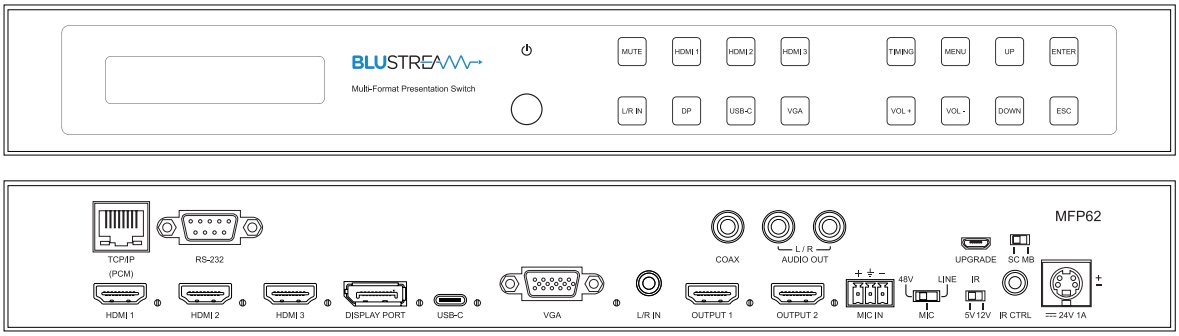
MFP62

Quick Reference Guide



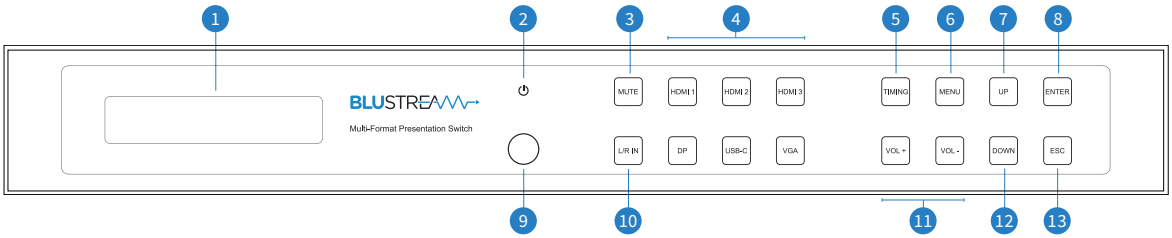
Introduction

Our MFP62 is an advanced 4K multi format presentation switch featuring 3 x HDMI, 1 x USB-C, 1 x DisplayPort and 1 x VGA input to dual HDMI outputs. The MFP62 provides enhanced features including video scaling on outputs, MIC input with phantom power and audio mixing. The MFP62 also features web GUI for control and configuration, analogue audio embedding, audio de-embedding and control via front panel, IR, RS-232 and TCP/IP. The MFP62 is an ideal product for your boardroom, classroom or huddle-space application.

FEATURES:

- Features 3 x HDMI, 1 x USB-C, 1 x DisplayPort & 1 x VGA input which can be routed to dual HDMI outputs
- Supports HDMI 2.0 18Gbps specification including HDR
- Supports resolutions up to 4K UHD 60Hz 4:4:4
- Supports bitstream passthrough of multichannel surround sound including object-based audio formats in line with HDMI specifications
- Dual HDMI outputs with simultaneous video scaling
- Supports USB Type C up to 4K UHD 60Hz 4:4:4, DP1.2 & Alt mode
- Supports DisplayPort up to 4K UHD 60Hz 4:4:4, DP1.2
- Audio breakout to analogue L/R audio and Coaxial (S/PDIF) digital outputs concurrently
- Features audio mixer with independent level adjustment
- Analogue audio embedding
- MIC input supports line level, 48V Phantom power or 1CH balanced/un-balanced audio
- Web interface module for control and configuration of switch
- Control via front panel, IR, RS-232 and TCP/IP
- HDCP 2.2 compliant with advanced EDID management

Panel Description - Front



1 LCD display – Shows the status of input/output selection, EDID etc

2 Power button – Press to power on/off the Switcher. Illuminates blue when powered on

3 Mutes all audio output

4 Input selection - To select the input signal between HDMI 1 to 3, DP, USB-C and VGA

5 Timing selection - To select scaler output video resolution

6 Menu button – Press to enter EDID, Network and MIC setup menu

7 Up selection button – Press to change segment's value

8 Enter button – Press to select current menu item.

9 IR receiver window

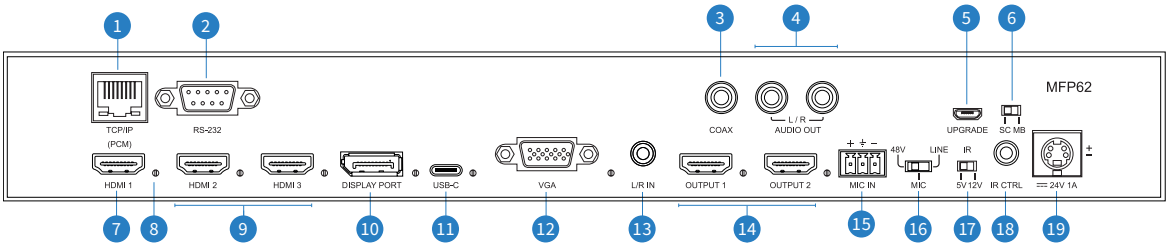
q L/R In button - Press to select analogue audio input

