CNV-DMXR2 Tool User Manual

Content

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Purpose

- To allow users to set the DMX address, and change the dimming curve of the CNV-DMXR2 without the use of a DMX RDM master.

Required Materials

- UTEK UT890
- CNV-DMXR2
- PC (win XP, win 7 Microsoft .NET Framework 4.0)with CNV-DMXR2 Tool installed

Wiring Diagram

A wiring diagram for connections required to program the CNV-DMXR2 can be seen below in Figure 1.
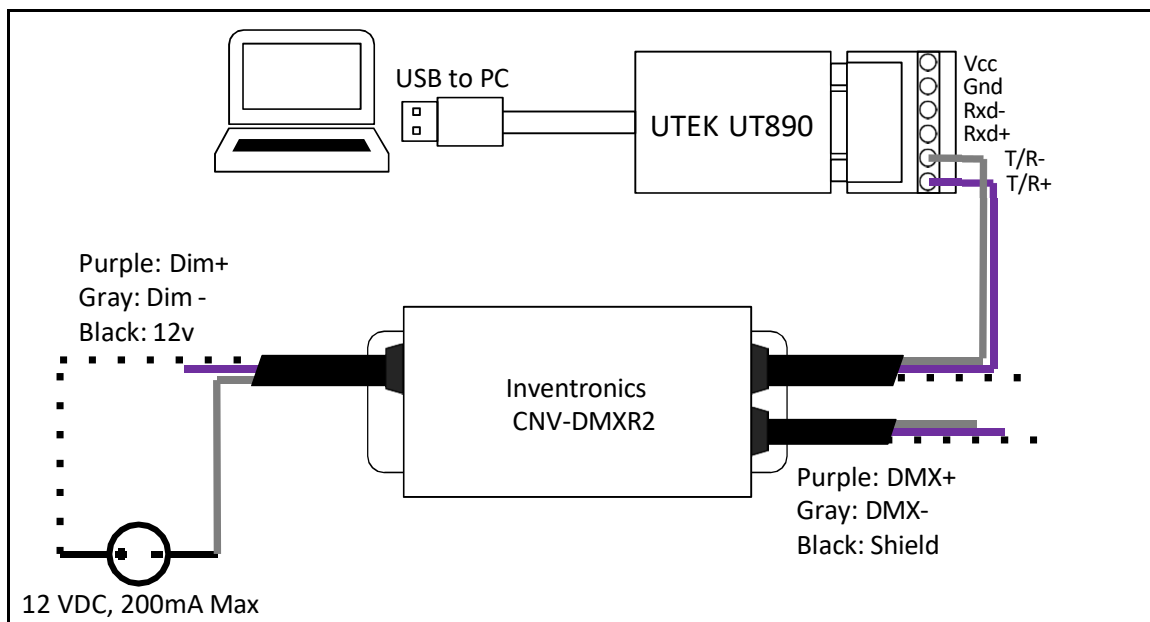

