

# Installing the Ampire UART TFT

Thank you for Purchasing this UART TFT Kit from IES.

The setup of the device is broken down into 4 stages which should be carried out IN THE FOLLOWING ORDER for correct operation of the UART TFT

1. Ampire UART Windows Driver
2. IDS UART Software
3. Setting up and Connecting the hardware
4. Enabling Software Communication

## 1 Ampire UART Windows Drivers

Before connecting the UART display to your PC, you will need to install the device driver.

The Installer is located on the supplied USB drive in the following folder.

Installer\CP210x\_VCP\_Windows\

Simply run one of the following .exe files depending on the version of Windows you are running.

### 64 BIT Operating System

CP210xVCPInstaller\_x64.exe

### 32 BIT Operating System

CP210xVCPInstaller\_x86.exe

## 2 IDS UART Software

This package enables you to easily control and communicate with the UART display over USB.

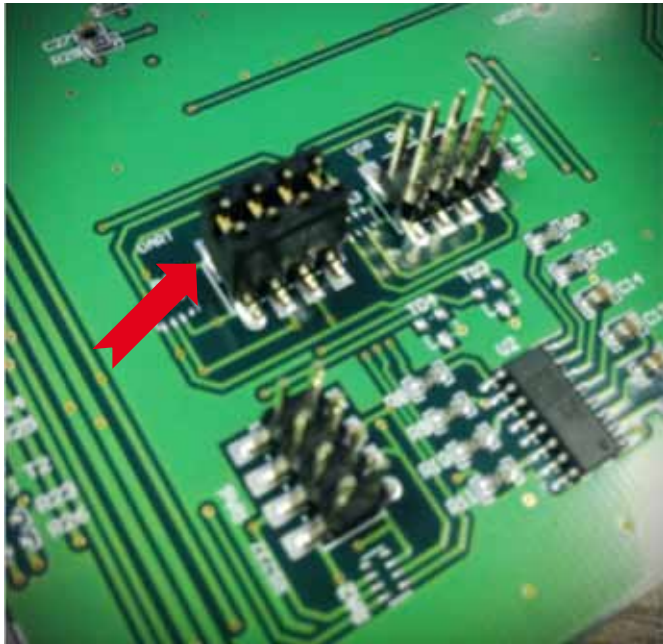
Installer\Package 1\_0\_0\_3\Install\

From here run the setup application and follow the onscreen prompts.

Once the installer has finished close the software (if it starts automatically) before connecting the UART display you need to make sure the hardware is setup correctly, and once connected to the windows machine, the correct COM port is selected.

### 3 Setting up and Connecting Hardware

You can interface with the device over, RS232, UART and USB by moving the jumper on to the other headers switch between these interface lines. This walk through focuses on using an RS232 connection on the PC.



Before connecting the UART display, you need to ensure that the Jumper on the back of the display is connected to the **RS232** Header pins.



The white 8 way connector will enable you to plug the display into your PC's RS232 port or via a USB to RS232 connector.