w Vol +/- button - Press to adjust the volume of the audio output for 2ch PCM signals only

e Down selection button – Press to change segment's value

r ESC button – Press to escape the current setup menu

Panel Description - Rear



1 TCP/IP (RJ45) – Connect to LAN for TCP/IP control of Switcher and Web GUI

2 RS-232 port – For control of the Switcher from PC or third party control processor

3 Coaxial digital audio output – Extract audio from the selected input signal

4 L/R analogue audio outputs (RCA) – Extracted audio from the selected input signal. Note: Input signal must be PCM 2ch audio

5 Upgrade port (Micro USB) - For firmware upgrade

6 SC/MB switch - For firmware upgrade

7 HDMI input 1 - Connect to HDMI source. Supports up to 4K/60/4:4:4 video and 2ch PCM audio only

8 Status LED - Illuminates when an input or output has an active connection to a source or display

9 HDMI input 2 to 3 - Connect to HDMI source. Supports up to 4K/60/4:4:4 video and multi channel audio

q DisplayPort input - Connect to DisplayPort source. Supports up to 4K/60/4:4:4 and DP1.2

w USB-C input - Connect to USB-C source. Note: this port does not support charging via USB. Supports up to 4K/60/4:4:4, DP1.2 and Alt mode

e VGA input - Connect to VGA source. Supports up 1920x1200 (including 1080p)

r L/R In - 3.5mm Analogue audio input for embedding audio onto HDMI outputs

t HDMI outputs - Connects to HDMI display. Both outputs display the same signal concurrently

y Mic in - Supports balanced and unbalanced microphones including 48V phantom power

u Mic input selection - Select between 48V phantom power, line level and mic level input sensitivity

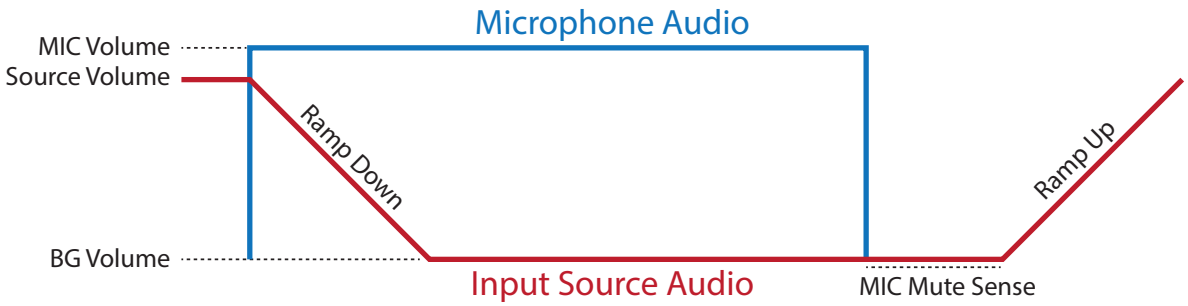
i IR selection - Select between 5V or 12V IR on the IR CTRL connection. See full manual for pin out

o IR CTRL receiver input – 3.5mm stereo jack for connection of an IR receiver or control processor for remote IR control of the switcher

p Power port – Use included 24V/1A DC adaptor to power the switcher

Microphone Input & Audio Mixing

The MFP62 features a microphone input that can support 48v phantom power, balanced and unbalanced microphones, as well as line level audio input. It also features auto audio ducking where by the input source's audio decreases in volume and the microphone audio is mixed over the top. This feature is enabled by default and can be customised via the MFP62's web GUI or RS-232. The illustration below outlines how the microphone audio mixes over the input source's audio.



When using the microphone mixing functionality, it is recommended to only use 2ch audio sources, or set the EDID of the product to a 2ch EDID. While the MFP62 does support multichannel audio, mixing the microphone input over the multichannel signal is not possible hence the source audio drops out when the microphone audio is triggered. To enable multichannel audio support, you must choose a multichannel EDID via the Web GUI of the product.

