

MONOPRICE

Blackbird™ HDMI® Extender

P/N 24181

User's Guide

SAFETY WARNINGS AND GUIDELINES

Please read this entire manual before using this device, paying extra attention to these safety warnings and guidelines. Please keep this manual in a safe place for future reference.

- This device is intended for indoor use only.
- Do not expose this device to water or moisture of any kind. Do not place drinks or other containers with moisture on or near the device. If moisture does get in or on the device, immediately unplug it from the power outlet and allow it to fully dry before reapplying power.
- Do not touch the device, the power cord, or any other connected cables with wet hands.
- Do not expose this device to excessively high temperatures. Do not place it in, on, or near heat sources, such as a fireplace, stove, radiator, etc. Do not leave it in direct sunlight.
- This device ventilates excessive heat through the slots and openings in the case. Do not block or cover these openings. Ensure that the device is in an open area where it can get sufficient airflow to keep from overheating.
- Do not place or install this device in an area where it can be exposed to excessive amounts of dust, humidity, oil, smoke, or combustible vapors.
- Prior to operation, check the unit and power cord for physical damage. Do not use if physical damage has occurred.
- Before plugging the unit into a power outlet, ensure that the outlet provides the same type and level of power required by the device.
- Unplug this device from the power source when not in use.
- Take care to prevent damage to the power cord. Do not allow it to become crimped, pinched, walked on, or become tangled with other cords. Ensure that the power cord does not present a tripping hazard.
- Never unplug the unit by pulling on the power cord. Always grasp the connector head or adapter body.

- Ensure that power is turned off and disconnected before making any electrical connections.
- Remove the batteries from the controller if it will go unused for a lengthy period of time.
- Clean using a soft, dry cloth only. Do not use chemical cleaners, solvents, or detergents. For stubborn deposits, moisten the cloth with warm water.
- This device has no user serviceable parts. Do not attempt to open, service, or modify this device.

INTRODUCTION

Thank you for purchasing this Blackbird™ HDMI® Extender! This extender transmits 1080p@60Hz signals to distances up to 180 feet (55 meters) over a single Cat6 Ethernet cable. It supports the Power over Cable (PoC) feature, which allows the receiver to be powered by the transmitter over the Ethernet cable. It supports bidirectional IR extension, which allows you to control the source device from the remote location, as well as the remote display from the source location.

FEATURES

- Extends 1080p@60Hz HDMI® video signals to distances up to 180 feet (55 meters) over a single Cat6 Ethernet cable
- Supports the Power over Cable (PoC) feature
- Fully compliant with the HDMI 1.4 and HDCP 1.4 specifications
- Includes HDMI loop out to allow connection of a display at the source location
- Supports bidirectional IR extension
- Features built-in EDID management for matching the input resolution and audio capabilities of the connected display

CUSTOMER SERVICE

The Monoprice Customer Service department is dedicated to ensuring that your ordering, purchasing, and delivery experience is second to none. If you have any problem with your order, please give us an opportunity to make it right. You can contact a Monoprice Customer Service representative through the Live Chat link on our website www.monoprice.com during normal business hours (Mon-Fri: 5am-7pm PT, Sat-Sun: 9am-6pm PT) or via email at support@monoprice.com

PACKAGE CONTENTS

Please take an inventory of the package contents to ensure you have all the items listed below. If anything is missing or damaged, please contact Monoprice Customer Service for a replacement.

1x Transmitter

1x Receiver

2x IR transmitters

2x IR receivers

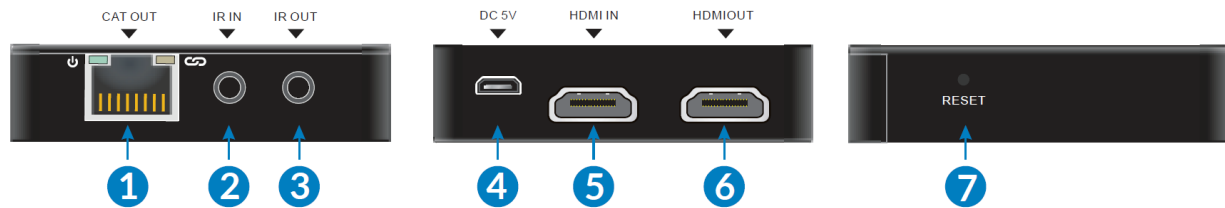
1x AC power adapter (5 VDC, 1A)

