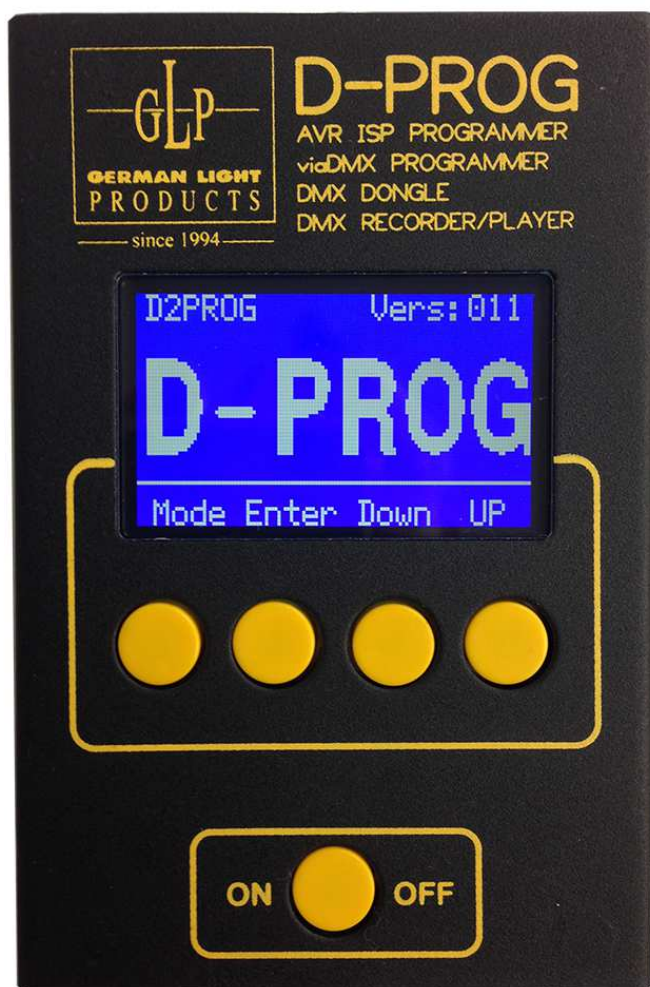


Instruction Manual

D-Prog Software Programmer Device



(version 1.0)



e-mail: support@glp.de
Internet: <http://www.glp.de>

Table of Contents

(version 1.0).....	1
1 What's in the Box:	3
2 Installing the PA Software for the D-Prog.....	5
3 Starting the D-Prog PA Software and Loading Hex Files.....	9
4 Uploading .HEX files to Fixtures.....	14
5 Uploading New Software to Fixtures via DMX port	18

1 What's in the Box:

- One D-Prog Software Programmer Device
- One USB plug in power adapter
- One USB cable
- 2 AA, 2,000mAh Re-Chargeable Batteries (installed)
- One DB-9 to AVR/ISP cable
- One USB Memory Stick with Programmer software

The D-Prog must have 2 AA Alkaline batteries or 2 AA Re-Chargeable 2,000mAh batteries to operate. If using re-chargeable batteries, the supplied USB power supply and cable will recharge the batteries internally if the jumper at JP1 is positioned to the left as show in fig.1

Fig.1



WARNING: JUMPER MUST BE SET TO RIGHT HAND POSTION IF ALKALINE BATTERIES ARE USED. CHARGING WITH ALKALINE BATTERIES WILL CAUSE BATTERY LEAKAGE AND DAMAGE THE D-PROG AND VOID THE WARRANTY!!!

The D-Prog is a hardware device that is used to update pcb software for the following fixtures via AVR/IPS function:

- impression 90 range fixtures
- impression RZ 120 fixtures
- impression 240/300 XL
- Volkslicht 60 and Volkslicht Zoom
- Impression X4 and X4S fixtures
- Volkslicht Spot

The D-Prog can also update X4, X4S, Volkslicht Spot and future fixtures via DMX.

This instruction manual will show how to install PCB software to the D-Prog and how to update fixture PCB's via the AVR/ISP function.

