
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® AVoIP protocol
- Seamless video synchronization among multiple media processors
- Supports a max. content resolution of 18 million pixels (long side 7680 pixels or less)
- 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

Intuitive User Interface

- Gentle learning curve
- Quick and easy to master
- Consists of four screens arranged in operation order

Auto & Manual Blending

- Auto blending, black level adjustment, and content splitting
- Click to define the image projection area
- Works with Nikon or IDS cameras³
- Free layout adjustment
- Supports manual blending

Warping & Color Adjustment

- Supports free shape masking, even in blends
- Corner/Keystone/Detail Adjustment
- 7-color manual adjustment (auto TBA)

Playlist & Timeline

- Create multiple playlists with custom timelines for each
- Convenient drag-and-drop media timeline
- Gapless playback loops to prevent screen blanking
- Supports playback via external UDP commands

Preview Content

- Preview content on PC screen or on the projection screen by sending it directly to ET-FMP20

Automated Operation

- Create custom schedules for automated daily playback
- Simple and intuitive

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.

³ Compatible cameras (sold separately) comprise NIKON D5200/D5300/D5500/D5600/D7500/Z50 and the IDS GV-5890CP-C-HQ. Please visit PASS for more information.

Specifications

Main unit (Specifications subject to change without notice.)

Type		Box-type
Terminals	LAN	RJ-45 x 1 for network connection 10Base-T/100Base-TX, 1000Base-T, NDI® 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 kΩ or lower
Content compatible with streaming playback NDI®		Image compression method: High Bandwidth NDI®
		Image resolution/frame rate: 1920 x 1080/60fps, 1920 x 1080/50fps
		Audio signals: Linear PCM and sampling frequency: 44.1kHz/48kHz, 16-bit, 2 channels
Max. video output 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, YPbPr 4:2:0, 300 Mbps / H.265 ⁴ , 8-bit, 18million pixels (long side of 7680 pixels or less), 60p, YPbPr 4:2:0, 300 Mbps Color format: RGB Color depth: 8-bit
Audio format		AAC-LC, 16-bit, stereo
Storage		512 GB ⁵
Operating system		Linux
Power supply		AC 100V-240V 50Hz/60Hz
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 environment	Operating temperature	0-40 °C (32-104 °F)
	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

Content that can be registered

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

Still image	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
	png	Portable Network Graphics	Number of pixels: Maximum 4096 x 4096 Number of bits: 24 Transparent: Unsupported
	bmp	Windows Bitmap	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

Movie	Extension	Codec		Restriction ¹	
		Video	Audio	Video	Audio
	mp4	H.264/MPEG-4 AVC H.265/HEVC	MPEG-4 AAC-LC	<ul style="list-style-type: none"> Resolution <ul style="list-style-type: none"> With H.264/MPEG-4 AVC <ul style="list-style-type: none"> Maximum: 3840 x 2160 Minimum: 240 x 180 With H.265/HEVC <ul style="list-style-type: none"> Maximum: Total number of pixels: 18 million (long side 7680 or less) Minimum: 240 x 180 Frame rate <ul style="list-style-type: none"> 25 fps/30 fps/50 fps/60 fps Bit rate <ul style="list-style-type: none"> Maximum 300 Mbps YUV format <ul style="list-style-type: none"> Only 4:2:0 supported Supported profiles <ul style="list-style-type: none"> With H.264/MPEG-4 AVC²: <ul style="list-style-type: none"> Baseline Profile/Main Profile/ High Profile With H.265/HEVC: <ul style="list-style-type: none"> Main Profile³ 	Sample rate: <ul style="list-style-type: none"> 44.1 kHz, 48 kHz Channel: <ul style="list-style-type: none"> 2 ch, 0 ch (no audio) Bit width: <ul style="list-style-type: none"> 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.

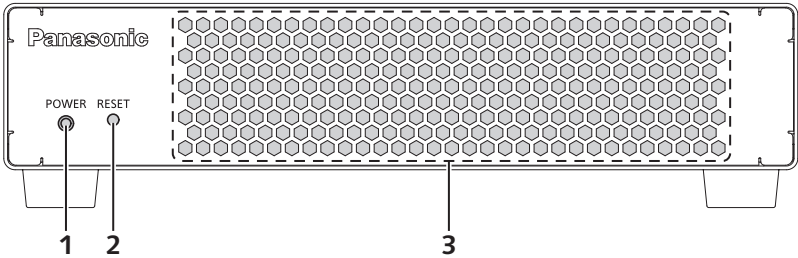
Main 10, Main 12, Main 422-10, Main 422-12, Main 444-8, Main 444-10, Main 444-12

