DigiBird Technology Co., Ltd.

AVCLink-H

Optical Transceiver Manual V2.3

DIGIBIRD
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1. Common Optical Transceivers

SDI Fiber Optic Transmitter/Receiver

Introduction

(Transmitter)

(Receiver)

(Dimensions: 206.6x204.1x26.7mm)

SDI optical transceivers are transmission devices launched by DigiBird that transmit audio and video signals over optical fibers, consisting of a transmitter and a receiver. The transmitter and receiver can be used in pairs or with fiber cards in DigiBird's video wall, matrix, and other devices. This transmission device is specifically designed for use in scenarios such as financial service centers, government command centers, and live broadcast centers to meet the needs of remotely accessing and controlling computer video signals. Data transmission via optical fiber provides high interference resistance and security.

Features

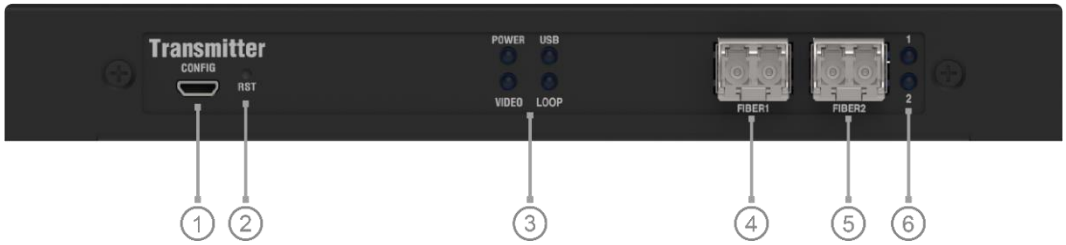
- Pure digital zero-compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber;
- Two SFP+ optical module cages, configured with 10G single-mode LC optical modules as required, requiring single-mode fiber transmission;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 1080p@60Hz (HDTV);
- It supports loop-out of input signals, enabling local monitoring while transmitting signals;
- The dual optical port automatic backup function is used to improve product reliability and stability.

Interface Description

Transmitter

The transmitter converts audio and video signals into fiber signals for remote transmission. The transmitter's video and audio ports connect to the signal source (camera, etc.), while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, a point-to-point fiber connection to the receiver can be used.

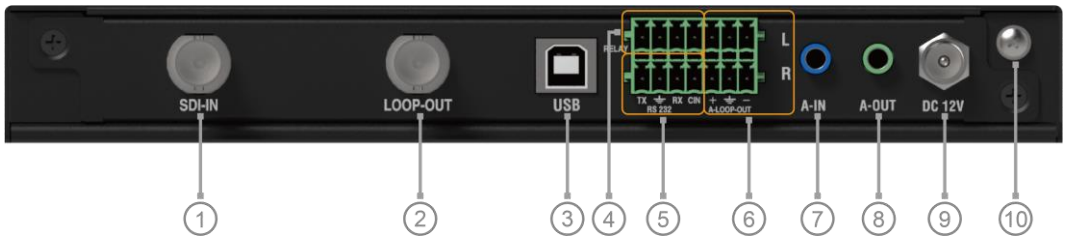
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



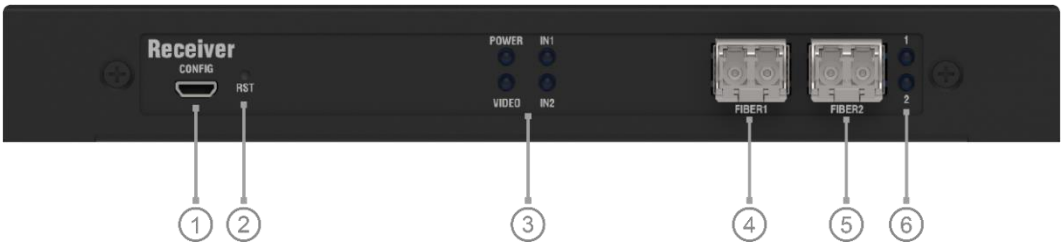
The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	SDI IN: SDI video signal input, maximum resolution 1920x1080@60Hz
②	Video loop-out interface	LOOP-OUT: SDI video signal loop-out, which can be used for local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	A-IN: 3.5mm connector
⑧	Audio output interface	Reserved, no function available yet.
⑨	Power interface	DC 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Receiver

The receiver converts fiber signals into audio and video signals. The fiber end of the receiver connects to the fiber output card of a high-definition fiber matrix device, or it can be directly connected to the transmitter via a point-to-point fiber connection; the other end connects to display devices and audio devices.

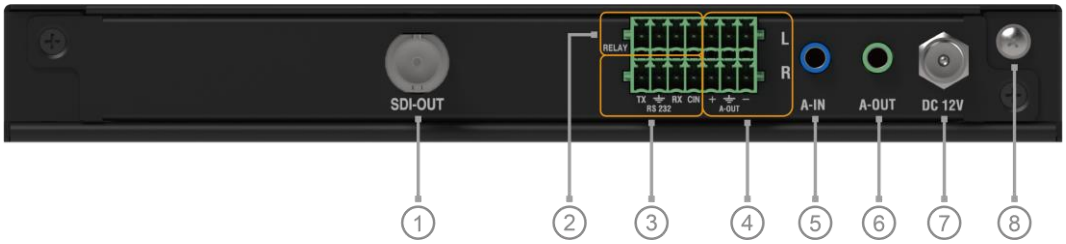
Receiver Front Panel



The interfaces and indicator lights on the receiver's front panel are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Always On IN1: When lit, it indicates that the currently operating optical link is 1. IN2: When lit, it indicates that the currently operating optical link is 2.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑥	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Receiver Rear Panel



The interfaces and indicator lights on the rear panel of the receiver are described below:

NO.	TYPE	DESCRIPTION
①	Video output interface	SDI OUT: SDI video signal output, maximum resolution 1920x1080@60Hz
②	Phoenix terminal	Reserved, no function available yet.
③	Phoenix terminal	Reserved, no function available yet.
④	Balanced audio output interface	A-OUT: 6-pin terminal
⑤	Audio input interface	Reserved, no function available yet.
⑥	Audio output interface	A-OUT: 3.5mm interface
⑦	Power interface	DC 12V: 12V DC power supply interface
⑧	Grounding terminal	/

Application Diagram

VGA Fiber Optic Transmitter/Receiver

Introduction

(Transmitter)

(Receiver)

(Dimensions: 206.6x204.1x26.7mm)

The VGA optical transceiver is a transmission device launched by DigiBird that transmits audio and video signals over optical fiber. It includes a transmitter and a receiver. The transmitter and receiver can be used in pairs or with fiber optic cards in DigiBird's video wall, matrix, and other devices. This transmission device is specifically designed for use in scenarios such as financial service centers, government command centers, and live broadcast centers to meet the needs of remotely accessing and controlling computer video signals. Data is transmitted via optical fiber, providing high resistance to interference and security.

Features

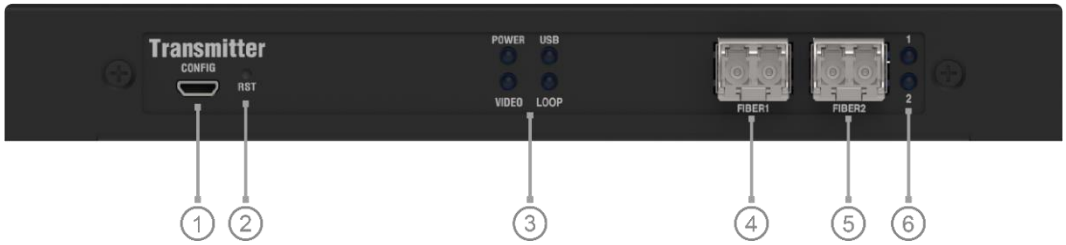
- Pure digital zero compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber;
- Two SFP+ optical module cages, configured with 10G single-mode LC optical modules as required, requiring single-mode fiber optic transmission;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 1920x1200@60Hz;
- It supports loop-out of input signals, enabling local monitoring while transmitting signals;
- The dual optical port automatic backup function is used to improve product reliability and stability.

Interface Description

Transmitter

The transmitter converts audio and video signals into Fiber Optic signals for remote transmission. The transmitter's video and audio ports connect to the signal source (camera, etc.), while the Fiber Optic port connects to the Fiber Optic input card of a high-definition Fiber Optic matrix device. Alternatively, a point-to-point fiber optic connection to the receiver can be used.

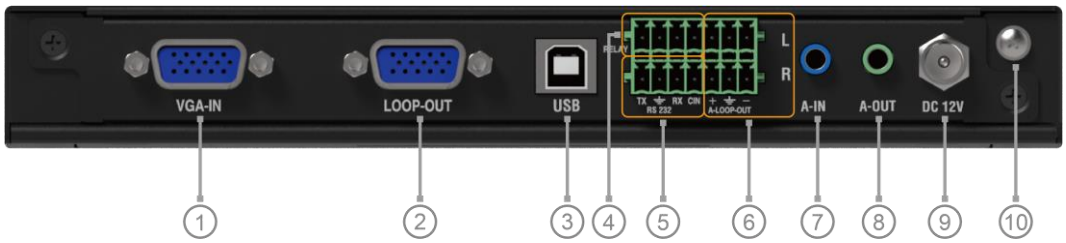
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



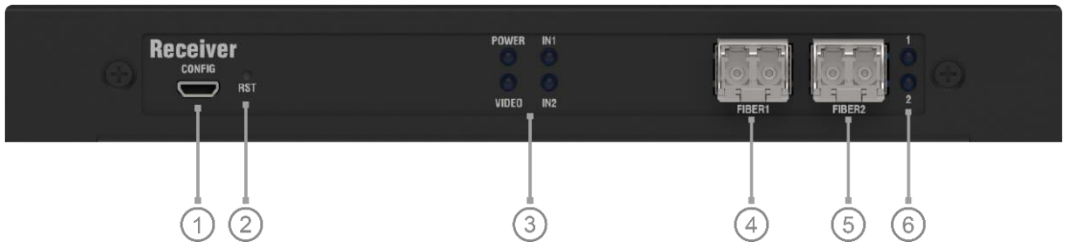
The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	VGA-IN: VGA video signal input, maximum resolution 1920x1200@60Hz
②	Video loop-out interface	LOOP-OUT: VGA video signal loop-out, which can be used for local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	A-IN: 3.5mm connector
⑧	Audio output interface	Reserved, no function available yet.
⑨	Power interface	DC 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Receiver

The receiver converts fiber signals into audio and video signals. The fiber end of the receiver connects to the fiber output card of a high-definition fiber matrix device, or it can be directly connected to the transmitter via a point-to-point fiber connection; the other end connects to display devices and audio devices.

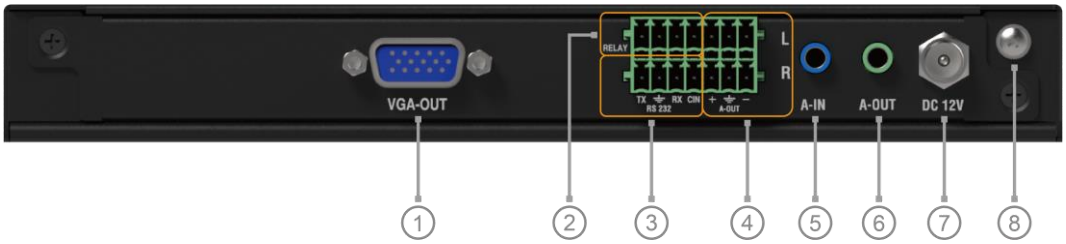
Receiver Front Panel



The interfaces and indicator lights on the receiver's front panel are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Always On IN1: When lit, it indicates that the currently operating optical link is 1. IN2: When lit, it indicates that the currently operating optical link is 2.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑥	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Receiver Rear Panel



The interfaces and indicator lights on the rear panel of the receiver are described below:

NO.	TYPE	DESCRIPTION
①	Video output interface	VGA-OUT: VGA video signal output, maximum resolution 1920x1200@60Hz
②	Phoenix terminal	Reserved, no function available yet.
③	Phoenix terminal	Reserved, no function available yet.
④	Balanced audio output interface	A-OUT: 6-pin terminal
⑤	Audio input interface	Reserved, no function available yet.
⑥	Audio output interface	A-OUT: 3.5mm interface
⑦	Power interface	DC 12V: 12V DC power supply interface
⑧	Grounding terminal	/

Application Diagram

DVI Fiber Transmitter/Receiver

Introduction

(Transmitter)

(Receiver)

(Dimensions: 206.6x204.1x26.7mm)

The DVI optical transceiver is a transmission device launched by DigiBird that transmits audio and video signals over optical fiber, including a transmitter and a receiver. The transmitter and receiver can be used in pairs or with fiber cards in DigiBird's video wall, matrix, and other devices. This transmission device is specifically designed for use in scenarios such as financial service centers, government command centers, and live broadcast centers to meet the needs of remotely accessing and controlling computer video signals. Data is transmitted via optical fiber, providing high resistance to interference and security.

Features

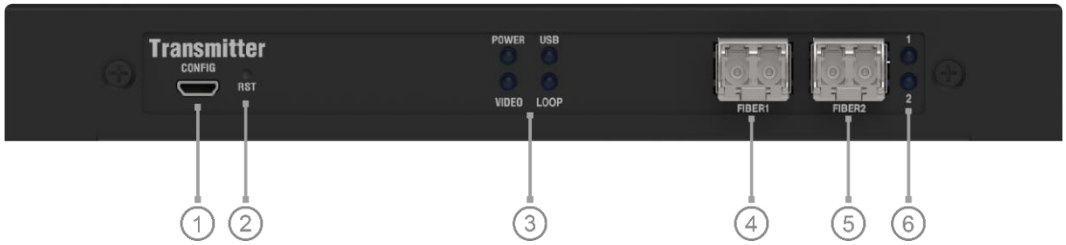
- Pure digital zero compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber;
- Two SFP+ optical module cages, configured with 10G single-mode LC optical modules as required, requiring single-mode fiber transmission;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 1920x1200@60Hz;
- It supports loop-out of input signals, enabling local monitoring while transmitting signals;
- The dual optical port automatic backup function is used to improve product reliability and stability.

Interface Description

Transmitter

The transmitter converts audio and video signals into fiber signals for remote transmission. The transmitter's video and audio ports connect to the signal source (camera, etc.), while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, a point-to-point fiber connection to the receiver can be used.

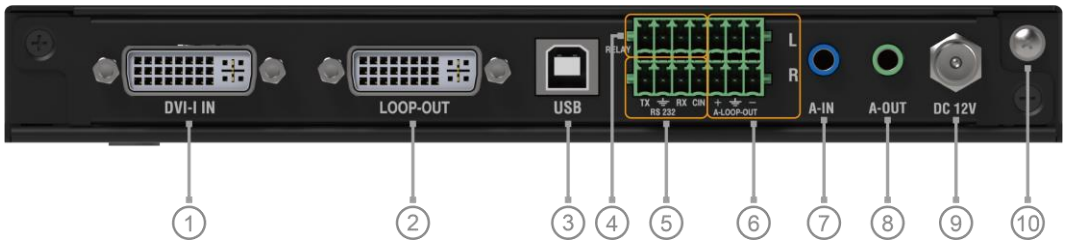
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



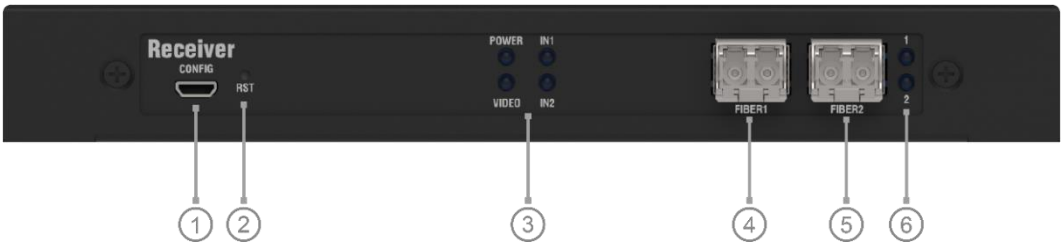
The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	DVI-I IN: DVI video signal input, maximum resolution 1920x1200@60Hz, configurable to VGA mode. VGA video signal input can be achieved through a DVI to VGA adapter.
②	Video loop-out interface	LOOP-OUT: DVI video signal loop-out, which can be used for local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	A-IN: 3.5mm connector
⑧	Audio output interface	Reserved, no function available yet.
⑨	Power interface	DC 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Receiver

The receiver converts fiber signals into audio and video signals. The fiber end of the receiver connects to the fiber output card of a high-definition fiber matrix device, or it can be directly connected to the transmitter via a point-to-point fiber connection; the other end connects to display devices and audio devices.