Updating software to the fixtures that are capable of DMX update feature will also be shown.



WHEN USING AVR/ISP METHOD OF UPDATING FOR PCB'S DO NOT UPLOAD THE WRONG SOFTWARE TO THE WRONG PCB. THIS WILL DAMAGE THE PCB

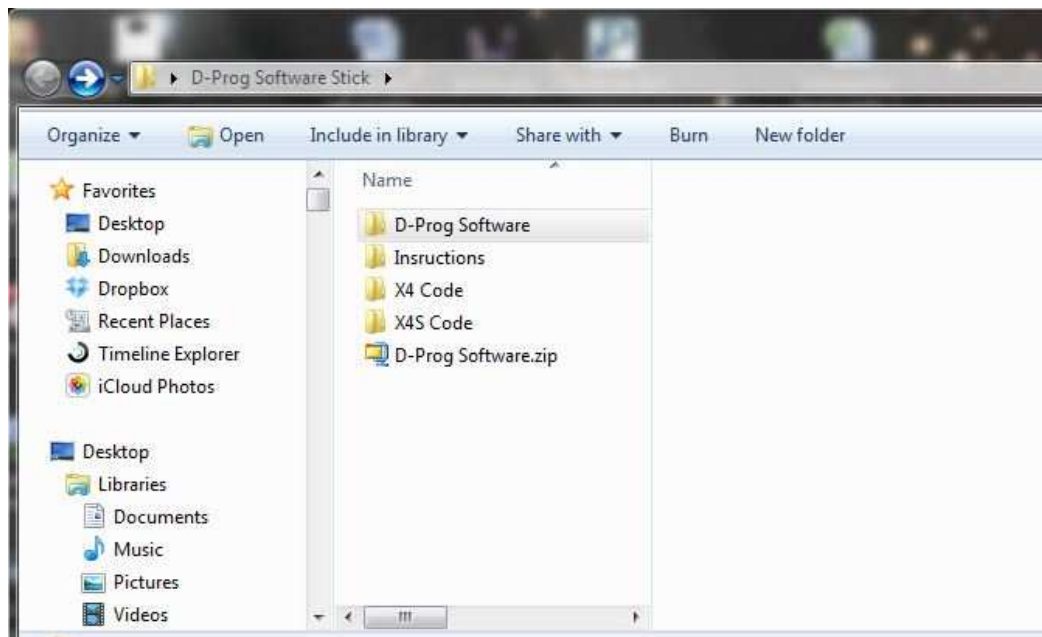
2 Installing the Programmer Update Software for the D-Prog on a computer

The current version of the Programmer Update Software is only compatible on PC's with WIN 7 or earlier versions

Copy the contents of the supplied USB Memory stick to a new folder on the Desktop of a Windows computer

Once transferred open the folder named D-Prog Software as shown in fig 2.

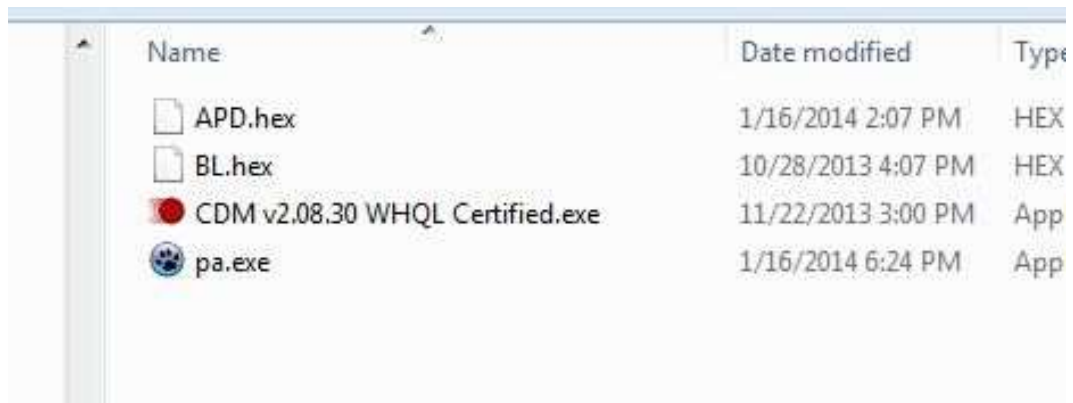
Fig. 2



Open the folder named D-Prog Software and locate the executable file named CDM v2.08.30 WHQL Certified.exe as shown in fig 3.