Note

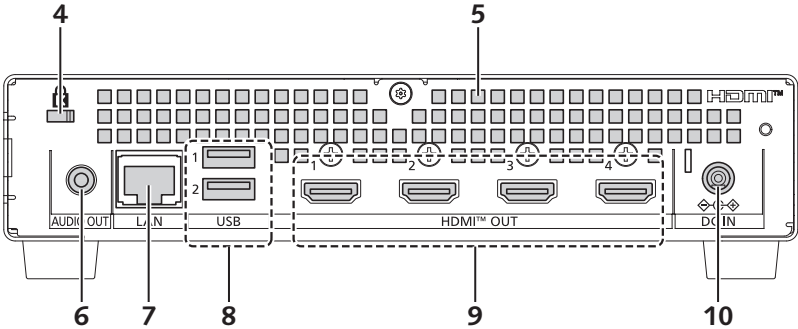
- Some information for still image/movie files can be viewed with a computer where relevant files are accessible.
Operation example
- For Windows computer
 - Right-click a file, and click [Properties].
 - Click the [Details] tab.
- A movie file cannot be used if its playback time is less than ten seconds 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

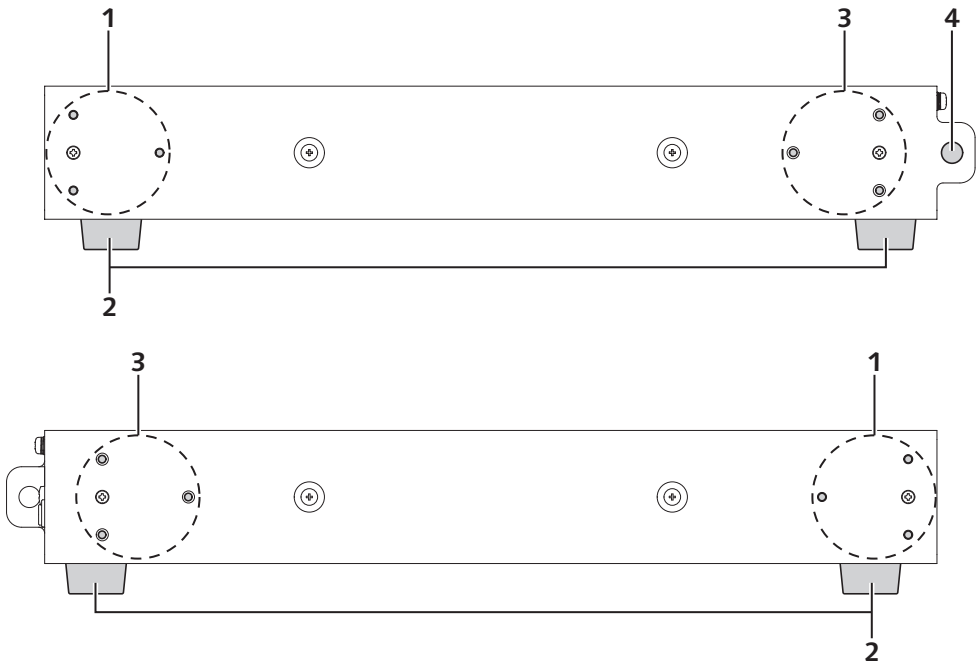


■ Rear



1	Power indicator <POWER> Indicates the status of the device.	6	<AUDIO OUT> terminal 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 This terminal is for connecting to a network.
3	Air intake vent	8	<USB> terminals These terminals are not used with this device.
4	Security slot This security slot is compatible with Kensington security cables.	9	<HDMI™ OUT 1> terminal / <HDMI™ OUT 2> terminal / <HDMI™ OUT 3> terminal / <HDMI™ OUT 4> terminal These terminals are for outputting HDMI signals.
5	Air exhaust vent	10	<DC IN> terminal Connect the supplied AC adapter.

