

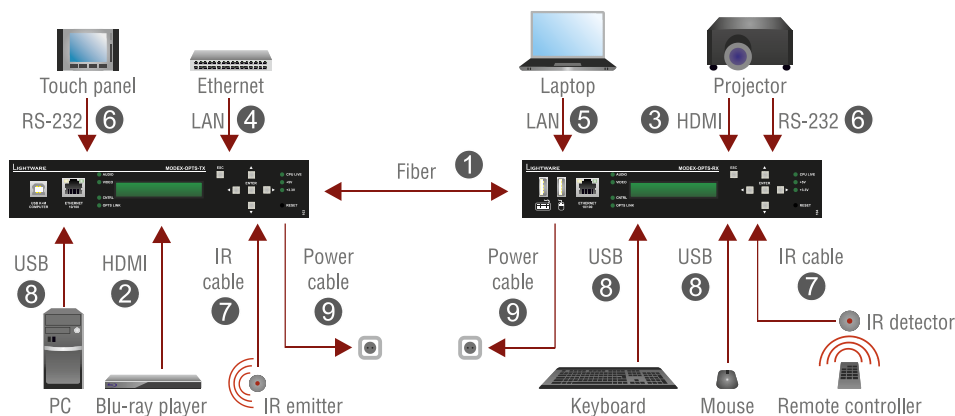
Introduction

Thank you for choosing MODEX, Lightware's Modular Extender family. The MODEX family is a hybrid, modular and multi-layer group of extenders supporting AV and broadcast industry's formats. Capable of extending digital and analog audio and video, USB KVM, Ethernet and control signals like RS-232, RS-422 or Infrared.

Front and rear view (transmitter)



Installation



Connecting steps

1. Connect the transmitter and the receiver by a multi- or single mode fiber cable. Connect channel A on transmitter to channel B on receiver.
2. Connect a DVI or HDMI source to the transmitter's DVI or HDMI INPUT connector.
3. Connect a DVI or HDMI sink (e.g. projector) to the receiver's DVI or HDMI output.
4. To control the extenders connect the transmitter or the receiver to Ethernet.
5. Optionally connect Ethernet devices to the available RJ45 connector(s) of the extender(s). All connected devices will work as if they are connected to the same network.
6. Optionally for RS-232 extension:
 - Connect a controller unit (e.g. Touch panel) to the RS-232 port of the transmitter with a null modem serial cable.
 - Connect a controlled device (e.g. Projector) to the RS-232 port of the receiver with a regular serial cable.
7. Optionally for Infra-Red extension:
 - Connect the supplied IR emitter to the IR OUT port of the transmitter or receiver.
 - Connect the supplied IR detector to the IR IN port of the transmitter or receiver.
8. Optionally for USB HID extension:
 - Connect a USB HID device to the receiver.
 - Connect the transmitter to the computer by the USB-B cable.
9. Power on the devices.

Video input selection

If the Audio & Video module contains more video connectors, the desired input can be selected via the front panel menu. Navigate to the Modules/Video/Settings/Input port submenu and press the enter button. The available video ports are listed, select the desired one and press the enter button.

Info: The input can be also selected by using the built-in web or sending an LW3 command.

Set static IP address

The IP address of the extender can be also set from the front panel. Firstly navigate to the Settings/Network settings/DHCP submenu and press the enter button. If the setting is Enabled change it to Disabled and press the enter button. Press the Escape button twice and apply the settings by the enter button.



Secondly navigate to the Settings/Network settings submenu, and select the IP address, Subnet mask, Static gateway options. Set the parameters by the front panel buttons according to your Network requirements. Press the Escape button twice and apply the settings by the enter button.

Set dynamic IP address

Navigate to the Settings/Network settings/DHCP submenu and press the enter button. Select the Enabled setting and press the enter button. Press the Escape button twice and apply the settings by the enter button.

```

◀ Network Settings
  DHCP
  ▶
    
```

Using the built-in website

The extender can be controlled via a simple web browser. Make sure that the device is connected to the same network as the control PC. Type the IP address of the MODEX into the address line of the browser.

Info: More information about the built-in web can be found in the User's manual of the MODEX.

Restart the device

Navigate to the Settings/System/Reset submenu and press the enter button. To restart the device, confirm your selection by pressing the enter button again.

```

◀ System
  Reset
  ▶
    
```

The other way is to press the hidden Reset button on the front panel by a thin tool (e.g. paperclip). The device is restarted immediately.

Restore factory default settings

Navigate to the Settings/System/Fact.defaults submenu and press the enter button. To restart the device, confirm your selection by pressing the enter button again.

```

◀ System
  Fact. defaults
  ▶
    
```

Firmware upgrade

MODEX can be upgraded by connecting a Windows PC via LAN and using Lightware Device Updater (LDU). The application can be downloaded from www.lightware.eu. In order to get the firmware pack with the necessary components (*.lfp file) for your specific product, please contact support@lightware.eu.

The upgrading steps:

1. Get the firmware pack and the Lightware Device Updater (LDU) application.
2. Install the LDU application.
3. Connect the computer to the MODEX device(s).
4. Start the LDU and follow the instructions shown on the screen.

Info: For more information about the process please refer to the User's manual of the MODEX.

Factory default settings

Parameter	Setting/Value
Network settings	
IP address (transmitter)	192.168.0.101
IP address (receiver)	192.168.0.102
Subnet mask	255.255.255.0
Static gateway	192.168.0.1
Port number	6107
DHCP	disabled
HTTP port	80
WEB socket	81
HDMI input port	
Input port	HDMI
HDMI output port	
HDMI mode	Auto
Color space	Auto
HDCP mode	Auto
Color range	Auto
Serial port (RS-232)	
RS-232 Baud rate [baud]	9600
RS-232 data bits	8
Stop bits	1
Parity	None
Infrared port	
IR input carrier frequency [Hz]	38000
IR output carrier frequency [Hz]	38000
Analog audio ports	
Application mode	(0) Analog ↔ Emb. & Ret. Aux
Analog in Gain [dB] (only on input)	0
Analog out Volume [dB]	0
Analog out Balance	50% (centered)
Invert phase	disabled
DC filter	disabled
EDID settings	
DVI port	D1 (dynamic)
HDMI port	D1 (dynamic)

Info: The User's manual of MODEX is available on <http://www.lightware.eu/modex>.