Figure 1: Wiring Diagram

Instructions

1. Connect CNV-DMXR2 to the UTEK UT890
   a. CNV-DMXR2 Data+ to UT890 T/R+
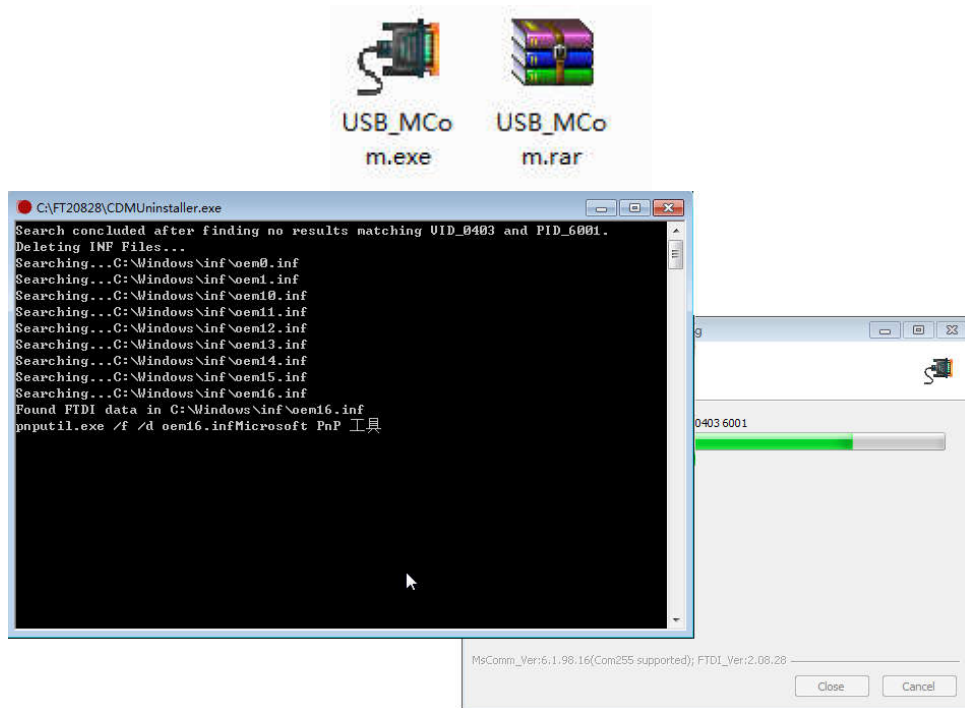   b. CNV-DMXR2 Data- to UT890 T/R-

   *Note: Only one set of the CNV-DMXR2 DMX leads needs to be connected to the UT890. Either set can be used.

2. Connect CNV-DMXR2 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-DMXR2 will not consume more than 200mA

3. Open DMXR2 Tool

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CNV-DMXR2 Tool User   *Version 3.0*

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

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User Interface

Port Selection

The CNV-DMXR2 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.
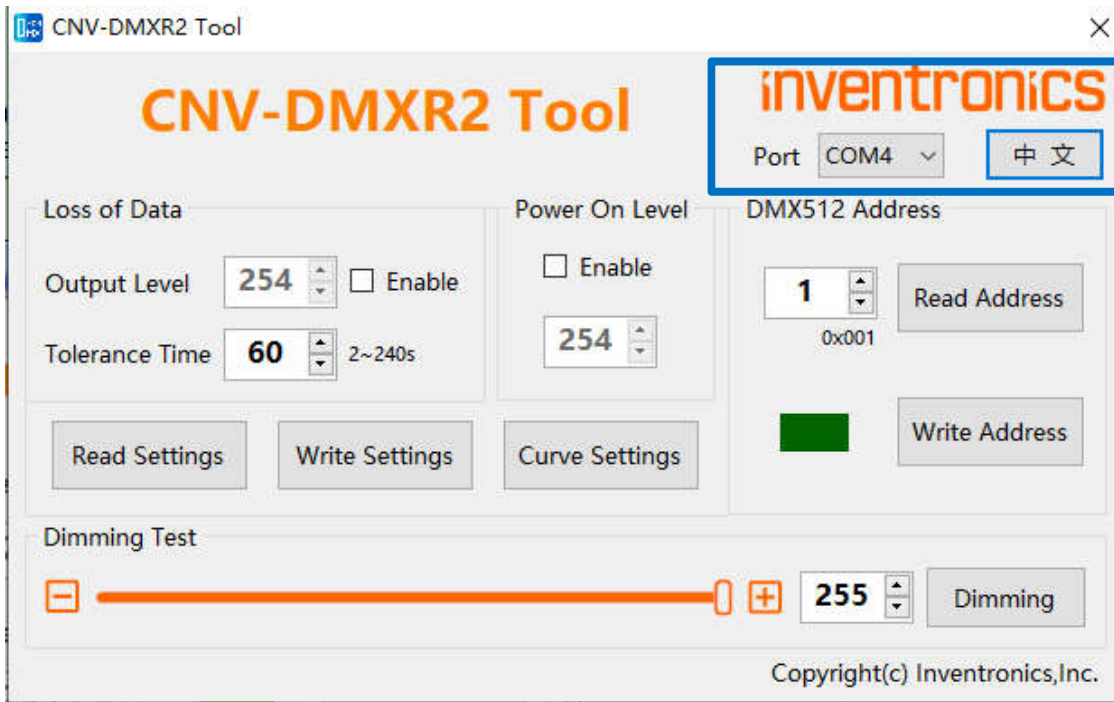

