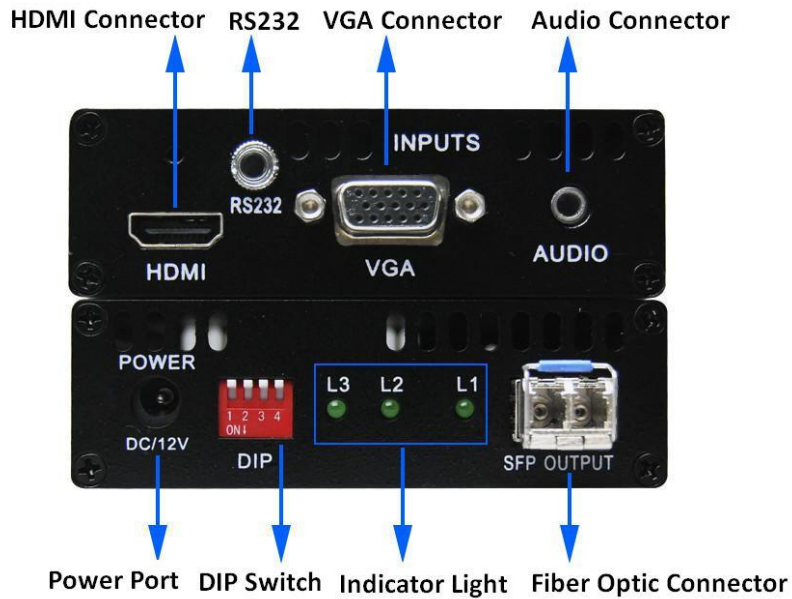# Fiber Optic Extender User Manual

Model: HD-F01-TX

1. I/O Connectors

Figure 1   HD-F01-TX Fiber Optic Transmitter I/O Connectors

2. Connection Introduction

Figure 2   HD-F01-TX Fiber Optic Transmitter Connection

Note:
➢   Please connect one single-mode optical fiber to the left port in the fiber optic connector.

➢ If HDMI transmission is needed, please connect HDMI cable to the HDMI connector; if VGA transmission is needed, please connect VGA cable to the VGA connector. Please note that HDMI and VGA can not be transmitted at the same time.

3. DIP Switch

Dial up is "OFF", the corresponding number is "1"; dial down is "ON", the corresponding number is "0". The DIP switch operating instructions as shown in Table 1.

Table 1   DIP switch operation instruction

DIP	Item	Description
Dial Switch 1	Function	Auto-correct switch when VGA input.
	Applying Condition	The HD-F01-TX is in service and the input mode is VGA.
	Operation	If the initial switch state is "ON", dial it to "OFF" first and then switch it to "ON" quickly (within 1s). If the initial switch state is "OFF", dial it to "ON" first and then switch it to "OFF" quickly (within 1s).
Dial Switch 2	Function	To select HDMI input audio mode.
	Applying Condition	Before applying power to the HD-F01-TX or during the service of the item.
	Operation	If the switch sate is "ON", analog audio will be selected as the input audio for HDMI video. If the switch sate is "OFF", HDMI audio will be selected as the input audio for HDMI video.
Dial Switch 3	Function	To select VGA input audio mode.
	Applying Condition	Before applying power to the HD-F01-TX or during the service of the item.
	Operation	If the switch sate is "ON", HDMI audio will be selected as the input audio for VGA. If the switch sate is "OFF", analog audio will be selected as the input audio for VGA.
Dial Switch 4	Function	To select VGA/HDMI input mode.
	Applying Condition	Before applying power to the HD-F01-TX or during the service of the item
	Operation	If the switch is "ON", VGA input is available. If the switch is "OFF", HDMI input is available.

Note: Input audio of signal source can be embedded through the serial port.

4. Indicator Light

Table 2　Indicator light and signal state

Light State	L1 on	L2 on	L3 flash
Description	HDMI Input	VGA Input	The HD-F01-TX works normally.

5. Supported Resolutions

The supported resolutions of HDMI/VGA transmission mode as shown in table 3 and table 4 respectively.