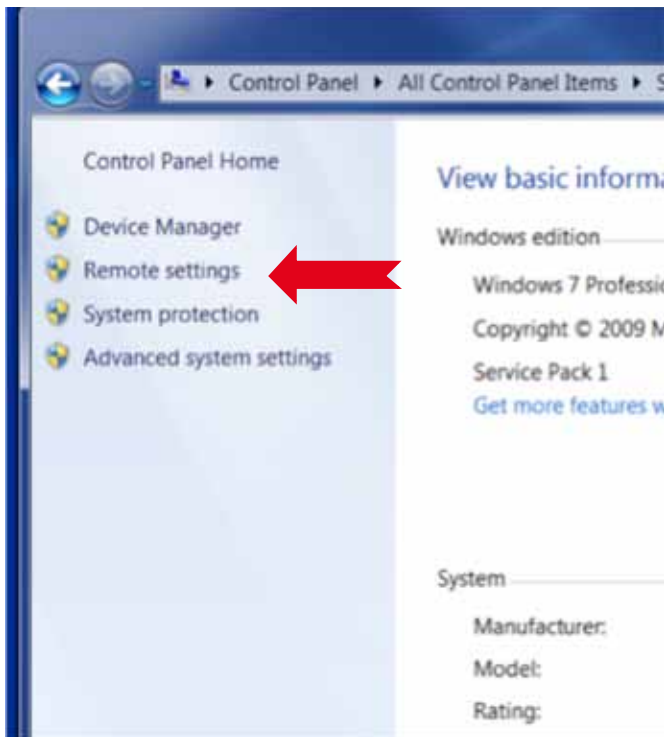


Next you need to connect the display to our Power & RS232 Board (**Board shown may be slightly different to that supplied**) via the supplied cable.

This gives you a socket for DC power and enables you to connect the Display directly to the RS232 port on your PC\*

\*This document was derived from using a Serial to USB Converter as an alternative to an RS232 port on a PC.

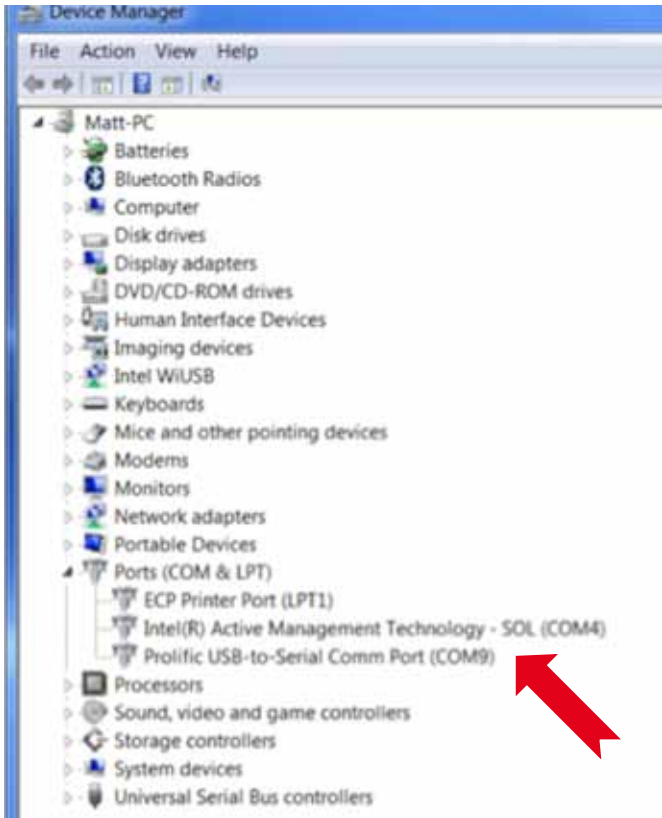
#### 4 Enabling Software Communication



Close IDS UART software if it is open and connect the display to your PC.

Launch **Device Manager**.

Start > Control Panel > System > Device Manager (see top left of System window)



