

# IPEX2200 Series Specification Sheet



*IPEX2201 Encoder*



*IPEX2202 Decoder*



# Product Overview

## ***IPEX2201 Encoder***

The DigitalinXIP IPEX2201 encodes / transmits HDMI video and audio over a 1Gb network infrastructure using h.264/265 AVC encoding with a configurable data rate up to 30 Mbps. The IPEX2201 supports video signals up to 1080p@60 Hz. An analog audio output port de-embeds 2 channel stereo audio from the embedded HDMI content ingested into encoder. The encoder supports control of 3rd party devices via RS232.

The IPEX2201 supports PoE and can be powered remotely by compatible power source equipment, such as a PoE Ethernet switch, eliminating the need for a nearby power outlet.

## ***IPEX2202 Decoder***

The DigitalinX IP IPEX2202 decodes HDMI video and audio from an IPEX2201 stream over a 1Gb network infrastructure using h.264/265 AVC encoding. The IPEX2202 outputs video up to 1080p@60 Hz and can scale the video content either by user defined preference or automatically based on the native resolution of the connected display while seamlessly switching between sources. Depending on the needs of the installation, multiple IPEX2202 devices can be configured to make a video wall configuration. An analog audio output port de-embeds 2 channel stereo audio from the embedded HDMI content, while still passing the audio to the HDMI output. The decoder supports control of 3rd party devices via RS232.

The IPEX2202 supports PoE and can be powered remotely by compatible power source equipment, such as a PoE Ethernet switch, eliminating the need for a nearby power outlet.

## Package Contents per Device

1. Installation Guide
2. Power Supply with US, UK, EU, and AU adapters
3. 3-pin Removable Screw Terminal (Phoenix) (2 ea)
4. Mounting Ears (2 ea)
5. IR Emitter Cable (1)
6. IR Receiver Cable (1)

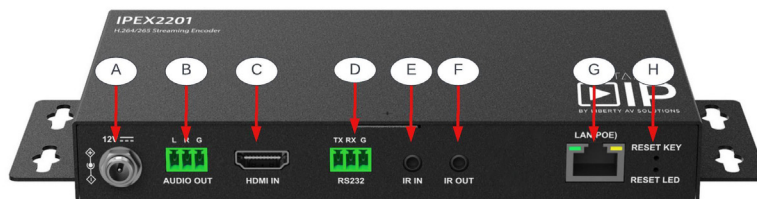
# Front and Rear Panels

## IPEX2201 Front Panel



1. Power indicator
  - When ON; encoder is powered on
  - When OFF; encoder is powered off
2. Status indicator
  - When ON; encoder detects valid input signal
  - When BLINKING; encoder detects no input signal
  - When OFF; encoder is powered OFF or in the boot up process

## IPEX2201 Rear Panel



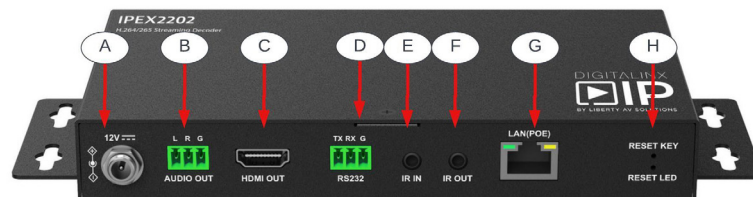
- A. 12V DC power input
- B. Analog audio output
- C. HDMI input
- D. RS232 Connection
- E. IR In connect to IR Receiver
- F. IR out connect to IR Emitter
- G. LAN connection with PoE support
- H. Reset LED lights up when reset is active. Factory default reset (press for 5 seconds)

## IPEX2202 Front Panel



1. Power indicator
  - When ON; encoder is powered on
  - When OFF; encoder is powered off
2. Status indicator
  - When ON; encoder detects valid input signal
  - When BLINKING; encoder detects no input signal
  - When OFF; encoder is powered OFF or in the boot up process
3. Identification button - Shows hostname / alias on TV display

## IPEX2202 Rear Panel



- A. 12V DC power input
- B. Analog audio output
- C. HDMI output
- D. RS232 connection
- E. IR In connect to IR Receiver
- F. IR Out connect to IR Emitter
- G. LAN connection with PoE support
- H. Reset LED lights up when reset is active. Factory default reset (press for 5 seconds)

