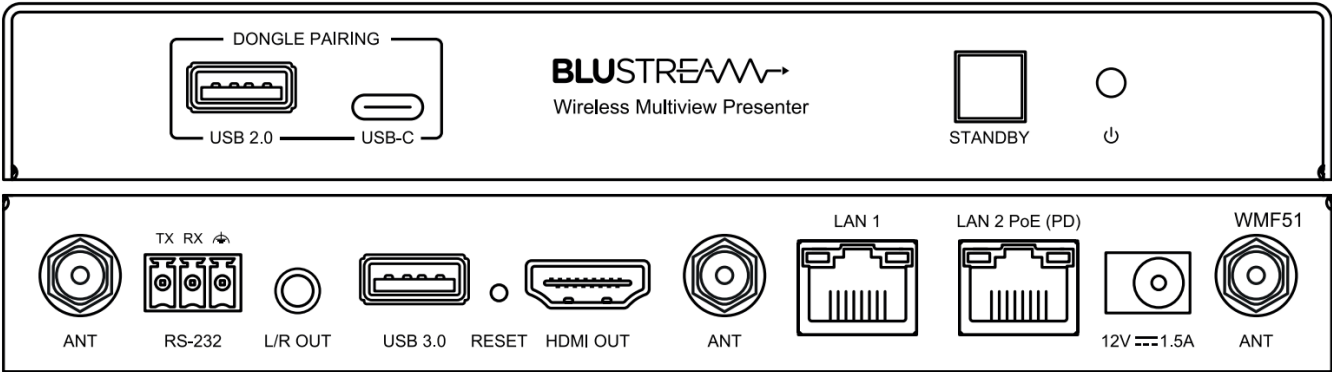




# BLUSTREAM WMF51 4K Multi Format Presentation Switch User Manual

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## BLUSTREAM WMF51 4K Multi Format Presentation Switch



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## Introduction

The WMF51 is a 4K multi-format presentation switch featuring AirPlay, Miracast® and Chromecast® inputs to a single HDMI output. The WMF51 provides enhanced features including multi-view presentation, video scaling, a web-GUI for control and configuration, localised 2.4/5G WiFi hotspot and dual LAN connectivity. The WMF51 also features OSD control, USB touch-back to connected host device, whiteboard and screen overlay annotation, with manual or automated source selection. The WMF51 can be controlled via front panel, RS-232 or TCP/IP.

The WMF51 is also compatible with Blustream WMF-USBC and WMF-HDMI plug and play wireless dongles, providing an ideal BYOD solution for your boardroom, classroom, or huddle-space application.

## FEATURES

- 4K multi-format multi-view presentation switch
- Features AirPlay, Miracast®, Chromecast® and Blustream wireless dongle support which can be switched to a single HDMI output
- Multiview presentation with up to 4 concurrent video signals with configurable screen layout
- In-built video scaler with output timing up to 4K 60Hz 4:4:4
- Localised 2.4G/5G WiFi hotspot to host AirPlay, Miracast® and Chromecast® local point-to-point mode (up to 1080p)
- Dual LAN connection for integration to existing network infrastructures
- Supports USB touch-back feature via WMF-USBC and WMF-HDMI dongles and Miracast®\*
- Audio breakout to analogue L/R audio
- Web interface module for control and configuration of unit
- OSD control with preview function
- Whiteboard and screen overlay annotation feature
- Control via front panel, RS-232 and TCP/IP with manual or auto source selection
- Features Class 0 IEEE 802.3af PoE for powering of product from a PoE switch \*Miracast touch-back compatibility subject to Windows features

## Front Panel Description

1. USB-A / USB-C Dongle Pairing Ports – Connect Blustream WMF-HDMI or WMF-USBC wireless dongles to

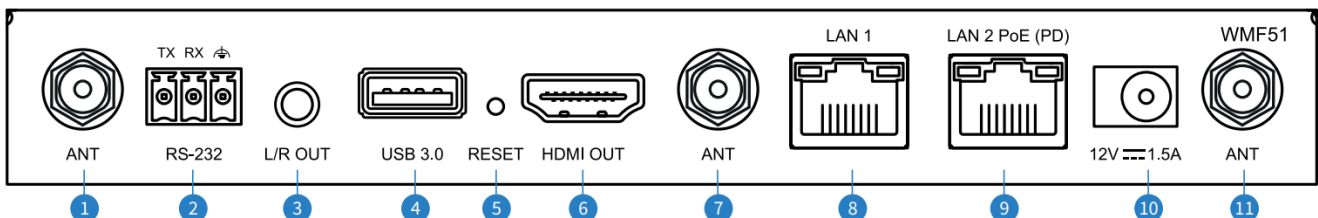
corresponding port to pair with the WMF51. WMF51 video output will display information regarding the automatic pairing and firmware update process. Please note: wireless dongles sold separately

2. Standby Button – Press to turn on or off the WMF51
3. Power LED Indicator – Illuminates when the device is powered on.