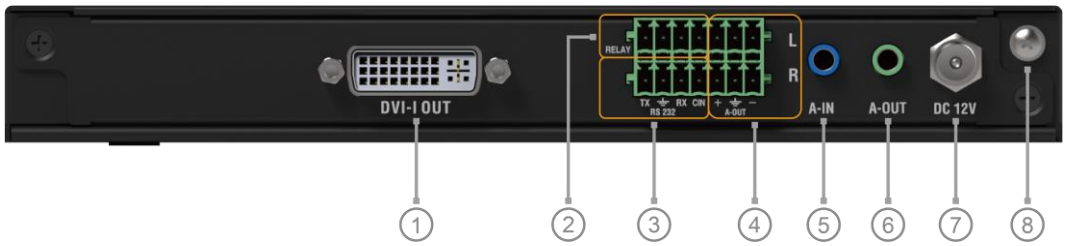
Receiver Front Panel



The interfaces and indicator lights on the receiver's front panel are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Always On IN1: When lit, it indicates that the currently operating optical link is 1. IN2: When lit, it indicates that the currently operating optical link is 2.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑥	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Receiver Rear Panel



The interfaces and indicator lights on the rear panel of the receiver are described below:

NO.	TYPE	DESCRIPTION
①	Video output interface	DVI-I OUT: DVI video signal output, maximum resolution 1920x1200@60Hz, configurable to VGA mode. VGA video signal output can be achieved through a DVI to VGA adapter.
②	Phoenix terminal	Reserved, no function available yet.
③	Phoenix terminal	Reserved, no function available yet.
④	Balanced audio output interface	A-OUT: 6-pin terminal
⑤	Audio input interface	Reserved, no function available yet.
⑥	Audio output interface	A-OUT: 3.5mm interface
⑦	Power interface	DC 12V: 12V DC power supply interface
⑧	Grounding terminal	/

Application Diagram

HDMI Fiber Optic Transmitter/Receiver

Introduction

(Transmitter)

(Receiver)

(Dimensions: 206.6x204.1x26.7mm)

The HDMI optical transceiver is a transmission device launched by DigiBird that transmits audio and video signals via fiber cables. It includes a transmitter and a receiver. The transmitter and receiver can be used in pairs or with fiber cards in DigiBird's video wall, matrix, and other devices. This transmission device is specifically designed for use in scenarios such as financial service centers, government command centers, and live broadcast centers to meet the needs of remotely accessing and controlling computer video signals. Data is transmitted via fiber cables, providing high interference resistance and security.

Features

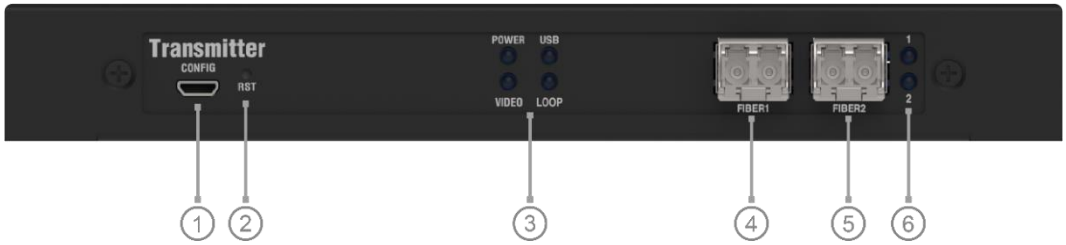
- Pure digital zero-compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber;
- Two SFP+ optical module cages, configured with 10G single-mode LC optical modules as required, requiring single-mode fiber transmission;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 1920x1080@60Hz;
- It supports loop-out of input signals, enabling local monitoring while transmitting signals;
- The dual optical port automatic backup function is used to improve product reliability and stability.

Interface Description

Transmitter

The transmitter converts audio and video signals into fiber signals for remote transmission. The transmitter's video and audio ports connect to the signal source (camera, etc.), while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, a point-to-point fiber connection to the receiver can be used.

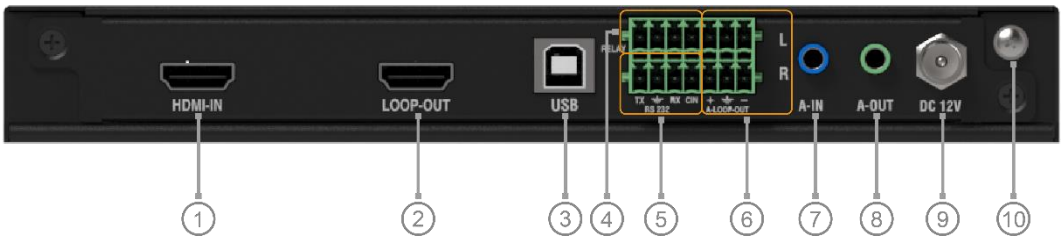
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



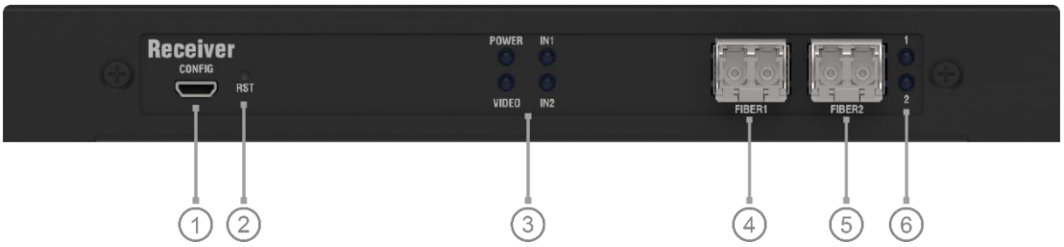
The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	HDMI-IN: HDMI video signal input, maximum resolution 1920x1080@60Hz
②	Video loop-out interface	LOOP-OUT: HDMI video signal loop-out, allowing for local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	A-IN: 3.5mm connector
⑧	Audio output interface	Reserved, no function available yet.
⑨	Power interface	DC 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Receiver

The receiver converts fiber signals into audio and video signals. The fiber end of the receiver connects to the fiber output card of a high-definition fiber matrix device, or it can be directly connected to the transmitter via a point-to-point fiber connection; the other end connects to display devices and audio devices.

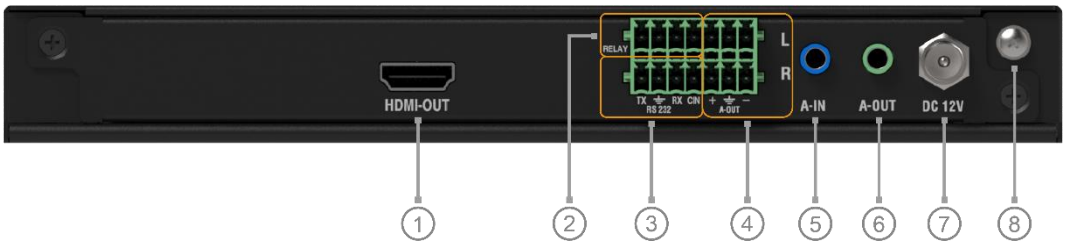
Receiver Front Panel



The interfaces and indicator lights on the receiver's front panel are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Always on IN1: When lit, it indicates that the currently operating optical link is 1. IN2: When lit, it indicates that the currently operating optical link is 2.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑥	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Receiver Rear Panel



The interfaces and indicator lights on the Rear Panel of the receiver are described below:

NO.	TYPE	DESCRIPTION
①	Video output interface	HDMI-OUT: HDMI video signal output, maximum resolution 1920x1080@60Hz
②	Phoenix terminal	Reserved, no function available yet.
③	Phoenix terminal	Reserved, no function available yet.
④	Balanced audio output interface	A-OUT: 6-pin terminal
⑤	Audio input interface	Reserved, no function available yet.
⑥	Audio output interface	A-OUT: 3.5mm interface
⑦	Power interface	DC 12V: 12V DC power supply interface
⑧	Grounding terminal	/

Application Diagram

4K HDMI Fiber Optic Transmitter/Receiver

Introduction

(Transmitter)

(Receiver)

(Dimensions: 206.6x204.1x26.7mm)

4K HDMI optical transceiver is a transmission device launched by DigiBird that transmits audio and video signals via fiber cable. It includes a transmitter and a receiver. The transmitter and receiver can be used in pairs or with fiber cards in DigiBird's video wall, matrix, and other devices. This transmission device is specifically designed for use in scenarios such as financial service centers, government command centers, and live broadcast centers to meet the needs of remotely accessing and controlling computer video signals. Data is transmitted via fiber cable, providing high interference resistance and security.

Features

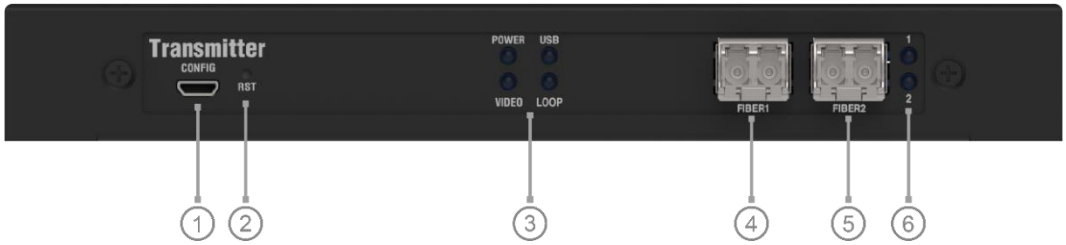
- Pure digital zero-compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber;
- Two SFP+ optical module cages, configured with 10G single-mode LC optical modules as required, requiring single-mode fiber transmission;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 3840x2160@30Hz;
- It supports loop-out of input signals, enabling local monitoring while transmitting signals;
- The dual optical port automatic backup function is used to improve product reliability and stability.

Interface Description

Transmitter

The transmitter converts audio and video signals into fiber signals for remote transmission. The transmitter's video and audio ports connect to the signal source (camera, etc.), while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, a point-to-point fiber connection to the receiver can be used.

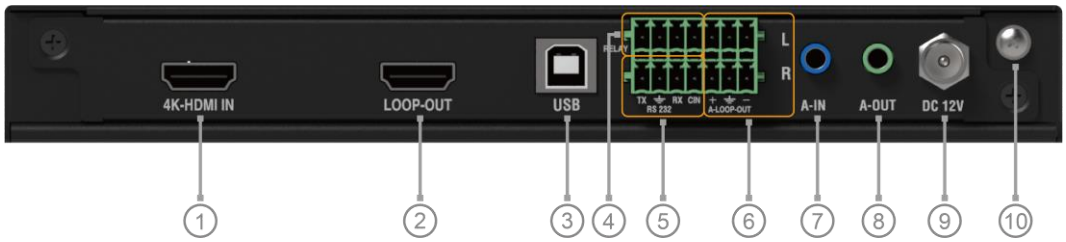
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



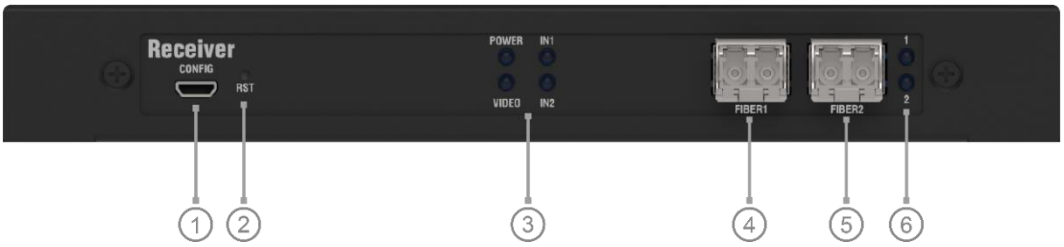
The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	4K-HDMI IN: HDMI video signal input, maximum resolution 3840x2160@30Hz
②	Video loop-out interface	LOOP-OUT: HDMI video signal loop-out, allowing for local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	A-IN: 3.5mm connector
⑧	Audio output interface	Reserved, no function available yet.
⑨	Power interface	DC 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Receiver

The receiver converts fiber signals into audio and video signals. The fiber end of the receiver connects to the fiber output card of a high-definition fiber matrix device, or it can be directly connected to the transmitter via a point-to-point fiber connection; the other end connects to display devices and audio devices.

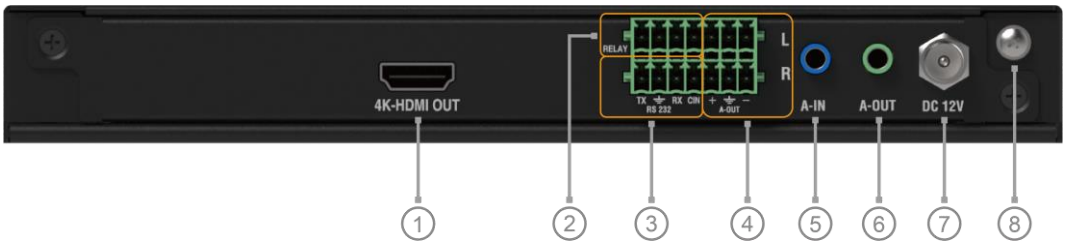
Receiver Front Panel



The interfaces and indicator lights on the receiver's front panel are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Always On IN1: When lit, it indicates that the currently operating optical link is 1. IN2: When lit, it indicates that the currently operating optical link is 2.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑥	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Receiver Rear Panel



The interfaces and indicator lights on the Rear Panel of the receiver are described below:

NO.	TYPE	DESCRIPTION
①	Video output interface	4K-HDMI OUT: HDMI video signal output, maximum resolution 3840x2160@30Hz
②	Phoenix terminal	Reserved, no function available yet.
③	Phoenix terminal	Reserved, no function available yet.
④	Balanced audio output interface	A-OUT: 6-pin terminal
⑤	Audio input interface	Reserved, no function available yet.
⑥	Audio output interface	A-OUT: 3.5mm interface
⑦	Power interface	DC 12V: 12V DC power supply interface
⑧	Grounding terminal	/

Application Diagram

4K DP Fiber Optic Transmitter/Receiver

Introduction

(Transmitter)

(Receiver)

(Dimensions: 206.6x204.1x26.7mm)

The 4K DP optical transceiver is a transmission device launched by DigiBird that transmits audio and video signals over optical fiber. It includes a transmitter and a receiver. The transmitter and receiver can be used in pairs or with fiber cards of our video wall, matrix, and other devices. This transmission device is specifically designed for use in scenarios such as financial service centers, government command centers, and live broadcast centers to meet the needs of remotely accessing and controlling computer video signals. Data is transmitted via optical fiber, providing high resistance to interference and security.

Features

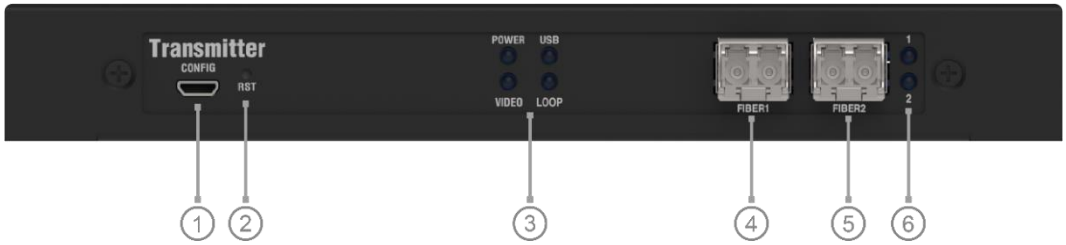
- Pure digital zero-compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber;
- Two SFP+ optical module cages, configured with 10G single-mode LC optical modules as required, requiring single-mode fiber transmission;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 3840x2160@30Hz;
- It supports loop-out of input signals, enabling local monitoring while transmitting signals;
- The dual optical port automatic backup function is used to improve product reliability and stability.

Interface Description

Transmitter

The transmitter converts audio and video signals into fiber signals for remote transmission. The transmitter's video and audio ports connect to the signal source (camera, etc.), while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, a point-to-point fiber connection to the receiver can be used.

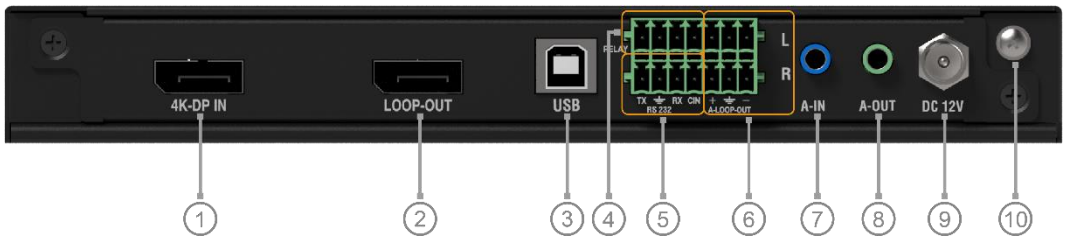
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



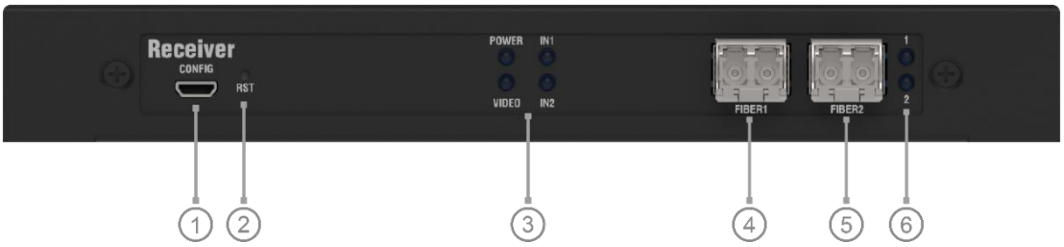
The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	4K-DP IN: 4K DP video signal input, maximum resolution 3840x2160@30Hz
②	Video loop-out interface	LOOP-OUT: 4K DP video signal loop-out, which can be used for local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	A-IN: 3.5mm connector
⑧	Audio output interface	Reserved, no function available yet.
⑨	Power interface	DC 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Receiver

The receiver converts fiber signals into audio and video signals. The fiber end of the receiver connects to the fiber output card of a high-definition fiber matrix device, or it can be directly connected to the transmitter via a point-to-point fiber connection; the other end connects to display and audio devices.

