

User Manual



MC61-BYOD

Multiformat Presentation Switcher



All Rights Reserved

Version: MC61-BYOD

Preface

Read this user manual carefully before using the product. Pictures shown in this manual are for reference only. Different models and specifications are subject to real product.

This manual is only for operation instruction, please contact the local distributor for maintenance assistance. The functions described in this version were updated till August, 2018. In the constant effort to improve the product, we reserve the right to make functions or parameters changes without notice or obligation. Please refer to the dealers for the latest details.

FCC Statement

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. It 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 commercial installation.

Operation of this equipment in a residential area is likely to cause interference, in which case the user at their own expense will be required to take whatever measures may be necessary to correct the interference.

Any changes or modifications not expressly approved by the manufacture would void the user's authority to operate the equipment.



SAFETY PRECAUTIONS

To ensure the best from the product, please read all instructions carefully before using the device. Save this manual for further reference.

- Unpack the equipment carefully and save the original box and packing material for possible future shipment.
- Follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- Do not dismantle the housing or modify the module. It may result in electrical shock or burn.
- Using supplies or parts not meeting the products' specifications may cause damage, deterioration or malfunction.
- Refer all servicing to qualified service personnel.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Do not put any heavy items on the extension cable in case of extrusion.
- Do not remove the housing of the device as opening or removing housing may expose you to dangerous voltage or other hazards.
- Install the device in a place with fine ventilation to avoid damage caused by overheat.
- Keep the module away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Do not twist or pull by force ends of the optical cable. It can cause malfunction.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
- Unplug the power cord when left unused for a long period of time.
- Information on disposal for scrapped devices: do not burn or mix with general household waste, please treat them as normal electrical wastes.

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1. Product Introduction

The MC61 BYOD is a Multiformat Presentation Switcher converting AV signal from Lightning, USB-C, MINI DP, DP, HDMI type-A and HDMI type-D to HDMI.

The BYOD is a green low energy consumption product which has a various application in different places, such as classroom, small meeting room, lecture hall, and etc.

1.1. Features

- Supports Lightning, USB-C, MINI DP, DP, HDMI type-A, and HDMI type-D input signals to be converted to HDMI signals.
- Auto-detects the input signal, the last connected signal source will be switched to the output automatically.
- Starts to scan from Lightning to HDMI type-D and switch the first detected source to the output.
- Supports HDMI, DP and USB input video resolution up to 4Kx2K@30 Hz.
- Supports HDMI output video resolutions up to 4Kx2K@30Hz 4:4:4.
- The Lightning device can be powered over the Lightning cable.

1.2. Package List

- 1x BYOD
- 1x Power Adapter (24V DC, 1.25A)
- 1x Mounting Bracket
- 1x USB-A to Micro-USB Cable
- 1x User Manual

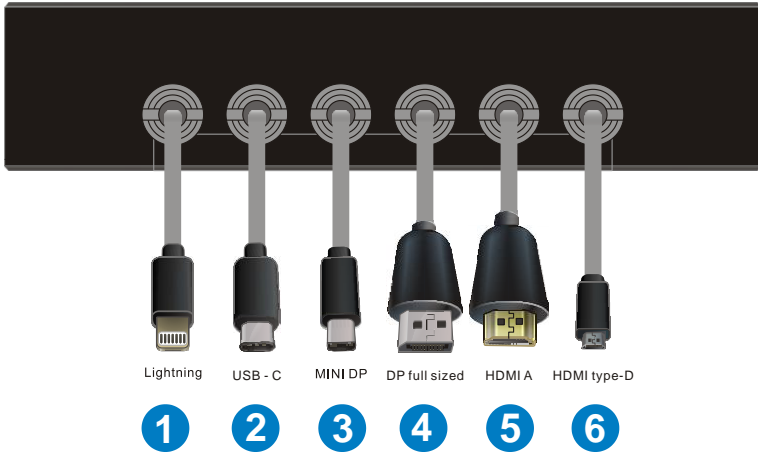
Note: Please contact your distributor immediately if any damage or defect in the components is found.