## Rear Panel Description

1. WiFi Antenna Connection (1) – Connect supplied WiFi antenna
2. RS-232 Port – 3-pin Phoenix connector for control of the WMF51
3. Analogue L/R Output – 3.5mm stereo jack for analogue audio break out (2ch PCM audio only)
4. USB 3.0 Connector – Connect to USB mouse/keyboard
5. Reset button – Press and hold reset button for 10 seconds to return the WMF51 to factory default settings
6. HDMI Output – Connect to HDMI display equipment
7. WiFi Antenna Connection (2) – Connect supplied WiFi antenna
8. TCP/IP Port 1 – 100Mbps RJ45 connector to connect to LAN for TCP/IP control of device and to access web-GUI
9. TCP/IP PoE Port 2 – 1Gbps RJ45 connector to connect to LAN for TCP/IP control of device and to access Web GUI, includes PoE function to power device
10. Power Port – Use included 12v/1.5A DC adaptor
11. WiFi Antenna Connection (3) – Connect supplied WiFi antenna



**NOTE:** The distance between user and products should be no less than 20cm.

**WARNING:** 5.2 GHz band is restricted to indoor use only

## Configuration and Web-GUI Control

The WMF51 features an in-built web-GUI which is required for control and configuration of the device. This configuration includes features such as source EDID management, output scaler resolution, network / WiFi configuration, and user control.

You can connect to the WMF51 either via hardwired LAN connection, or via local WiFi hotspot.

### Connecting via LAN:

By default this device is set to DHCP, however if a DHCP server (eg: network router) is not installed or you

connect directly from your PC to the WMF51, the IP address will revert to the below details:

Default Username is: blustream Default Password is: 1234 Default IP Address is: 192.168.0.200 If the WMF51 is connected to a pre-existing network then it will be provided an IP Address via DHCP. There are several ways in which you can find the IP address of the device as follows:

- The On Screen Display shows the IP address of the product in the lower left corner of the screen (item A in the image below).
- Use a 3rd party IP scanning tool on your PC to find the IP address of the WMF51.

### Connecting via Local WiFi Hotspot:

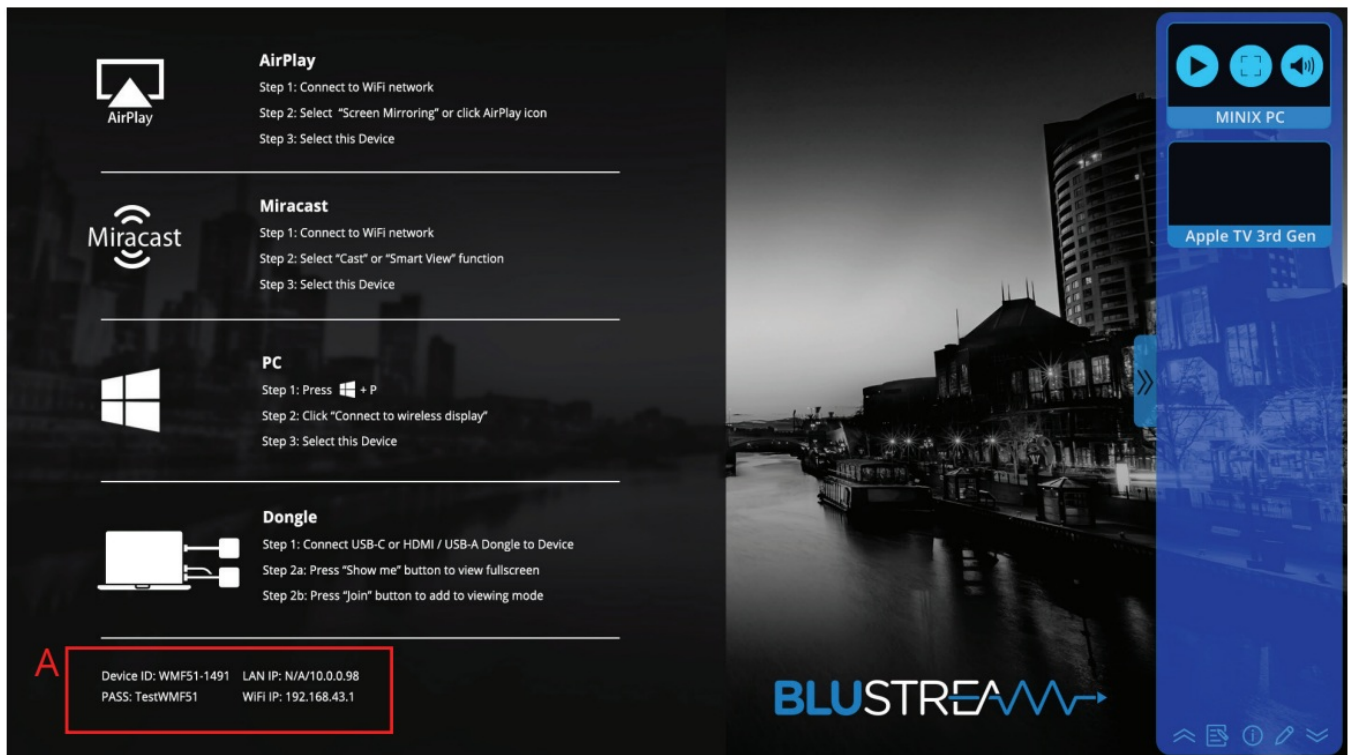
This device can broadcast its own local WiFi hotspot which users can connect to in order to stream content to the device, or control and configure it. The default local WiFi hotspot settings are as follows:

Default Device ID / SSID is: WMF51-xxxx where xxxx is bound to MAC address of the unit.