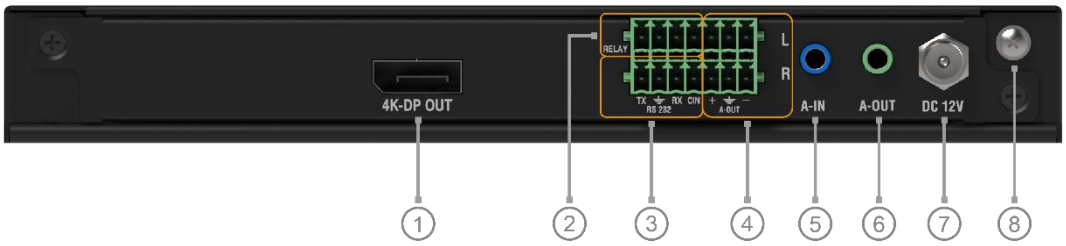
Receiver Front Panel



The interfaces and indicator lights on the receiver's front panel are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Always On IN1: When lit, it indicates that the currently operating optical link is 1. IN2: When lit, it indicates that the currently operating optical link is 2.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑥	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Receiver Rear Panel



The interfaces and indicator lights on the Rear Panel of the receiver are described below:

NO.	TYPE	DESCRIPTION
①	Video output interface	4K-DP OUT: Outputs 4K DP video signals with a maximum resolution of 3840x2160@30Hz.
②	Phoenix terminal	Reserved, no function available yet.
③	Phoenix terminal	Reserved, no function available yet.
④	Balanced audio output interface	A-OUT: 6-pin terminal
⑤	Audio input interface	Reserved, no function available yet.
⑥	Audio output interface	A-OUT: 3.5mm interface
⑦	Power interface	DC 12V: 12V DC power supply interface
⑧	Grounding terminal	/

Application Diagram

2. 4K60 Optical Transceiver

4K60 HDMI Fiber Optic Transmitter/Receiver (Dual Optical)

Introduction

(Transmitter)

(Receiver)

(Dimensions: 206.6x204.1x26.7mm)

The 4K60 HDMI (Dual-Optical) transceiver is a transmission device launched by DigiBird that transmits audio and video signals via fiber cables, including a transmitter and a receiver. The transmitter and receiver can be used in pairs or with fiber cards in DigiBird's video wall, matrix, and other devices. This transmission device is specifically designed for use in scenarios such as financial service centers, government command centers, and live broadcast centers to meet the needs of remotely accessing and controlling computer video signals. Data is transmitted via fiber cables, providing high interference resistance and security.

Features

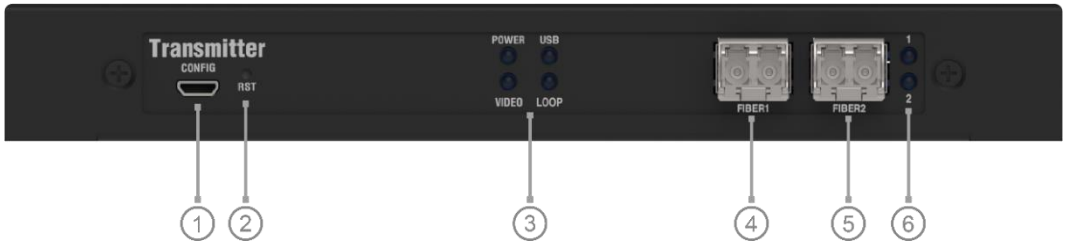
- Pure digital zero compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber;
- Two SFP+ optical module cages, each configured with two 10G single-mode LC optical modules, require single-mode fiber transmission;
- It uses dual-path fiber transmission for one 4K60 channel and does not support link redundancy.
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 4096x2160@60Hz;
- It supports loop-out of input signals, enabling local monitoring while transmitting signals.

Interface Description

Transmitter

The transmitter converts audio and video signals into fiber signals for remote transmission. The transmitter's video and audio ports connect to the signal source (camera, etc.), while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, a point-to-point fiber connection to the receiver can be used.

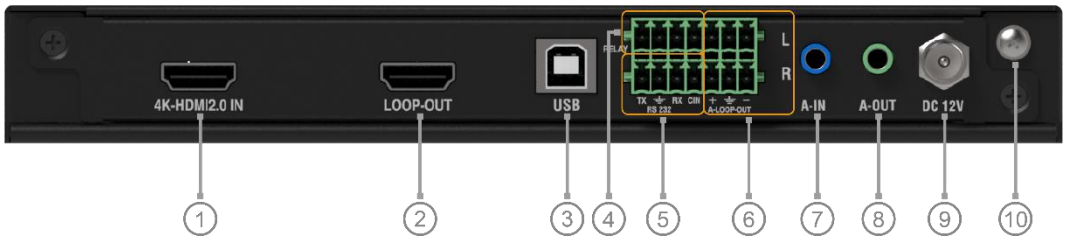
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



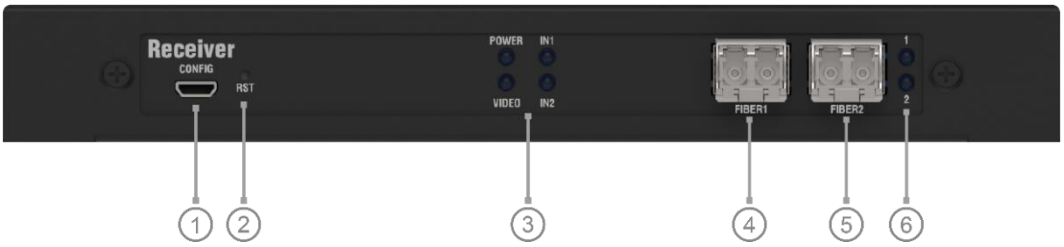
The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	4K-HDMI 2.0 IN: 4K 60 HDMI video signal input, maximum resolution 4096x2160@60Hz
②	Video loop-out interface	LOOP-OUT: 4K60HDMI video signal loop-out, which can be used for local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	A-IN: 3.5mm connector
⑧	Audio output interface	Reserved, no function available yet.
⑨	Power interface	DC 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Receiver

The receiver converts fiber signals into audio and video signals. The fiber end of the receiver connects to the fiber output card of a high-definition fiber matrix device, or it can be directly connected to the transmitter via a point-to-point fiber connection; the other end connects to display devices and audio devices.

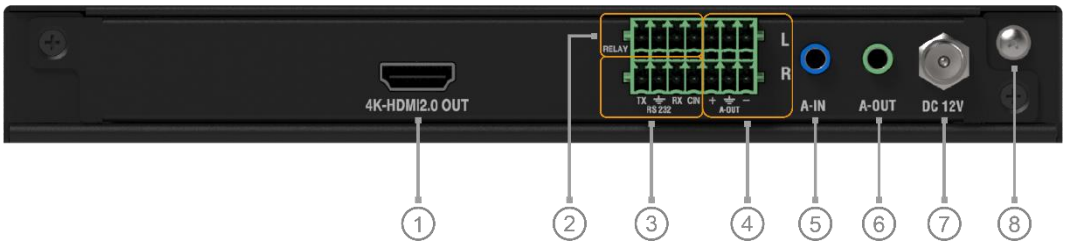
Receiver Front Panel



The interfaces and indicator lights on the receiver's front panel are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Always On IN1: Long Dark IN2: When lit, it indicates that the current working link is normal.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑥	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Receiver Rear Panel



The interfaces and indicator lights on the Rear Panel of the receiver are described below:

NO.	TYPE	DESCRIPTION
①	Video output interface	4K-HDMI 2.0 OUT: HDMI video signal output, maximum resolution 4096x2160@60Hz.
②	Phoenix terminal	Reserved, no function available yet.
③	Phoenix terminal	Reserved, no function available yet.
④	Balanced audio output interface	A-OUT: 6-pin terminal
⑤	Audio input interface	Reserved, no function available yet.
⑥	Audio output interface	A-OUT: 3.5mm interface
⑦	Power interface	DC 12V: 12V DC power supply interface
⑧	Grounding terminal	/

Application Diagram

4K60 HDMI Fiber Optic Transmitter/Receiver (Four Optical)

Introduction

(Transmitter)

(Receiver)

(Dimensions: 212.6x204.1x40.4mm)

The 4K60 HDMI (Four-optical) optical transceiver is a transmission device launched by DigiBird that transmits audio and video signals via optical fiber. It includes a transmitter and a receiver. The transmitter and receiver can be used in pairs or with fiber cards in DigiBird's video wall, matrix, and other devices. This transmission device is specifically designed for use in scenarios such as financial service centers, government command centers, and live broadcast centers to meet the needs of remotely accessing and controlling computer video signals. Data is transmitted via optical fiber, providing high resistance to interference and security.

Features

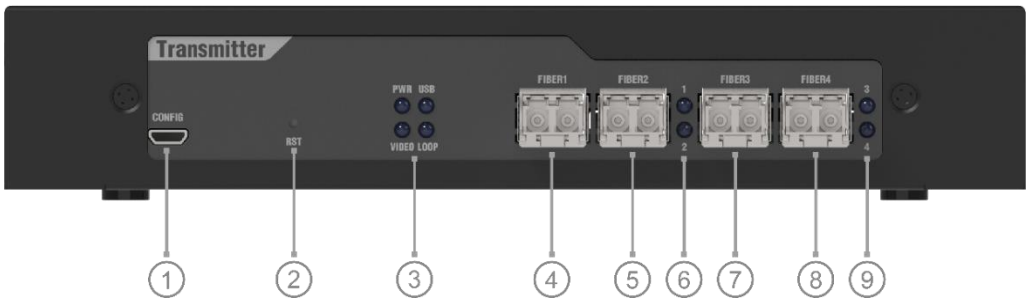
- Pure digital zero-compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber.
- Four SFP+ optical module cages, each configured with four 10G single-mode LC optical modules, require single-mode fiber transmission;
- It uses dual-path fiber transmission with one 4K60 channel, supporting link redundancy;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 4096x2160@60Hz;
- It supports loop-out of input signals, enabling local monitoring while transmitting signals.

Interface Description

Transmitter

The transmitter converts audio and video signals into fiber signals for remote transmission. The transmitter's video and audio ports connect to the signal source (camera, etc.), while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, a point-to-point fiber connection to the receiver can be used.

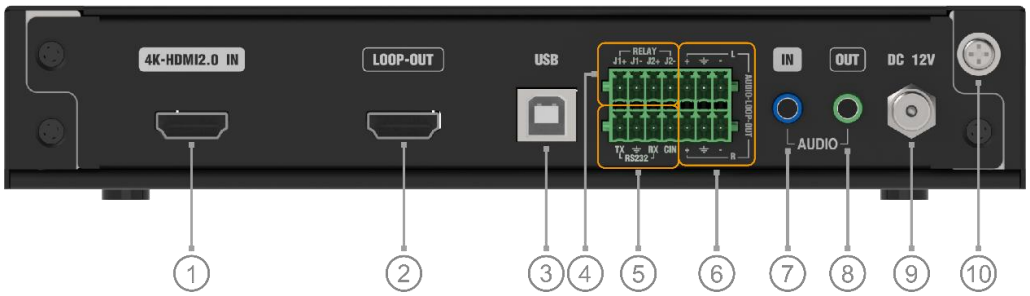
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	PWR: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Indicator lights	1: The FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.
⑦	Fiber interface	FIBER3: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑧	Fiber interface	FIBER4: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑨	Indicator lights	3: FIBER3 interface connection status indicator light stays on when the link is normal. 4: FIBER4 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



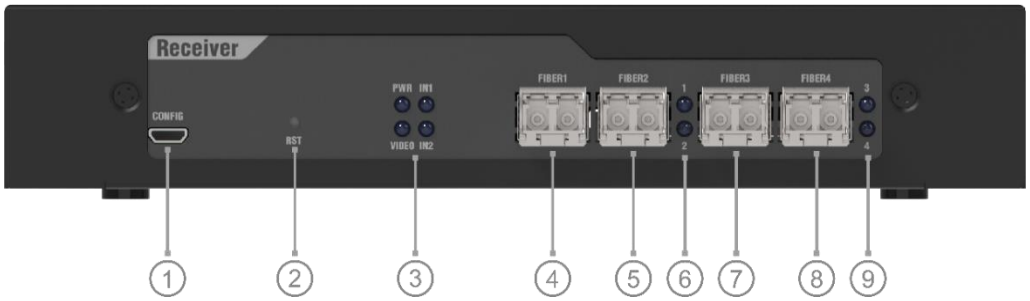
The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	4K-HDMI 2.0 IN: 4K 60 HDMI video signal input, maximum resolution 4096x2160@60Hz.
②	Video loop-out interface	LOOP-OUT: 4K60HDMI video signal loop-out, which can be used for local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	IN: 3.5mm interface
⑧	Audio output interface	Reserved, no function available yet.
⑨	Power interface	DV 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Receiver

The receiver converts fiber signals into audio and video signals. The fiber end of the receiver connects to the fiber output card of a high-definition fiber matrix device, or it can be directly connected to the transmitter via a point-to-point fiber connection; the other end connects to display devices and audio devices.

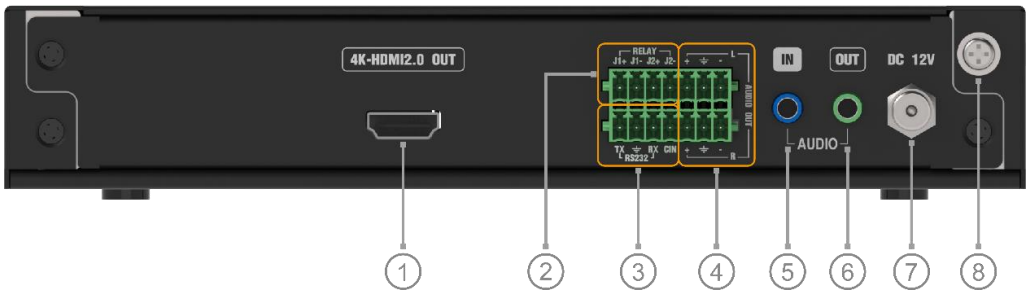
Receiver Front Panel



The interfaces and indicator lights on the receiver's front panel are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	PWR: Power indicator light, stays on after startup. VIDEO: Always On IN1: When lit, it indicates that the currently active optical link is 1 or 2. IN2: When lit, it indicates that the currently active optical links are 3 and 4.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑥	Indicator lights	1: The FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light, stays on when the link is normal.
⑦	Fiber interface	FIBER3: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑧	Fiber interface	FIBER4: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑨	Indicator lights	3: FIBER3 interface connection status indicator light stays on when the link is normal. 4: FIBER4 interface connection status indicator light stays on when the link is normal.

Receiver Rear Panel



The interfaces and indicator lights on the Rear Panel of the receiver are described below:

NO.	TYPE	DESCRIPTION
①	Video output interface	4K-HDMI 2.0 OUT: Outputs 4K 60 HDMI video signals, with a maximum resolution of 4096x2160@60Hz.
②	Phoenix terminal	Reserved, no function available yet.
③	Phoenix terminal	Reserved, no function available yet.
④	Balanced audio output interface	AUDIO-OUT: 6-pin terminal
⑤	Audio input interface	Reserved, no function available yet.
⑥	Audio output interface	OUT: 3.5mm interface
⑦	Power interface	DV 12V: 12V DC power supply interface
⑧	Grounding terminal	/

Application Diagram

4K60 DP Fiber Optic Transmitter/Receiver (Dual Optical)

Introduction

(Transmitter)

(Receiver)

(Dimensions: 206.6x204.1x26.7mm)

The 4K60 DP (Dual-Optical) optical transceiver is a transmission device launched by DigiBird for transmitting audio and video signals via optical fiber. It includes a transmitter and a receiver. The transmitter and receiver can be used in pairs or with fiber cards in DigiBird's video wall, matrix, and other devices. This transmission device is specifically designed for use in scenarios such as financial service centers, government command centers, and live broadcast centers to meet the needs of remotely accessing and controlling computer video signals. Data is transmitted via optical fiber, providing high anti-interference and confidentiality.

Features

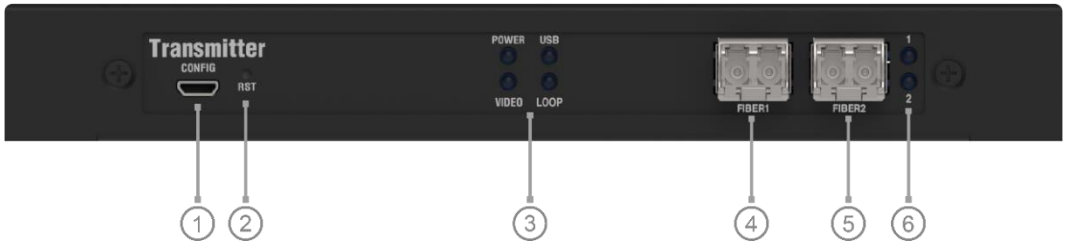
- Pure digital zero compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber;
- Two SFP+ optical module cages, each configured with two 10G single-mode LC optical modules, requiring single-mode fiber transmission;
- It uses dual-path fiber transmission for one 4K60 channel and does not support link redundancy;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 4096x2160@60Hz;
- It supports loop-out of input signals, enabling local monitoring while transmitting signals.

