CNV-DMXR Tool User Manual

Version 3.0

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Specifications are subject to changes without notice.

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Purpose

• To allow users to set the DMX address, and change the dimming curve of the CNV-DMXR without the use of a DMX RDM master.

Required Materials

- UTEK UT890
- CNV-DMXR
- PC (win XP, win 7 Microsoft .NET Framework 4.0) with CNV-DMXR Tool installed

Wiring Diagram

A wiring diagram for connections required to program the CNV-DMXR can be seen below in Figure 1.



Figure 1: Wiring Diagram

Instructions

- 1. Connect CNV-DMXR to the UTEK UT890
 - a. CNV-DMXR Data+ to UT890 T/R+
 - b. CNV-DMXR Data- to UT890 T/R-

*Note: Only one set of the CNV-DMXR DMX leads needs to be connected to the UT890. Either set can be used.

- 2. Connect CNV-DMXR to 12 VDC
 - a. Dim- to 12VDC- of DC source or Inventronics Controls Ready driver
 - b. Vaux to 12VDC+ of DC source or Inventronics Controls Ready driver
 - Note: CNV-DMXR will not consume more than 200mA
- 3. Open DMXR Tool

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Software Installation

Install the USB driver and serial port driver library

- 1. extract the file USB_MCom.rar
- 2. run USB_MCom.exe
- 3. Enter the installation interface, click on the next step, and then click Finish

	USB_MCo m.exe	USB_MCo m.rar		
▶ C:\FT20828\CDMUninstaller.exe Search concluded after finding no resu Deleting INF Files SearchingC: Windows \inf \oen4. inf SearchingC: Windows \inf \oen1. inf SearchingC: Windows \inf \oen11. inf SearchingC: Windows \inf \oen13. inf SearchingC: Windows \inf \oen13. inf SearchingC: Windows \inf \oen13. inf SearchingC: Windows \inf \oen14. inf SearchingC: Windows \inf \oen15. inf SearchingC: Windows \inf \oen16. inf Found FIDI data in C: Windows \inf \oen16. inf Poputil.exe /f /d oen16. infMicrosoft F	ilts matching VID_ 6.inf hp 工具	9403 and PID_6001.	9 0403 6001	
		MsComm_Ver:6.1.98.16(Com255 supp	ported); FTDI_Ver:2.08.28	e Cancel

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ST USB_MCom.exe	2014/5/8	10:32	立用程序	1,547 KB	
	JUSB_MCom 0.10.0.1	Setup: Insta	alling		
Davies Drives Installation Wie					
Device Driver Installation Wiza	ard				S
	Completing the De Installation Wizard	vice Driv I	ver		
	The drivers were successfully installed on this computer.				
	You can now connect your device to this computer. If your device came with instructions, please read them first.				
	Driver Name	Status			
	 FTDI CDM Driver Packa FTDI CDM Driver Packa 	Ready to use Ready to use)	Close	Cancel
	<上−歩(₿)	完成			

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User Interface

Port Selection

The CNV-DMXR Tool will automatically detect if a UT890 is connected to the PC via USB on program startup. The port being used will be displayed in the upper right corner. If no port is shown, see the Troubleshooting section below. The port selection portion can be seen in Figure 2 below.

CNV-DMXR Tool V3.0.0.2		X
CNV-DMX	INVENTRONICS Port COM5 、中文	
Dimming Curve Linear Curve Logarithmic Curve Read Settings Write Settings	Power On Level Enable 255 Loss of Data Level Enable 255	DMX512 Address 1 Read Address 0x001 Write Address
Dimming Value Test — Press F1 for help		255 Dimming Copyright(c) Inventronics,Inc.

Figure 2: Port Selection

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Indicator Box

The indicator will either show as "Red" or "Green." "Red" means that a read or write was not successful, and "Green" indicates a successful read or write. When the software is opened, the indicator box will show as "Green."

The indicator box can be seen highlighted in Figure 3.

CNV-DMXR Tool V3.0.0.2	_	X
CNV-DMX	INVENTR③NICS Port COM5 • 中文	
Dimming Curve	Power On Level	DMX512 Address
 Linear Curve Logarithmic Curve 	Enable 255	1 Read Address
	Loss of Data Level	0x001
Read Settings Write Settings	Enable 255	Write Address
Dimming Value Test		
Θ		Dimming
Press F1 for help		Copyright(c) Inventronics,Inc.

Figure 3: Indicator Box

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DMX512 Address

To view the current programmed address of the CNV-DMXR, press the "Read Address" button. If the read address function is successful, the indicator will turn green, and the address will change. The default address of the CNV-DMXR is "2."