Scaler Control

The MFP62 supports scaling of the output video signal. This can be selected by pressing the Timing button on the front panel of the matrix, or via the Web GUI or RS-232. Note: both HDMI outputs will output at the same resolution. Scaler options are:

1024x768@60Hz	1680x1050@60Hz	1080p@50Hz	4K2K@50Hz	DCI 4K2K@50Hz
1280x800@60Hz	1920x1200@60Hz	1080p@60Hz	4K2K@60Hz	DCI 4K2K@60Hz
1360x768@60Hz	720p@50Hz	4K2K@25Hz	DCI 4K2K@25Hz	
1440x900@60Hz	720p@60Hz	4K2K@30Hz	DCI 4K2K@30Hz	

EDID Control

EDID (Extended Display Identification Data) is a data structure that is used between a display and a source. This data is used by the source to find out what audio and video resolutions are supported by the display. By pre-determining the video resolution and audio format of the source and display device you can reduce the time needed for EDID hand shaking.

Configuration of switcher's EDID settings can be achieved using the Menu button on the front panel of the MFP62, RS-232 or via its Web GUI. The EDID options available are:

Selectable via Front Panel / RS-232 / Web GUI

HDMI 1080p@60Hz, Audio 2ch PCM
HDMI 1080i@60Hz, Audio 2ch PCM
HDMI 1080p@60Hz/3D, Audio 2ch PCM
HDMI 4K@30Hz 4:4:4, Audio 2ch PCM
HDMI 4K@60Hz 4:2:0, Audio 2ch PCM
HDMI 4K@60Hz 4:4:4, Audio 2ch PCM
DVI 1280x1024@60Hz, Audio None
DVI 1920x1080@60Hz, Audio None
DVI 1920x1200@60Hz, Audio None
HDMI 1920x1200@60Hz, Audio 2ch PCM

Selectable via RS-232 / Web GUI only

HDMI 1080p@60Hz, Audio 5.1ch PCM
HDMI 1080p@60Hz, Audio 7.1ch PCM
HDMI 1080i@60Hz, Audio 5.1ch PCM
HDMI 1080i@60Hz, Audio 7.1ch PCM
HDMI 1080p@60Hz/3D, Audio 5.1ch PCM
HDMI 1080p@60Hz/3D, Audio 7.1ch PCM
HDMI 4K@30Hz 4:4:4, Audio 5.1ch PCM
HDMI 4K@30Hz 4:4:4, Audio 7.1ch PCM
HDMI 4K@60Hz 4:2:0, Audio 5.1ch PCM
HDMI 4K@60Hz 4:2:0, Audio 7.1ch PCM
HDMI 4K@60Hz 4:4:4, Audio 5.1ch PCM
HDMI 4K@60Hz 4:4:4, Audio 7.1ch PCM

Specifications

MFP62

- **Video Input Connectors:** 3 x HDMI Type A, 19-pin, female, 1 x USB-C Type C, 1 x Display Port, 1x VGA
- **Video Output Connectors:** 2 x HDMI Type A, 19-pin, female
- **Audio Input Connectors:** 1 x analogue left / right audio (3.5mm stereo jack)
- **MIC Input Connectors:** 1 x 3-pin Phoenix connector
- **Audio Output Connectors:** 1 x RCA (S/PDIF), 2 x RCA analogue left / right
- **RS-232 Serial Ports:** 1 x 9-pin RS-232 connector
- **TCP/IP Control:** 1 x RJ45, female
- **IR Input Ports:** 1 x 3.5mm stereo jack
- **Product Upgrade:** 1 x Micro USB female
- **Rack-Mountable:** 1U rack height, rack ears included
- **Casing Dimensions (W x H x D):** 344mm x 44mm x 168mm, without feet
- **Shipping Weight:** 3kg
- **Operating Temperature:** 32°F to 104°F (0°C to 40°C)
- **Storage Temperature:** -4°F to 140°F (-20°C to 60°C)
- **Power Supply:** 24V/1A DC

Package Contents

MFP62

- 1 x MFP62
- 1 x Remote Control
- 1 x 24V/1A DC Power Supply
- 1 x Rack Mounting Kit
- 1 x IR Receiver
- 1 x Quick Reference Guide

Maintenance

Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner or benzene to clean this unit.

NOTE: *Specifications are subject to change without notice. Weights and dimensions are approximate.*

Certifications

FCC NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio/TV technician for help.

CAUTION - changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CANADA, INDUSTRY CANADA (IC) NOTICES

This Class B digital apparatus complies with Canadian ICES-003. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

CORRECT DISPOSAL OF THIS PRODUCT

This marking indicates that this product should not be disposed with other household wastes. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmentally safe recycling.

For the full Blustream MFP62 User Manual please visit the Blustream website: www.blustream.com.au / www.blustream.co.uk