Doble click the executable.

Fig. 3



Name	Date modified	Type
APD.hex	1/16/2014 2:07 PM	HEX
BL.hex	10/28/2013 4:07 PM	HEX
CDM v2.08.30 WHQL Certified.exe	11/22/2013 3:00 PM	App
pa.exe	1/16/2014 6:24 PM	App

This will start the installation of the “FTDICHip CDM Drivers” These drivers allow the D-Prog Software to automatically select the appropriate COMM port for the D-Prog to utilize. The splash screen shown in fig 4 will be shown.

Fig. 4



Click the “Extract” button to start the installation of the driver package. A new Splash Screen as shown in fig 5 will appear.

Click the “Next” button to install the drivers. Once the install is completed, installation verification Splash Screen as shown in fig 6 will appear.

Fig. 5



Fig. 6



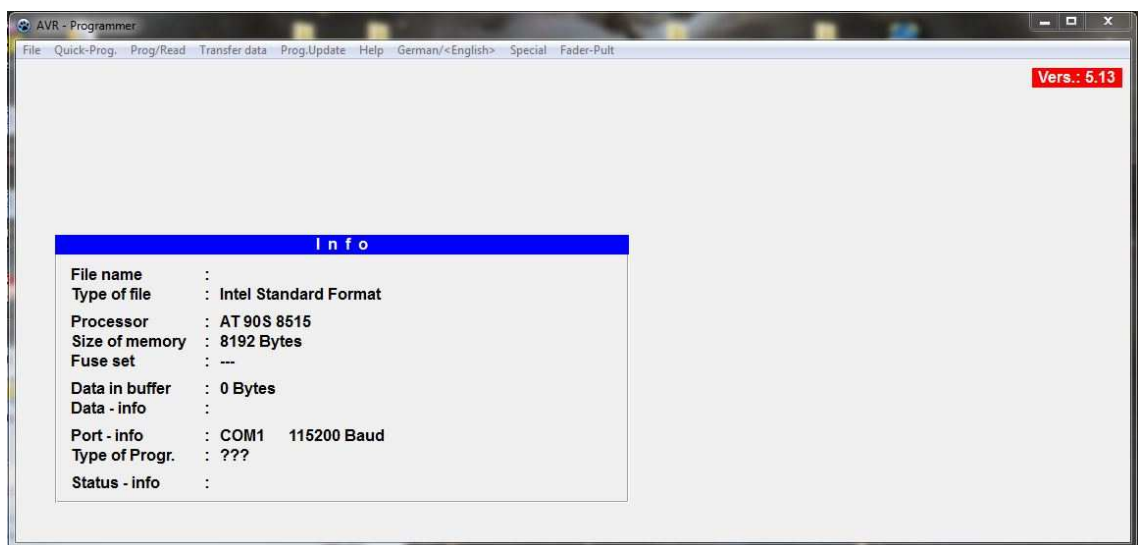
3 Starting the D-Prog PA Software and Loading Hex Files.

In the software folder that was created locate the “pa.exe” file as shown in fig 7 and open it. When the software has executed, you will see the “Programmer Software” as shown in fig 8.

Fig.7



Fig.8



Locate the “<German>/English” menu item to toggle between German and English languages. (Not all items will translate to full English)

Connect the supplied USB cable to the D-Prog and to an available USB port on the computer. Turn the D-Prog on by pressing the On/Off button.

