QUESTTEL
Broadcast Systems

1 CHANNEL HDMI OVER FIBER WITH RS-232 DATA

User Manual

L-1HDMI-FE-RS-232-TX/RX

Introduction

Overview

The QuestTel L-1HDMI-FE-RS-232-TX/RX Fiber Optic Transmitter and Receiver provides long haul transmission of high resolution HDMI signals over a single fiber up to 20km and multimode fiber 500m with RS 232 control signal. Engineered for reliability and exceptional high resolution image performance, it uses QuestTel technology to deliver perfect pixel-for-pixel transmission of computer-video images up to 1920x1080@60Hz resolution. The compact, low profile enclosure of the L-1HDMI-FE-RS-232-TX/RX allows for discreet installation. It can be used for simple point-to-point applications or handle the most challenging AV system designs, from a simple conference room to an enterprise-wide fiber optic distribution system.
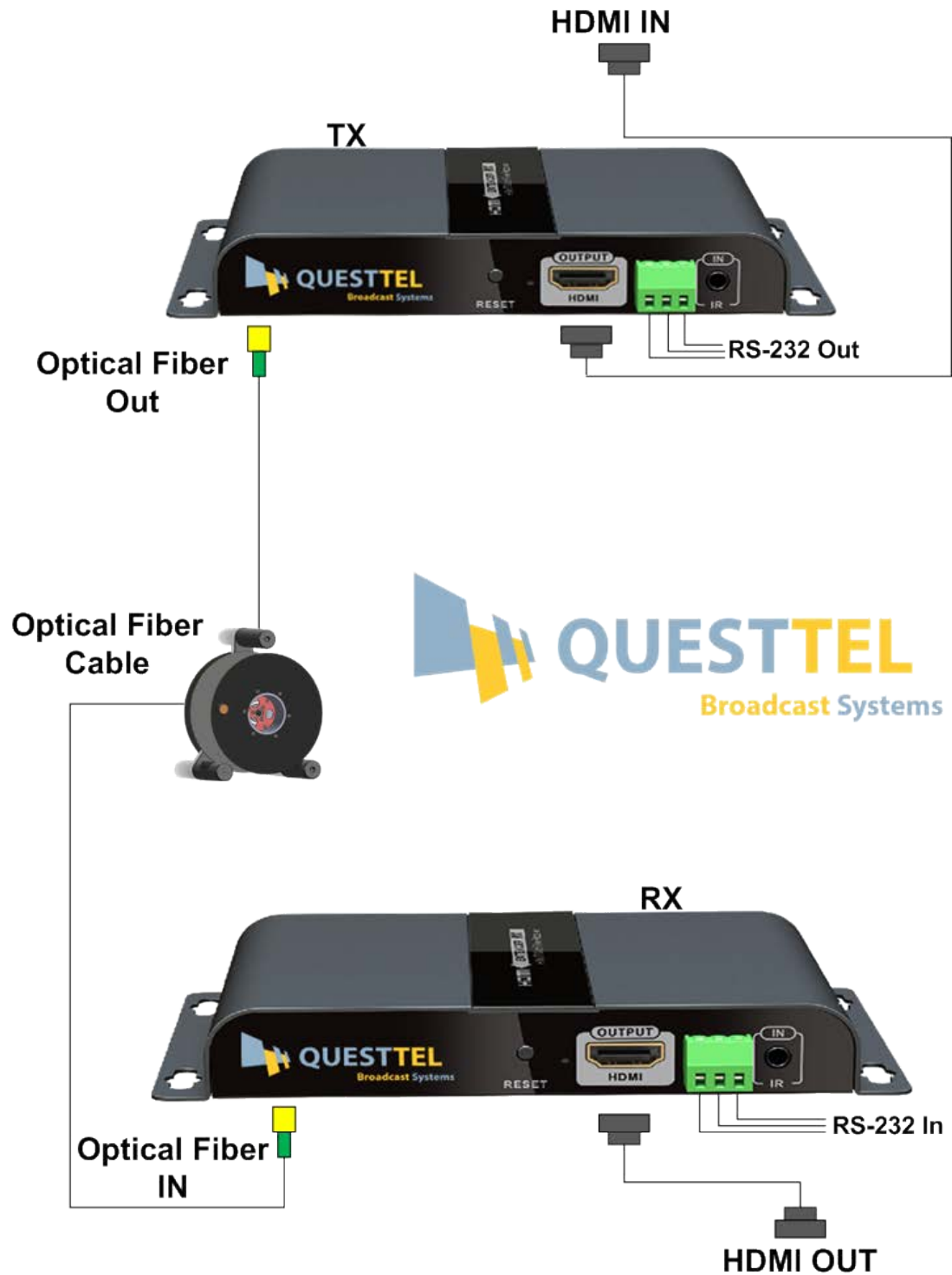
The FE-RS-232-TX/RX Transmitter and Receiver is ideal for a wide range of applications requiring long distance transmission of high resolution content with the highest quality. Because transmission of content is inherently secure and immune to outside interference, fiber applications are favored in government, military, and medical environments. The transmitter features industry standard SC-type Optical Connector.