Table 3　Supported resolution of HDMI input

HDMI Input Mode		
800×600@60Hz	1024×768@60Hz	1280×720@60Hz
1280×768@60Hz	1280×800@60Hz	1280×960@60Hz
1280×1024@60Hz	1360×768@60Hz	1366×768@60Hz
1400×1050@60Hz	1440×900@60Hz	1600×900@60Hz
1600×1200@60Hz	1680×1050@60Hz	1920×1080@60Hz
1920×1200@60Hz	—	—

Table 4　Supported resolution of VGA input

VGA Input Mode		
800×600@60Hz	1024×768@60Hz	1280×720@60Hz
1280×768@60Hz	1280×800@60Hz	1280×960@ 60Hz
1280×1024@60Hz	1360×768@60Hz	1366×768@60Hz
1440×900@60Hz	1400×1050@60Hz	1600×900@60Hz
1600×1200@60Hz	1680×1050@60Hz	1920×1080@60Hz

6. Audio Input

Audio transmission is available in two modes as below:

(1) Analog audio input, which can be embedded with VGA or HDMI.

(2) HDMI digital audio input, which is transmitted by HDMI video synchronously. It can also be de-embedded from HDMI and embedded with VGA.

Note:

➢　Audio can not be transmitted separately.

➢　VGA/HDMI signal transmission without audio is available.

7. Applying Power

➢　First, please make sure that all the connection is fine.

➢　Second, make all the configuration completed according to your specific needs.

➢　Third, applying stable **12V/2A** power to both the transmitter and the receiver.
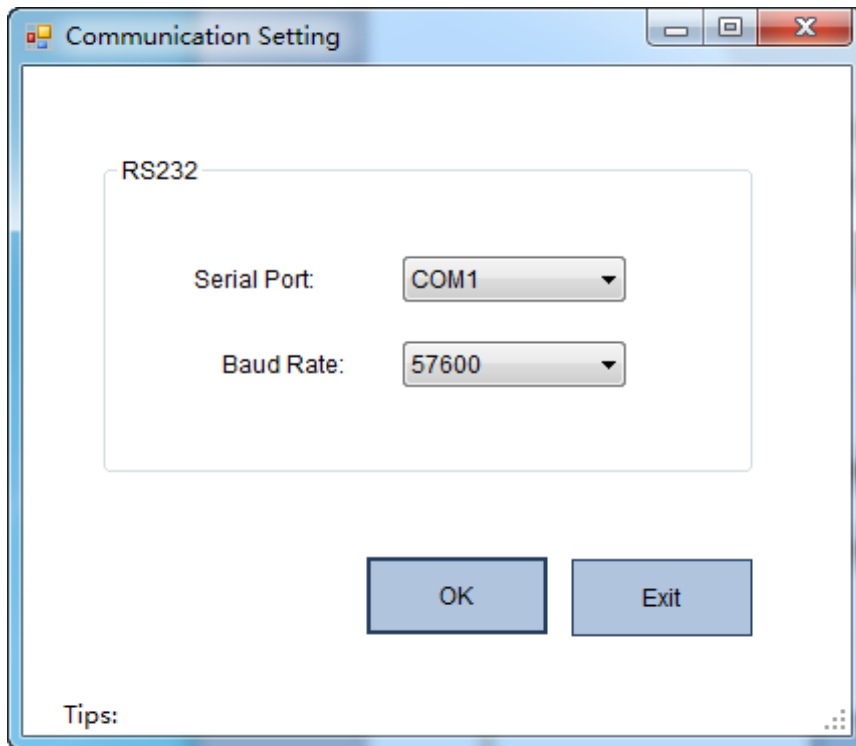
8. OSD Setting

Step 1: Connect the HD-F01-TX to the control computer by using serial cable that comes with the item. (The serial cable contains one 3.5 mm ear jack male connector and one DB9 pin female connector.)

Step 2: Put the CD into the control computer. Decompress the configuration tool folder that burned in the CD and install the tool. (You can also ask the technical specialist for the configuration tool folder.)

Step 3: Double-click the configuration tool will enter into the **Communication Setting** interface. Select the serial port and baud rate as shown in figure 3. After that, click the **OK** button.