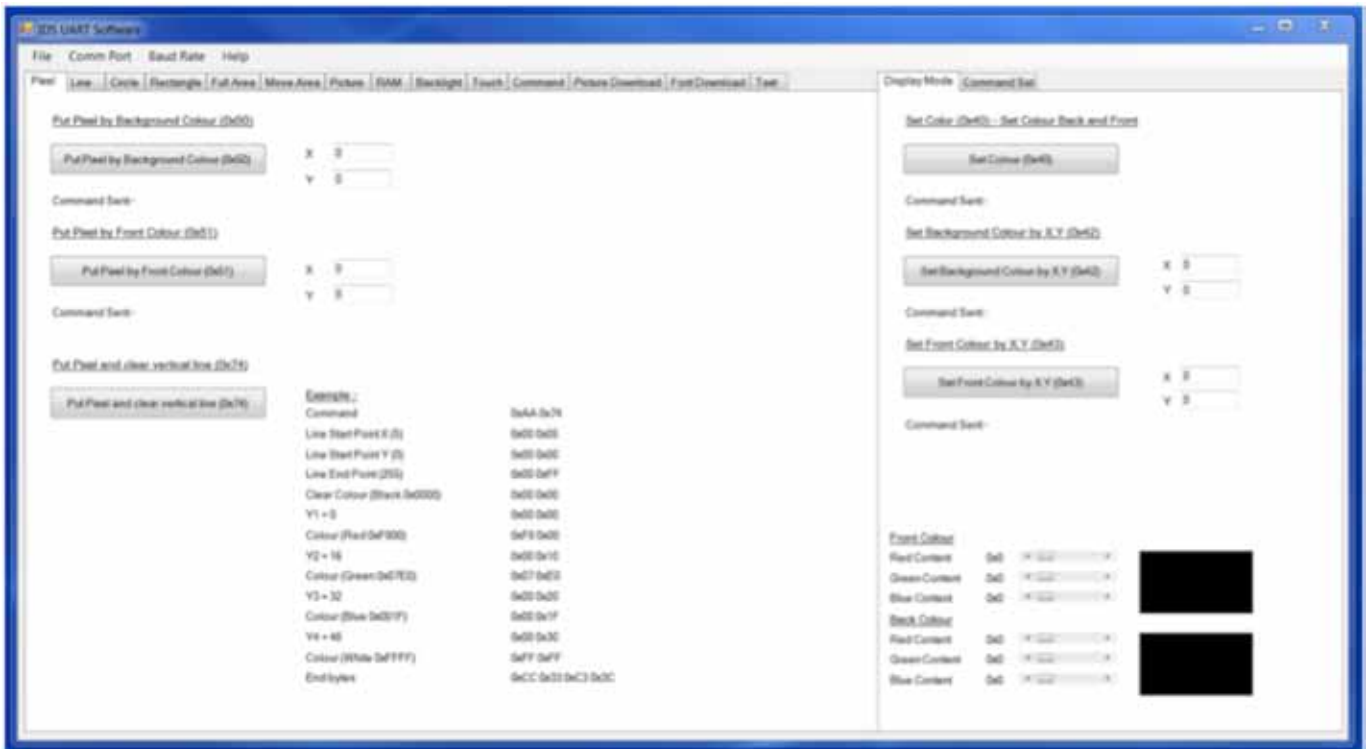
Here you need to find out which COM port the display has been assigned.

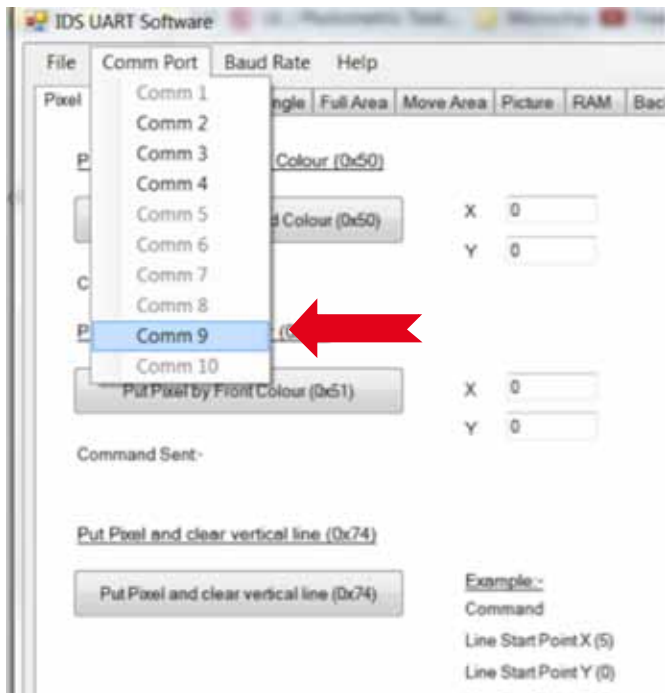
If you look for 'Ports' and expand the tree, you are looking for the Serial device you have just connected. In this case it is the USB to serial converter has been attached to the UART display power and RS232 board.

