning cloth. Avoid using an excessive amount of cleaner. Abrasive cleaners, solvents or other harsh chemicals might scratch the lens.
- 2 Lightly wipe the cleaning cloth over the lens.
- 3 When you don't use the projector, replace the lens cover.



LAMP REPLACEMENT Indicator

When the Lamp of this projector draws to an end, the LAMP REPLACEMENT indicator lights yellow. When the image become dark or the color of the image become unnatural, replacement of the Lamp is required.

LAMP REPLACEMENT



CAUTION

• For continued safety, replace with a lamp assembly of the same type.

- Allow the projector to cool for at least 45 minutes before you open the lamp cover. The inside of the projector can become very hot.
- Do not drop the lamp assembly or touch the glass bulb! The glass can shatter and may cause injury.

Follow these steps to replace the lamp assembly.

- *I* Turn off the projector and disconnect the AC plug. Allow the projector to cool for at least 45 minutes.
- 2 Remove a screw with a screwdriver and remove the lamp cover.
- **3** Remove 2 screws with a screwdriver and pull out the lamp assembly by grasping the handle.
- **4** Replace the Lamp Assembly and tighten 2 screws. Make sure that the Lamp Assembly is set properly. And replace the Lamp Cover and tighten a screw.
- 5 Connect the AC Power Cord to the projector and turn the projector on.
- 6 Reset the Lamp Replacement Monitor Timer (refer to the section "Lamp Replacement Monitor Timer" below.)



Lamp Replacement Monitor Timer

Be sure to reset the Lamp Replacement Monitor Timer when the Lamp Assembly is replaced. When the Lamp Replacement Monitor Timer is reset, the LAMP REPLACEMENT indicator stops to lighting.

- 1 Turn the projector on, and press the MENU button and the ON-SCREEN MENU will appear. Press the POINT LEFT/RIGHT buttons to select SETTING press the SELECT button (refer to the page 32). Another dialog box SETTING MENU Menu will appear.
- 2 Press the POINT DOWN button and a red-arrow icon will appear. Move the arrow to Lamp age, and then press the SELECT button. The message of "Lamp replace monitor Reset?" is displayed.
- 3 Select [Yes] to reset the Timer.

Do not reset the Lamp Replacement Monitor Timer, except after the lamp is replaced.

TROUBLESHOOTING

Before calling your dealer or service station for assistance, check the matters below once again.

- 1. Make sure you have connected the projector to your equipment a s described in section "CONNECTING THE PROJECTOR" on pages 10 ~ 15.
- 2. Check cable connection. Verify that all computer, video and power cord are properly connected.
- 3. Verify that all power is switched on.
- 4. If the projector still does not produce the image, re-start the computer.
- 5. If the image sill does not appear, unplug the projector from the computer and check the computer monitor's display. The problem may be with your graphics controller rather than with the projector. (When you reconnect the projector, remember to turn the computer and monitor off before your power up the projector. Power the equipment back in order of : Projector and computer.)
- 6. If the problem still exists, check with following chart.

Problem:	Try these Solution
No power.	 Plug the projector into the AC outlet. Be sure READY Indicator light is On. Wait 90 seconds after the projector is turned OFF before turning the projector back on. NOTE : After pressing the power ON-OFF switch to OFF, make sure the projector works as follow.
	 The LAMP indicator will light and the READY indicator will turn off. After one minute, the READY indicator will light green again and the projector may be turned on by pressing the power ON-OFF button.
	 Check the TEMPERATURE WARNING indicator. If the indicator flashes red, the projector cannot be turned on. (See "TURNING ON/OFF THE PROJECTOR" section on page 21.) Check the Projection Lamp. (Refer to the page 35.)
Image is out of focus.	 Adjust the focus Make sure the projection screen is at least 4.6' (1.4m) from the projector. Check the projection lens to see if it needs cleaning.
	NOTE : Moving the projector from a cool temperature location to a warm temperature location may result in moisture condensation on the lens. In such an event, leave the projector OFF and wait until condensation disappears.
Picture is L/R reversed.	Check Ceiling / Rear feature. (See "SETTING" section on page 32.)
Picture is T/B reversed.	 Check Ceiling feature. (See "SETTING" section on page 32.)
Some displays are not seen during the Operation.	 Check Display feature.(See "SETTING" section on page 32.)
No image.	 Check the connection between the computer or video equipment and the projector. When turning the projector on, it is about 30 seconds to display the image. Check the system that you select is corresponding with the computer or the video equipment. Make sure the temperature is not out of the Operating Temperature (5°C ~ 35°C).
No sound.	 Check audio cable connection from audio input source. Adjust the audio source. Press VOLUME (+) button. Press MUTE button.

WARNING : High voltages are used to operate this projector. Do not attempt to open the cabinet.

Sanyo Service is easily obtained. If after following all operating instructions, you find that service is

