## **MAGEWELL**

# Pro Convert HDMI 4K Plus Technical Specifications

Copyright (c) 2011-2018 Nanjing Magewell Electronics Co., Ltd. All rights reserved.

Specifications are based on current hardware, firmware and software revisions, and are subject to change without notice.

HDMI, the HDMI logo and High-Definition Multimedia interface are trademarks or registered trademarks of HDMI Licensing LLC. Windows, DirectShow and DirectSound are trademarks or registered trademarks of Microsoft Corporation. OS X and macOS are trademarks or registered trademarks of Apple Inc. NDI is trademark or registered trademark of NewTek Inc.

Revised 6/9/2018

## Supported Web Browser (tested)

- Microsoft Internet Explorer 11
- Microsoft Edge
- Mozilla Firefox version 61 and above
- Google Chrome version 49 and above
- Apple Safari 11.1 and above
- Opera 55.0.2994.44 and above

# **Supported Software (tested)**

- OBS
- XSplit
- vMix
- VidBlasterX
- Wirecast
- streamstar SW
- mimoLive
- Any other NewTek NDI<sup>®</sup> based encoding or streaming software

# **Input Interfaces**

- HDMI
  - o DVI-D 1.0
  - HDMI 1.4
  - HDMI 2.0

# **Loop-through Interface**

- HDMI
  - DVI-D 1.0
  - HDMI 1.4
  - HDMI 2.0

# **Output Interface**

• SD Card (functions to be developed)

#### **PTZ Control**

• Mini-DIN-8 jack

# **Screw Mounting Hole**

• ½-20 mounting hole

#### **Network Interfaces**

- 10/100/1000Mbps Ethernet
- IEEE 802.3af PoE

#### **USB Interface**

- USB2.0 Type B
- 5V/2.1A power supply
- USB RNDIS

## Input feature

Support for input video resolutions up to 4:4:4 8-bit 4096x2160 60fps

## **HDMI Specific Features**

- 600MHz HDMI receiver
- Adaptive HDMI equalizer
- Support for customized EDID
- Support for extraction of AVI/Audio InfoFrames
- Full colorimetry support
- Support for up to 4096x2160 4:4:4 60fps input signals
- Support for 8 channel IEC60958 audio streams
- · Support for extraction of audio formation information & channel status data
- Support for extraction of video timing information
- Support for extraction of 3D format information
- Support for Side-by-Side Half, Top-and-Bottom, Frame Packing 3D mode.

# **NDI<sup>®</sup> Output Format**

- Support for 4:2:2 8-bit output
- Support for up to 4096x2160 60fps or 1920x1080 240fps
- Support for NDI 3.5

# **Video Processing Features**

- Video processing pipelines with 4096x2160 60fps
- · Video brightness, contrast, saturation, hue adjustment
- Video de-interlacing
  - Top field only
  - · Bottom field only
- Video aspect ratio conversion
  - Auto or manual selection of output aspect ratio
- Video color format conversion
  - Auto or manual selection of input color format & quantization range
  - Auto or manual selection of output color format, quantization range & saturation range
  - Support for RGB, YUV BT.601, YUV BT.709, YUV BT.2020 input color formats
  - Support for YUV BT.601, YUV BT.709, YUV BT.2020 output color formats
  - Support for Limited or Full quantization range
  - Support for Limited, Full & 'Extended gamut' saturation range
- Video frame rate conversion
- Video mirror flip

# **NDI®** Source Name

- Support for setting the device name shown in the system using Web UI. By default, the device name is 'Pro Convert HDMI 4K+'.
- Support for setting the source name shown in the system using Web UI. By default, the source name is 'board-index + serial number'.
- Support for setting board-index, from 0 to F, through on-board rotary switch

# Firmware Upgrade

• Support for manual update using Web UI

### **LED Indicator**

- Status LEDs indicate:
  - the state of power supply: on/off
  - Tally: preview/program
  - the state of input signal: locked/unlocked
  - the state of loopthrough signal: loopthrough connected and signal detected/undetected

#### **Form Factor**

• 117.5mm (L) x 66.7mm (W) x 23.4mm (H)

#### **Accessories**

- USB2.0 A to B Cable
- 5V/2.1A power adaptor

# **Power Consumption**

- 5V max current: ~2A
- Max power consumption: ~10W

## **Working Environment**

- Operating temperature: 0 to 45 deg C
- Storage temperature: -20 to 70 deg C
- Relative Humidity: 5% to 90% non-condensing