Sides



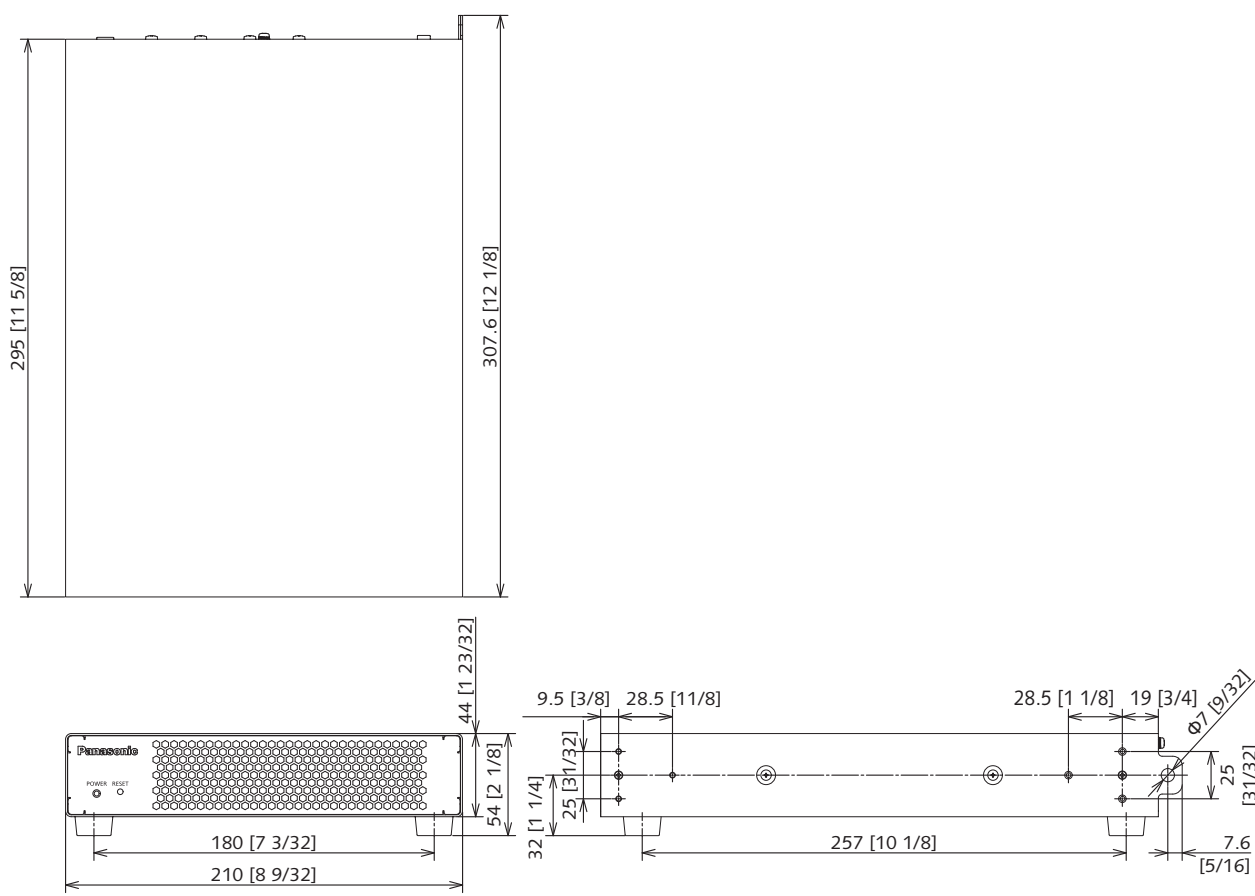
1	Rack mount bracket attachment position Use these three screw holes to mount the device to a rack. Also use them to connect two devices horizontally.	3	Connection angle bracket attachment position Use these three screw holes to connect two devices horizontally.
2	Rubber feet Rubber feet are removable.	4	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

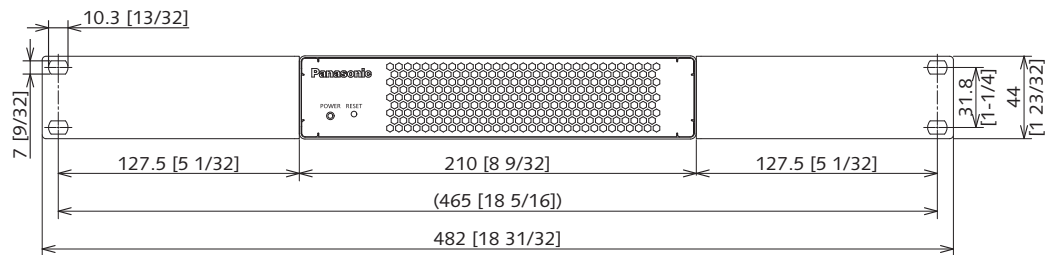
- The LAN cable connected directly to this device must be indoors only.

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