TECHNICAL SPECIFICATIONS

Projector Type	Multi-media Projector		
Dimensions (W x H x D)	8.46" x 4.29" x 12.85" (215mm x 109mm x 326.5mm)		
Net Weight	9.48 lbs (4.3 kg)		
LCD Panel System	0.9" TFT Active Matrix type, 3 panels		
Panel Resolution	1024 x 768 dots		
Number of Pixels	2,359,296 (1024 x 768 x 3 panels)		
Color System	PAL, SECAM, NTSC, NTSC4.43 and PAL-M		
Scanning Frequency	H-sync. 15 ~ 100 KHz, V-sync. 50 ~ 100 Hz		
Projection Image size (Diagonal)	Adjustable from 30" to 300"		
Horizontal Resolution	800 TV lines		
Projection Lens	F 1.7 ~ 2.0 lens with f 33.2mm ~ 43.1mm Motor zoom and focus		
Throw Distance	4.6' (1.4m) ~ 35.4' (10.8m)		
Projection Lamp	120 W		
AV Input Jacks	RCA Type x 1 (Video, Audio R and L) and DIN 4 pin (S-Video) x 1		
Computer Input Jacks	(VGA) HDB 15 Terminal x 1		
Control Port Jack	Multi-pole 12 pin (Control Port) x 1		
Serial Port	Serial Port DIN 8 pin x 1		
Monitor Output Jack	(VGA) HDB 15 Terminal x 1		
Computer Audio Input Jack	Mini Jack (stereo)		
Audio Output Jack	Mini Jack (stereo)		
Internal Audio Amp	1W RMS (Monaural)		
Built-in Speaker	1 speaker, 1.57" x 1.18" (40mm x 30mm)		
Feet Adjustment	0° to 2°		
Voltage	AC 100 ~ 120 V, 50 / 60 Hz		
Power Consumption	2.2 A (Max. Ampere)		
Operating Temperature	41 °F ~ 95 °F (5 °C ~ 35 °C)		
Storage Temperature	14 °F ~ 140 °F (-10 °C ~ 60 °C)		
Remote Control Transmitter	Power Source : AA Type x 2 Operating Range : 16.4' (5m) / ±30° Dimensions : 2.2" x 1.4" x 7.6" (56mm x 35mm x 193mm) Net Weight : 0.23 lbs (105 g) (including batteries)		
Accessories	Owner's Manual AC Power Cord Remote Control Transmitter and Batteries VGA Cable Control Cables for PS/2 port Lens Cover Carrying Bag		

• The specifications are subject to change without notice.



This symbol on the nameplate means the product is Listed by Underwriters Laboratories Inc. It is designed and manufactured to meet rigid U.L. safety standards against risk of fire, casualty and electrical hazards.

OPTIONAL PARTS

The parts listed below are optionally supplied. When ordering those parts, give the name and the Type No. of it to the sales dealer.

- Control Cable for Serial Port Type No. : POA-MC12SRL
- Control Cable for ADB Port Type No. : POA-MC12MAC
- MAC Adapter
 Type No. : POA-MACAP

SANYO INDUSTRIAL VIDEO LCD PROJECTOR LIMITED WARRANTY

OBLIGATIONS

In order to obtain warranty service, the product must be delivered to and picked up from and Authorized Sanyo Factory Service Center at the user's expense, unless specifically stated otherwise in this warranty. the names and addresses of authorized Sanyo Service Centers may be obtained by calling the toll-free number listed below.

For product operation, authorized service center referral, service assistance or problem resolution, call

CUSTOMER INFORMATION 1-800-421-5013 Weekdays 8:00 AM - 5:00 PM Pacific Time

For accessories and/or parts not available form an authorized dealer, call

PARTS ORDER INFORMATION 1-800-726-9662 Weekdays 8:00 AM - 5:00 PM Pacific Time

THIS WARRANTY IS VALID ONLY ON SANYO PRODUCTS PURCHASED OR RENTED AND USED IN THE UNITED STATES OF AMERICA, EXCLUDING ALL U.S. TERRITORIES AND PROTECTORATES, FOR INDUSTRIAL PROFESSIONAL OR COMMERCIAL PURPOSES. THIS WARRANTY APPLIES ONLY TO THE ORIGINAL RETAIL USER. THE ORIGINAL DATED BILL OF SALE, SALES SLIP OR RENTAL AGREEMENT MUST BE SUBMITTED TO THE AUTHORIZED SANYO SERVICE CENTER AT THE TIME WARRANTY SERVICE IS REQUESTED.

Subject to the OBLIGATIONS above and EXCLUSIONS below, SANYO FISHER COMPANY (SFC) warrants this SANYO product against defects in materials and workmanship for the periods of LABOR and PARTS specified below. SFC will repair or replace (at its option) the product and any of its parts which fall to conform to this warranty. The warranty period commences on the date the product was first purchased or rented at retail.

LABOR	PARTS	LAMP
1YEAR	1YEAR	90DAYS

EXCLUSIONS

This warranty does not cover (A) the adjustment of customer-operated controls as explained in the appropriate model's instruction manual, or (B) the repair of any product whose serial number has been altered, defaced or removed.

This warranty shall not apply to the cabinet or cosmetic parts, knobs or batteries or routine maintenance. This warranty does not apply to uncrating, setup, installation, removal of the product for repair or reinstallation of the product after repair.

This warranty does not apply to repairs or replacements necessitated by any cause beyond the control of SFC including, but not limited to, any malfunction, defect or failure caused by or resulting from unauthorized service or parts, improper maintenance, operation contrary to furnished instructions, shipping or transit accidents, modification or repair by the user, abuse, misuse, neglect, accident, incorrect power line voltage, fire, flood or other Acts of God, or normal wear and tear.

The foregoing is in lieu of all other expressed warranties and SFC does not assume or authorize any party to assume for it any other obligation or liability.

SFC DISCLAIMS ALL WARRANTIES WHICH MAY BE IMPLIED BY LAW (INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS), SFC'S LIABILITY FOR ANY AND ALL LOSSES AND DAMAGES RESULTING FROM ANY CAUSE WHATSOEVER, INCLUDING WARRANTOR'S NEGLIGENCE, ALLEGED DAMAGED OR DEFECTIVE GOODS, WHETHER SUCH DEFECTS ARE DISCOVERABLE OR LATENT, SHALL IN NO EVENT EXCEED THE PURCHASE PRICE OF THE EQUIPMENT.

ATTENTION

For your protection in the event of theft or loss of this product, please fill in the information below for your own personal records.

Model No.

Serial No.

(Located on back or bottom side of unit.)

Date of Purchase _____ Purchase Price _____

Where Purchased ____



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