2. Specification

Input	
Connector Type	(1) Lighting, (1) Type-C USB, (1) Mini DP, (1) DP, (1) Type-A HDMI, (1) Type-D HDMI
Lighting Video Resolution	Up to 1080P@60Hz
USB-C Video Resolution	Up to 4Kx2K@30Hz
DP Video Resolution	Up to 4Kx2K@30Hz
HDMI Video Resolution	Up to 4Kx2K@30Hz
HDMI Version	1.4
HDCP Version	2.2
Video Bandwidth	10.2Gbps
Output	
Connector Type	Type-A HDMI
HDMI Version	1.4
HDCP Version	1.4
Video Resolution	Up to 4Kx2K@30Hz 4:4:4
General	
Operation Temperature	-10 ~ +55°C
Storage Temperature	-25 ~ +70°C
Relative Humidity	10% ~ 90%
Input Power	24V DC 1.25A
AC Adapter Input Power	100 ~ 240V AC, 50/60 Hz
Dimension (W*H*D)	135mm x 135mm x 30mm; Cable Length:1.3m
Net Weight	770g (Including cables)

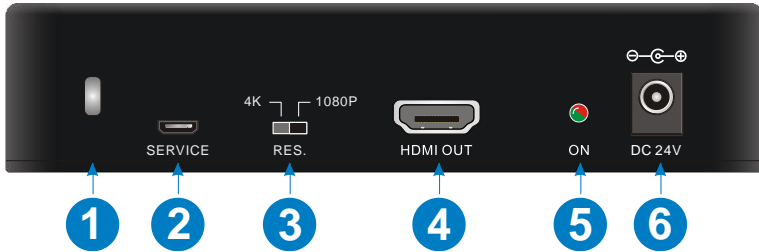
3. Panel Description

3.1. Front Panel



- ① Lightning port to connect iOS device, such as iPhone or iPad with charging capability.
- ② USB-C port to connect MacBook, Chromebook or other devices with SlimPort output.
- ③ Mini DP port to connect Mac MINI or other devices with Mini DP output.
- ④ DP port to connect the device with DP output.
- ⑤ Type-A HDMI port to connect the device with HDMI output.
- ⑥ Type-D HDMI port to connect the device with HDMI type-D output.

3.2. Rear Panel



- ① Security lock slot for Kensington lock installing.
- ② Micro-USB port for firmware upgrade.
- ③ DIP switch for setting the HDMI output resolution as 4K or 1080P base on the EDID of connected display and source.

EDID of Display	Source	DIP Switch Status	HDMI Output Resolution
4K	1080P	1080P	1080P
4K	4K	1080P	1080P
4K	1080P	4K	4K
4K	4K	4K	4K
1080P	1080P	1080P	1080P
1080P	1080P	4K	1080P
1080P	4K	4K	1080P
1080P	4K	1080P	1080P

- ④ Type-A HDMI port to connect display.
- ⑤ The bicolor indicator:
 - Red when DC power source is connected.
 - Green when one valid signal source is detected.
- ⑥ Power port for 24V DC 1.25A power adapter.

4. System Connection

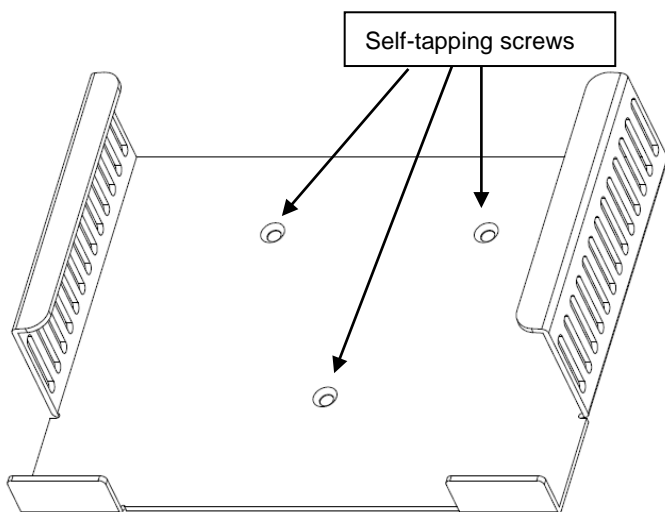
4.1. Usage Precaution

- Make sure all components and accessories included before installation.
- System should be installed in a clean environment with proper temperature and humidity.
- All of the power switches, plugs, sockets, and power cords should be insulated and safe.
- All devices should be connected before power on.

