

# **Operating Instructions**

Interface Board Commercial Use

Model No.

# ET-MDNHM10C ET-MDNDV10C



\* The illustration above is an example. In this manual, illustrations of ET-MDNHM10C are used as an example unless otherwise specified.

#### Read before use

The "Operating Instructions" explains about the interface boards to be installed to a Panasonic display device (projector or flat panel display). For Model No. and model names, refer to the product list ( $\Rightarrow$  page 5).

Thank you for purchasing this Panasonic product.

- Before using this product, please read these "Operating Instructions" and the "Operating Instructions" of the display device carefully and save the manuals for future use.
- Before using this product, be sure to read "Read this first!" (→ pages 3 to 4).



ENGLISH TQZJ730-3

## Contents

Read this first!	3
Precautions for use	5
Products list	5
Supported display device	5
About the handling of the product	5
Disposal	6
Accessories	6
Part names and functions	6
Installing the Interface Board	8
Before installing or removing the Interface Board	8
How to install the Interface Board	9
How to remove the Interface Board	10
Specifications	11

## Trademarks

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

## Read this first!

### WARNING:

#### **Do not spill water on this product or allow this product to get wet.** Doing so may cause fire, electric shock, or malfunction due to short circuit

or overheating.

- Do not place a container with liquid close to this product.
- Consult your dealer when liquid such as water is spilled on this product.

#### **Do not place the supplied screws in a location that a child can reach.** Accidentally swallowing them can cause a physical harm.

• Seek a medical advice immediately if a child might have swallowed a screw.

#### Do not disassemble or modify.

Doing so may cause electric shock or fire. It may also cause a malfunction.

# Ask the qualified technician or your dealer to install or remove this product to/from the flat panel display.

Failure to do so may cause electric shock. It may also cause a malfunction.

#### Turn off the power and disconnect the power plug from the outlet when installing or removing this product to/from the flat panel display.

Failure to do so may cause electric shock.

### CAUTION:

Do not place this product in a location with excessive humidity or dust, or in a location exposed to oil smoke or steam.

Doing so may cause fire or electric shock.

#### Do not place this product in extremely hot location.

Doing so may deteriorate the part, or may cause fire.

• Do not install or store in a location with direct sunlight or close to the heating device, etc.

## Turn off the power and disconnect the power plug from the outlet when installing or removing this product to/from the projector.

Failure to do so may cause electric shock.

#### Read this first!

product						
Parts	Hazardous substances					
	Pb	Hg	Cd	Cr(VI)	PBB	PBDE
Printed circuit boards (PCB)	×	0	0	0	0	0
Accessories	0	0	0	0	0	0

O: The amount of hazardous substances included in all homogeneous materials for the relevant part does not exceed the limit specified in GB/T 26572.

 $\times$ : The amount of hazardous substances included in all homogeneous materials for the relevant part exceeds the limit specified in GB/T 26572.

## Precautions for use

## **Products list**

The product names and their Model Nos. described in this document are as follows.

Product name	Product Model No.	Remark
Interface Board for HDMI 2 input	ET-MDNHM10C	An Interface Board equipped with 2 HDMI inputs.
Interface Board for DVI-D 2 input	ET-MDNDV10C	An Interface Board equipped with 2 DVI-D inputs.

## Supported display device

The display device (projector or flat panel display) supported by the Interface Board described in this document is as follows.

(As of March 2019)

Projector	PT-SRQ13KC, PT-SRQ32KC, PT-SRQ22KC
Flat panel display	(Support to be determined)

#### Note

• The model not described in the table may also be supported. Refer to the Operating Instructions of your display device.

## About the handling of the product

# Do not touch the connector section of the Interface Board directly with your hands.

The component may be damaged by the static electricity. Handle this product after removing the static in your body by touching the surrounding metal, etc.

### Ask a qualified technician to install or remove to/from the flat panel display.

There is a danger of electric shock or a malfunction may occur due to static electricity. Consult your dealer.

