Operating Instructions

Interface Board Commercial Use

Model No. ET-MDNHM10 ET-MDNDV10

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 (page 4).

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!” (page 3).

Printed in China
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## 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.
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.

Importer’s name and address within the European Union
Panasonic Marketing Europe GmbH
Panasonic Testing Centre
Winsbergring 15, 22525 Hamburg, Germany
Precautions for use

Products list

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

<table>
<thead>
<tr>
<th>Product name</th>
<th>Product Model No.</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interface Board for HDMI 2 input</td>
<td>ET-MDNHM10</td>
<td>An Interface Board equipped with 2 HDMI inputs.</td>
</tr>
<tr>
<td>Interface Board for DVI-D 2 input</td>
<td>ET-MDNDV10</td>
<td>An Interface Board equipped with 2 DVI-D inputs.</td>
</tr>
</tbody>
</table>

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)

<table>
<thead>
<tr>
<th>Projector</th>
<th>PT-RQ13K, PT-RQ32K, PT-RQ22K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat panel display</td>
<td>(Support to be determined)</td>
</tr>
</tbody>
</table>

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.
Precautions for use

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-MDNHM10)

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

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

3 Handle
Installing the Interface Board

Interface Board for DVI-D 2 input (Model No.: ET-MDNDV10)

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

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Installing the Interface Board

- 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-MDNHM10) and the optional projector (Model No.: PT-RQ13K) 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 8).

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

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 7).

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-MDNHM10)**

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

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

**Interface Board for DVI-D 2 input (Model No.: ET-MDNDV10)**

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

*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.
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Eski Ekipman ve Bataryaların İşlenmesi.
Sadece geri dönüşüm sistemleri olan Avrupa Birliği ve ülkeleri için geçerlidir.

Ürünler, ambalaj ve/veya ekli belgeler üzerindeki bu semboller kullanılan elektrik ve elektronik ürünlerin genel ev atığı ile karıştırılmaması gerektiğini ifade eder.
Eski ürünlerin toplanması ve geri kazanılması için bu atıkları lütfen yasayla belirlenmiş olan uygun toplama merkezlerine teslim ediniz.
Bu atıkların doğru işlenmesiyle, değerli kaynakların korunmasına ve insan sağlığı ve çevreye olası negatif etkilerinin engellenmesine yardımcı olabilirsiniz.
Atıkların toplanılması ve geri dönüştümü için detaylı bilgi için lütfen bağlı olduğunuz yerel yönetimlerle iletişime geçiniz. Atıkların atılmasınıyla ilgili yanlış uygulamalar yasayla belirlenmiş olan cezalara sebebiyet verebilir.