To write a new address to the CNV-DMXR, type in the desired address in the text box, and click "Write Address." DMX address must be in the range of 1 to 512.

The DMX512 Address programming box can be seen below in Figure 4.

CNV-DMXR Tool V3.0.0.2	_	X
CNV-DMX	INVENTR③NICS Port COM5 • 中文	
Dimming Curve Linear Curve Logarithmic Curve Read Settings Write Settings	Power On Level Enable 255 Loss of Data Level Enable 255 Enable 255 Power On Level	DMX512 Address 1 Read Address 0x001 Write Address
Dimming Value Test — Press F1 for help		Dimming Copyright(c) Inventronics,Inc.

Figure 4: DMX512 Address programming section

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Parameters Setting

(1) The CNV-DMXR allows for 2 different dimming curves to be selected. These dimming curves are "Linear" and "Logarithmic." Only one dimming curve can be selected at a time. The default dimming curve is "Linear."

(2) \checkmark After an external power cycle, the CNV-DMXR shall activate the power on level (range of validity : 0 - 255), if the Power On Level function is enabled. If it is not set, the default level is 0.

(3) When encountering a loss of data condition, the CNV-DMXR shall remain in an operating condition for at least 60 seconds, awaiting resumption of the DMX512 signal, after that, if devices are still in the loss signal condition, then activate the loss of data level (range of validity : 0 - 255), if the Loss of Data Level function is enabled. If it is not set, the CNV-DMXR remain in the previous level.

To view the current parameters settings, click on "Read Settings." To change the parameters settings, select the desired parameters, and then click "Write Settings." A successful read or write to the parameters settings will result in a green light. If an issue is present, the indicator box will show red. The dimming curve section can be seen in Figure 5 below.

CNV-DMXR Tool V3.0.0.2	_	X
CNV-DMX	INVENTR③NICS Port COM5 • 中文	
Dimming Curve	Power On Level	DMX512 Address
 Linear Curve Logarithmic Curve 	Enable 255	1 🚊 Read Address
	Loss of Data Level	0x001
Read Settings Write Settings	Enable 255	Write Address
Dimming Value Test		
Θ		• 255 Dimming
Press F1 for help		Copyright(c) Inventronics,Inc.

Figure 5: Dimming Curve section

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Dimming Value Test

The dimming value test allows for quick testing of DMX networks. To use this function, put the desired test address in the address box, and then select the desired dimming value. To send the dimming value, click on the "Dimming" button. The "Dimming Value Test" function is meant for troubleshooting and development. Inventronics also recommends testing with a standard DMX controller, as the CNV-DMXR tool only broadcast one command at a time, while standard DMX controllers are constantly broadcasting data. The Dimming Value Test box can be seen in Figure 6 below.

CNV-DMXR Tool V3.0.0.2	_	X
CNV-DMX	INVENTR③NICS Port COM5 • 中文	
Dimming Curve Linear Curve Logarithmic Curve Read Settings Write Settings	Power On Level Enable 255 Loss of Data Level Enable 255	DMX512 Address 1 Read Address 0x001 Write Address
Dimming Value Test - Press F1 for help		Dimming Copyright(c) Inventronics,Inc.

Figure 6: Dimming Value Test

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Troubleshooting

No Port Shown

If no port is shown, the UT890 has not been detected. Follow the steps listed below:

- Exit the CNV-DMXR Software
- Check the USB connection from the PC to the UT890
- If no port is still detected after the software is restarted and connections are checked, ensure that the UT890 device driver has installed correctly.

Programming Error

If the programming is successful, the indicator box will change to green. If there is an issue, it will turn red. If programming is not successful, check the following

- Connection between CNV-DMXR and the UT890 (See Figure 1)
- Ensure that the CNV-DMXR is powered (12VDC, 200mA max)
- Check that the port field is populated

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Shortcut operation

To simplify the operation, CNV-DMXR tool provides several shortcuts. Press the "Alt" key to give a prompt.

- Read Address is R;
- Write Address is W;
- Dimming is D;
- Press F1 can read manual

CNV-DMXR Tool V3.0.0.2		X			
CNV-DM)	INVENTRONICS Port COM5 • 中文				
Dimming Curve	Power On Level	DMX512 Address			
 Linear Curve Logarithmic Curve 	Enable 255	1 Read Address			
	Loss of Data Level	0x00			
Read Settings Write Settings	Enable 255	<u>W</u> rite Address			
Dimming Value Test					
Θ		• 255 - Dimming			
Press F1 for help		Copyright(c) Inventronics,Inc.			