Interface Description

Transmitter

The transmitter converts audio and video signals into fiber signals for remote transmission. The transmitter's video and audio ports connect to the signal source (camera, etc.), while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, a point-to-point fiber connection to the receiver can be used.

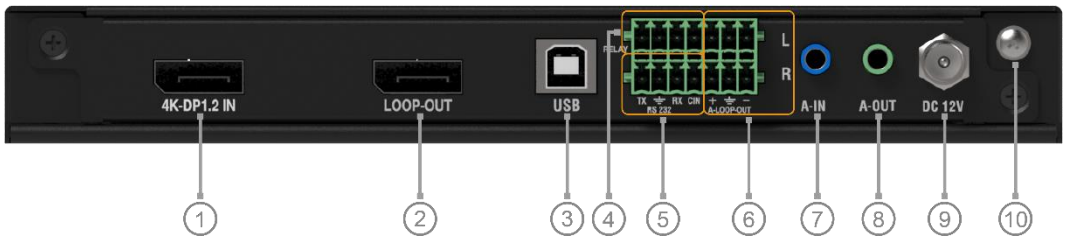
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



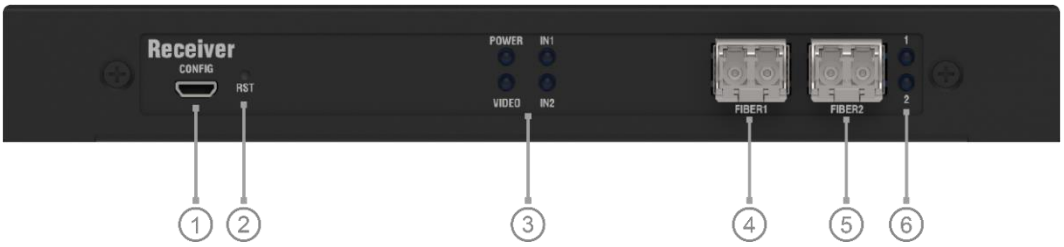
The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	4K-DP1.2 IN: 4K60DP video signal input, maximum resolution 4096x2160@60Hz
②	Video loop-out interface	LOOP-OUT: 4K60DP video signal loop-out, which can be used for local monitoring of video source signals.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	A-IN: 3.5mm connector
⑧	Audio output interface	Reserved, no function available yet.
⑨	Power interface	DC 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Receiver

The receiver converts fiber signals into audio and video signals. The fiber end of the receiver connects to the fiber output card of a high-definition fiber matrix device, or it can be directly connected to the transmitter via a point-to-point fiber connection; the other end connects to display devices and audio devices.

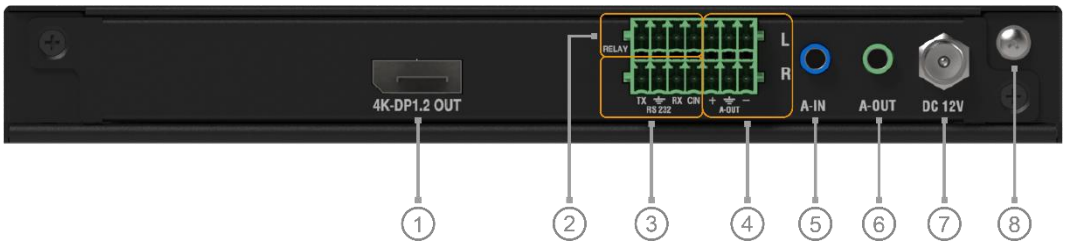
Receiver Front Panel



The interfaces and indicator lights on the receiver's front panel are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Always On IN1: Long Dark IN2: When lit, it indicates that the current working link is normal.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑥	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Receiver Rear Panel



The interfaces and indicator lights on the Rear Panel of the receiver are described below:

NO.	TYPE	DESCRIPTION
①	Video output interface	4K-DP1.2 OUT: DP video signal output, maximum resolution 4096x2160@60Hz
②	Phoenix terminal	Reserved, no function available yet.
③	Phoenix terminal	Reserved, no function available yet.
④	Balanced audio output interface	A-OUT: 6-pin terminal
⑤	Audio input interface	Reserved, no function available yet.
⑥	Audio output interface	A-OUT: 3.5mm interface
⑦	Power interface	DC 12V: 12V DC power supply interface
⑧	Grounding terminal	/

Application Diagram

4K60 DP Fiber Optic Transmitter/Receiver (Four Optical)

Introduction

(Transmitter)

(Receiver)

(Dimensions: 212.6x204.1x40.4mm)

The 4K60DP (Four-Optical) optical transceiver is a transmission device launched by DigiBird that transmits audio and video signals via optical fiber. It includes a transmitter and a receiver. The transmitter and receiver can be used in pairs or with fiber cards in DigiBird's video wall, matrix, and other devices. This transmission device is specifically designed for use in scenarios such as financial service centers, government command centers, and live broadcast centers to meet the needs of remotely accessing and controlling computer video signals. Data is transmitted via optical fiber, providing high interference resistance and confidentiality.

Features

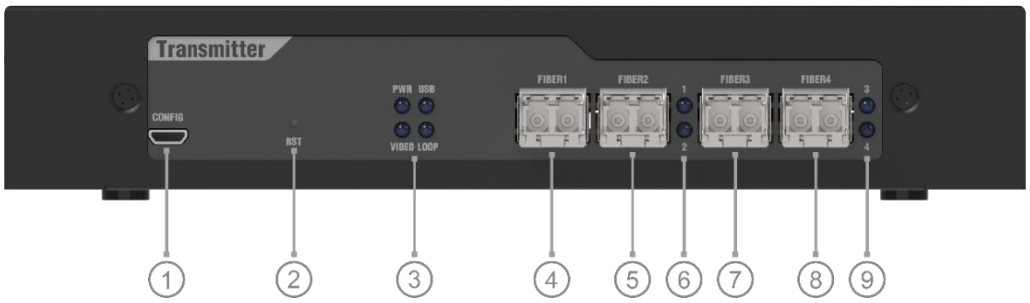
- Pure digital zero-compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber;
- Four SFP+ optical module cages, each configured with four 10G single-mode LC optical modules, require single-mode fiber transmission;
- It uses dual-channel fiber transmission with one-channel 4K60, supporting link redundancy;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 4096x2160@60Hz;
- It supports loop-out of input signals, enabling local monitoring while transmitting signals.

Interface Description

Transmitter

The transmitter converts audio and video signals into fiber signals for remote transmission. The transmitter's video and audio ports connect to the signal source (camera, etc.), while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, a point-to-point fiber connection to the receiver can be used.

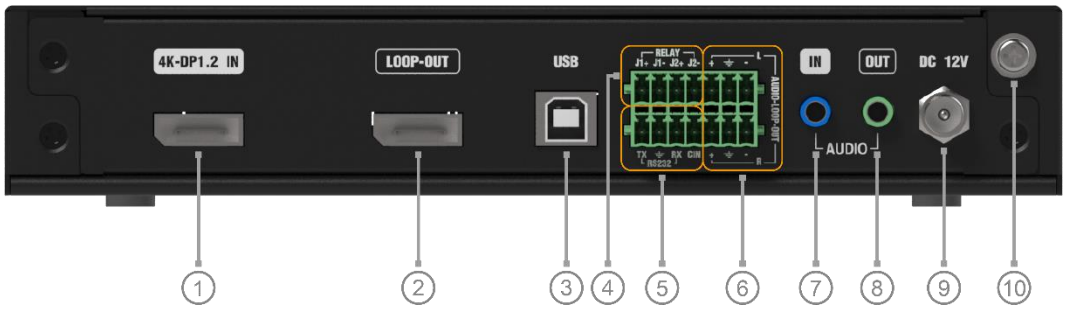
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	PWR: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Indicator lights	1: The FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.
⑦	Fiber interface	FIBER3: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑧	Fiber interface	FIBER4: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑨	Indicator lights	3: FIBER3 interface connection status indicator light stays on when the link is normal. 4: FIBER4 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



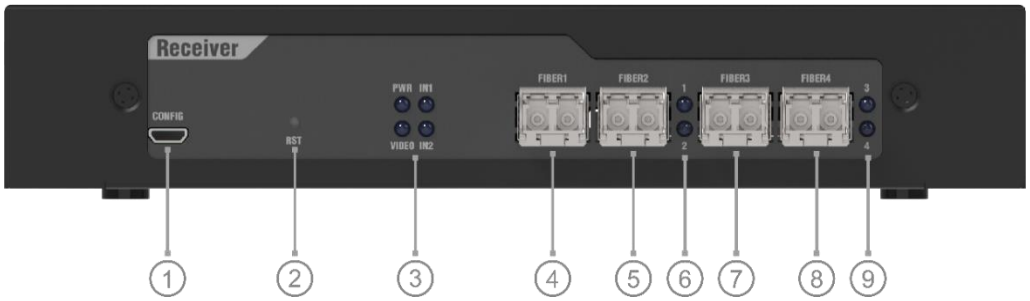
The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	4K-DP1.2 IN: 4K60DP video signal input, maximum resolution 4096x2160@60Hz
②	Video loop-out interface	LOOP-OUT: 4K60DP video signal loop-out, which can be used for local monitoring of video source signals.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	IN: 3.5mm interface
⑧	Audio output interface	Reserved, no function available yet.
⑨	Power interface	DV 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Receiver

The receiver converts fiber signals into audio and video signals. The fiber end of the receiver connects to the fiber output card of a high-definition fiber matrix device, or it can be directly connected to the transmitter via a point-to-point fiber connection; the other end connects to display devices and audio devices.

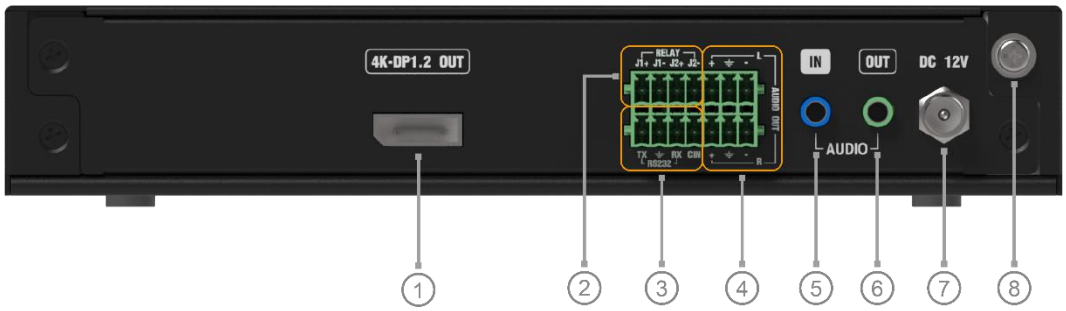
Receiver Front Panel



The interfaces and indicator lights on the receiver's front panel are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	PWR: Power indicator light, stays on after startup. VIDEO: Always On IN1: When lit, it indicates that the currently active optical link is 1 or 2. IN2: When lit, it indicates that the currently active optical links are 3 and 4.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑥	Indicator lights	1: The FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light, stays on when the link is normal.
⑦	Fiber interface	FIBER3: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑧	Fiber interface	FIBER4: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑨	Indicator lights	3: FIBER3 interface connection status indicator light stays on when the link is normal. 4: FIBER4 interface connection status indicator light stays on when the link is normal.

Receiver Rear Panel



The interfaces and indicator lights on the Rear Panel of the receiver are described below:

NO.	TYPE	DESCRIPTION
①	Video output interface	4K-DP1.2 OUT: Outputs 4K 60DP video signals with a maximum resolution of 4096x2160@60Hz.
②	Phoenix terminal	Reserved, no function available yet.
③	Phoenix terminal	Reserved, no function available yet.
④	Balanced audio output interface	AUDIO-OUT: 6-pin terminal
⑤	Audio input interface	Reserved, no function available yet.
⑥	Audio output interface	OUT: 3.5mm interface
⑦	Power interface	DV 12V: 12V DC power supply interface
⑧	Grounding terminal	/

Application Diagram

3. High-End Transmitter

High-End DVI Fiber Optic Transmitter

Introduction

(Dimensions: 206.6x204.1x26.7mm)

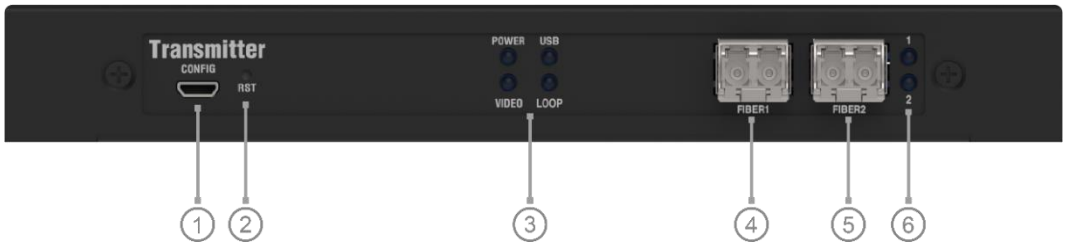
The high-end DVI transmitter is a transmission device launched by DigiBird that transmits audio and video signals via fiber cables. The transmitter converts audio and video signals into fiber signals for remote transmission. The transmitter's video and audio ports connect to the signal source (camera, etc.), while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, a point-to-point direct connection to the receiver can be used.

Features

- Pure digital zero compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber;
- Two SFP+ optical module cages, configured with 10G single-mode LC optical modules as required, requiring single-mode fiber transmission;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 1920x1200@60Hz;
- It supports direct loop-out of input signals. Even when the optical transceiver loses power, the loop-out video port can still enable local monitoring of the signal;
- The dual optical port automatic backup function is used to improve product reliability and stability.

Interface Description

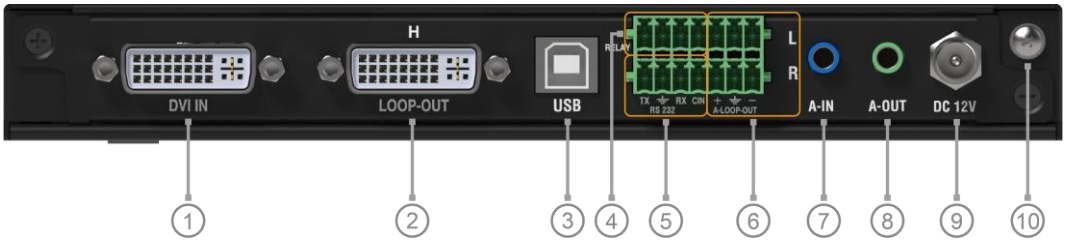
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	DVI IN: DVI video signal input, maximum resolution 1920x1200@60Hz, DVI-D interface, does not support VGA.
②	Video pass-through loop-out interface	LOOP-OUT: Supports normal loop-out even after the optical transceiver loses power, allowing local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	A-IN: 3.5mm connector
⑧	Audio output interface	Reserved, no function available yet.
⑨	Power interface	DC 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Application Diagram

High-End Dual-Link DVI Fiber Optic Transmitter

Introduction

(Dimensions: 206.6x204.1x26.7mm)

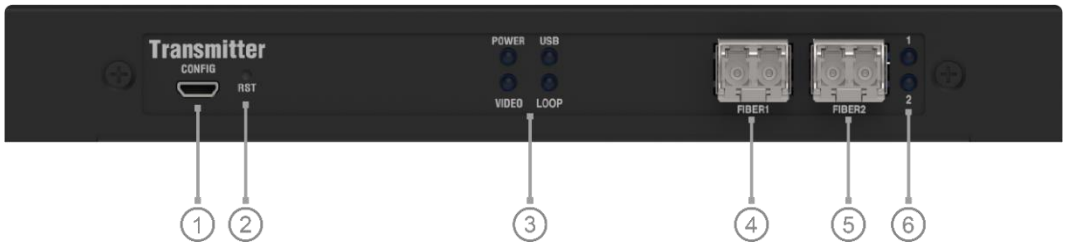
The high-end dual-link DVI transmitter is a transmission device launched by DigiBird that transmits audio and video signals via fiber cables. The transmitter converts audio and video signals into fiber signals for remote transmission. The transmitter's video and audio ports connect to the signal source (camera, etc.), while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, a point-to-point direct connection to the receiver can be used.

Features

- Pure digital zero-compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber;
- Two SFP+ optical module cages, configured with 10G single-mode LC optical modules as required, requiring single-mode fiber transmission;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- maximum supported resolution is 3840x2160@30Hz;
- It supports direct loop-out of input signals. Even when the optical transceiver loses power, the loop-out video port can still enable local monitoring of the signal;
- The dual optical port automatic backup function is used to improve product reliability and stability.

