



MG-FB-61x HDMI™ Fiber Optical Extender Kit

User Guide V1.00

MNL-MG-FB-61x-V1.00

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In this guide

About your Magenta™ MG-FB-61x kit	1
Choosing a mode for routing audio	5
Quick start	7
Troubleshooting	8
Contact us	10

About your Magenta™ MG-FB-61x kit

Thanks for buying this Magenta MG-FB-61x kit from tvONE™. The MG-FB-61x kit includes a transmitter and a receiver to extend your 4Kx2K @60 Hz signal up to 300 m (984 ft).

The MG-FB-61x kit supports:

- Single and multi-mode LC connected fiber
- 4K @60 Hz Dolby Vision
- HDMI™ 2.0 and HDCP 2.2
- Bidirectional RS-232 and IR
- High-bandwidth video and audio, fully uncompressed, with zero latency
- HDMI with ARC, CEC, and EDID
- IR signal extension, use your IR remote from up to 300 m away from your device

Transmitter front panel



When the LED is lit, power is on.

LINK

When the LED is lit, the transmitter and receiver are successfully linked.

STATUS

When the LED is lit, signal data is transmitted between the transmitter and receiver.

ARC,
AUDIO

Select an audio mode.
Choose between Audio Return Channel (ARC) and S/PDIF.
Read more about choosing an audio mode on page 5.

FW

Connect a USB drive.
For updating your firmware only.

Transmitter rear panel



OPTICAL OUT AB	Connect to OPTICAL IN, BA on the receiver with LC connected fiber optic cable.
HDMI IN	Connect to a source.
AUDIO OUT ARC	Connect to an audio broadcast device with an optical audio cable, for example, TOSLINK.
IR IN	Connect an IR receiver with a carrier.
IR OUT	Connect to an IR transmitter.
RS232	Connect either a control device or a device you want to control. Connect the other device in the pair to the receiver.
DC 12V	Connect to a power outlet.

Receiver front panel



When the LED is lit, power is on.

LINK

When the LED is lit, the transmitter and receiver are successfully linked.

STATUS

When the LED is lit, signal data is transmitted between the transmitter and receiver.

ARC,
AUDIO

Select an audio mode.
Choose between Audio Return Channel (ARC) and S/PDIF.
Read more about choosing an audio mode on page 5.

FW

Connect a USB drive.
For updating your firmware only.

Receiver rear panel



OPTICAL IN BA	Connect to AB on the transmitter with LC connected fiber optic cable.
HDMI OUT	Connect to a display.
AUDIO IN ARC	Audio in. Connect to an audio device with an optical audio cable, for example, TOSLINK. Note: this is for separate audio devices and displays that do not support ARC only. Audio from most displays is sent by HDMI and fiber optic cable using ARC.
IR IN	Connect an IR receiver with a carrier.
IR OUT	Connect to an IR transmitter.
RS232	Connect either a control device or a device you want to control. Connect the other device in the pair to the transmitter.
DC 12V	Connect to a power outlet.

Choosing a mode for routing audio

The MG-FB-61x kit has four modes for routing audio. The mode you choose depends on where your audio is generated, where it plays, the types of devices you use, and whether those devices support Audio Return Channel (ARC).

Check for a label saying ARC near the HDMI port of your device.

Select a mode using the ARC, AUDIO switch on the front panels of the transmitter and receiver.

Mode	Transmitter switch	Receiver switch	Description
1	ARC	ARC	Audio from your display is sent to the AUDIO OUT and HDMI IN ports of the transmitter.
2	ARC	AUDIO	Audio from the AUDIO IN port of the receiver is sent to the AUDIO OUT and HDMI IN ports of the transmitter.
3	AUDIO	ARC	Audio from your display is sent to the AUDIO OUT port of the transmitter only.
4	AUDIO	AUDIO	Audio from the AUDIO IN port of the receiver to the AUDIO OUT port of the transmitter only.

Mode 1

In this mode, audio from your display is sent to an audio broadcast device connected to the transmitter, and to the source device.

You might want to choose this option if you want to play the audio from a Smart TV on an audio device connected to your source. In this example, your source might be an amplifier with HDMI in and audio out.

- Select ARC on both the transmitter and receiver.

Mode 2

In this mode, audio from a device connected to the receiver is sent to an audio broadcast device connected to the transmitter, and to the source

device.

You might want to choose this option if you want to play audio from a separate device connected to the receiver on an audio device connected to your source. In this example, your source might be an amplifier with HDMI in and audio out.

- Select ARC on the transmitter.
- Select AUDIO on the receiver.

Mode 3

In this mode, audio from your display is sent to an audio broadcast device connected to the transmitter.

You might want to choose this option if you want to play the audio from a Smart TV through speakers connected to the transmitter.

- Select AUDIO on the transmitter.
- Select ARC on the receiver.

Mode 4

In this mode, audio from a device connected to the receiver is sent to an audio broadcast device connected to the transmitter.

You might want to choose this option if you want to play audio from a separate device connected to the receiver through speakers connected to the transmitter.

- Select AUDIO on both the transmitter and receiver.

Quick start

1. Connect OPTICAL IN on the receiver to OPTICAL OUT on the transmitter with LC connected fiber optic cables.
2. Connect an amplifier to HDMI IN on the transmitter.
3. Connect an HDMI source and speaker to the amplifier.
4. Connect a display device to HDMI OUT on the receiver.
5. Select an audio mode on both the transmitter and receiver.
 - On the front panel, select AUDIO or ARC.

Read more on page 5.
6. OPTIONAL: depending on the audio mode you selected, connect audio devices to AUDIO OUT on the transmitter and AUDIO IN on the receiver.
7. OPTIONAL: connect a control device to RS-232.
 - If the device to be controlled is connected to the transmitter, connect your control device to the receiver.
 - If the device to be controlled is connected to the receiver, connect your control device to the transmitter.
8. OPTIONAL: connect an IR transmitter and IR receiver to IR IN and IR OUT.

Troubleshooting

The image is desaturated or appears doubled

- ✗ The optical fiber cable is poor quality.
- ✓ Make sure you use OM3 or OM4 optical fiber cable.

Nothing is working and the ✨ LED is not lit

- ✗ The power adapter isn't connected properly or is switched off at the outlet.
- ✓ Check the connections and make sure the outlet is switched on.

There's nothing on the display

- ✗ The source or display is switched off.
- ✓ Check the source and display are switched on.
- ✗ There's a bad connection somewhere.
- ✓ Check all cable connections.
- ✗ The display doesn't support the resolution.
- ✓ Connect the display to the HDMI port of the transmitter. The transmitter collects the EDID file from the display. Reconnect the display to the receiver.

If the advice here doesn't work, first contact your distributor. If your distributor can't help, contact tvONE support at tech.usa@tvone.com, tech.europe@tvone.com or tech.asia@tvone.com.

Contact us

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