## Disposal

To dispose of the product, ask your local authorities or dealer for correct methods of disposal.

## Accessories

Make sure that the following accessories are provided with your product. Numbers enclosed in < > show the number of accessories.

Screw <4> (XSB3+8FN)



### Attention

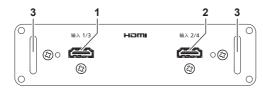
- Appropriately discard the packaging material after unpacking the product.
- For missing accessories, consult your dealer.
- Store small parts in an appropriate manner, and keep them away from small children.

#### Note

- The supplied screws are spare. Use them when a screw to fix the slot cover of the display device is lost.
- The model numbers of accessories are subject to change without prior notice.

## Part names and functions

## Interface Board for HDMI 2 input (Model No.: ET-MDNHM10C)

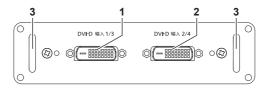


1 <HDMI 输入 1> terminal (when installed in <SLOT 1> of the display device), <HDMI 输入 3> terminal (when installed in <SLOT 2> of the display device) This is a terminal to input the HDMI

signal.

- 2 <HDMI 输入 2> terminal (when installed in <SLOT 1> of the display device), <HDMI 输入 4> terminal (when installed in <SLOT 2> of the display device) This is a terminal to input the HDMI signal.
- 3 Handle

### ■ Interface Board for DVI-D 2 input (Model No.: ET-MDNDV10C)



1 <DVI-D 输入 1> terminal (when installed in <SLOT 1> of the display device), <DVI-D 输入 3> terminal (when installed in <SLOT 2> of the display device)

This is a terminal to input the DVI-D signal.

- 2 <DVI-D 输入 2> terminal (when installed in <SLOT 1> of the display device), <DVI-D 输入 4> terminal (when installed in <SLOT 2> of the display device) This is a terminal to input the DVI-D signal.
- 3 Handle

# Installing the Interface Board

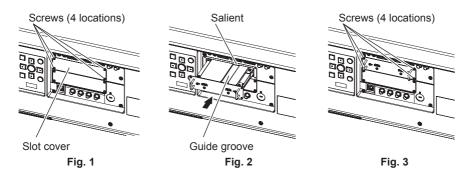
It is recommended to ask a qualified technician to install or remove the Interface Board to a projector. A malfunction may occur due to static electricity. Consult your dealer.

Ask a qualified technician to install or remove the Interface Board to/from a flat panel display. There is a danger of electric shock or a malfunction may occur due to static electricity. Consult your dealer.

## Before installing or removing the Interface Board

- Always turn off the power of the display device (projector or flat panel display) before installing or removing the Interface Board.
  - Make sure to follow the procedure described in the Operating Instructions of your display device when turning off the power.
- Do not touch the connector section of the Interface Board directly with your hands.
  - The component may be damaged by the static electricity.
- Remove the static charge from your body by touching the surrounding metal, etc., in advance to prevent the static electricity damage.
- Take care not to get injured when installing or removing the Interface Board.
  - Hands may be injured by the opening of the blank slot of the display device or the edge of the bracket of the Interface Board.
- When installing the Interface Board to the slot, insert it into the connector straight and slowly.
  - It may not operate or cause malfunction if it is not correctly installed.
- The figure indicating the installation and removal of the Interface Board is using the combination of the Interface Board for HDMI 2 input (Model No.: ET-MDNHM10C) and the optional projector (Model No.: PT-SRQ13KC) as an example. Illustration of this document may vary from the actual product.
- The details of the installation or removal may be different depending on the display device, so confirm the Operating Instructions of your display device too.