Interface Description

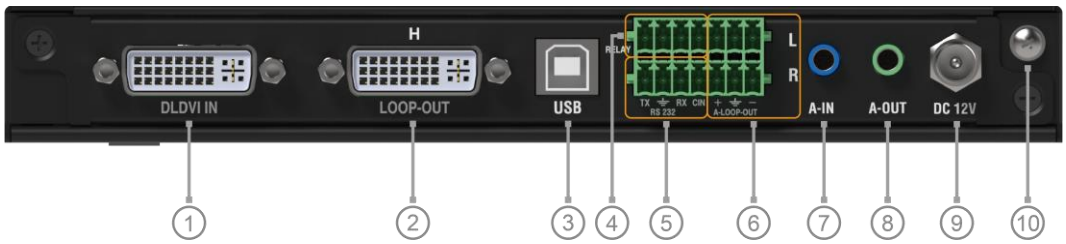
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	DLDVI IN: Dual-link DVI video signal input, maximum resolution 3840x2160@30Hz
②	Video pass-through loop-out interface	LOOP-OUT: Supports normal loop-out even after the optical transceiver loses power, allowing local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	A-IN: 3.5mm connector
⑧	Audio output interface	Reserved, no function available yet.
⑨	Power interface	DC 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Application Diagram

High-End HDMI Fiber Optic Transmitter

Introduction

(Dimensions: 206.6x204.1x26.7mm)

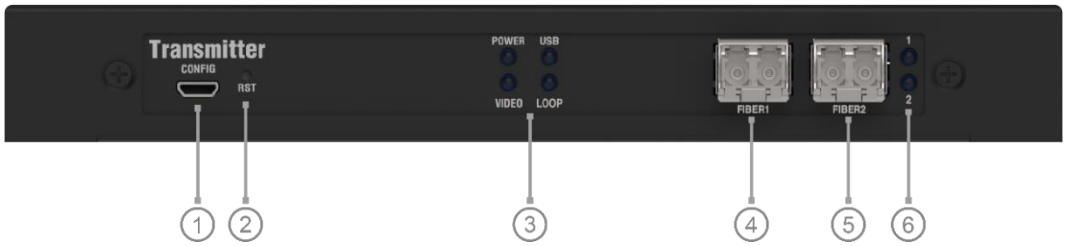
A high-end HDMI transmitter is a transmission device launched by DigiBird that transmits audio and video signals via fiber cables. The transmitter converts audio and video signals into fiber signals for remote transmission. The transmitter's video and audio ports connect to the signal (camera, etc.), while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, a point-to-point fiber connection to the receiver can be used.

Features

- Pure digital zero compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber;
- Two SFP+ optical module cages, configured with 10G single-mode LC optical modules as required, requiring single-mode fiber transmission;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 1920x1200@60Hz;
- It supports direct loop-out of input signals. Even when the optical transceiver loses power, the loop-out video port can still enable local monitoring of the signal;
- The dual optical port automatic backup function is used to improve product reliability and stability.

Interface Description

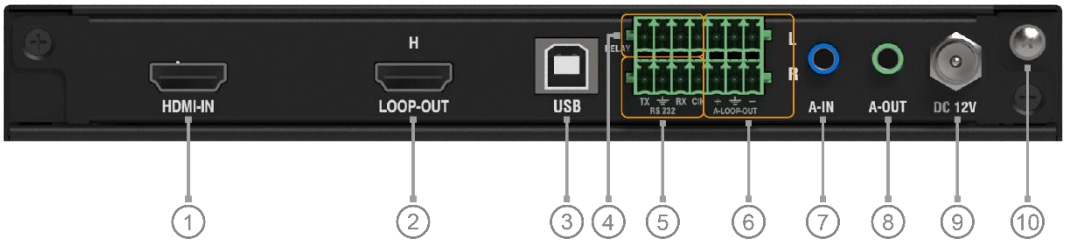
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	HDMI-IN: HDMI video signal input, maximum resolution 1920x1200@60Hz
②	Video pass-through loop-out interface	LOOP-OUT: Supports normal loop-out even after the optical transceiver loses power, allowing local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	A-IN: 3.5mm connector
⑧	Audio output interface	Reserved, no function available yet.
⑨	Power interface	DC 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Application Diagram

High-End 4K HDMI Fiber Optic Transmitter

Introduction

(Dimensions: 206.6x204.1x26.7mm)

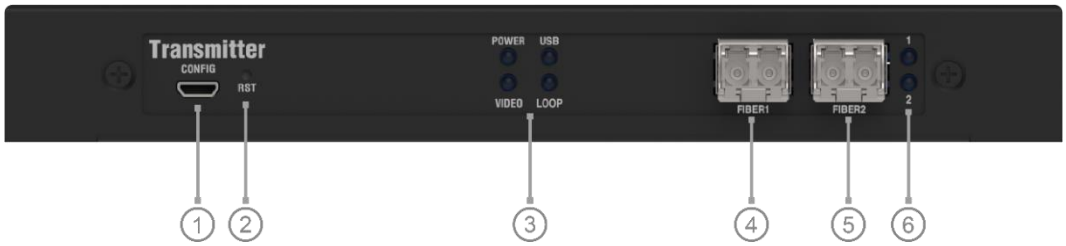
The high-end 4K HDMI transmitter is a transmission device launched by DigiBird that transmits audio and video signals via fiber cables. The transmitter converts audio and video signals into fiber signals for remote transmission. The transmitter's video and audio ports connect to the signal source (camera, etc.), while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, a point-to-point fiber connection to the receiver can be used.

Features

- Pure digital zero-compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber.
- Two SFP+ optical module cages, configured with 10G single-mode LC optical modules as required, requiring single-mode fiber transmission;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 3840x2160@30Hz;
- It supports direct loop-out of input signals. Even when the optical transceiver loses power, the loop-out video port can still enable local monitoring of the signal.
- The dual optical port automatic backup function is used to improve product reliability and stability.

Interface Description

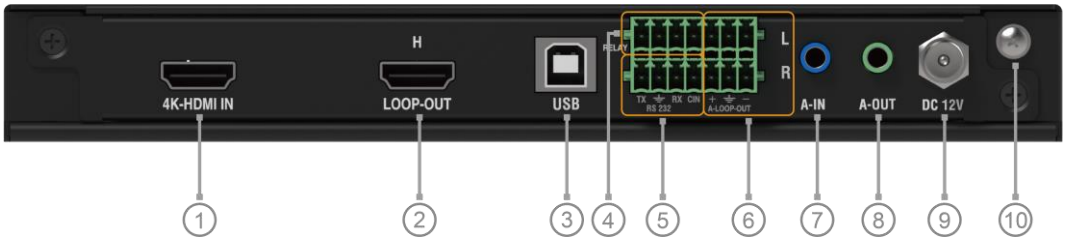
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
④	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑤	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	4K-HDMI IN: 4K HDMI video signal input, maximum resolution 3840x2160@30Hz
②	Video pass-through loop-out interface	LOOP-OUT: Supports normal loop-out even after the optical transceiver loses power, allowing local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	A-IN: 3.5mm connector
⑧	Audio output interface	Reserved, no function available yet.
⑨	Power interface	DC 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Application Diagram

High-End DVI Dual-Power Fiber Optic Transmitter

Introduction

(Dimensions: 212.6x204.1x40.4mm)

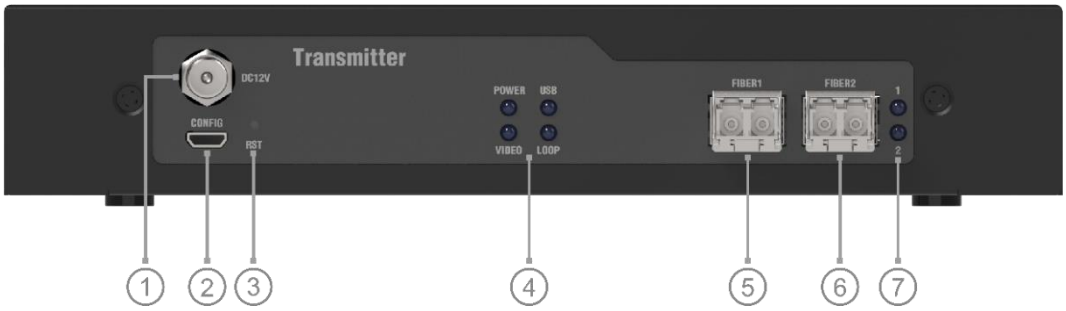
The high-end DVI dual-power transmitter is a transmission device launched by DigiBird that transmits audio and video signals via fiber cables. The transmitter converts audio and video signals into fiber signals for remote transmission. The transmitter's video and audio ports connect to the signal source (camera, etc.), while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, a point-to-point direct connection to the receiver can be used.

Features

- Pure digital zero-compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber;
- Two SFP+ optical module cages, configured with 10G single-mode LC optical modules as required, requiring single-mode fiber transmission;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 1920x1200@60Hz;
- It supports direct loop-out of input signals. Even when the optical transceiver loses power, the loop-out video port can still enable local monitoring of the signal;
- The dual optical port automatic backup function is used to improve product reliability and stability;
- Supports dual power supply redundancy.

Interface Description

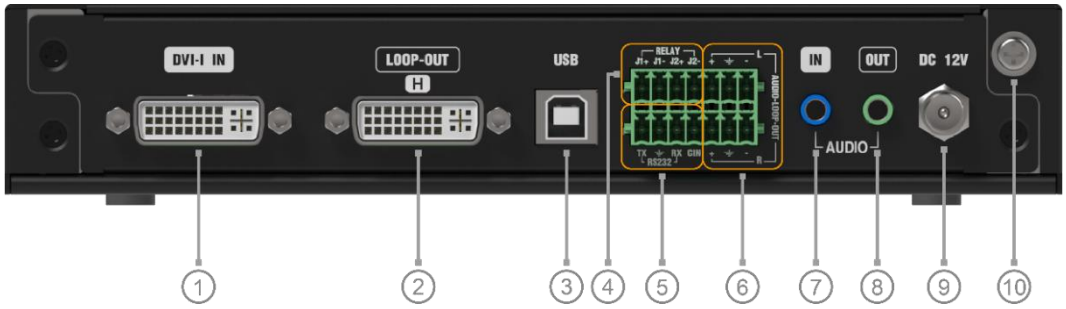
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Power interface	DV 12V: 12V DC power supply interface
②	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
③	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
④	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
⑤	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑦	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	DVI-I IN: DVI video signal input, maximum resolution 1920x1200@60Hz, DVI-D interface, does not support VGA.
②	Video pass-through loop-out interface	LOOP-OUT: Supports normal loop-out even after the optical transceiver loses power, allowing local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	IN: 3.5mm interface
⑧	Audio output interface	OUT: 3.5mm interface
⑨	Power interface	DV 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Application Diagram

High-End HDMI Dual-Power Fiber Optic Transmitter

Introduction

(Dimensions: 212.6x204.1x40.4mm)

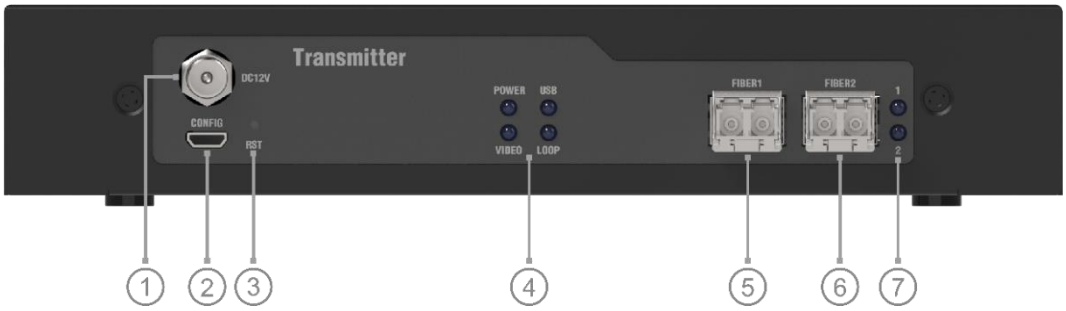
The high-end HDMI dual-power transmitter is a transmission device launched by DigiBird that transmits audio and video signals via fiber cables. The transmitter converts audio and video signals into fiber signals for remote transmission. The transmitter's video and audio ports connect to the signal source (camera, etc.), while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, a point-to-point fiber connection to the receiver can be used.

Features

- Pure digital zero-compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber;
- Two SFP+ optical module cages, configured with 10G single-mode LC optical modules as required, requiring single-mode fiber transmission;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 1920x1080@60Hz;
- It supports direct loop-out of input signals. Even when the optical transceiver loses power, the loop-out video port can still enable local monitoring of the signal;
- The dual optical port automatic backup function is used to improve product reliability and stability;
- Supports dual power supply redundancy.

Interface Description

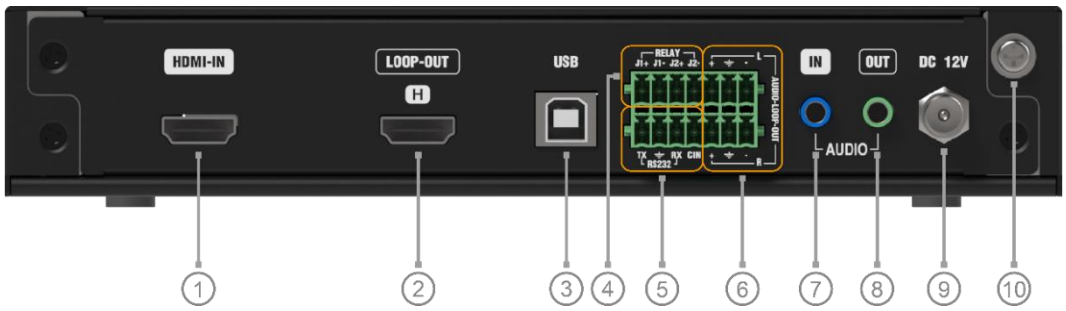
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Power interface	DV 12V: 12V DC power supply interface
②	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
③	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
④	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
⑤	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑦	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	HDMI - IN: HDMI video signal input, maximum resolution 1920x1080@60Hz
②	Video pass-through loop-out interface	LOOP-OUT: Supports normal loop-out even after the optical transceiver loses power, allowing local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	IN: 3.5mm interface
⑧	Audio output interface	OUT: 3.5mm interface
⑨	Power interface	DV 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Application Diagram

High-End 4K HDMI Dual-Power Fiber Optic Transmitter

Introduction

(Dimensions: 212.6x204.1x40.4mm)

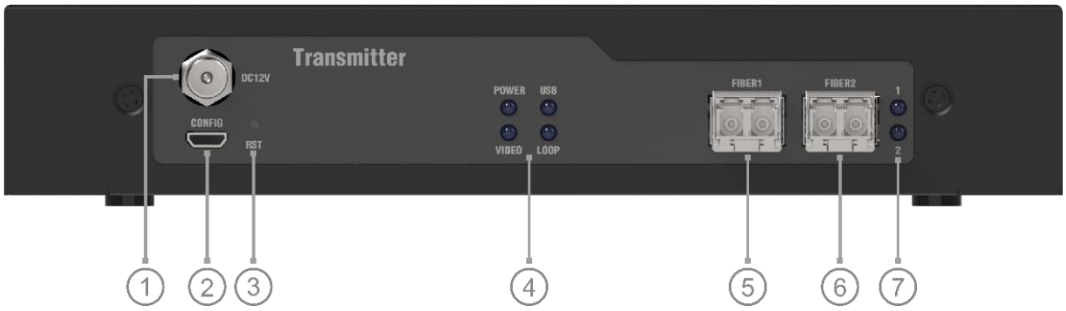
The high-end 4K HDMI dual-power transmitter is a transmission device from DigiBird that transmits audio and video signals via fiber cable. The transmitter converts audio and video signals into fiber signals for remote transmission. The transmitter's video and audio ports connect to the signal source (camera, etc.), while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, a point-to-point fiber connection to the receiver can be used.

Features

- Pure digital zero-compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber;
- Two SFP+ optical module cages, configured with 10G single-mode LC optical modules as required, requiring single-mode fiber transmission;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 3840x2160@30Hz;
- It supports direct loop-out of input signals. Even when the optical transceiver loses power, the loop-out video port can still enable local monitoring of the signal;
- The dual optical port automatic backup function is used to improve product reliability and stability;
- Supports dual power supply redundancy.

Interface Description

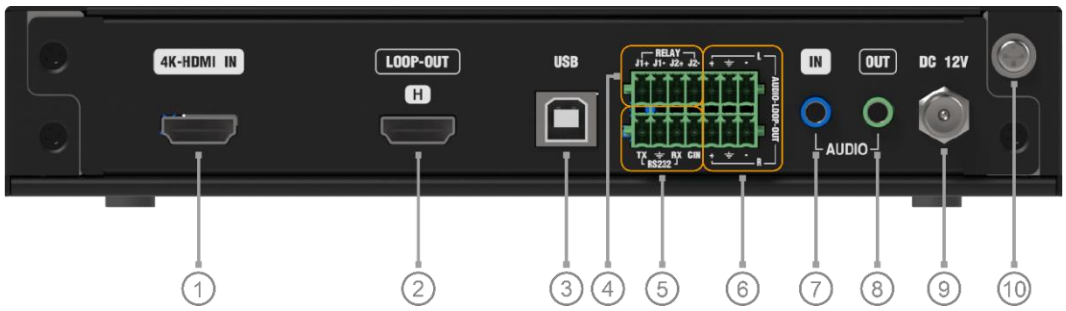
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Power interface	DV 12V: 12V DC power supply interface
②	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
③	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
④	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
⑤	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑦	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	4K HDMI-IN: 4K HDMI video signal input, maximum resolution 3840x2160@30Hz
②	Video pass-through loop-out interface	LOOP-OUT: Supports normal loop-out even after the optical transceiver loses power, allowing local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	IN: 3.5mm interface
⑧	Audio output interface	OUT: 3.5mm interface
⑨	Power interface	DV 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Application Diagram

4. Dual-Power Optical Transceiver

SDI Dual-Power Fiber Optic Transmitter/Receiver

Introduction

(Transmitter) **(Receiver)**

(Dimensions: 212.6x204.1x40.4mm)

The SDI dual-power optical transceiver is a transmission device launched by DigiBird that transmits audio and video signals over optical fiber, including a transmitter and a receiver. The transmitter and receiver can be used in pairs or with fiber cards in DigiBird's video wall, matrix, and other devices. This transmission device is specifically designed for use in scenarios such as financial service centers, government command centers, and live broadcast centers to meet the needs of remotely accessing and controlling computer video signals. Data is transmitted via optical fiber, providing high interference resistance and confidentiality.