Figure 2: Port Selection

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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."

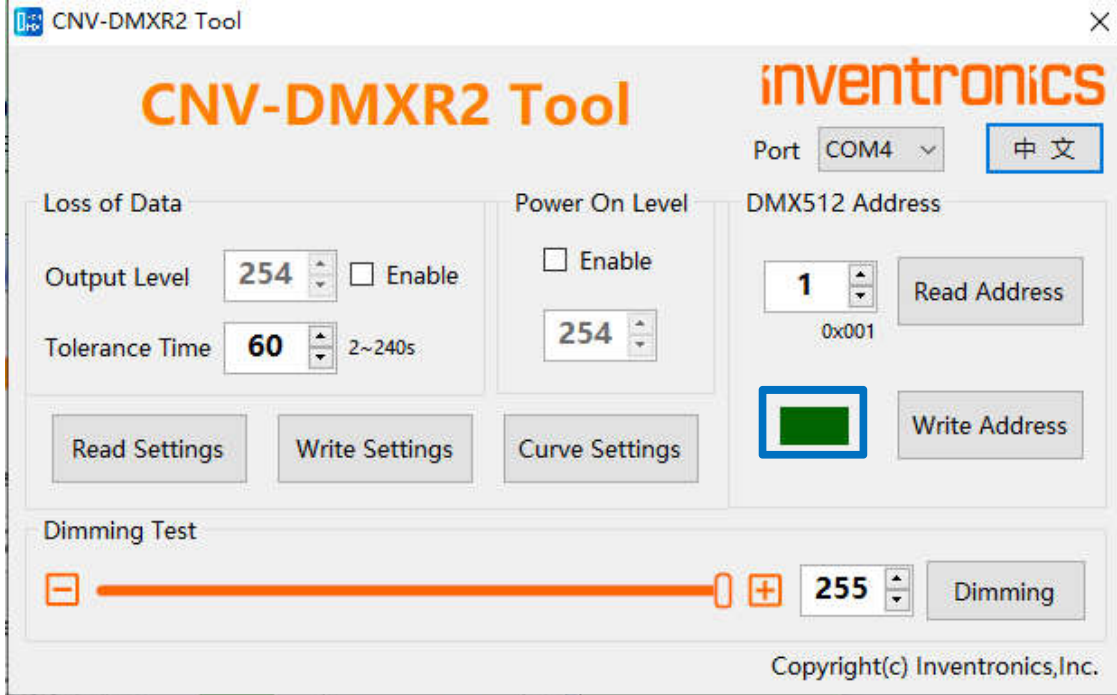The indicator box can be seen highlighted in Figure 3.

Figure 3: Indicator Box

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DMX512 Address

To view the current programmed address of the CNV-DMXR2, 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-DMXR2 is "2."

To write a new address to the CNV-DMXR2, type in the desired address in the text box, and click "Write Address." DMX address must be in the range of 1 to 512.

