Panasonic

S P E C F I L E

Product Number: ET-FMP20

Product Name : Media Processor

(Box-type)



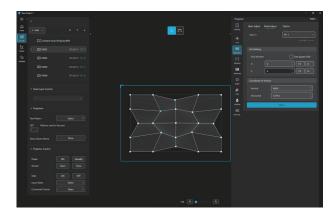
Overview

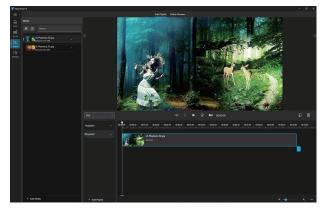
This product is a media processor featuring camera-based blending/black-level adjustments and 4K media playback capability. It eases the burden on your team when installing and adjusting multi-projection attractions, making operations more efficient.

Hardware Highlights

- Compact box-type
- Up to 4 x 1920 x 1080/60p outputs¹ per device
- Supports NDI® (Max. 3840 x 2160/60p) and Dante® (2-channel) AVoIP protocol
- Seamless video synchronization among multiple media processors
- Supports signal input of up to 18 million pixels (max. length 7680 pixels), with resolutions including 7680 x 1920/60p and 4096 x 4096/60p for smoother content production
- Supports video bandwidth up to 300 Mbps
- Compatible with H.264, and H.265 codecs
- Supports MP4, JPEG, BMP, and PNG formats
- Large internal storage: 512 GB²
- Pixel-based adjustment for unrivaled precision
- Stable Linux® operating system
- Optional rack-mounting kits for one or two ET-FMP20 units

Software Highlights





This media processor is compatible with Visual Software Suite 2.0. For detailed specifications, please refer to the Visual Software Suite 2.0 spec file.

- 1 When four HDMI™ outputs are used simultaneously
- 2 Approximately 30 GB of the total storage space is allocated for system usage and is unavailable to the user.

ET-FMP20 **Media Processors**

Specifications

Main unit (Specifications subject to change without notice.)

| Туре | | Box-type | | | | |
|---------------------------|------------------------------|--|--|--|--|--|
| Terminals | LAN | RJ-45 x 1 for network connection 10Base-T/100Base-TX, 1000Base-T, NDI® and Dante®(2 channels) compatible | | | | |
| HDMI™ OUT 1/2/3/4 | | HDMI™ x 4 Audio signals: Linear PCM and sampling frequency: 44.1kHz/48kHz, 16-bit, 2 channels | | | | |
| | Audio OUT | 3.5 mm stereo mini-jack 0 V [rms] to 2.0 V [rms] (variable), output impedance 2.2 k Ω or lower | | | | |
| Content compat | ible with streaming playback | Image compression method: High Bandwidth NDI® | | | | |
| NDI® | | Image resolution/frame rate: 3840 x 2160/60 fps, 3840 x 2160/50 fps, 1920 x 1080/60fps, 1920 x 1080/50fps | | | | |
| | | Audio signals: Linear PCM and sampling frequency: 44.1kHz/48kHz, 16-bit, 2 channels | | | | |
| Max. video outp | out resolution | 3840 x 2160/60p ¹ x 1 or 1920 x 1080/60p x 4 ² | | | | |
| Video format | | H.264 ³ , 8-bit, 3840 x 2160 pixels, 60p, YP ₈ P _R 4:2:0, 300 Mbps / H.265 ⁴ , 8-bit, 18million pixels (long side of 7680 pixels or less), 60p (including 7680 x 1920/60p, 4096 x 4096/60p), YP ₈ P _R 4:2:0, 300 Mbps Color format: RGB Color depth: 8-bit | | | | |
| Audio format | | AAC-LC, 16-bit, stereo | | | | |
| Storage | | 512 GB ⁵ | | | | |
| Operating syste | m | Linux AC 100V-240V 50Hz/60Hz | | | | |
| Power supply | | | | | | |
| Maximum power consumption | | 64 W | | | | |
| Dimensions | Width | Approx. 210 mm [8 9/32 in] | | | | |
| | Height | Approx. 44 mm [1 23/32 in] (Excluding feet) | | | | |
| | Depth | Approx. 295 mm [11 5/8 in] | | | | |
| Weight | | Approx. 2.0 kg (4.41 lbs) (Excluding AC adapter and cord) | | | | |
| Operating | Operating temperature | 0-40 °C (32-104 °F) | | | | |
| environment | Operating humidity | 10-80 % (no condensation) | | | | |