1x Hook and loop tape

1x User's manual

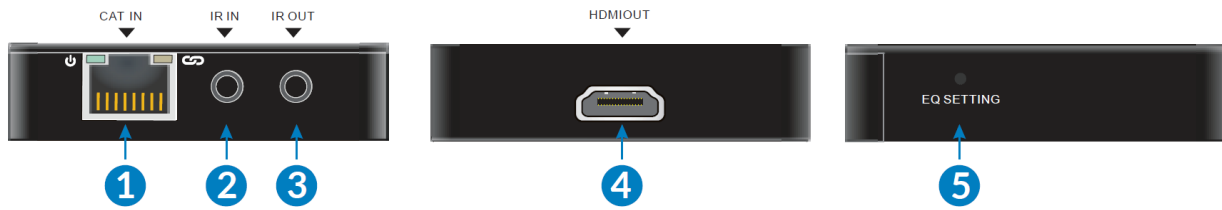
PRODUCT OVERVIEW

Transmitter



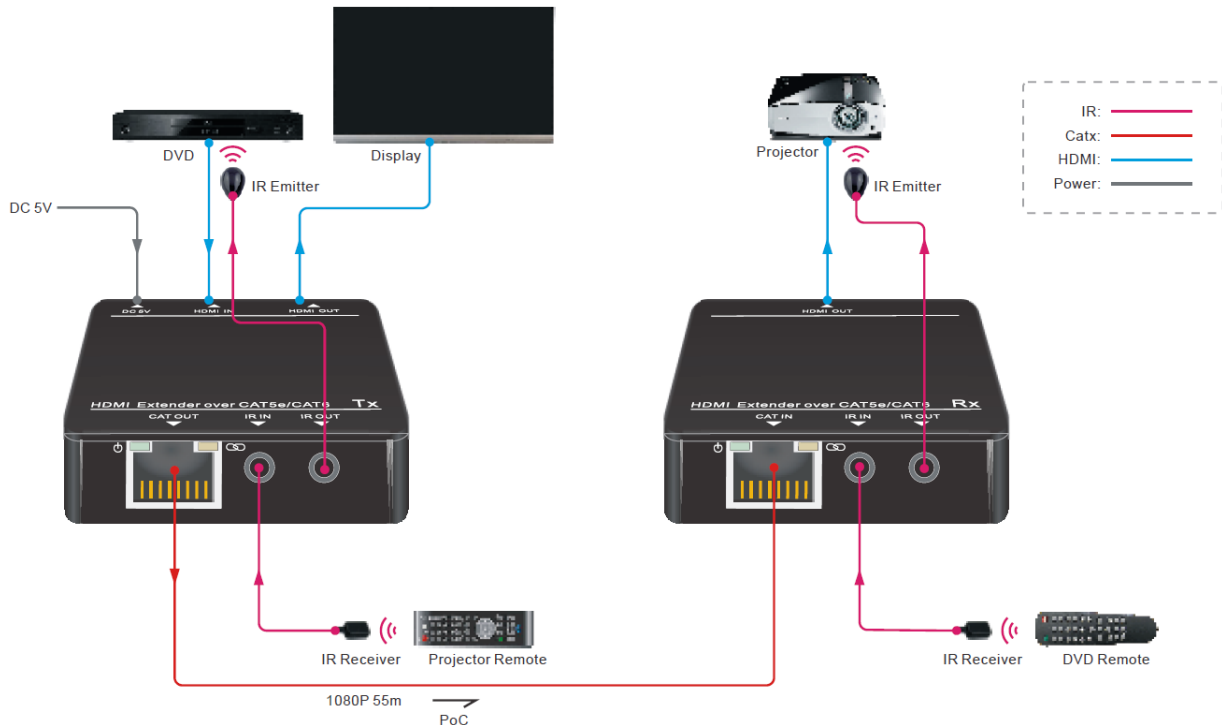
1. **CAT OUT:** RJ45 jack for connecting the Cat6 Ethernet cable to the receiver. The green LED illuminates when power is applied. The yellow LED illuminates when there is a valid link with the receiver.
2. **IR IN:** 3.5mm jack for attaching one of the included IR receivers.
3. **IR OUT:** 3.5mm jack for attaching one of the included IR transmitters.
4. **DC 5V:** Micro USB port for connecting the included AC power adapter.
5. **HDMI IN:** HDMI® port for connecting the HDMI source device.
6. **HDMI OUT:** HDMI loop out port for connecting a local video display.
7. **RESET:** Reset button for rebooting the transmitter.