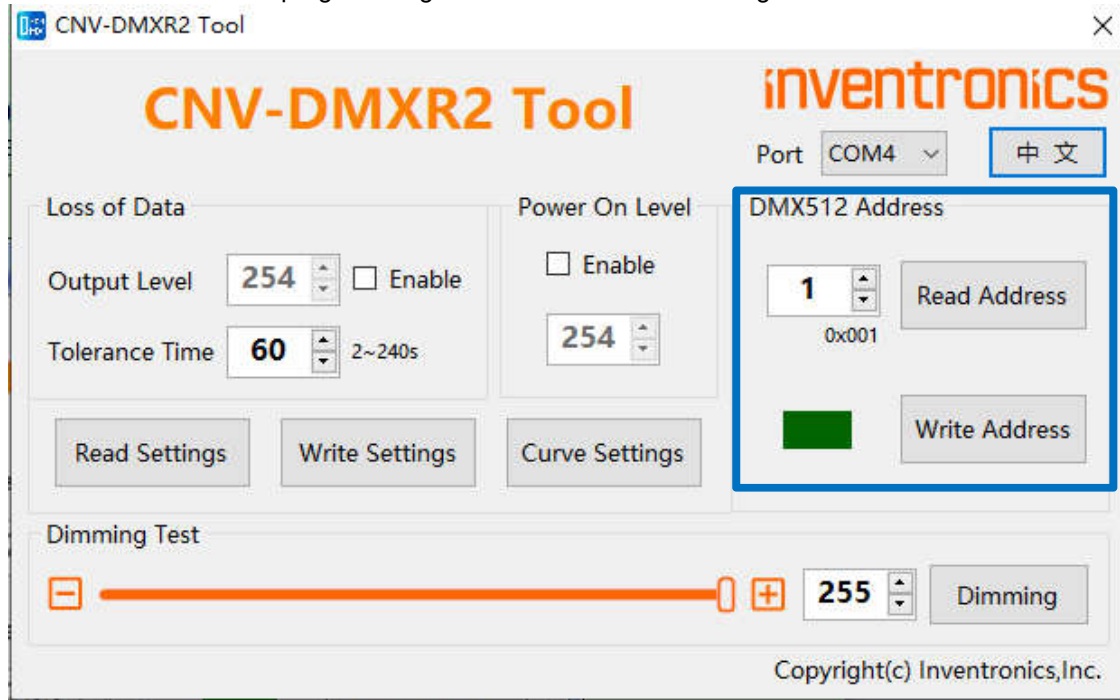The DMX512 Address programming box can be seen below in Figure 4.

Figure 4: DMX512 Address programming section

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Parameters Setting

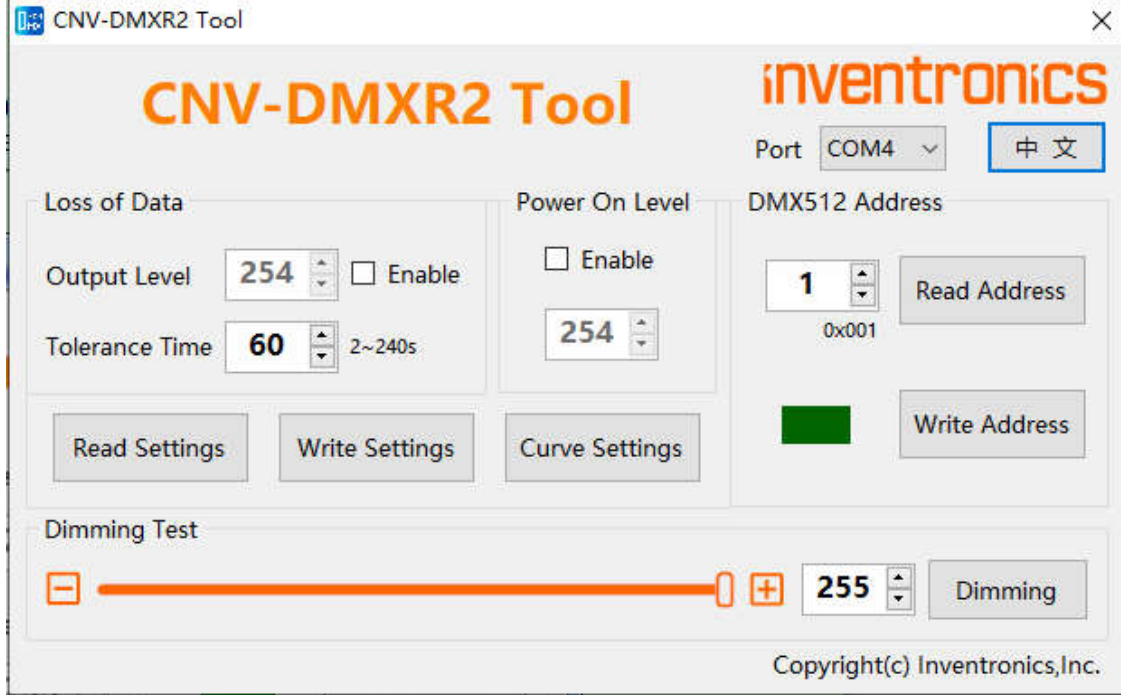The programming interface for overall parameters setting are illustrated as below