In the “File” Menu select “Test Line” as shown in fig 9. If the software is properly communicating with the D-Prog, an information dialogue box will appear as shown in fig 10

Fig.9

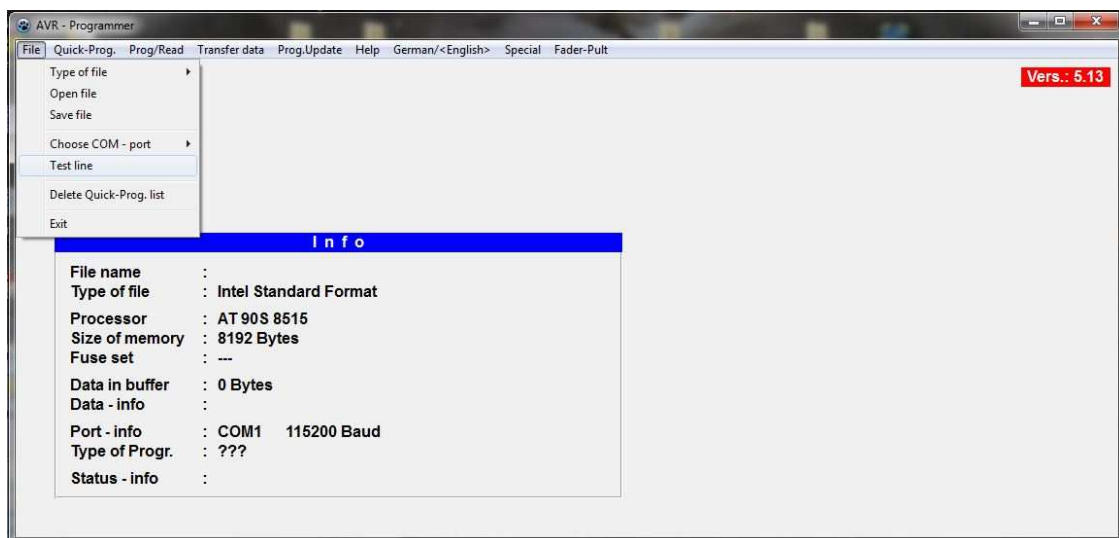
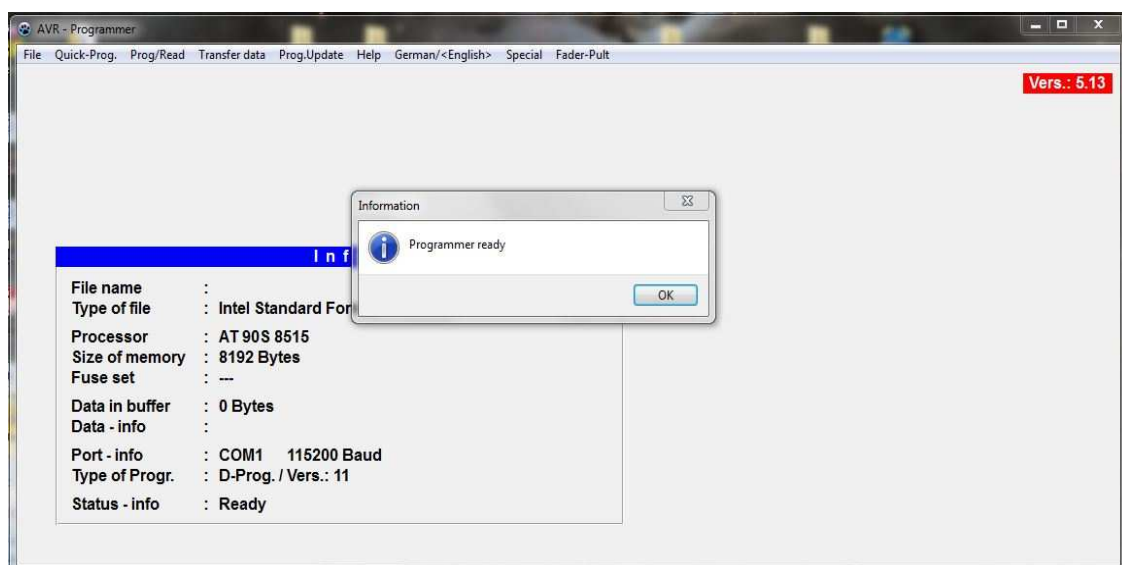
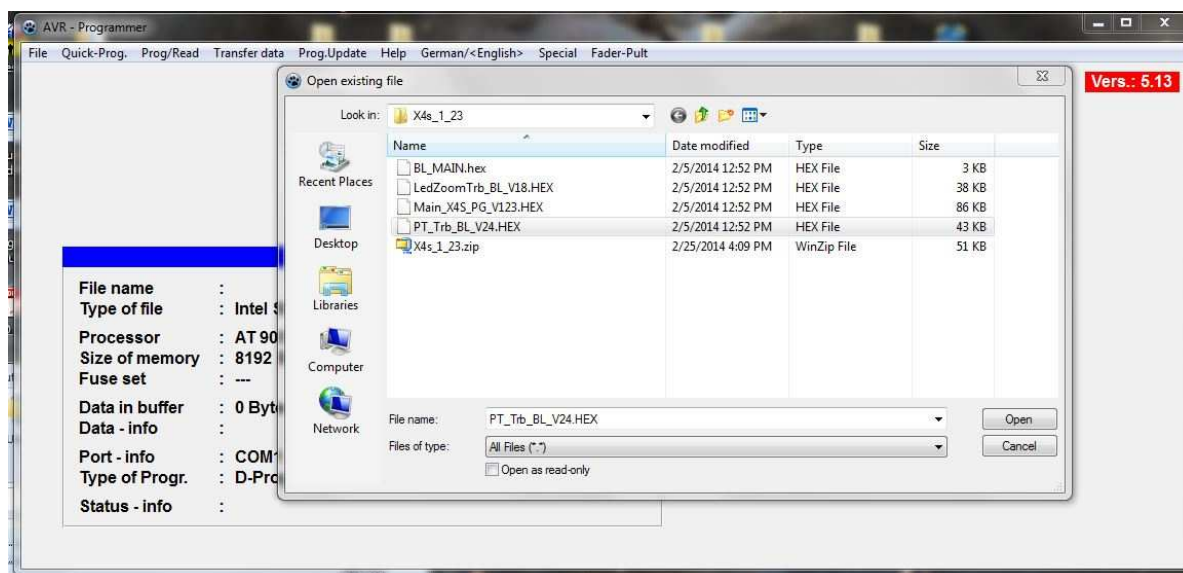