Features

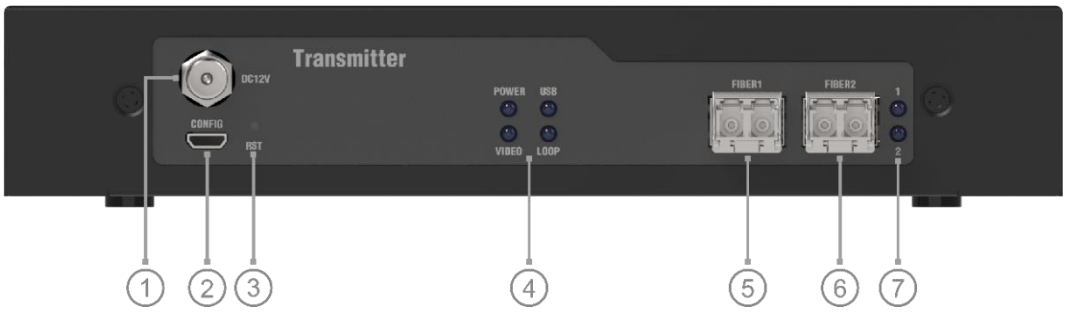
- Pure digital zero-compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber;
- Two SFP+ optical module cages, configured with 10G single-mode LC optical modules as required, requiring single-mode fiber transmission;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 1920x1200 / 60Hz (WUXGA) or 1080p / 60Hz (HDTV);
- It supports loop-out of input signals, enabling local monitoring while transmitting signals;
- The dual optical port automatic backup function is used to improve product reliability and stability;
- Supports dual power supply redundancy.

Interface Description

Transmitter

The transmitter converts audio and video signals into fiber signals for remote transmission. The transmitter's video and audio ports connect to the signal source (camera, etc.), while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, a point-to-point fiber connection to the receiver can be used.

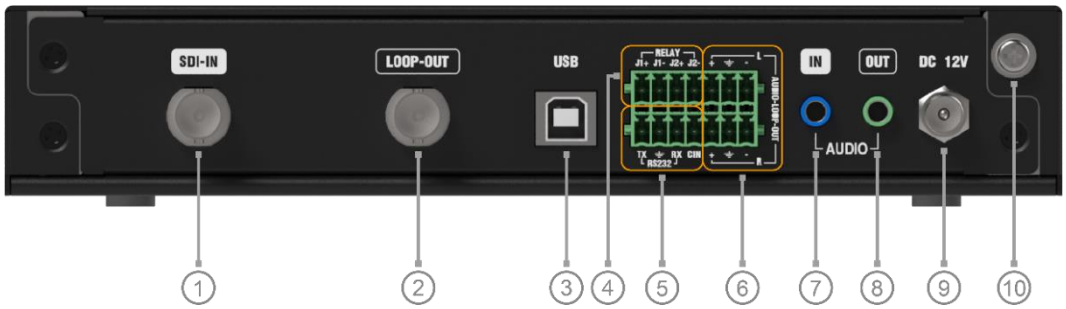
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Power interface	DV 12V: 12V DC power supply interface
②	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
③	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
④	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
⑤	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑦	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



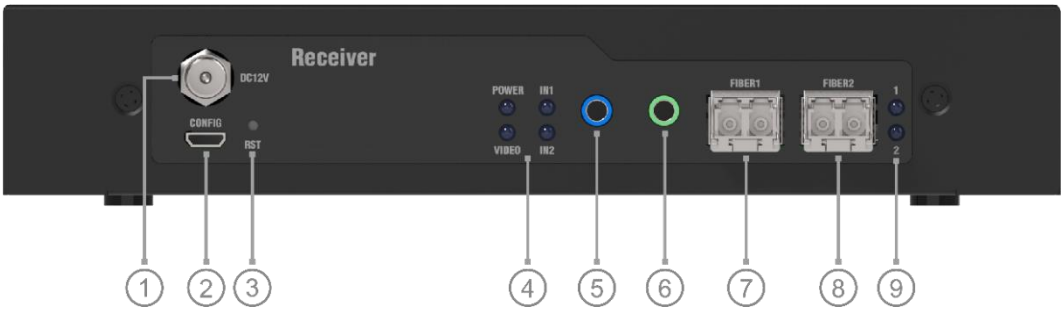
The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	SDI IN: SDI video signal input, maximum resolution 1920x1080@60Hz
②	Video loop-out interface	LOOP-OUT: SDI video signal loop-out, which can be used for local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	IN: 3.5mm interface
⑧	Audio output interface	OUT: 3.5mm interface
⑨	Power interface	DV 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Receiver

The receiver converts fiber signals into audio and video signals. The fiber end of the receiver connects to the fiber output card of a high-definition fiber matrix device, or it can be directly connected to the transmitter via a point-to-point fiber connection; the other end connects to display devices and audio devices.

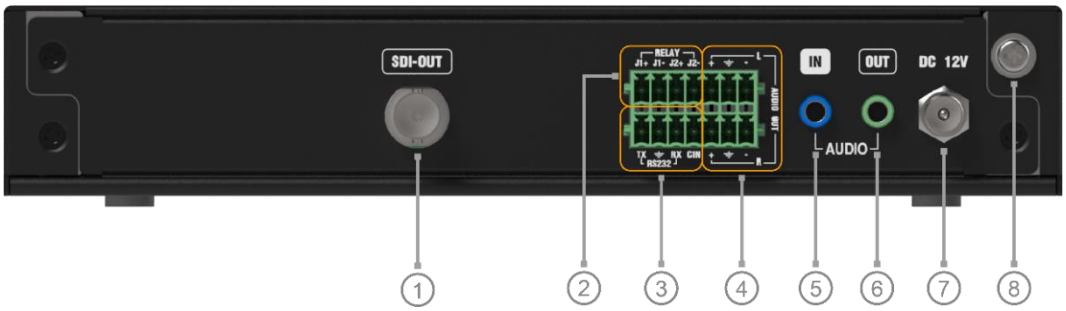
Receiver Front Panel



The interfaces and indicator lights on the receiver's front panel are described below:

NO.	TYPE	DESCRIPTION
①	Power interface	DV 12V: 12V DC power supply interface
②	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
③	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
④	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Always On IN1: When lit, it indicates that the currently operating optical link is 1. IN2: When lit, it indicates that the currently operating optical link is 2.
⑤	Infrared input interface	Connect to infrared receiving device (reserved)
⑥	Infrared output interface	Connect to an infrared transmitting device (reserved)
⑦	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑧	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑨	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light, stays on when the link is normal.

Receiver Rear Panel



The interfaces and indicator lights on the Rear Panel of the receiver are described below:

NO.	TYPE	DESCRIPTION
①	Video output interface	SDI-OUT: SDI video signal output, maximum resolution 1920x1080@60Hz
②	Phoenix terminal	Reserved, no function available yet.
③	Phoenix terminal	Reserved, no function available yet.
④	Balanced audio output interface	AUDIO-OUT: 6-pin terminal
⑤	Audio input interface	IN: 3.5mm interface
⑥	Audio output interface	OUT: 3.5mm interface
⑦	Power interface	DV 12V: 12V DC power supply interface
⑧	Grounding terminal	/

Application Diagram

DVI Dual-Power Fiber Optic Transmitter/Receiver

Introduction

(Transmitter)

(Receiver)

(Dimensions: 212.6x204.1x40.4mm)

The DVI dual-power optical transceiver is a transmission device launched by DigiBird that transmits audio and video signals over optical fiber. It includes a transmitter and a receiver. The transmitter and receiver can be used in pairs or with fiber cards in DigiBird's video wall, matrix, and other devices. This transmission device is specifically designed for use in scenarios such as financial service centers, government command centers, and live broadcast centers to meet the needs of remotely accessing and controlling computer video signals. Data is transmitted via optical fiber, providing high resistance to interference and security.

Features

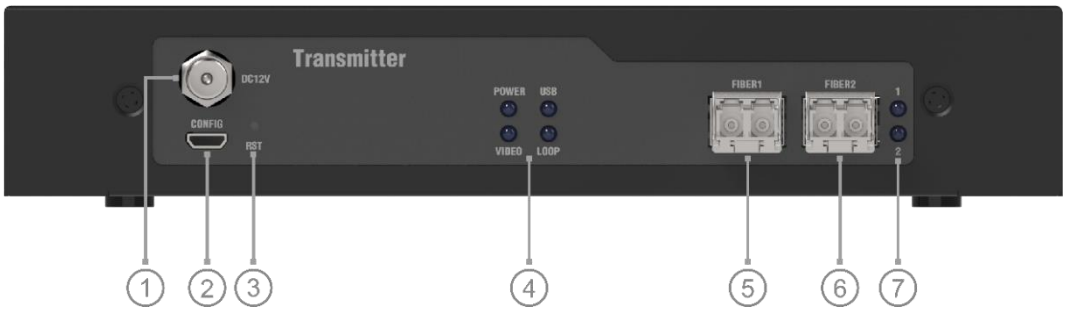
- Pure digital zero-compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber;
- Two SFP+ optical module cages, configured with 10G single-mode LC optical modules as required, requiring single-mode fiber transmission;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 1920x1200@60Hz;
- It supports loop-out of input signals, enabling local monitoring while transmitting signals;
- The dual optical port automatic backup function is used to improve product reliability and stability;
- Supports dual power supply redundancy.

Interface Description

Transmitter

The transmitter converts audio and video signals into fiber signals for remote transmission. The transmitter's video and audio ports connect to the signal (camera, etc.), while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, a point-to-point fiber connection to the receiver can be used.

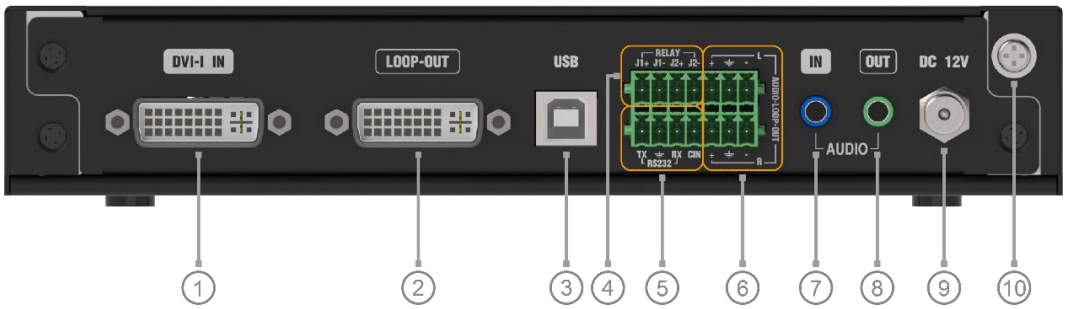
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Power interface	DV 12V: 12V DC power supply interface
②	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
③	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
④	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
⑤	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑦	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



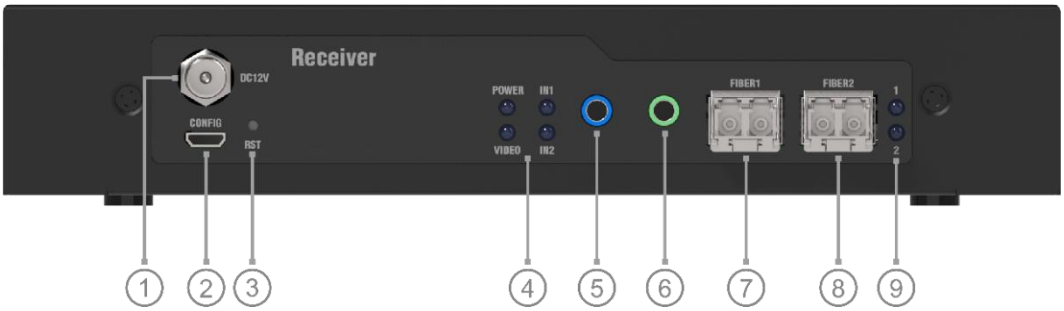
The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	DVI-D IN: DVI video signal input, maximum resolution 1920x1200@60Hz, configurable to VGA mode. VGA video signal input can be achieved through a DVI to VGA adapter.
②	Video loop-out interface	LOOP-OUT: DVI video signal loop-out, which can be used for local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	IN: 3.5mm interface
⑧	Audio output interface	OUT: 3.5mm interface
⑨	Power interface	DV 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Receiver

The receiver converts fiber signals into audio and video signals. The fiber end of the receiver connects to the fiber output card of a high-definition fiber matrix device, or it can be directly connected to the transmitter via a point-to-point fiber connection; the other end connects to display devices and audio devices.

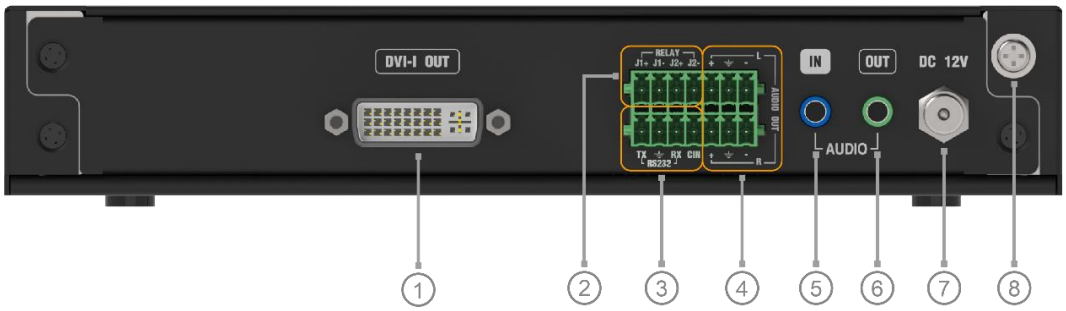
Receiver Front Panel



The interfaces and indicator lights on the receiver's front panel are described below:

NO.	TYPE	DESCRIPTION
①	Power interface	DV 12V: 12V DC power supply interface
②	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
③	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
④	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Always On IN1: When lit, it indicates that the currently operating optical link is 1. IN2: When lit, it indicates that the currently operating optical link is 2.
⑤	Infrared input interface	Connect to infrared receiving device (reserved)
⑥	Infrared output interface	Connect to an infrared transmitting device (reserved)
⑦	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑧	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑨	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light, stays on when the link is normal.

Receiver Rear Panel



The interfaces and indicator lights on the Rear Panel of the receiver are described below:

NO.	TYPE	DESCRIPTION
①	Video output interface	DVI-D OUT: DVI video signal output, maximum resolution 1920x1200@60Hz, configurable to VGA mode. VGA video signal output can be achieved through a DVI to VGA adapter.
②	Phoenix terminal	Reserved, no function available yet.
③	Phoenix terminal	Reserved, no function available yet.
④	Balanced audio output interface	AUDIO-OUT: 6-pin terminal
⑤	Audio input interface	IN: 3.5mm interface
⑥	Audio output interface	OUT: 3.5mm interface
⑦	Power interface	DV 12V: 12V DC power supply interface
⑧	Grounding terminal	/

Application Diagram

HDMI Dual-Power Fiber Optic Transmitter/Receiver

Introduction

(Transmitter)

(Receiver)

(Dimensions: 212.6x204.1x40.4mm)

The HDMI dual-power optical transceiver is a transmission device launched by DigiBird that transmits audio and video signals via optical fiber. It includes a transmitter and a receiver. The transmitter and receiver can be used in pairs or with fiber cards in DigiBird's video wall, matrix, and other devices. This transmission device is specifically designed for use in scenarios such as financial service centers, government command centers, and live broadcast centers to meet the needs of remotely accessing and controlling computer video signals. Data is transmitted via optical fiber, providing high interference resistance and security.

Features

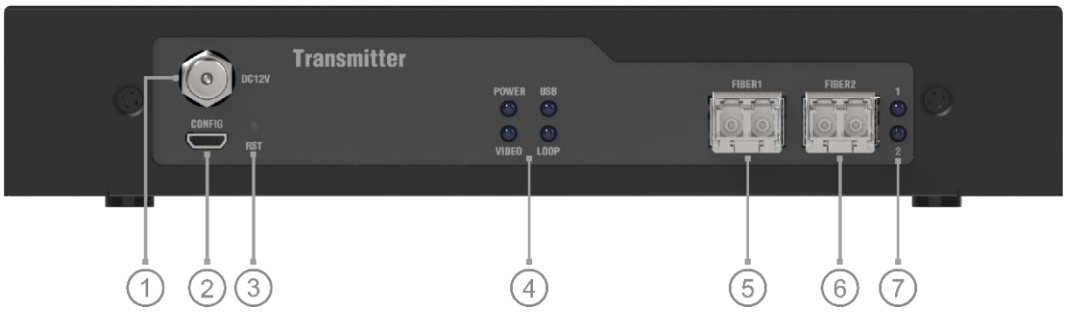
- Pure digital zero-compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber;
- Two SFP+ optical module cages, configured with 10G single-mode LC optical modules as required, requiring single-mode fiber transmission;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 1920x1080@60Hz;
- It supports loop-out of input signals, enabling local monitoring while transmitting signals;
- The dual optical port automatic backup function is used to improve product reliability and stability;
- Supports dual power supply redundancy.