Receiver



1. **CAT IN:** RJ45 jack for connecting the Cat6 Ethernet cable from the transmitter. The green LED illuminates when power is applied. The yellow LED illuminates when there is a valid link with the transmitter.
2. **IR IN:** 3.5mm jack for attaching one of the included IR receivers.
3. **IR OUT:** 3.5mm jack for attaching one of the included IR transmitters.
4. **HDMI OUT:** HDMI® port for connecting the remote video display.
5. **EQ SETTING:** Button for initiating image rectification in the event that the display shows an abnormal image.

SAMPLE CONNECTION DIAGRAM



INSTALLATION

Perform the following steps to install the HDMI® extender.

1. Ensure that all equipment to be connected is powered off and unplugged from its power source.
2. Position the receiver and transmitter in their intended location.
3. Using a High Speed HDMI Cable (not included), plug one end into the HDMI input on your remote display or projector, then plug the other end into the **HDMI OUT** port on the receiver.
4. (Optional) If you want to control the remote display from the source location, plug one of the included IR transmitters into the **IR OUT** jack on the receiver, then position the IR emitter where it can transmit IR signals to the IR "eye" on your remote display.
5. (Optional) If you want to control the source device from the remote location, plug one of the included IR receivers into the **IR IN** jack on the receiver, then position the IR "eye" where it can receive IR signals from the source's remote control.
6. Using a Cat6 Ethernet cable of the appropriate length, plug one end into the **CAT IN** jack on the receiver, then plug the other end into the **CAT OUT** jack on the transmitter. If this cable will be run inside or through the walls, it must be rated for in-wall use.
7. (Optional) Using a High Speed HDMI® Cable (not included), plug one end into the HDMI input on the local display, then plug the other end into the **HDMI OUT** port on the transmitter.
8. Using a High Speed HDMI Cable (not included), plug one end into the **HDMI IN** port on the transmitter, then plug the other end into the HDMI output of your video source device.
9. (Optional) If you want to control the remote display from the source location, plug one of the included IR receivers into the **IR IN** jack, then position the IR "eye" where it can receive IR signals from display's remote control.

10. (Optional) If you want to control the video source device from the remote location, plug one of the included IR transmitters into the **IR OUT** jack on the transmitter, then position the IR emitter where it can transmit signals to the IR "eye" on the source device.
11. Plug the included AC power adapter into the **DC 5V** micro USB port, then plug the adapter into a nearby AC power outlet. The green LEDs on the transmitter and receiver should illuminate, indicating that power is applied. After a few moments, the yellow LEDs on the transmitter and receiver should illuminate, indicating that a valid link has been established between the transmitter and receiver.
12. Plug in and power on all connected equipment. Start video playback on the source device, then verify that the video can be seen on the remote and local displays. If you are using the IR extension feature, verify that you can control the source device and/or remote display from the opposite location.

Congratulations, your Blackbird™ HDMI® Extender is installed and ready for use.

TECHNICAL SUPPORT

Monoprice is pleased to provide free, live, online technical support to assist you with any questions you may have about installation, setup, troubleshooting, or product recommendations. If you ever need assistance with your new product, please come online to talk to one of our friendly and knowledgeable Tech Support Associates. Technical support is available through the online chat button on our website www.monoprice.com during regular business hours, 7 days a week. You can also get assistance through email by sending a message to tech@monoprice.com

SPECIFICATIONS

Model	24181
Maximum Video Resolution	1080p@60Hz
Transmission Medium	HDBaseT™
HDMI® Standard	1.4
HDCP Standard	1.4
Input Power	5 VDC, 1A (micro USB)
AC Adapter Input Power	100 ~ 240 VAC, 50/60 Hz
Maximum Power Consumption	4 watts
Operating Temperature	+14 ~ +131°F (-10 ~ +55°C)
Operating Humidity	10 ~ 90% RH, non-condensing
Dimensions (each)	2.6" x 2.6" x 0.7" (66 x 66 x 17 mm)
Transmitter Weight	1.3 oz. (36 g)
Receiver Weight	1.3 oz. (38 g)

REGULATORY COMPLIANCE

Notice for FCC



Modifying the equipment without Monoprice's authorization may result in the equipment no longer complying with FCC requirements for Class B digital devices. In that event, your right to use the equipment may be limited by FCC regulations, and you may be required to correct any interference to radio or television communications at your own expense.

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.

Notice for Industry Canada

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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