# IPEX2201 Technical Specifications

<b>Input/Output Connections</b>	
HDMI Input	One (1) HDMI Type A Receptacle
LAN	One (1) 8P8C port (Shielded RJ45)
Power	One (1) 5.5 mm OD, 2.6 mm ID Threaded Barrel
RS232 Port	One (1) 3-pin Removable Terminal Block Connector
Audio Output	One (1) 3-pin Removable Terminal Block Connector
<b>Supported Audio, Video and Control</b>	
Input Video Resolution Support	640 x 480@60Hz, 480p@60Hz, 576i@50Hz, 576P@50Hz, 800 x 600@60Hz, 1024 x 768@60Hz, 720p@50Hz, 720p@60Hz, 1280 x 800@60Hz, 1280 x 1024@60Hz, 1360 x 768@60Hz, 1366 x 768@60Hz, 1400 x 1050@60Hz, 1440 x 900@60Hz, 1680 x 1050@60Hz, 1920 x 540@60Hz, 1080i@50Hz, 1080i@60Hz, 1080p@50Hz, 1080p@60Hz
Video Compliance	HDMI 1.3 and HDCP 1.4
Embedded Audio	PCM 2 Channel Stereo
De-embedded Audio	2 Channel Stereo
ARC (Audio Return Channel)	No
HEC (HDMI Ethernet Channel)	No
CEC (Consumer Electronics Control)	Yes
Supported Baud Rates	2400, 4800, 9600, 19200, 38400, 57600, 115200
<b>Streaming Signal Characteristics</b>	
Maximum Distance (point to point)	100 m (328 ft)
Cable Requirements	Solid Core Category 5e or greater with TIA/EIA-568B crimp pattern
Encoding Data Rate	Up to 30 Mbps, Support CBR and VBR
Encoding Method	H.264/H.265 MPEG-4 AVC
End to End Latency	Low Latency Mode: 80 ms High Quality Mode: 250 ms
<b>Chassis and Environmental</b>	
Construction	Black Steel
Dimensions (H x W x D)	25 mm x 100 mm x 175 mm (0.98in x 3.9 in x 6.9 in)
Operating Temperature	0° to +45° C (+32° to +113° F)
Operating Humidity	10% to 90%, Non-condensing
Storage Temperature	-10° to +60° C (+14° to +140° F)
Storage Humidity	10% to 90%, Non-condensing
<b>Power and Regulatory</b>	
Power Input	12V DC 1A or 48V DC PoE (Power over Ethernet)
Power over Ethernet (PoE) Compatibility	802.3af Alternative A
Power Consumption	6 watts
ESD Protection	8kV air, 4kV contact
Regulatory	FCC, CE, RoHS
<b>Other</b>	
Warranty	5 years
Diagnostic Indicators	Power and Status
Included Accessories	Installation Guide, Power Supply with US, UK, EU, and UK adapters, 3-pin Removable Screw Terminal (2 ea), Mounting Ears (2 ea)
Required System Controller	IPEXAR-2200
Compatible Decoders	IPEX2102, IPEX2202

Distances and picture quality may be affected by cable grade, cable quality, source and destination equipment, RF and electrical interference, and cable patches.

# IPEX2202 Technical Specifications

<b>Input/Output Connections</b>	
HDMI Output	One (1) HDMI Type A Receptacle
LAN	One (1) 8P8C port (Shielded RJ45)
Power	One (1) 5.5 mm OD, 2.6 mm ID Threaded Barrel
RS232 Port	One (1) 3-pin Removable Terminal Block Connector
Audio Output	One (1) 3-pin Removable Terminal Block Connector
<b>Supported Audio, Video and Control</b>	
Input Resolution Support	From 480p@60Hz to 1920x1080@60Hz
Output Video Resolution Support	640 x 480@60Hz, 480p@60Hz, 576P@50Hz, 800 x 600@60Hz, 1024 x 768@60Hz, 720p@50Hz, 720p@60Hz, 1280 x 800@60Hz, 1280 x 1024@60Hz, 1366 x 768@60Hz, 1400 x 1050@60Hz, 1440 x 900@60Hz, 1680 x 1050@60Hz, 1920 x 540@60Hz, 1080p@24Hz, 1080p@25Hz, 1080p@30Hz, 1080p@50Hz, 1080p@60Hz
Video Compliance	HDMI 1.3 and HDCP 1.4
Embedded Audio	PCM 2 Channel Stereo
De-embedded Audio	2 Channel Stereo
ARC (Audio Return Channel)	No
HEC (HDMI Ethernet Channel)	No
CEC (Consumer Electronics Control)	Yes
Supported Baud Rates	2400, 4800, 9600, 19200, 38400, 57600, 115200
<b>Streaming Signal Characteristics</b>	
Maximum Distance (point to point)	100 m (328 ft)
Cable Requirements	Category 5e or greater with TIA/EIA-568B crimp pattern
Decode Support	H.264/ H.265 MPEG-4 AVC (IPEX2101, IPEX2201 only)
End to End Latency	Low Latency Mode: 80 ms High Quality Mode: 250 ms
Maximum Video Wall Size	16 x 16
Bandwidth	up to 40Mbps
<b>Chassis and Environmental</b>	
Construction	Black Steel
Dimensions (H x W x D)	25 mm x 100 mm x 175 mm (0.98in x 3.9 in x 6.9 in)
Operating Temperature	0° to +45° C (+32° to +113° F)
Operating Humidity	10% to 90%, Non-condensing
Storage Temperature	-10° to +60° C (+14° to +140° F)
Storage Humidity	10% to 90%, Non-condensing
<b>Power and Regulatory</b>	
Power Input	12V DC 1A or 48V DC PoE (Power over Ethernet)
Power over Ethernet (PoE) Compatibility	802.3af Alternative A
Power Consumption	6 watts
ESD Protection	8kV air, 4kV contact
Regulatory	FCC, CE, RoHS
<b>Other</b>	
Warranty	5 years
Diagnostic Indicators	Power and Status
Included Accessories	Installation Guide, Power Supply with US, UK, EU, and UK adapters, 3-pin Removable Screw Terminal (2 ea), Mounting Ears (2 ea)
Required System Controller	IPEXAR-2200
Compatible Encoder	IPEX2201, IPEX2101

Distances and picture quality may be affected by cable grade, cable quality, source and destination equipment, RF and electrical interference, and cable patches.

Thank you for your purchase.

For Technical Support please call our toll free number at  
800-530-8998 or email us at [supportlibav@libav.com](mailto:supportlibav@libav.com)

[www.libav.com](http://www.libav.com)

The logo for Liberty, featuring the word "Liberty" in a bold, black, sans-serif font. The letter "i" is stylized with a small orange square above it.

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