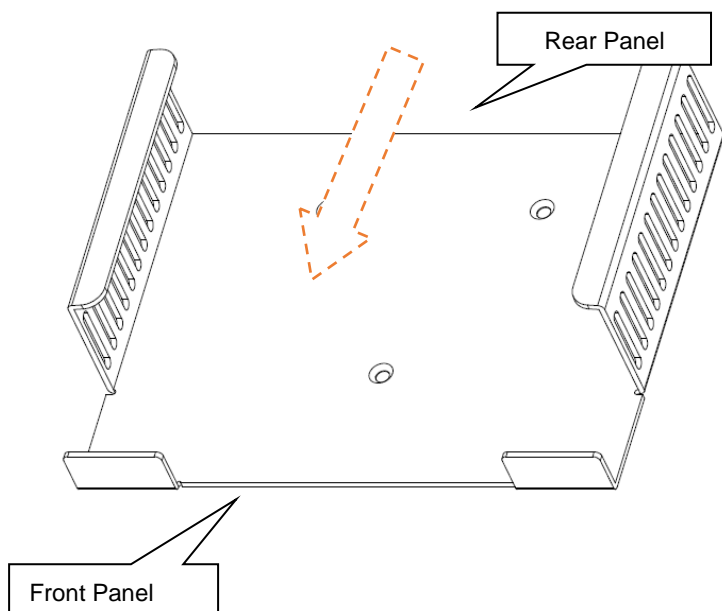
4.2. Bracket Installation

If the BYOD will be permanently mounted to a surface, the included bracket can be mounted to lock the unit according the below procedures.

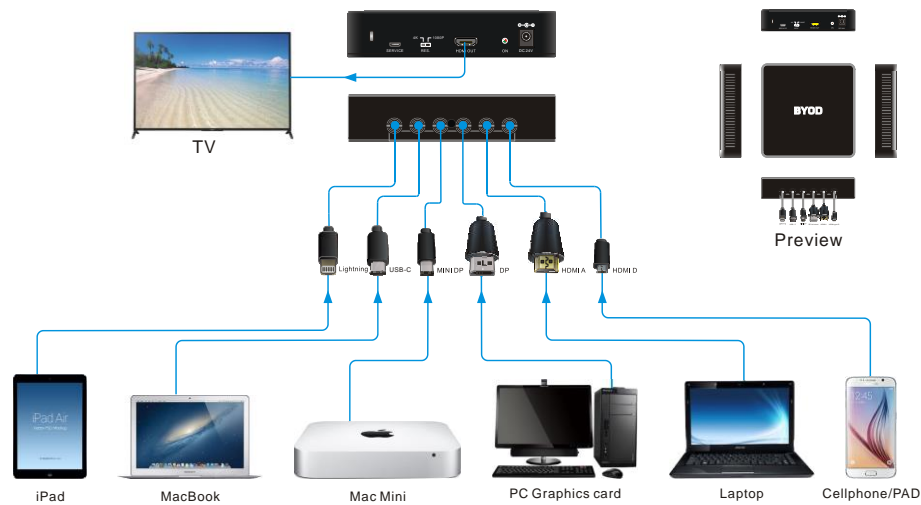
- ① Take out the bracket and self-tapping screws from the package.
- ② Fix the bracket to a surface by using three self-tapping screws.



- ③ According the below installing direction arrow to insert the BYOD to bracket.

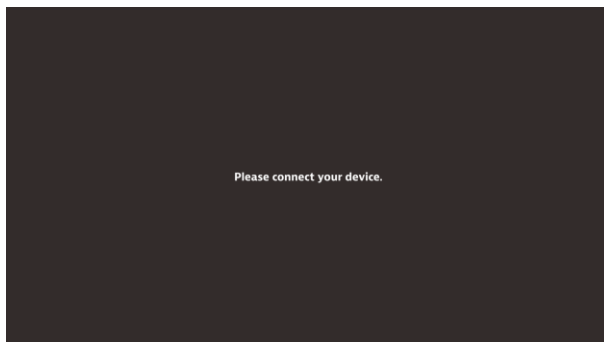


4.3. System Diagram

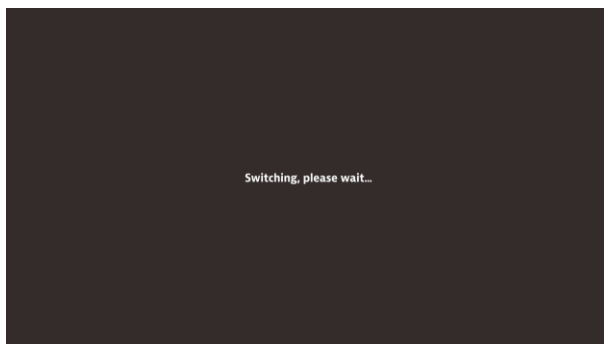


4.4. System Operation

- ① Connect TV to the HDMI output on the rear panel.
- ② Power on TV and the switcher, and then the TV will show “Please connect your device”. If the switcher doesn’t detect any source within 10 minutes, it will automatically turn off TMDS.



- ③ If the switcher is back to work or detect source input, it will auto turn on TMDS, and the TV will show “Switching, please wait”.