Interface Description

Transmitter

The transmitter converts audio and video signals into fiber signals for remote transmission. The transmitter's video and audio ports connect to the signal (camera, etc.), while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, a point-to-point fiber connection to the receiver can be used.

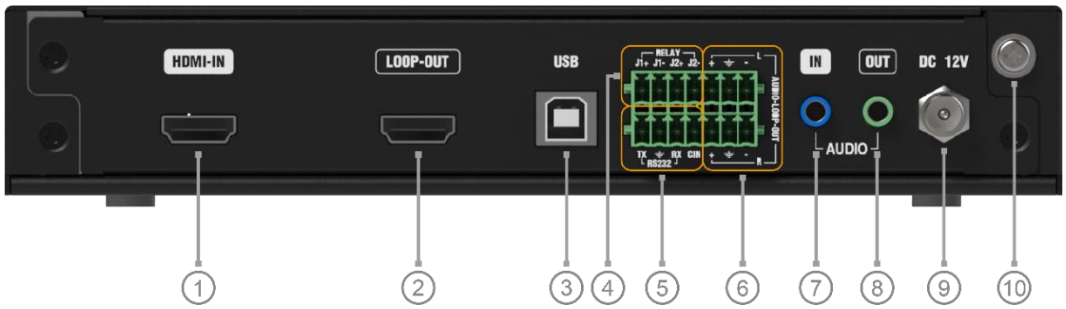
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Power interface	DV 12V: 12V DC power supply interface
②	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
③	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
④	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
⑤	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑦	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



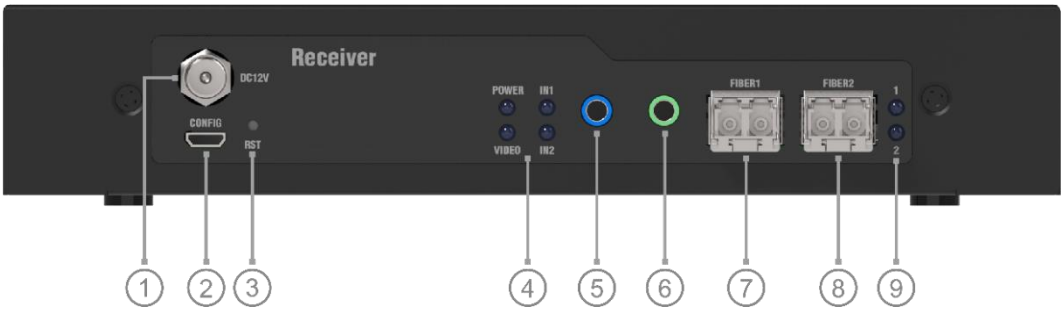
The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	HDMI - IN: HDMI video signal input, maximum resolution 1920x1080@60Hz
②	Video loop-out interface	LOOP-OUT: HDMI video signal loop-out, allowing for local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	IN: 3.5mm interface
⑧	Audio output interface	OUT: 3.5mm interface
⑨	Power interface	DV 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Receiver

The receiver converts fiber signals into audio and video signals. The fiber end of the receiver connects to the fiber output card of a high-definition fiber matrix device, or it can be directly connected to the transmitter via a point-to-point fiber connection; the other end connects to display devices and audio devices.

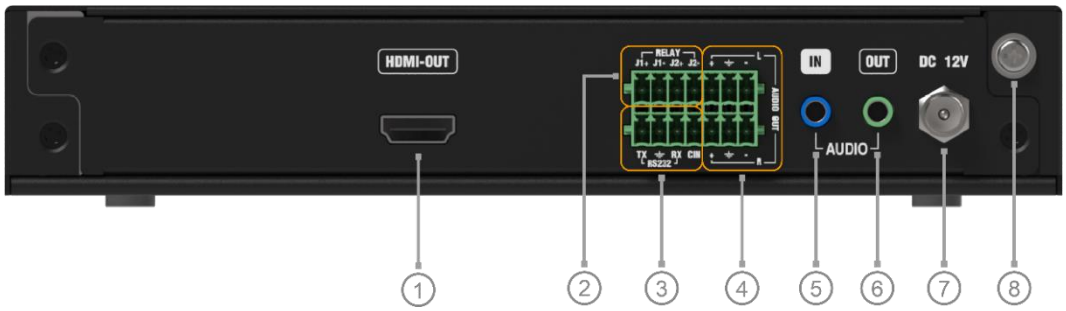
Receiver Front Panel



The interfaces and indicator lights on the receiver's front panel are described below:

NO.	TYPE	DESCRIPTION
①	Power interface	DV 12V: 12V DC power supply interface
②	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
③	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
④	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Always On IN1: When lit, it indicates that the currently operating optical link is 1. IN2: When lit, it indicates that the currently operating optical link is 2.
⑤	Infrared input interface	Connect to infrared receiving device (reserved)
⑥	Infrared output interface	Connect to an infrared transmitting device (reserved)
⑦	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑧	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑨	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light, stays on when the link is normal.

Receiver Rear Panel



The interfaces and indicator lights on the rear panel of the receiver are described below:

NO.	TYPE	DESCRIPTION
①	Video output interface	HDMI-OUT: HDMI video signal output, maximum resolution 1920x1080@60Hz
②	Phoenix terminal	Reserved, no function available yet.
③	Phoenix terminal	Reserved, no function available yet.
④	Balanced audio output interface	AUDIO-OUT: 6-pin terminal
⑤	Audio input interface	IN: 3.5mm interface
⑥	Audio output interface	OUT: 3.5mm interface
⑦	Power interface	DV 12V: 12V DC power supply interface
⑧	Grounding terminal	/

Application Diagram

4K HDMI Dual-Power Fiber Optic Transmitter/Receiver

Introduction

(Transmitter)

(Receiver)

(Dimensions: 212.6x204.1x40.4mm)

The 4K HDMI dual-power optical transceiver is a transmission device launched by DigiBird that transmits audio and video signals via fiber cable. It includes a transmitter and a receiver. The transmitter and receiver can be used in pairs or with fiber cards in DigiBird's video wall, matrix, and other devices. This transmission device is specifically designed for use in scenarios such as financial service centers, government command centers, and live broadcast centers to meet the needs of remotely accessing and controlling computer video signals. Data is transmitted via fiber cable, providing high interference resistance and security.

Features

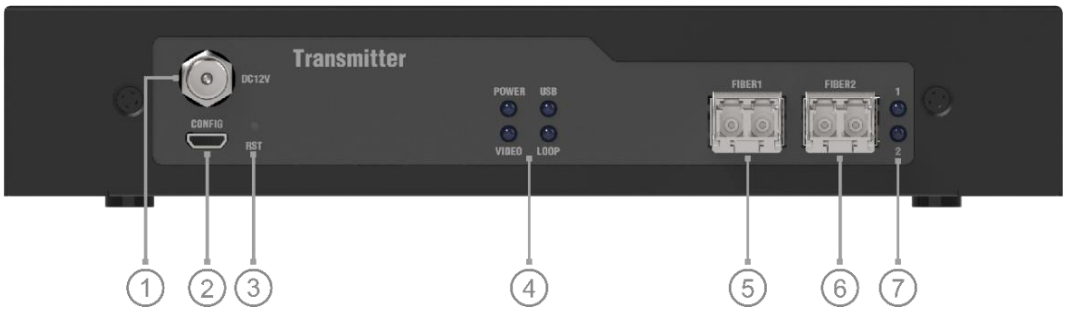
- Pure digital zero-compression technology;
- The optical module supports hot-swappable;
- Audio and video signals are transmitted via optical fiber;
- Two SFP+ optical module cages, configured with 10G single-mode LC optical modules as required, requiring single-mode fiber transmission;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 3840x2160@30Hz;
- It supports loop-out of input signals, enabling local monitoring while transmitting signals;
- The dual optical port automatic backup function is used to improve product reliability and stability;
- Supports dual power supply redundancy.

Interface Description

Transmitter

The transmitter converts audio and video signals into fiber signals for remote transmission. The transmitter's video and audio ports connect to the signal (camera, etc.), while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, a point-to-point fiber connection to the receiver can be used.

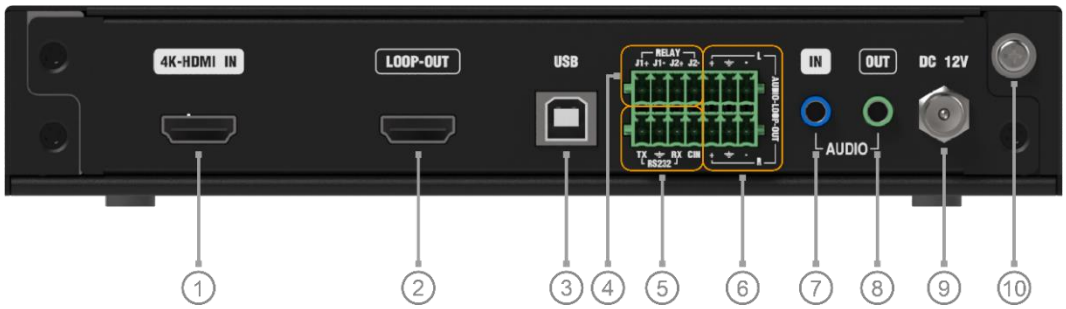
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Power interface	DV 12V: 12V DC power supply interface
②	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
③	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
④	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
⑤	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑥	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑦	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



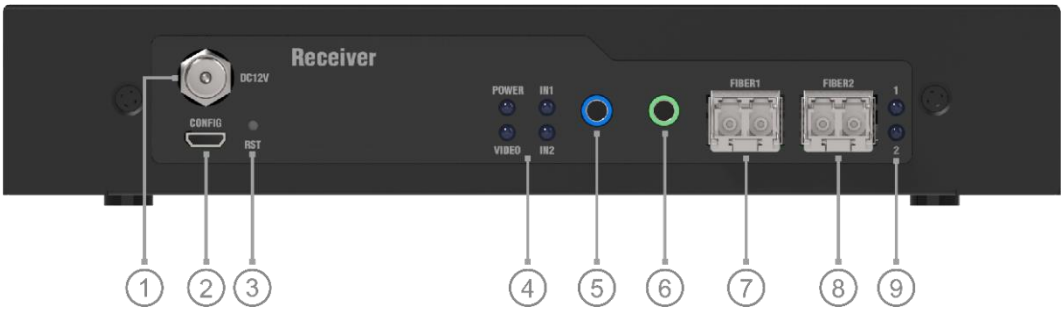
The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	4K-HDMI IN: 4K HDMI video signal input, maximum resolution 3840x2160@30Hz
②	Video loop-out interface	LOOP-OUT: 4kHz DMI video signal loop-out, which can be used for local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	IN: 3.5mm interface
⑧	Audio output interface	OUT: 3.5mm interface
⑨	Power interface	DV 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Receiver

The receiver converts fiber signals into audio and video signals. The fiber end of the receiver connects to the fiber output card of a high-definition fiber matrix device, or it can be directly connected to the transmitter via a point-to-point fiber connection; the other end connects to display devices and audio devices.

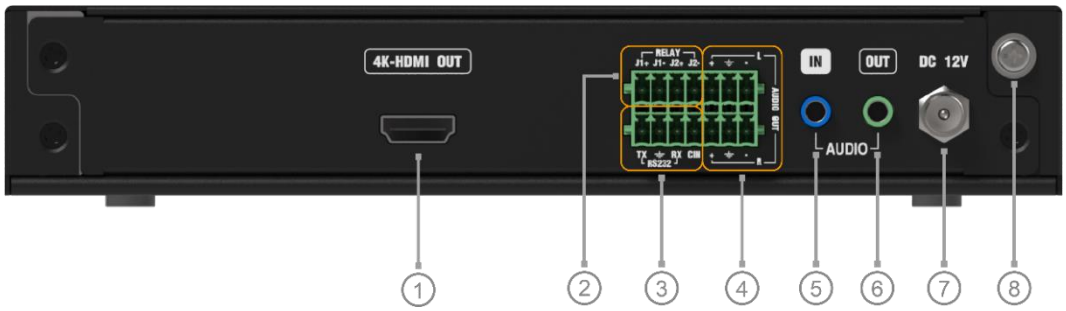
Receiver Front Panel



The interfaces and indicator lights on the receiver's front panel are described below:

NO.	TYPE	DESCRIPTION
①	Power interface	DV 12V: 12V DC power supply interface
②	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
③	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
④	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Always On IN1: When lit, it indicates that the currently operating optical link is 1. IN2: When lit, it indicates that the currently operating optical link is 2.
⑤	Infrared input interface	Connect to an infrared receiving device (reserved)
⑥	Infrared output interface	Connect to an infrared transmitting device (reserved)
⑦	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑧	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the transmitter.
⑨	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light, stays on when the link is normal.

Receiver Rear Panel



The interfaces and indicator lights on the rear panel of the receiver are described below:

NO.	TYPE	DESCRIPTION
①	Video output interface	4KHDMI-OUT: 4K HDMI video signal output, maximum resolution 3840x2160@30Hz
②	Phoenix terminal	Reserved, no function available yet.
③	Phoenix terminal	Reserved, no function available yet.
④	Balanced audio output interface	AUDIO-OUT: 6-pin terminal
⑤	Audio input interface	IN: 3.5mm interface
⑥	Audio output interface	OUT: 3.5mm interface
⑦	Power interface	DV 12V: 12V DC power supply interface
⑧	Grounding terminal	/

Application Diagram

5. Encoding Type Optical Transceiver

DVI Encoded Fiber Optic Transmitter/Receiver

Introduction

(Transmitter) **(Receiver)**

(Dimensions: 212.6x204.1x40.4mm)

The DVI-encoded optical transceiver is a transmission device launched by DigiBird that transmits audio and video signals over fibers and networks, including a transmitter and a receiver. The transmitter and receiver can be used in pairs or in conjunction with our video wall, matrix, distributed, and collaborative video control platforms, operation and maintenance management platforms, etc., to achieve long-distance transmission of audio and video signals and monitoring of terminal status.

Features

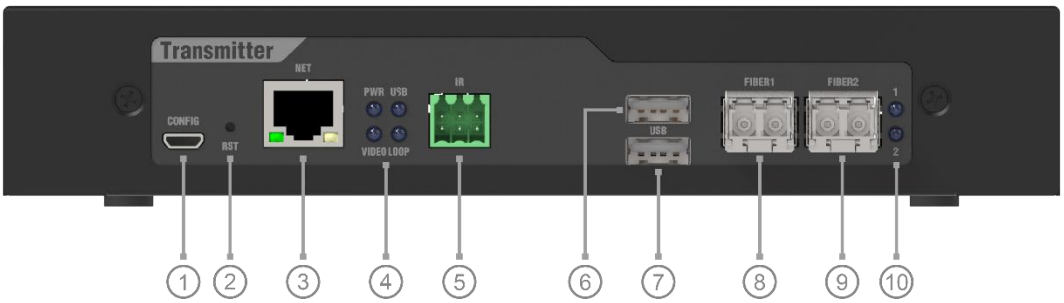
- Pure digital zero-compression technology;
- The optical module supports hot-swappable;
- Transmit audio and video signals via fiber cables and networks;
- Two SFP+ optical module cages, configured with 10G single-mode LC optical modules as required, requiring single-mode fiber transmission;
- The network port supports H.264 encoding, which can convert audio and video signals into network signals for transmission;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 1920x1200@60Hz;
- It supports loop-out of input signals, enabling local monitoring while transmitting signals;
- The dual optical port automatic backup function is used to improve product reliability and stability;

Interface Description

Transmitter

The transmitter can convert audio and video signals into fiber and network signals for remote transmission. The transmitter's video and audio ports connect to the signal source, while the fiber port connects to the fiber input card of a high-definition fiber matrix device. Alternatively, it can be used to directly connect the receiver point-to-point via fiber cable. The network port can connect to a distributed or collaborative video control platform server.