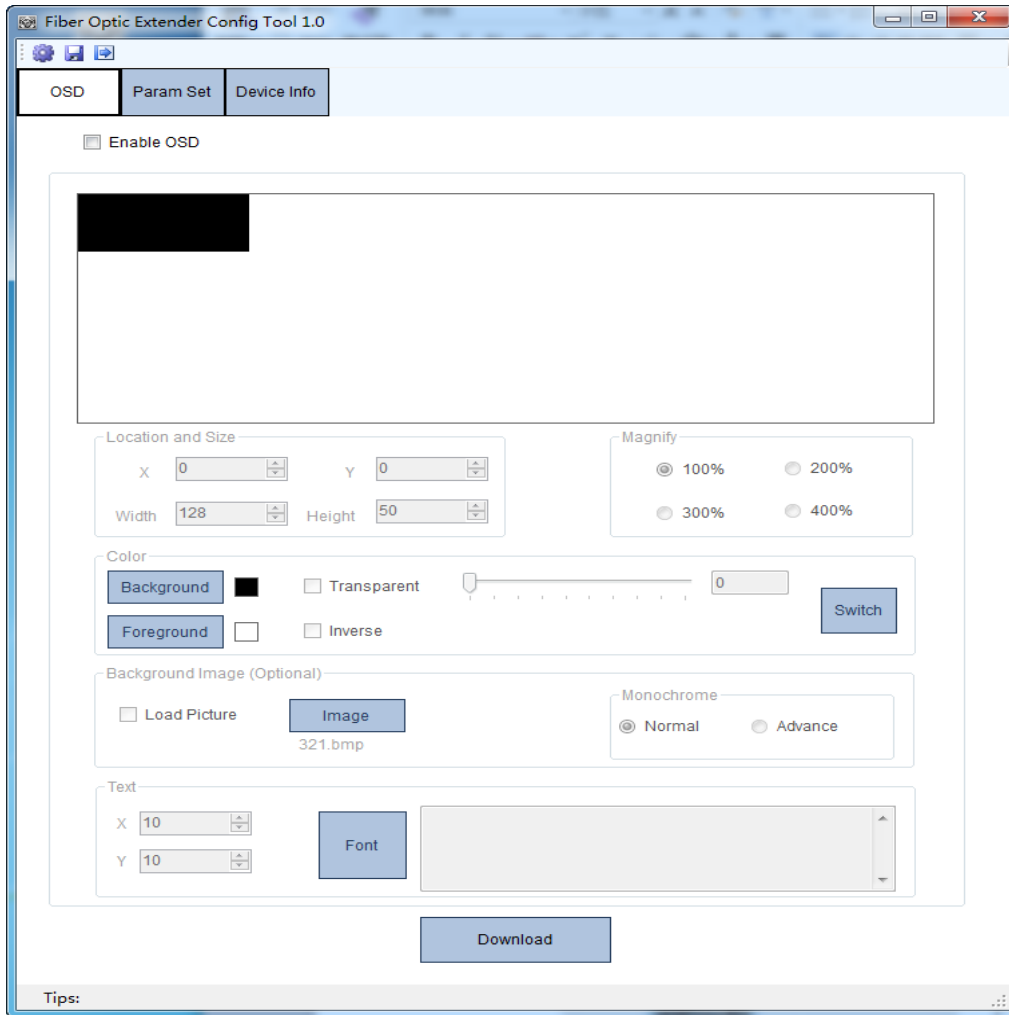Figure 3   Communication setting interface

Step 4: OSD setting main interface will show up after click the **OK** button in step 3. OSD setting is available in text and image mode.
- ➢ Image size is required to be less than 16K.
- ➢ Text should not exceed the software preview display.
- ➢ Image format is available in bmp, jpg and jpeg.
- ➢ Color setting is available in background and foreground.

Details as shown in figure 4.

Figure 4 OSD setting main interface

✓ **Image mode setting steps are as follows:**

Step 1: Click the checkbox which is in front of the **Enable OSD**.