Default SSID Password is set to dynamic by default and displayed on screen.

Default BYOD PIN is an 8 digit code displayed on screen that by default automatically changes every 5 minutes

It is also possible to disable the local WiFi hotspot and hardwire the WMF51 into a pre-existing data network. You would then use the pre-existing WiFi access points to connect to the network and communicate with the WMF51.



### BYOD (Bring Your Own Device) Connectivity

The on screen display shows a connection guide when no input devices are being viewed. This illustrates how to connect your laptop, wireless dongles, tablet or smartphone (BYOD device) to the unit. There are various technologies utilised to ensure your smart device is capable of broadcasting a video to the WMF51 without any apps required. These are:

- AirPlay (Apple devices)
- Miracast®, SmartView or ScreenCast (Android devices)
- Chromecast® (Google devices)
- Wireless Display Sharing (Windows 10 devices)

For further information please see the WMF51 User Manual – available to download from the Blustream website.

## RS-232 Configuration

The RS-232 port is used for control of source or display from the WMF51. The default RS-232 communication settings are:

**Baud Rate:** 57600

**Stop Bit:** 1

**Data Bit:** 8

**Parity Bit:** none

## Specifications

- **Video Output Connectors:** 1 x HDMI Type A, 19-pin, female
- **Audio Output Connectors:** 1 x 3.5mm stereo jack (2ch analogue audio)
- **RS-232 Serial Port:** 1 x 3-pin Phoenix connector
- **TCP/IP Control:** 2 x RJ45, female (1000Mbps x1, 100Mbps x1)
- **USB Connector:** 1 x USB 3.0 Type A female
- **USB Pairing Connector:** 1 x USB 2.0 Type A female, 1 x USB Type C female
- **WiFi Antenna Connections:** 3 x SMA, female connector, MIMO antennas (2.4G & 5G, WIFI IEEE 802.11 b/g/n/ac up to 1200Mbps)
- **WiFi Encryption:** AES WPA PSK, WPA2 PSK
- **WiFi Specification for Europe only :** 2.4GHz EIRP < 20dBm 5.150~5.250GHz EIRP < 23dBm 5.725~5.850GHz EIRP < 13.98dBm
- **Dimensions (W x H x D):** 165mm x 22mm x 90mm (excluding antennas)
- **Shipping Weight:** 1.5kg
- **Operating Temperature:** 0°C to 45°C (32°F to +113°F)
- **Storage Temperature:** -20°C to 70°C (-4°F to +158°F)
- **Power Supply:** Class 0 IEEE 802.3af PoE PD or 12v/1.5A DC

**NOTE:** Specifications are subject to change without notice. Weights and dimensions are approximate. For wall mounted installations, height may exceed 2m.

## Package Contents

- 1 x WMF51
- 1 x 3-pin Phoenix Connector (RS-232)
- 3 x Antenna
- 1 x Mounting Kit
- 1 x Quick Reference Guide
- 1 x 12v/1.5A DC Power Supply

## Power Supply Specification

**Model:** GME18A-120150FXR

**Rated Input:** 100-240vAC 50/60Hz 0.8A

**Rated Output:** 12.0v 1.5A 18.0W

**Includes:** US changeable plug, EU changeable plug, AU changeable plug, UK changeable plug

**Manufacturer:** GME Technology Co.,Ltd

**Address:** Building A19, Tantou West Industrial Park, Songgang Street, Baoan District, Shenzhen, Guangdong



Please read the entire manual carefully before operating this device.

## 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 device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1) This device may not cause interference. (2) This device must accept any interference, including interference that may cause undesired operation of the device.

### CORRECT DISPOSAL OF THIS PRODUCT

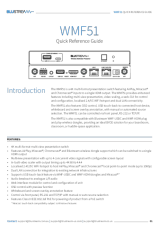
This marking indicates that this product should not be disposed with other household wastes. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please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

## Contact

[support@blustream.com.au](mailto:support@blustream.com.au) | [support@blustream-us.com](mailto:support@blustream-us.com) | [support@blustream.co.uk](mailto:support@blustream.co.uk)



## Documents / Resources

	<p><a href="#">BLUSTREAM WMF51 4K Multi Format Presentation Switch</a> [pdf] User Manual</p> <p>WMF51 4K Multi Format Presentation Switch, WMF51, 4K Multi Format Presentation Switch, Fo rmat Presentation Switch, Presentation Switch, Switch</p>
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## References

- [User Manual](#)

### Manuals+, Privacy Policy

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