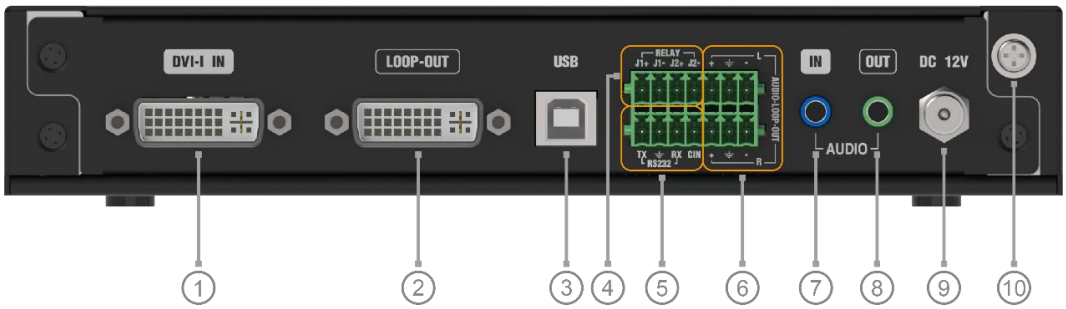
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Network interface	NET: Connect to the distributed or collaborative video control platform server via network cable.
④	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
⑤	Infrared interface	IR: Connects to infrared input /output devices, reserved for future use.
⑥	USB interface	USB: Factory-specific interface
⑦	USB interface	USB: Encoding module upgrade interface
⑧	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑨	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑩	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



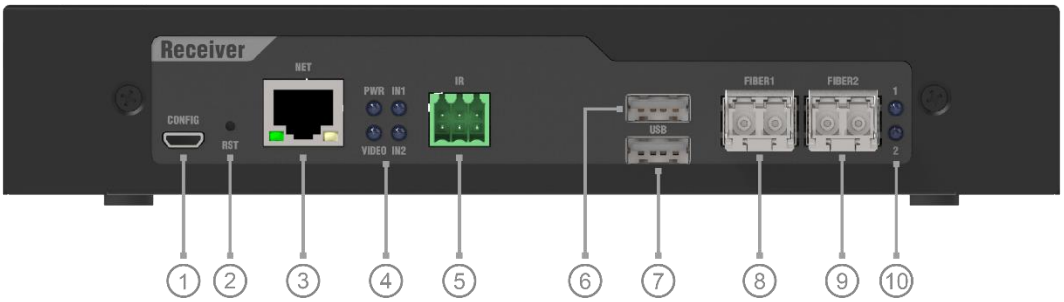
The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	DVI-I IN: DVI video signal input, maximum resolution 1920x1200@60Hz
②	Video loop-out interface	LOOP-OUT: DVI video signal loop-out, which can be used for local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	IN: 3.5mm interface
⑧	Audio output interface	OUT: 3.5mm interface
⑨	Power interface	DV 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Receiver

The receiver converts fiber signals into audio and video signals and performs network encoding on the converted signals. The encoded signals can then be transmitted to the operation and maintenance management system for signal status monitoring via the network port. The receiver's fiber port connects to the fiber output card of a high-definition fiber matrix device, or it can be directly connected to the transmitter via a fiber point-to-point connection; the audio and video ports connect to display and audio devices.

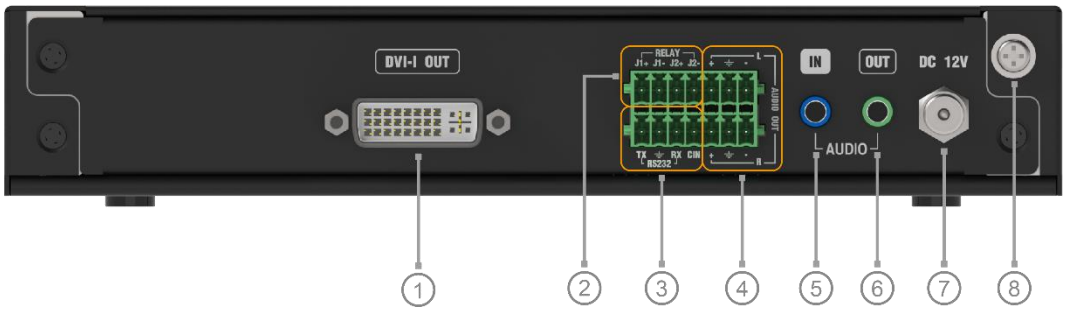
Receiver Front Panel



The interfaces and indicator lights on the receiver's front panel are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Network interface	N ET: Connect to the operation and maintenance management system via network cable for status monitoring.
④	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
⑤	Infrared interface	IR: Connects to infrared input /output devices, reserved for future use.
⑥	USB interface	USB: Factory-specific interface
⑦	USB interface	USB: Encoding module upgrade interface
⑧	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑨	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑩	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

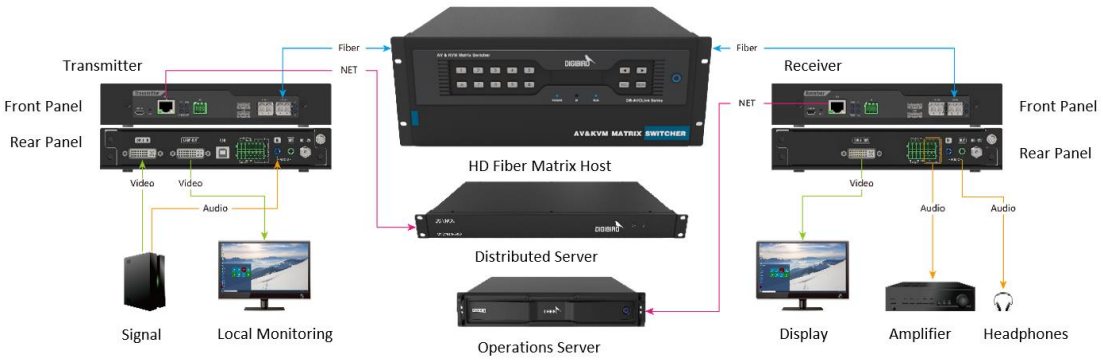
Receiver Rear Panel



The interfaces and indicator lights on the Rear Panel of the receiver are described below:

NO.	TYPE	DESCRIPTION
①	Video output interface	DVI-I OUT: DVI video signal output, maximum resolution 1920x1200@60Hz_
②	Phoenix terminal	Reserved, no function available yet.
③	Phoenix terminal	Reserved, no function available yet.
④	Balanced audio output interface	AUDIO-OUT: 6-pin terminal
⑤	Audio input interface	Reserved, no function available yet.
⑥	Audio output interface	OUT: 3.5mm interface
⑦	Power interface	DV 12V: 12V DC power supply interface
⑧	Grounding terminal	/

Application Diagram



SDI Encoded Fiber Optic Transmitter/Receiver

Introduction

(Transmitter)

(Receiver)

(Dimensions: 212.6x204.1x40.4mm)

The SDI encoded optical transceiver is a transmission device launched by DigiBird that transmits audio and video signals over fibers and networks. It includes a transmitter and a receiver. The transmitter and receiver can be used in pairs or in conjunction with our video wall, matrix, distributed, and collaborative video control platforms, operation and maintenance management platforms, etc., to achieve long-distance transmission of audio and video signals and monitoring of terminal status.

Features

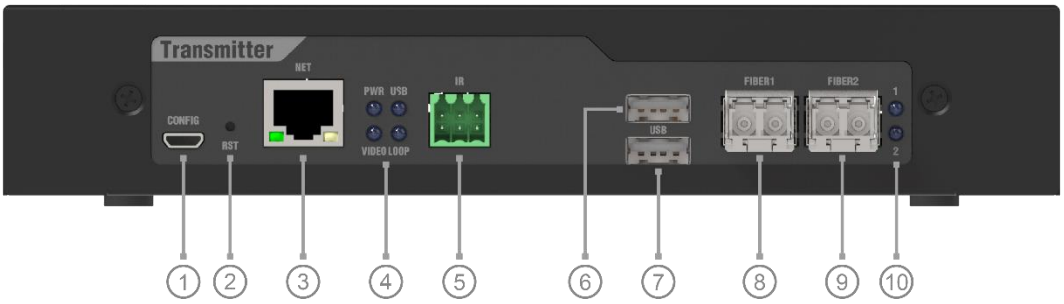
- Pure digital zero-compression technology;
- The optical module supports hot-swappable;
- Transmit audio and video signals via fiber cables and networks;
- Two SFP+ optical module cages, configured with 10G single-mode LC optical modules as required, requiring single-mode fiber transmission;
- The network port supports H.264 encoding, which can convert audio and video signals into network signals for transmission;
- Fully digital, completely transparent, latency-free, uncompressed, and frame-drop-free video transmission;
- The maximum supported resolution is 1920x1200/60Hz (WUXGA) or 1080p/60Hz (HDTV);
- It supports loop-out of input signals, enabling local monitoring while transmitting signals;
- The dual optical port automatic backup function is used to improve product reliability and stability;

Interface Description

Transmitter

The transmitter can convert audio and video signals into fiber and network signals for remote transmission. The transmitter's video and audio ports connect to the signal source (camera, etc.), the fiber port connects to the fiber input card of a high-definition fiber matrix device, or a direct point-to-point fiber connection to the receiver can be used; the network port can connect to a distributed or collaborative video control platform server.

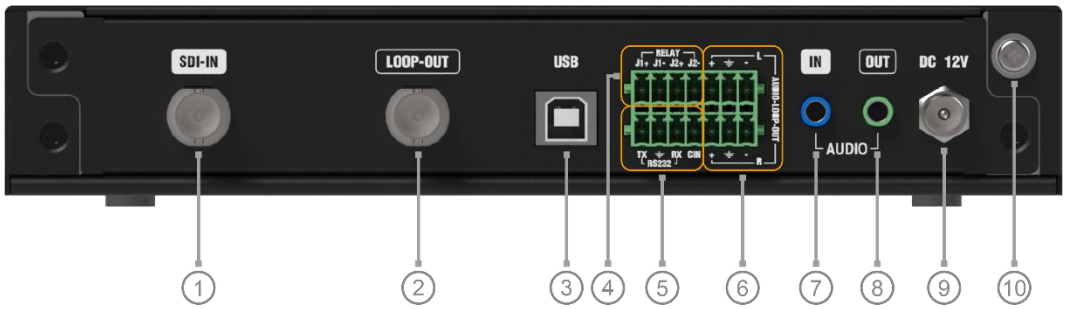
Transmitter Front Panel



The interfaces and indicator lights on the front panel of the transmitter are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Network interface	NET: Connect to the distributed or collaborative video conferencing control platform server via network cable.
④	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
⑤	Infrared interface	IR: Connects to infrared input /output devices, reserved for future use.
⑥	USB interface	USB: Factory-dedicated interface
⑦	USB interface	USB: Encoding module upgrade interface
⑧	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑨	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑩	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

Transmitter Rear Panel



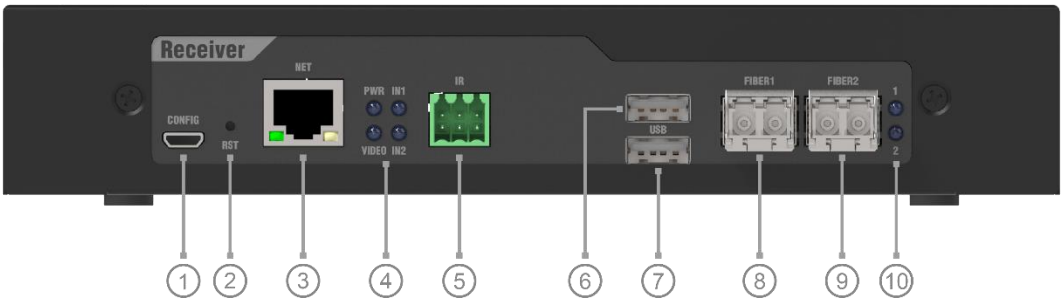
The interfaces and indicator lights on the transmitter's rear panel are described below:

NO.	TYPE	DESCRIPTION
①	Video input interface	SDI IN: SDI video signal input, maximum resolution 1920x1200@60Hz
②	Video loop-out interface	LOOP-OUT: SDI video signal loop-out, which can be used for local monitoring of the video source signal.
③	USB control interface	No function
④	Phoenix terminal	Reserved, no function available yet.
⑤	Phoenix terminal	Reserved, no function available yet.
⑥	Balanced audio loop-out interface	Reserved, no function available yet.
⑦	Audio input interface	IN: 3.5mm interface
⑧	Audio output interface	OUT: 3.5mm interface
⑨	Power interface	DV 12V: 12V DC power supply interface
⑩	Grounding terminal	/

Receiver

The receiver converts fiber signals into audio and video signals and performs network encoding on the converted signals. The encoded signals can then be transmitted to the operation and maintenance management system for signal status monitoring via the network port. The receiver's fiber port connects to the fiber output card of a high-definition fiber matrix device, or it can be directly connected to the transmitter via a fiber point-to-point connection; the audio and video ports connect to display and audio devices.

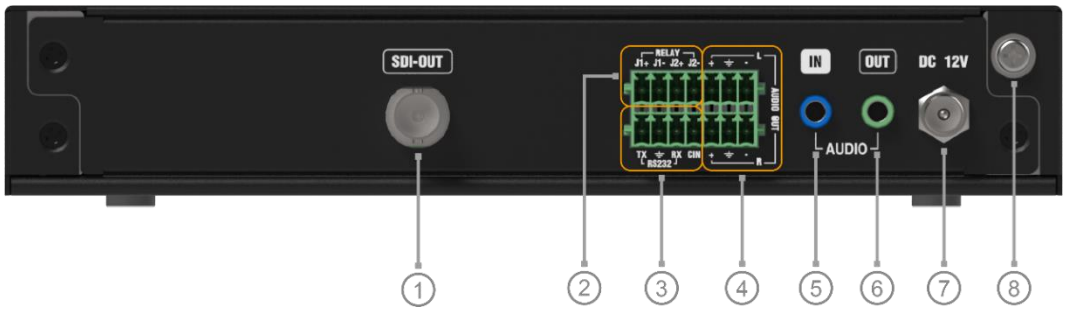
Receiver Front Panel



The interfaces and indicator lights on the receiver's front panel are described below:

NO.	TYPE	DESCRIPTION
①	Configuration interface	CONFIG: Mini USB interface, used during device debugging.
②	Factory reset	RST: Press and hold for 5 seconds to restore factory settings.
③	Network interface	N ET: Connect to the operation and maintenance management system via network cable for status monitoring.
④	Indicator lights	POWER: Power indicator light, stays on after startup. VIDEO: Video signal indicator light, illuminated when input duration is recorded. USB: No function LOOP: Stays lit after connecting to a monitor.
⑤	Infrared interface	IR: Connects to infrared input /output devices, reserved for future use.
⑥	USB interface	USB: Factory-specific interface
⑦	USB interface	USB: Encoding module upgrade interface
⑧	Fiber interface	FIBER1: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑨	Fiber interface	FIBER2: Connects to the fiber matrix device via fiber cable or connects point-to-point to the receiver.
⑩	Indicator lights	1: FIBER1 interface connection status indicator light stays on when the link is normal. 2: FIBER2 interface connection status indicator light stays on when the link is normal.

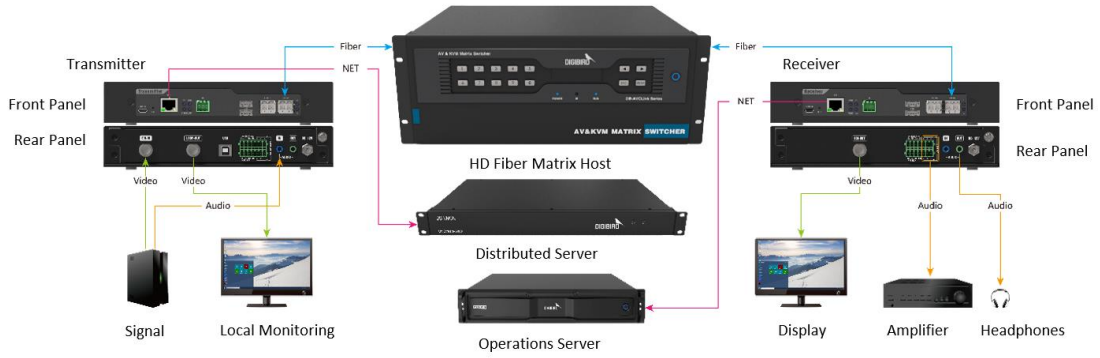
Receiver Rear Panel



The interfaces and indicator lights on the Rear Panel of the receiver are described below:

NO.	TYPE	DESCRIPTION
①	Video output interface	SDI OUT: SDI video signal output, maximum resolution 1920x1200@60Hz_
②	Phoenix terminal	Reserved, no function available yet.
③	Phoenix terminal	Reserved, no function available yet.
④	Balanced audio output interface	AUDIO-OUT: 6-pin terminal
⑤	Audio input interface	Reserved, no function available yet.
⑥	Audio output interface	OUT: 3.5mm interface
⑦	Power interface	DV 12V: 12V DC power supply interface
⑧	Grounding terminal	/

Application Diagram



6. Device Assembly

The optical transceiver is fixed in a standard cabinet using a standard rack, which facilitates construction and management. The installation methods include bracket type and chassis type.

1U Bracket

The 1U bracket supports the placement of two optical transceivers, each with its own power supply.

Classification	DESCRIPTION
Dimensions (WxDxH)	442.4x200x42.5 (mm)
Weight	1.1kg (bracket only)
Capacity	2

1U Chassis

The 1U chassis supports the installation of 4 optical transceivers (inserted into the chassis as cards), and the chassis is powered by a single power supply.

CLASSIFICATION	DESCRIPTION
Dimensions (WxDxH)	444x206.6x44.7 (mm)
Weight	4.2kg (chassis only)
Capacity	4

1.5U Chassis

1.5 U chassis supports the installation of 4 optical transceivers (inserted into the chassis as cards), with a unified power supply for the chassis.

Classification	DESCRIPTION
Dimensions (WxDxH)	444x247.3x66 (mm) No mounting ears
Weight	3.4kg (chassis only)
Capacity	4

The 1.5U chassis only supports the installation of dual power supplies and four optical ports 4K60 type cards.

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