Step 2: Set the background image according to your specific needs. Please note that this step is optional.
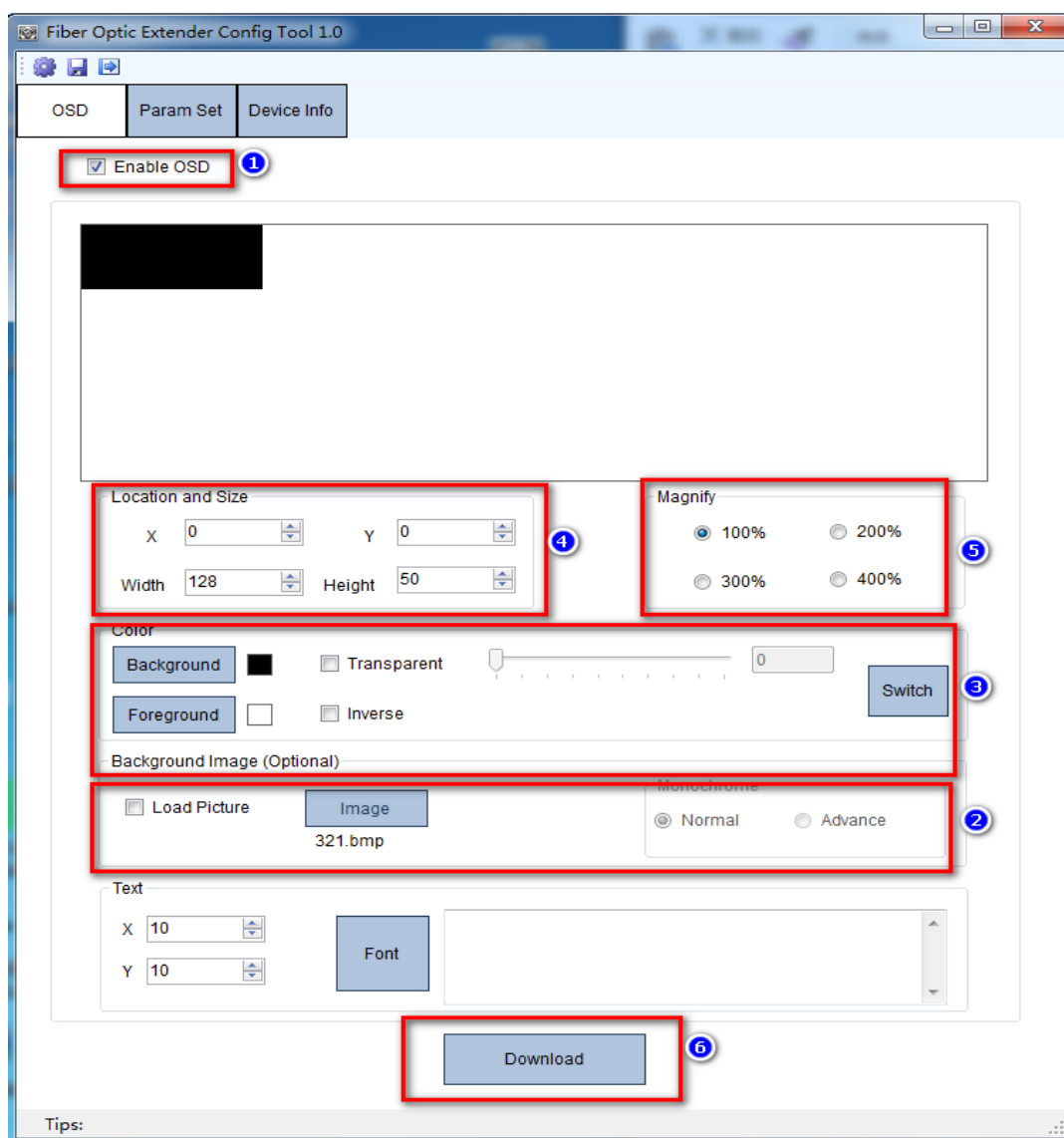
Step 3: Set the color of the image.

Step 4: Set the location and the size of image.

Step 5: Select the magnification.

Step 6: Click the **Download** button and the setting will come into effect immediately.

Details as shown in figure 5.

Figure 5   Image mode setting steps

✓ **Text mode setting steps are as follows:**

Step 1: Click the checkbox which is in front of the **Enable OSD**.