Figure 5: Parameters Setting Section

(1) Enter dimming curve setting by clicking "Curve Settings" button

The CNV-DMXR2 allows for two different dimming curves to be selected. These dimming curves are "Linear" and "Logarithmic" modes. There are more detailed parameters can be setting as shown in figure 6, which include output range ,dimming range and physical value for more flexible in real application.

Only one dimming curve can be selected at a time with default "Linear" mode.
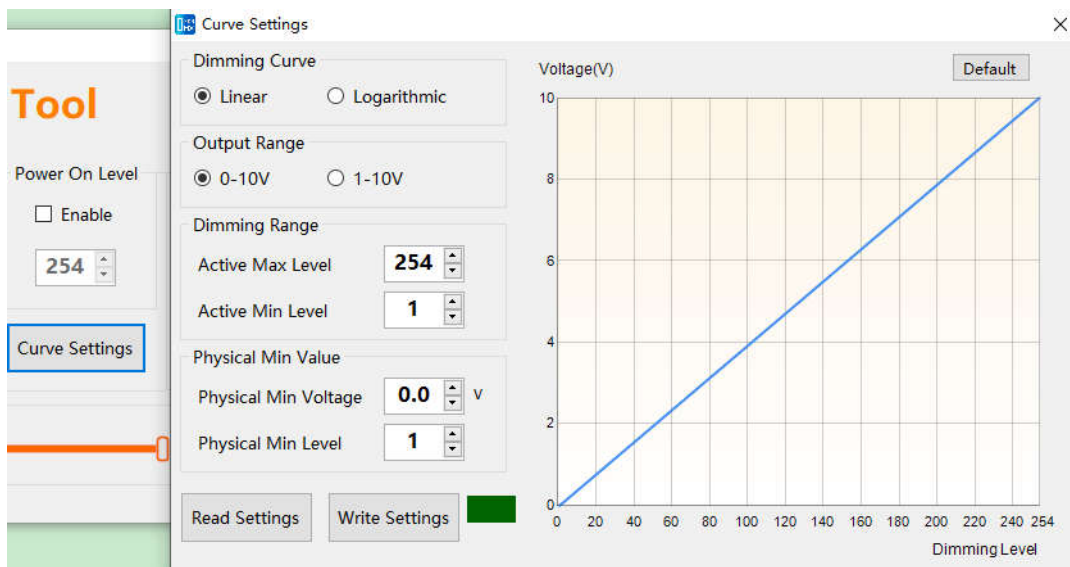