Notes:

- *The system diagram shown in this manual is for reference only.*
- *The last connected source will be automatically switched to output.*
- *Start to scan from 1 (Lightning) to 6 (HDMI type-D) and switch the first detected signal source to the output only if there is no active source.*

5. Firmware Upgrade

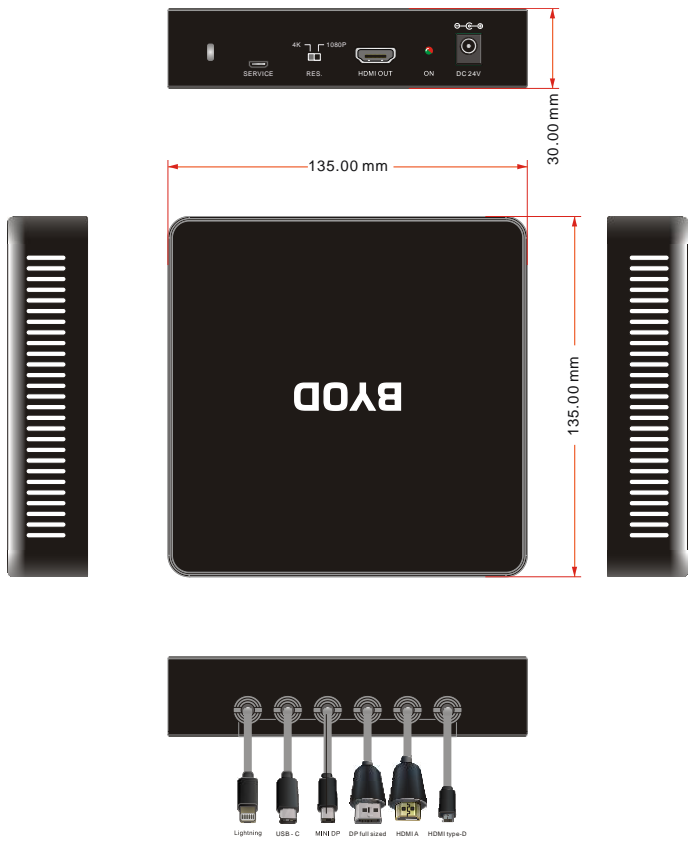
Notes:

- *Firmware should be in USB storage Home Directory and its name is MERGE.bin.*
- *Do not remove the USB cable from BYOD during the firmware upgrade.*
- *Firmware upgrade process takes around up to 90 seconds until reboot.*

Steps:

- *Connect the USB storage to the BYOD service port with micro-USB to USB-A cable.*
- *Plug power cable into the BYOD.*
- *The BYOD will update firmware automatically. It will output OSD to indicate firmware process on the display, and the power indicator blinks red.*
- *The BYOD will automatically reboot when the upgrade is completed. The red power indicator normally keeps on.*
- *Remove the USB cable.*

6. Panel Drawing



7. Troubleshooting & Maintenance

Problems	Potential Causes	Solutions
Color losing or no video signal output in HDMI display.	The connecting cables may not be connected correctly or it may be broken.	Check whether the cables are broken or connected correctly and in working condition.
No HDMI signal output in the device while local HDMI input is in normal working state.		
Output image with snowflake.		
POWER indicator doesn't work or no respond to any operation.	Loose or failed power cord connection.	Ensure the power cord connection is good.
Static becomes stronger when connecting the video connectors.	Bad grounding.	Check the grounding and make sure it is connected well.

Note: If your problem still remaining after following the above troubleshooting steps, please contact your local dealer or distributor for further assistance.

8. Customer Service

The return of a product to our Customer Service implies the full agreement of the terms and conditions hereinafter. These terms and conditions may be changed without prior notice.

1) Warranty

The limited warranty period of the product is fixed three years.

2) Scope

These terms and conditions of Customer Service apply to the customer service provided for the products or any other items sold by authorized distributor only.

3) Warranty Exclusion

- Warranty expiration.
- Factory applied serial number has been altered or removed from the product.
- Damage, deterioration or malfunction caused by:
 - ✓ Normal wear and tear.
 - ✓ Use of supplies or parts not meeting our specifications.
 - ✓ No certificate or invoice as the proof of warranty.
 - ✓ The product model showed on the warranty card does not match with the model of the product for repairing or had been altered.
 - ✓ Damage caused by force majeure.
 - ✓ Servicing not authorized by distributor.
 - ✓ Any other causes which does not relate to a product defect.
- Shipping fees, installation or labor charges for installation or setup of the product.

4) Documentation

Customer Service will accept defective product(s) in the scope of warranty coverage at the sole condition that the defect has been clearly defined, and upon reception of the documents or copy of invoice, indicating the date of purchase, the type of product, the serial number, and the name of distributor.

Remarks: Please contact your local distributor for further assistance or solutions.