- 1 HDMI™ OUT 1 only, HDMI™ OUT 2/3/4 have a maximum resolution of 1920x1080/60p
 2 When four HDMI™ outputs are used simultaneously.
 3 Compatible profiles: Baseline, Main, High (4:2:0)
 4 Compatible profiles: Main (4:2:0)
 5 Approximately 30 GB of the total storage space is allocated for system usage and is unavailable to the user.

Optional Accessories

| Rack Mounting Kit for 2 | ET-PKFMJ2 | | | |
|-------------------------|-----------|--|--|--|
| Rack Mounting Kit for 1 | ET-PKFMJ1 | | | |

ET-FMP20 **Media Processors**

Content that can be registered

You can register the following still image files and movie files as media in this software.

| | Extension Format | | Restriction | | |
|-------------|---|------|---|--|--|
| | jpg/jpeg | JPEG | Number of pixels: Maximum 9600 x 6400 (only baseline supported) YUV format: Only YUV420, YUV422, and YUV444 supported Color mode: Unsupported | | |
| Still image | png Portable Network Graphics bmp Windows Bitmap | | Number of pixels: Maximum 4096 x 4096 Number of bits: 24 Transparent: Unsupported | | |
| | | | Number of pixels: Maximum 4096 x 4096 (only 1-bit, 4-bit, 8-bit, and 24-bit supported) Following formats are not supported. Run-length encoding, Bit fields, Top to bottom, Transparent data | | |

| | Extension | Codec | | Restriction ¹ | | |
|-------|-----------|--------------------------------|---------------|---|---|--|
| | Extension | Video | Audio | Video | Audio | |
| Movie | mp4 | H.264/MPEG-4 AVC H.265/HEVC | MPEG-4 AAC-LC | Resolution With H.264/MPEG-4 AVC Maximum: 3840 x 2160 Minimum: 240 x 180 With H.265/HEVC Maximum: Total number of pixels: 18 million (long side 7680 or less) Minimum: 240 x 180 Frame rate 25 fps/30 fps/50 fps/60 fps Bit rate Maximum 300 Mbps YUV format Only 4:2:0 supported Supported profiles With H.264/MPEG-4 AVC ² : Baseline Profile/Main Profile / High Profile With H.265/HEVC: Main Profile ³ | Sample rate: 44.1 kHz, 48 kHz Channel: 2 ch, 0 ch (no audio) Bit width: 16 bit | |

- 1 Multi-angle video is not supported.
- 2 Constrained Baseline Profile, Extended Profile, and Hi10P/Hi422P/Hi444P are not supported.

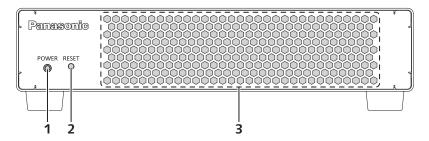
3 Following profiles are not supported.
Main 10, Main 12, Main 422-10, Main 422-12, Main 444-8, Main 444-10, Main 444-12

Note

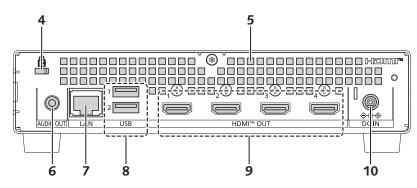
- Some information for still image/movie files can be viewed with a computer where relevant files are accessible. Operation example
 - For Windows computer
 - 1. Right-click a file, and click [Properties].
 - 2.Click the [Details] tab.
- A movie file cannot be used if its playback time is less that ten seconds or its playback time information cannot be acquired.
- The maximum number of characters for content file names is 80 characters.
- Files protected by DRM (Digital Rights Management) cannot be used.
- Some files listed as compatible formats may still not be able to be used.

