SHARP

PN-ZB03H

Operation Manual   HDBaseT Receiver Board

CINSE1411MP51 (1)

Applicable models (as of May 2016)	LCD MONITOR PN-R556/PN-R496/PN-R426

Available models differ according to region.

CAN ICES-3 (A) / NMB-3 (A)

● THANK YOU FOR PURCHASING A SHARP PRODUCT.

Before using the product, please be sure to read this operation manual carefully. In particular, be sure to read the section "To ensure safe and correct use". After reading the manual, keep it in a convenient location where it can be accessed at any time.
As for how to use the product, refer to the operation manual of the LCD MONITOR.

TIPS

- This product was shipped after strict quality control and inspection; however, if breakage or a malfunction should be found, contact your SHARP dealer or your nearest customer contact.
- Please understand that SHARP CORPORATION bears no responsibility for errors made during use by the customer or a third party, nor for any other malfunctions or damage to this product arising during use, except where indemnity liability is recognized under law.
- This product and its accessories may be upgraded without advance notice.

IMPORTANT: To aid reporting in case of loss or theft, please record the product's model and serial numbers in the space provided. The numbers are located on the product.	Model No.: Serial No.:

U.S.A. ONLY

WARNING:

FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

NOTE:

This equipment has been tested and found to comply with the limits for Class A digital device, pursuant to Part 15 of the 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.

U.S.A. ONLY

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

U.S.A. ONLY

WARNING:

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

To maintain compliance with EMC regulations, use shielded cables to connect to the following terminals: USB terminal, HDBaseT terminal.

To ensure safe and correct use

This operation manual and the product use various displays and labels to ensure safe use. Ignoring these displays and labels and incorrectly using the product could have results as classified below.
Please read the following warning symbol information before reading the rest of this section, and be sure to strictly observe all instructions.

⚠ **Warning:** Not following these instructions could result in death or serious injury.

- **Ask your SHARP dealer or qualified service person for the attachment/detachment of this product.**
  Attachment/detachment of this product by the customer may result in electric shock or injury.

- **Never try to modify, disassemble, or repair this product.**
  Doing so may result in fire, electric shock, or injury.

- **Only use the accessories with specified models.**
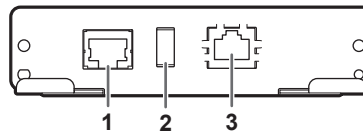 Failure to do so may result in fire.

Supplied accessories

If any component is missing, please contact your dealer.
☐ HDBaseT Receiver Board: 1
☐ Terminal label: 1
☐ Operation manual (this manual)
☐ Installation Manual (instructions for SHARP dealers and service engineers): 1

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> • The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing, LLC in the United States and other countries.

Connecting Peripheral Equipment

1 2 3

1. HDBaseT terminal	Use a commercially available LAN cable (Category 6 or better shielded cable) to connect to an HDBaseT transmitter.
2. USB terminal	You can connect a USB mouse or keyboard (HID class) to this terminal to control the computer connected to the HDBaseT transmitter.*
3. LAN terminal	Use a commercially available LAN cable to connect to the network. You can use this terminal in place of the LAN terminal of the monitor. Do not connect the LAN terminal to the same network as the LAN that the board is connected to by way of the HDBaseT terminal. A network loop malfunction will occur.

* You have to use this product with a transmitter that supports the HDBaseT 2.0 standard. Connections to all transmitters is not guaranteed.

About the HDBaseT Receiver Board

A commercially available HDBaseT transmitter is required to use this board. Depending on the transmitter, some functions may not be available. Check with the manufacturer regarding HDBaseT transmitter specifications.

■ OPERATING THE MONITOR

• When you use this device, set the input mode to OPTION.
• In some cases, the power of the HDBaseT receiver board may remain on even in the standby mode or input signal waiting mode. Power consumption will be higher when this occurs.
• The power consumption of the monitor with this board attached increases by up to 12 W.
• To use LAN signals or RS-232C signals via HDBaseT and LAN signals that have been applied to this board's LAN terminal, change the CONTROL ROUTE setting under COMMUNICATION SETTING on the SETUP menu.
  You can also use control commands to change the setting.

Function	Command	Direction	Parameter	Reply	Control/Responsecontents	
CONTROL ROUTE	CTCH	WR	0-1	0-1	0: MONITOR 1: OPTION	○

"○" indicates a command which cannot be used in standby mode when POWER SAVE MODE is set to ON.
  * When CONTROL ROUTE is set to OPTION, the communication speed is fixed to 9600 bps. Also, you cannot set POWER SAVE MODE to ON.
• AUTO INPUT SELECT PRIORITY is not supported.
• You can use the INFORMATION3 screen to check things such as the communication status of the board as shown below. Set the input mode to OPTION.
  - SIGNAL STRENGTH: This displays the signal strength. The smaller the value, the stronger the signal. To ensure stable operation, a signal strength of at least -10 dB (-10 dB, -11 dB, -12 dB, etc.) is necessary.
  - LINK STATUS: NO LINK, LINK, LOW POWER, or ETHERNET is displayed. When LOW POWER is displayed, the link has been established, but video cannot be transmitted. ETHERNET is displayed when the cable that should be connected to the LAN terminal is erroneously connected to the HDBaseT terminal.
  - HDMI STATUS: NO HDMI, HDMI, or HDCP is displayed.
    NO HDMI: No video data has been received.
    HDMI: HDMI/DVI data without HDCP is being received.
    HDCP: HDMI/DVI data with HDCP is being received.
  *Set the input mode to OPTION before checking the status.

When you connect the HDBaseT Receiver Board, the following become enabled on the monitor.
• If you are using an Extron device, set EXTRON XTP to ON under COMMUNICATION SETTING on the SETUP menu.
• The following control commands become enabled.

Function	Command	Direction	Parameter	Reply	Control/Responsecontents	
EXTRON XTP	EXTN	WR	0-1	0-1	0: OFF 1: ON	○

"○" indicates a command which cannot be used in standby mode when POWER SAVE MODE is set to ON.

■ PRODUCT SPECIFICATIONS

Model	PN-ZB03H
Supported standard	HDBaseT 2.0
Input/output terminals	HDBaseT terminal LAN terminal (10BASE-T/100BASE-TX) USB terminal (USB 2.0 compliant)
Max. resolution (pixels)	4096 x 2160 (30Hz)*
Maximum transmission distance	100 m*
Copy protection	Supports HDCP (pass through)
Power requirement	Supplied from the monitor
Input voltage	12 - 19 V
Power consumption	12 W
Dimensions inch (mm)	Approx. 4-15/16(W) x 5-3/8(D) x 1-3/16(H) (124.6 x 136.5 x 30)
Weight lbs. (g)	Approx. 0.408(185)

* To connect the devices, use a commercially available category 6 or better shielded cable.
• Use this device within the operating temperature and humidity conditions of the monitor.

As a part of our policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

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