Step 2: Design the text content according to your needs.
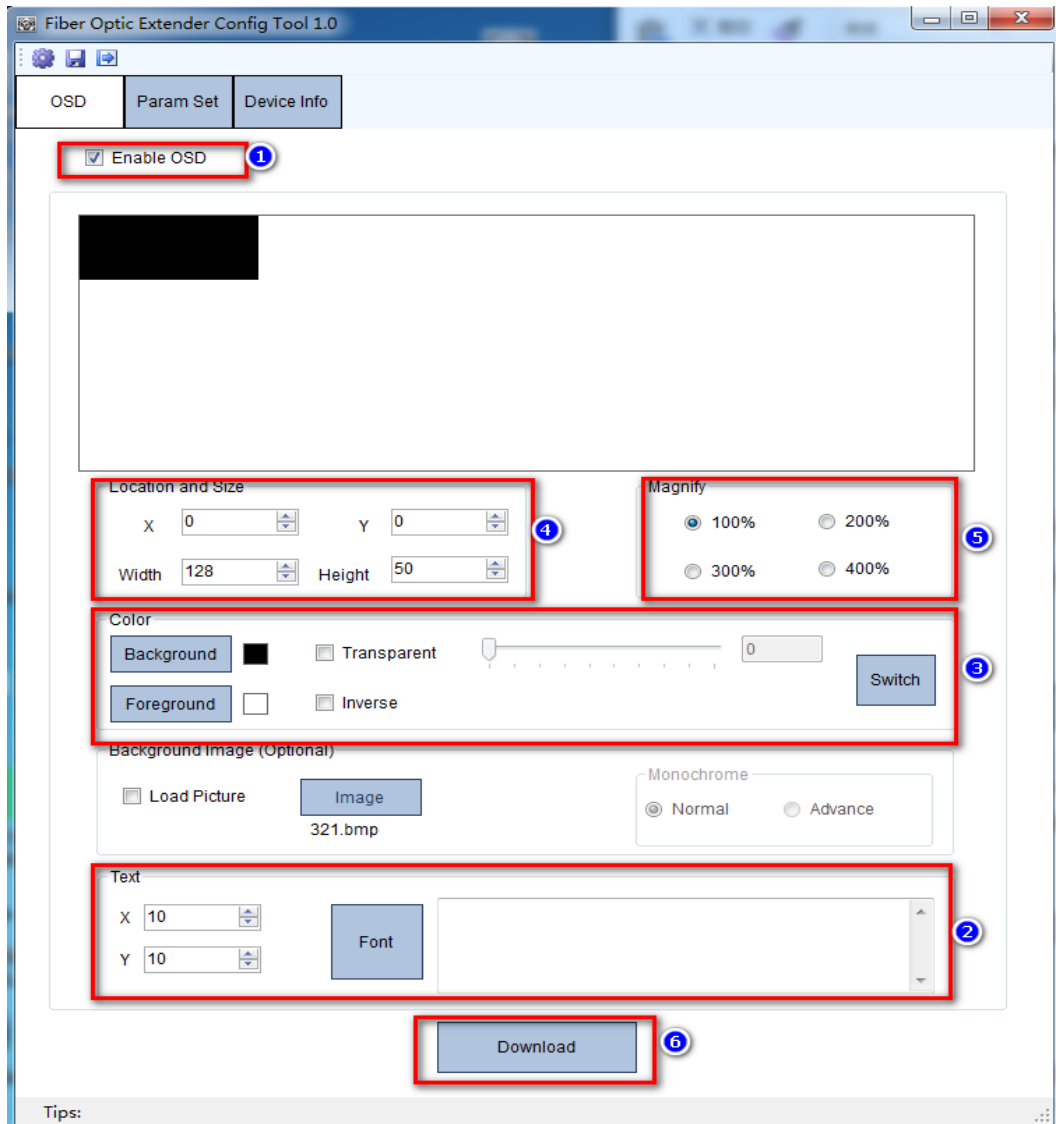
Step 3: Set the color of text.

Step 4: Set the location and the size of image.

Step 5: Select the magnification.