Figure 6: Dimming Curve Setting

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(1) After an external power cycle, the CNV-DMXR2 shall activate the power on level (range of validity : 0 - 255) , if the Power On Level function is enabled, the default level is 0. If it is not enabled, the default level is 254.
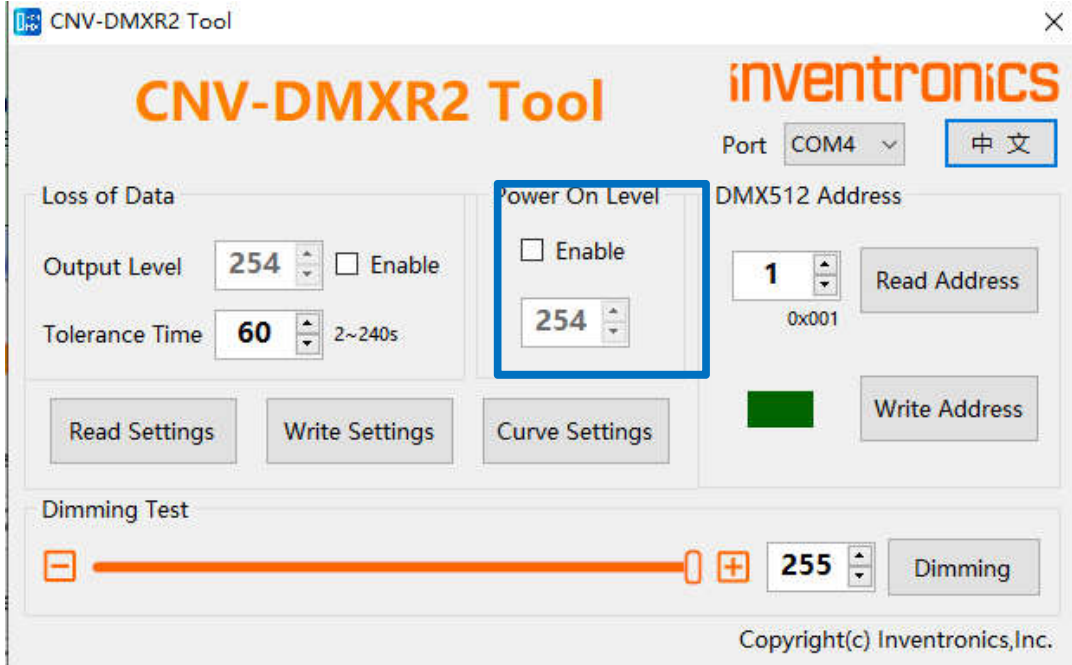
(2) When encountering a loss of data condition and under Loss of Data function enabled, the CNV-DMXR2 shall remain in an operating condition for setting duration time(range of validity :2 – 240s), awaiting resumption of the DMX512 signal, after that, if devices are still in the loss signal condition, then activate the loss of data level (range of validity : 0 - 255) . If it is not enabled, the CNV-DMXR2 remain in the previous level after signal loss conditions.
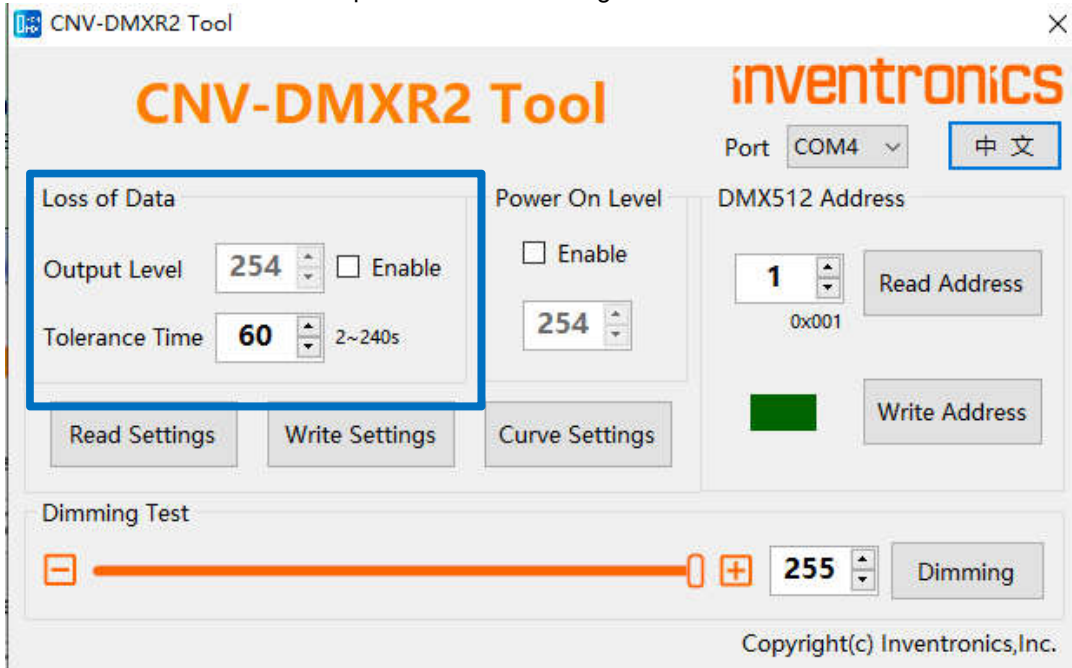
To view the current parameters settings, click on "Read Settings." To change the parameters settings, select the desired parameters, and then click "Write Settings." A successful read or write to the parameters settings will result in a green light. If an issue is present, the indicator box will show red.