Main body

■ Front

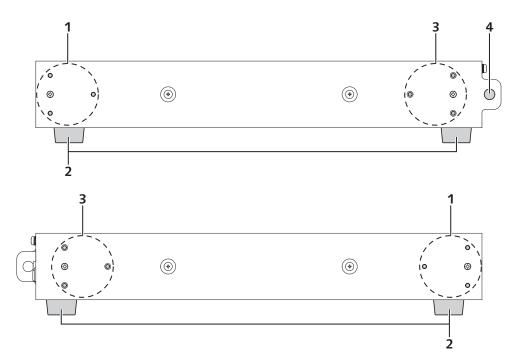


Rear



| 1 | Power indicator <power> Indicates the status of the device.</power> | 6 | <audio out=""> terminal</audio> This terminal is for outputting audio signals. |
|---|---|----|---|
| 2 | RESET> button This button initializes the network settings. If you press and hold the button, the settings of [System] menu → [Network] page are initialized and the device restarts. | 7 | <lan> terminal</lan> This terminal is for connecting to a network. |
| 3 | Air intake vent | 8 | <us><usb> terminals</usb>These terminals are not used with this device.</us> |
| 4 | Security slot This security slot is compatible with Kensington security cables. | 9 | <hdmi<sup>™ OUT 1> terminal / <hdmi<sup>™ OUT 2> terminal / <hdmi<sup>™ OUT 3> terminal / <hdmi<sup>™ OUT 4> terminal These terminals are for outputting HDMI signals.</hdmi<sup></hdmi<sup></hdmi<sup></hdmi<sup> |
| 5 | Air exhaust vent | 10 | CONSTANT CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL |

■ Sides



| 1 | Rack mount bracket attachment position Use these three screw holes to mount the device to a rack. Also use them to connect two devices horizontally. | 3 | Connection angle bracket attachment position Use these three screw holes to connect two devices horizontally. |
|---|--|---|--|
| 2 | Rubber feet Rubber feet are removable. | | Wire attachment hole This hole is for attaching a commercially available drop prevention wire. You can also connect a theft prevention wire, padlock, etc. |

Attention

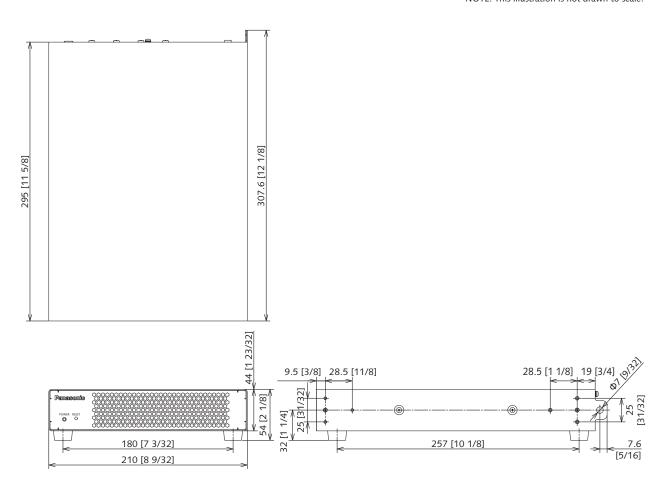
 $\bullet\,$ The LAN cable connected directly to this device must be indoors only.

Media Processors

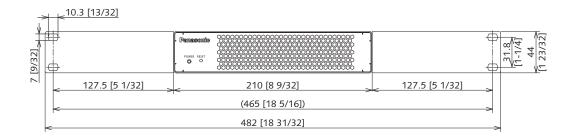
ET-FMP20

Dimensions

unit : mm [inch] NOTE: This illustration is not drawn to scale.



■ When the Rack Mounting Kit (model no.: ET-PKFMJ1) is attached



■ When the Rack Mounting Kit (model no.: ET-PKFMJ2) is attached

