

DVI-D-CatX/Fiber-KVM-Extender Single and DualHead

Service Setup Guide

<http://www.blackbox.com>

1. Service Setup

For most applications, you shouldn't need not to make any adjustments to set up your DVXi/LC KVM-Extender. Under some special circumstances it could be necessary to setup configuration specials.

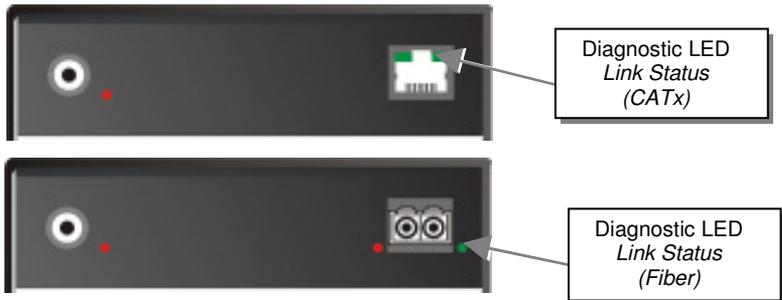
For some applications, you may need to open the Local Unit and/or the Remote Unit. Unscrew the Philips-type screws at both sides at the bottom of the device. Carefully displace the lower and upper shells of the case.



The diagnostic LED 'Video OK' is located at the local unit between the both DVI connectors



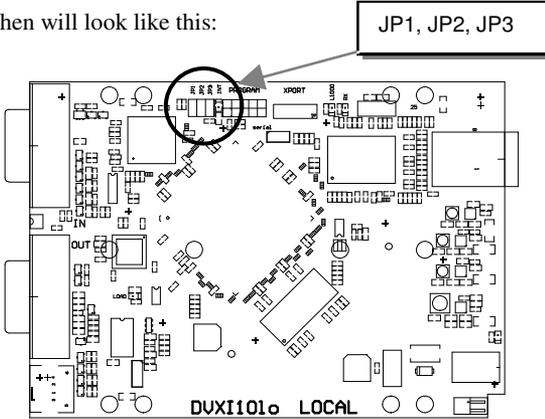
The diagnostic LED 'Video OK' is located near to the CATx- /fiber connectors



1.1 Setup at the Local Unit

After unscrewing and opening the upper shell, please place the device in this orientation: with the CATx/fiber connectors to the right and the electrical connectors to the left.

The main PCB then will look like this:



Use the diagram to locate jumpers.

DDC

You can select, whether the DDC is taken from internal DDC table or from local monitor or the DDC information could be downloaded from remote monitor and stored into internal table.

DDC	JP1	JP2	JP3
<i>From internal Table (default)</i>			
<i>From local Monitor</i>			
<i>Loading the DDC Information from the Remote Monitor into the internal DDC Table (see also below: Loading the DDC Information from the Remote Monitor into the internal DDC Table)</i>			
<i>Reset of the internal DDC Table to Default-Values (see also below: Reset of the internal DDC Table to Default-Values)</i>			

Loading the DDC Information from the Remote Monitor into the internal DDC Table

To load the DDC Information from the Remote Monitor into the internal DDC Table, please proceed the following steps:

- Switch off the Local Unit and the Remote Unit, unplug the Video-Cable to the Remote Monitor (Dualhead devices: BOTH Monitors!)
- Open the Local Unit like described above
- Unplug Jumper JP1 and plug it to Position JP3 (Dualhead devices: jumper setting on BOTH PCB's!)
- Switch on the Local and Remote Unit (Please ensure, the interconnect cable – CATx or fiber is connected - Dualhead devices: BOTH interconnect cables!)
- Wait until the LINK-LED is illuminated (see above)
- Plug the Video-Cable of the Remote Monitor into the remote unit (switch on the Monitor before plugging if switched off - Dualhead devices: BOTH Monitors!))
- The DDC Information of the Remote Monitors is read automatically, transferred to the Local Unit and stored into the DDC-EPROM
- After a successful programming of the DDC EPROM, the ,Video-OK' LED at the Local Unit is blinking rapidly for approx. 1 second
- Switch off the Local Unit and the Remote Unit
- Unplug Jumper JP3 and plug it to Position JP1 (Dualhead devices: jumper setting on BOTH PCB's!)
- Close the Local Unit like described above
- Switch on the Local Unit and the Remote Unit
- Done

Reset of the internal DDC Table to Default-Values

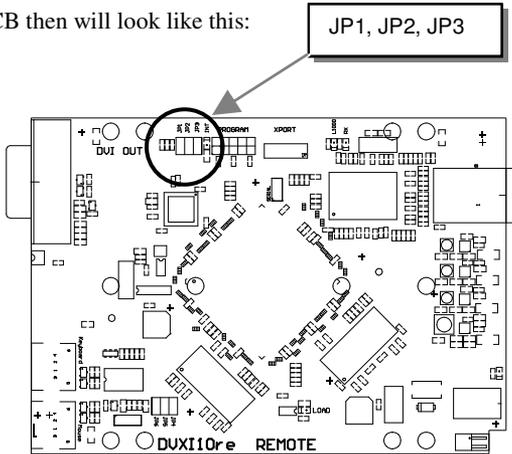
If you have loaded several DDC Configurations and got no satisfying result, you can restore the original (default) DDC Table. To do this, please proceed the followin steps:

- Switch off the Local Unit
- Open the Local Unit like described above
- Unplug Jumper JP1 (all Jumpers JP1, JP2 and JP3 are now open - Dualhead devices: jumper setting on BOTH PCB's!)
- Switch on the Local Unit
- After a successful reprogramming of the DDC EPROM, the ,Video-OK' LED at the Local Unit is blinking rapidly for approx. 1 second
- Switch off the Local Unit
- Replug Jumper JP1 (Dualhead devices: jumper setting on BOTH PCB's!)
- Close the Local Unit like described above
- Switch on the Local Unit
- Done

1.2 Setup at the Remote Unit

After unscrewing and opening the upper shell, please place the device in this orientation: with the CATx connectors to the right and the electrical connectors to the left.

The main PCB then will look like this:



Use the diagram to locate jumpers.

Selecting the moment of switching to the next frame

The transmission of screen data is not synchronous to the screen change of the graphic card. Normally, the transmission is terminated during displaying a frame on the screen. If the device switches to the new frame during the displaying period of the old frame (somewhere on the screen), it's possible, that you can see horizontal screen breaks in the moment of switching. On the other hand the device must idle, until the actual frame is displayed completely (until VSYNC) -> the number of frames per second transmitted sinks.

Moment to switch	JP3	behaviour
<i>Switching during HSYNC (default)</i>		Higher framerate but (possibly) horizontal breaks detectable
<i>Switching during VSYNC</i>		Lower framerate no horizontal breaks detectable but (possibly) stepping pictures