## How to install the Interface Board



#### 1) Remove the slot cover. (Fig. 1)

- Remove the four screws fixing the slot cover of the display by rotating counterclockwise with a Phillips screwdriver. The removed screws are used to fix the Interface Board.
- When removing the fourth screw, hold the slot cover with your hand so it will not fall.
- To replace from other Interface Board, remove the Interface Board following the procedure in "How to remove the Interface Board" (
   page 10).
- 2) Install the Interface Board to the display device. (Fig. 2)
  - Insert the guide groove of the Interface Board aligned to the salient of the slot. Insert the bracket firmly all the way in.
- 3) Fix the Interface Board. (Fig. 3)
  - Tighten and fix with the four screws removed in Step 1).

#### Attention

• The removed slot cover is required when the unnecessary Interface Board is removed. Store it so it can be attached in the future.

## How to remove the Interface Board

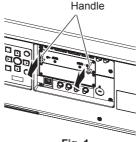


Fig. 1

#### 1) Remove the Interface Board. (Fig. 1)

- Remove the four screws fixing the Interface Board by rotating counterclockwise with a Phillips screwdriver. The removed screws are used to fix the slot cover.
- Hold the handle of the Interface Board and remove it slowly.
- 2) Attach the slot cover.
  - Attach the stored slot cover to the blank slot, and tighten and fix with the four screws removed in Step 1).
  - To replace with other Interface Board, attach the Interface Board following the procedure in "How to install the Interface Board" (
     page 9).

### Attention

- Always attach the slot cover on the blank slot.
- Store the removed Interface Board inside an antistatic bag.

# **Specifications**

The specifications of the Interface Board are as follows.

## ■ Interface Board for HDMI 2 input (Model No.: ET-MDNHM10C)

Compatible slot		SLOT NX specification
Connecting terminal		2 sets, HDMI 19p, HDCP 2.2 compatible, Deep Color compatible
Compatible signal	Resolution	Moving image signal: 480i*1/576i*1 to 4 096 x 2 160 Still image signal: 640 x 400 to 3 840 x 2 400 (non- interlace)
	Dot clock frequency	25 MHz to 594 MHz
Dimensions	Width	151 mm (5-15/16")
	Height	38.5 mm (1-17/32")
	Depth	142 mm (5-19/32")
Weight		340 g (12.0 ozs.)

\*1 Pixel-Repetition signal (dot clock frequency 27.0 MHz) only

### ■ Interface Board for DVI-D 2 input (Model No.: ET-MDNDV10C)

Compatible slot SLOT NX specification		SLOT NX specification	
Connecting terminal		2 sets, DVI-D 24p, DVI 1.0 compliant (only single link supported), HDCP compatible	
Compatible signal	Resolution	Moving image signal: 480i*1/576i*1 to 2 048 x 1 080 Still image signal: 640 x 400 to 1 920 x 1 200 (non- interlace)	
	Dot clock frequency	25 MHz to 162 MHz	
Dimensions	Width	151 mm (5-15/16")	
	Height	38.5 mm (1-17/32")	
	Depth	142 mm (5-19/32")	
Weight		350 g (12.3 ozs.)	

\*1 Pixel-Repetition signal (dot clock frequency 27.0 MHz) only

#### Note

- "SLOT NX" is a name of the slot unique to Panasonic supporting the signal input for the 4K image.
- The video signal that can actually display will vary depending on the display device (projector or flat panel display) that the Interface Board is installed. For details, refer to the Operating Instructions of your display device.

## Environment care information for users in China



The symbol is only valid for electronic and electrical products sold in China, and the central figure indicates the years of environment-friendly use period. On the premise of complying with the safety requirements and precautions related to the product, it will not cause environmental pollution, or affect the health and property of the people in this period from the date of production.

#### 松下电器(中国)有限公司

北京市朝阳区景华南街 5 号远洋光华中心 C 座 3 层、6 层 网站: http://panasonic.cn

原产地:中国 发行:2019年3月 © 松下电器产业株式会社 2015版权所有。 本产品按照企业标准:Q/PCG 14-2019设计制造