For this example you would note COM9\*

\*this may be different every time you connect to the device, these steps need to be followed before each session.

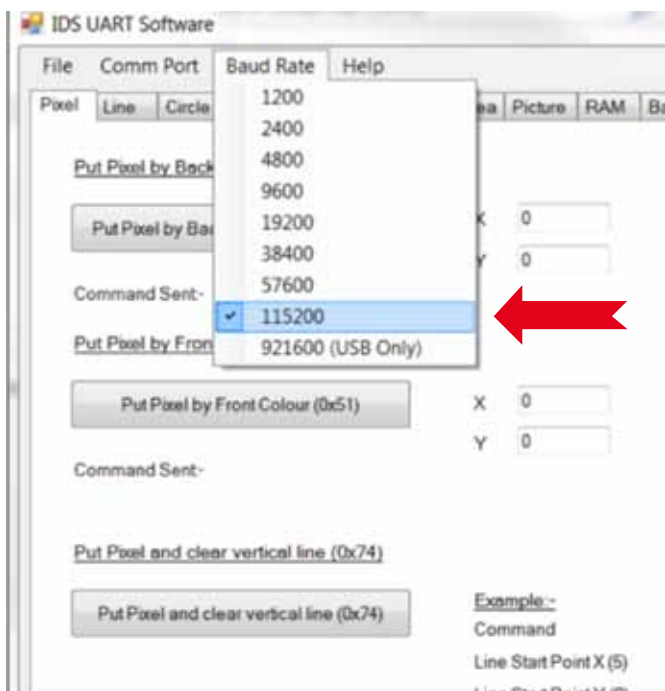
Launch **IDS UART Software** you installed in step 2





Now open, you need to assign the correct COM port, identified in the device manager Port.

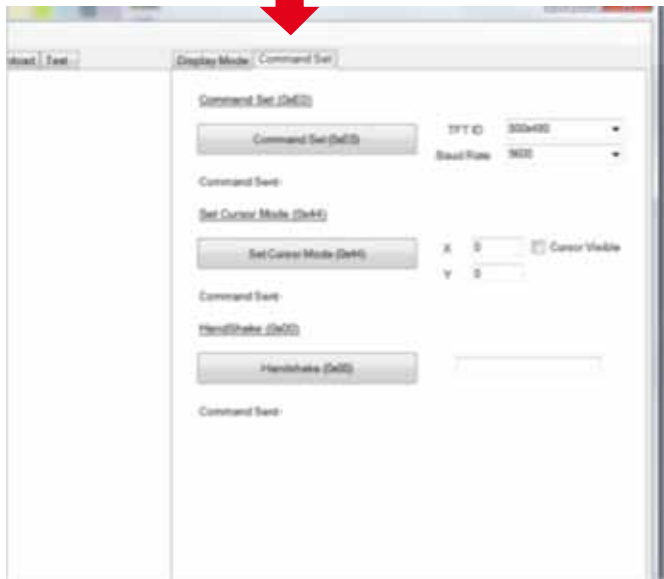
For this example it is Comm 9 we select. Remember this may vary each time you connect the UART display. You have to check in device manager BEFORE loading the UART IDS software.



Next, select the Baud Rate.

This is dictated by the display\* – which will normally be pre-set to 115200.

\*This display setting can be modified from within the UART software. That is an advanced feature that will be explored in further documents / guides.



To ensure everything is connected and set correctly, you can send a '**Handshake**' command from the IDS UART Software.

Located to the right hand side, you can find the command nestled below the '**Command Set**' tab



Clicking the **Handshake** button will display the command sent to the UART display (below) and a response, confirming all is OK and detailing the firmware version on the display is returned in the box to the right.

OK\_V5.5

You can now move forward with programming the UART display, uploading images and many other functions.

Don't forget to register your purchase at [www.i-groupuk.com/register](http://www.i-groupuk.com/register)

If you experience any difficulties in any of these processes, please contact us by email, [help@i-groupuk.com](mailto:help@i-groupuk.com) or phone our help desk on the telephone number below.