QuestTel FE-RS-232-TX/RX supports multimode and singlemode transmission. Singlemode fiber offers long-range transmission capability over extreme distances of up to 20 km (12 miles). It is used in very large facilities such as airports, stadiums, live broadcast signal transmission, remote studio, universal digital video transmission business, telecommunication signal transmission business, airport or transportation hubs as well as connecting over very long distances between facilities such as college campuses.

Features:

>Supports Singlemode and Multimode transmission
>Transmission distance up to 20Km over Single Mode Fiber
>Transmission distance up 500m over Multimode Fiber
>Resolution supported is up to 1920x1080@60Hz.
>Support RS232 Bi-directional pass back .
>Avoid the electromagnetic interference in environment for long distance transmission.
>Low signal loss, wide frequency band and strong anti-interference.
>Plug and play.
>Wall-mountable design, easy for installation.
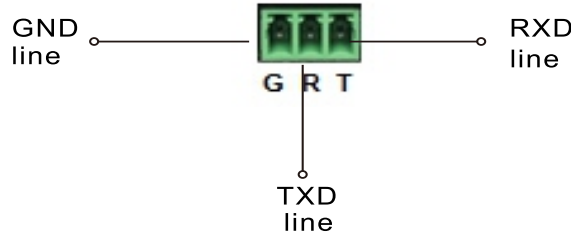
Application

4. RS232 serial bi-direction passback function

1) Baud rate

Different encoding mechanism can not mix-connect, the baud rate of RS232 serial of these transmitter unit and receiver unit, support 2400, 4800, 9600, 19200, 28800, 38400, 57600, and 115200

2) Line order

Check and make sure the RS23S serial line connect firmly and well, and make sure serial data line is connected correctly as below:

GND line   RXD line

G   R   T

TXD line

If the RS232 serial does not work by above connection, please try to change the order of TXD line and RXD line.

3) Check baud rate:

If you need to check the baud rate of last time, firstly, before power on, set the baud rate to 115200 on your serial port test tool . Then, power on, when the RS232 serial of product connects to serial port test tool, the software will read out the baud rate at present.

e.g.: software show information " Baud rate: 9600" , means 9600 is the current baud rate.

4) Set baud rate

For example: the current baud rate is 9600, but the baud rate of control equipment is 19200, so it needs to set the baud rate to 19200.

At this time, in serial port tool, choose baud rate "9600", then input command "set: 19200" in character format and send it out.

Tech Specs:

L-1HDMI-FE-RS-232-TX/RX

HDMI:	HDMI1.3
Supported resolution:	480i@60Hz, 480p@60Hz,576i@50Hz,576p@50Hz, 720P@50/60Hz,1080i@50/60Hz,1080p@50/60Hz
IR remote control:	Support 20~60kHz wide frequency IR pass back
RS232:	Support Bi-directional RS232 pass back
Optical Cable:	Support SMF and MMF cables
Transmission distance:	Up to 20Km over Single Mode Fiber Up 500m over Multimode Fiber
Working Temperature:	0°C ~ 60°C
Operation Humidity:	10-95% (No ncondensing)
Power Supply:	5V/1A*2pcs
Power Consumption:	TX<4W RX<4W
Product Dimensions:	151.5(L)x96.9(W)x21.8(H)mm*2pcs
Weight:	TX:330g RX:330g

This unit outputs continuous invisible light, which may beharmful to the eyes; use with caution. For additional safety, plug the attached dust caps into the optical transceivers when the fiber optic cable is unplugged. Direct viewing into optical connectors should be avoided at all times!

WARNING !