Fig.10



The next step is to open a *.hex file in the programmer window. Click on the “File” menu then “Open File” Look in the directory where the fixture software hex files are located, on the supplied memory stick and select the file you want to load onto the D-Prog as shown in fig 11.

Fig.11

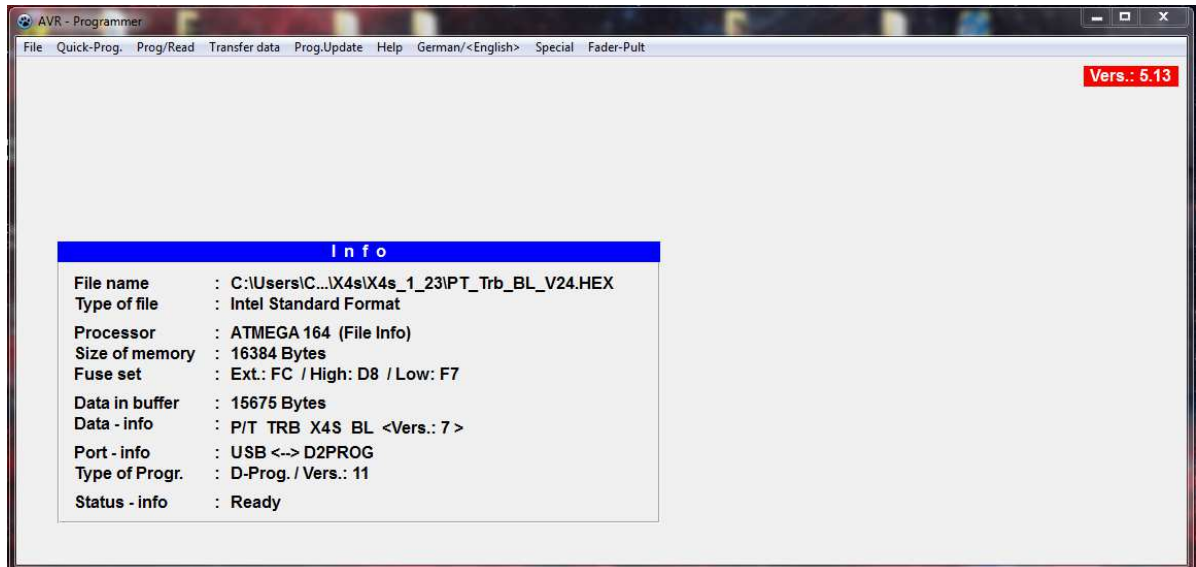


NOTE:

Always check for the latest versions of the software for the fixtures that are being updated. These files can be supplied from Technical Support at GLP or by via request from support@glp.de. The files that are supplied with the purchase of the D-Prog are the latest available at the time of shipping.

The file loaded in this example is the Pan and Tilt .hex file for the X4S fixture. The Programmer should look like fig 12

Fig.12

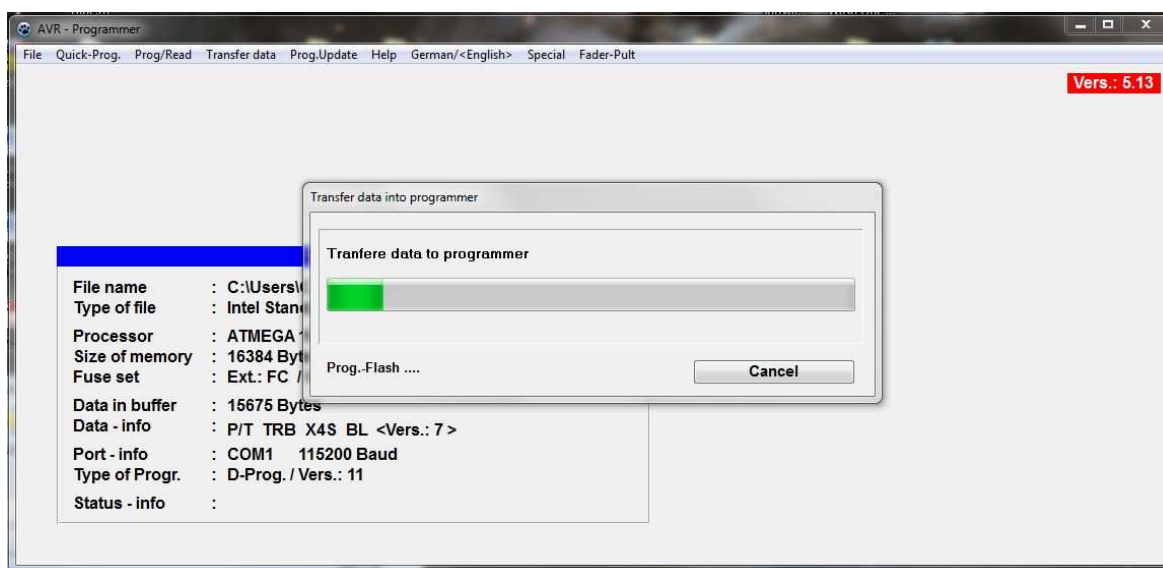


Next load the hex file into the D-Prog by selecting “Transfer Data”. A menu list will appear showing all the slots of the internal memories on the D-Prog as shown in fig 13. Clicking on “Load file list” will show any files that are already loaded into the D-Prog. Click on the “P.: * “ line that you want to upload the file to, and the transfer for the file will begin as shown in fig 14.

Fig.13



Fig.14



Continue the above process until you have loaded the entire list of files that are needed. During the process the D-Prog will show “PG-ONL” in the display as shown in fig 15.