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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-DMXR2 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.
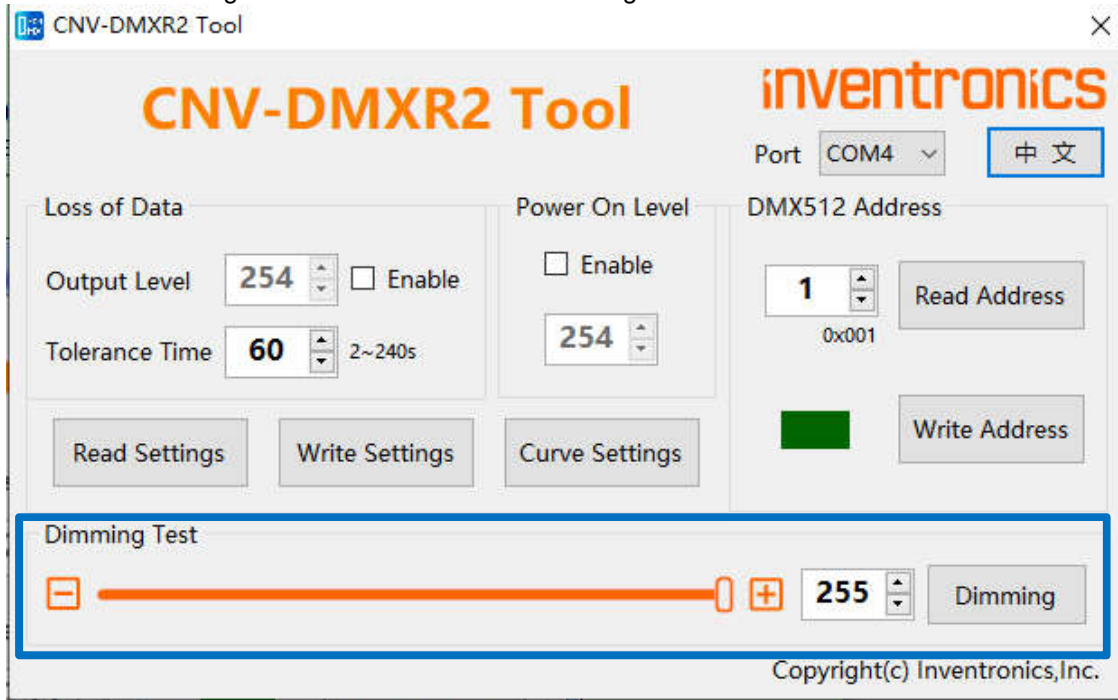

Figure 6: Dimming Value Test

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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-DMXR2 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-DMXR2 and the UT890 (See Figure 1)
- Ensure that the CNV-DMXR2 is powered (12VDC, 200mA max)
- Check that the port field is populated

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