Step 6: Click the **Download** button and the setting will come into effect immediately.

Details as shown in figure 6.
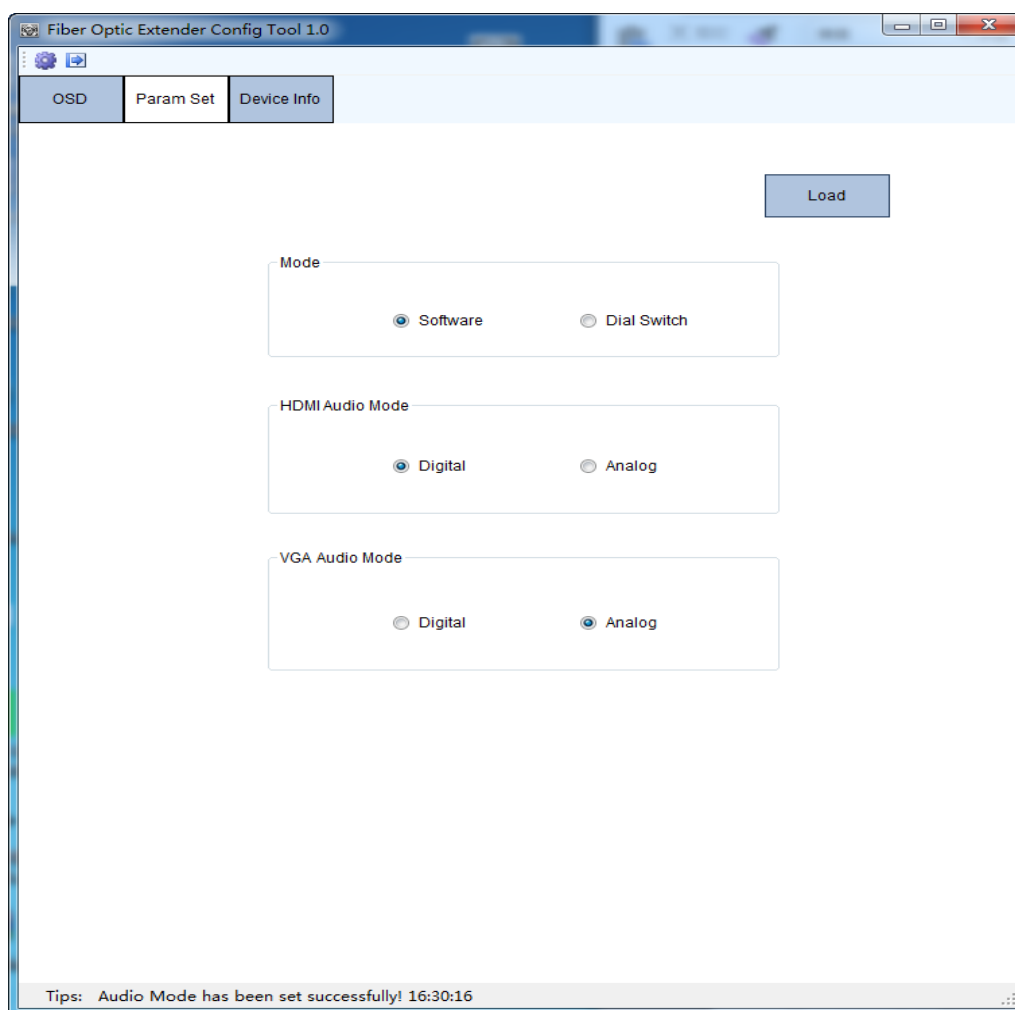
Figure 6   Text mode setting steps

Note: If OSD setting is not required, please uncheck the option which is in front of the **Enable OSD**.

9. Parameter Setting

Parameter setting of the HD-F01-TX can help user select the control mode as well as the audio input mode according to their actual application requirements. Details as shown in figure 7 below.

Figure 7　Parameter setting interface

Note:

➢ If you would like to check the current sate of the item, please click the **Load** button.

➢ If the control mode is **Dial Switch**, the resolution of the item can be configured by DIP switch directly.

➢ Important OSD information can be saved to the local computer through the configuration tool.