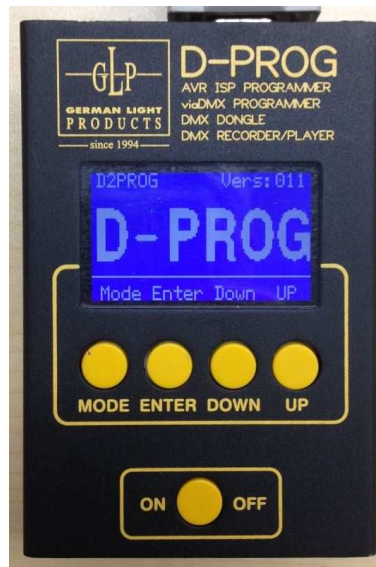
Fig.15



4 Uploading .HEX files to Fixtures

Connect the DB9 Serial Connector the D-Prog and turn the D-Prog on. The display on the D-Prog will be as shown in fig 16.

Fig.16



Press “Mode” one time and “Choose File” will be displayed as shown in fig 17.

Fig. 17



Press “Enter” then use the “Up” or “Down” buttons to select the file that is to be uploaded to the PCB as shown in fig. 18

Fig.18



Once the appropriate file has been selected press “Enter” then press the “Mode” button one time to “Choose File” menu, then use “Up” or “Down” button to scroll to “Program AVR/ISP” menu as shown is fig 19.

Fig.19



Connect the DB-9 Programmer connector to the connector on the PCB that is to be programmed as shown in the example in fig 20. If the connector is plugged to the PCB incorrectly, the D-Prog will turn off as a safety feature to prevent any damage to the PCB. Once the connection is made then press “Enter” to access Program Mode and start programming the PCB as shown in fig 21.

Fig.20

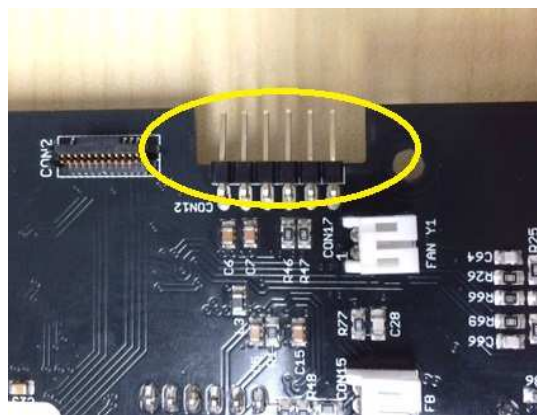


Fig.21



Once the programming has started the “Prog. Counter” will show the progress of the upload then the D-Prog will verify the upload by showing “Test” in the display as shown in fig 22.

Fig. 22



After the verification is completed, the D-Prog will display “OK” as shown in fig 23.

Fig.23



**DO NOT UPLOAD THE
WRONG SOFTWARE TO
THE WRONG PCB. THIS
WILL DAMAGE THE PCB**

5 Uploading New Software to Fixtures via DMX port

To update fixtures in a DMX Link using DMX the fixture will need to be powered up and there can be no more than 20 fixtures in the DMX Link at a time. They should also be of the same type. Fixtures that have already been updated via AVR/ISP that have the proper boot loader software in them can be updated using this method. The instruction sheets for each particular fixture type will note the latest version of software that must be installed to allow for this method.

Load the appropriate Main CPU file by selecting “Choose File” then “Up” or “Down” on the D-Prog as shown in fig 24, then press “Enter” to load that file.

Fig.24



Press “Mode” to return to the “Choose File” menu, then press “Up” or “Down” until “Program via DMX” menu appears as shown in fig 25, then press “Enter” The display will show the progress of the update as shown in fig 26.

Fig.25 & 26



The fixtures will pan and tilt to a 0/0 position and the displays will flash and flicker during the update process. Once completed, the fixtures will reset. During this reset, the Main CPU PCB will send update software to the remaining PCB's in the fixture. The Display will show “UPDATE” during this process.

If during this process of “UPDATE” the fixture encounters a PCB that does not have the proper boot loader version software in it, it will produce an “UP-ERR” and the fixture will have to have the proper software loaded to all PCB's via AVR/ISP method.

Once this is finished the fixtures will once again reset and then finalize to Home position and display the proper menu with the new software for all PCB's on the Home Menu Screen.

