



## Leica Flexline TS02 – TS06 – TS09 Pairing Guide (Cable)

Following the steps below should ensure easy communication with all Flexline Series Total Stations

1. From the main menu select **Option 5: Setting**



2. And then **Option 1: General**



3. Using the **PAGE** button scroll to page 4 of 6, and amend the GSI-Format Setting to be **GSI 8**, and not the default GSI 16.





4. Press **F4**, to **OK** and accept these amendments, this will take you page to the main Settings Menu.

5. Now select **Option 3: Comm.**



6. Make any amendments necessary so that your settings match the image below.



7. Press **F4**, to **OK** and accept these amendments, this will take you page to the main Settings Menu.

8. All the settings should now be complete, selecting the **ESC** button, will exit you back out to the main menu once again.

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NB: One final thing to remember is to make sure that your reflector type is set correctly to which surface that you are measuring to.



## Connecting your Leica Flexline TS02 – TS06 – TS09 to MBS Floor plans

### USB to Serial Converters/Drivers

Devices which include standard 9-pin serial connectors are becoming rare with USB ports tending to be more popular, especially on smaller devices. Devices with USB ports only require a USB to Serial converter cable to communicate with a total station. Most Leica Total Stations will come shipped with a USB Lemo cable which requires drivers that need to be installed separately. Most USB to Serial converters require drivers to be installed in order to work.

Since MBS v5.20 drivers for the USB to Serial converter that is supplied as part of the MBS kit are installed along with the software (i.e. the drivers are included in the installation process). Drivers for the Leica USB to Serial converter are also included, but not installed, and are placed in the installation directory for use if and when required.

Serial communication problems between handheld devices and total stations can be complex and difficult to track down.

### To Connect with a Serial Convertor to USB Cable

(We are assuming that you have set your total station communication parameters to be correct before completing the steps below)

- Boot the Tablet PC and switch on the total station.
- Once booted, insert your communication cable from the total station to the Tablet PC device.
- Your Tablet PC should recognise the insertion of a device; however it may not install the drivers correctly.
- To check that the cable is operating successfully you will need to access the Device Manager on the Tablet PC.
- For a device running Windows 7 Operating System Device Manager can be accessed by selecting the Start > Control Panel > Device Manager.
- For older devices running Windows XP or Vista Device Manager can be accessed by Start > and right mouse button clicking on 'My Computer'. In the contextual menu that appears select > Properties > and then in the window that opens select the Hardware Tab > Device Manager.
- Within the Device Manager window you will see all devices that are attached to your Tablet PC. Near the bottom of the list is an expanding out section called 'Ports (COM & LPT)'. If the attached cable is recognised and operating successfully, the cable will be shown in this expanded section and have a COM port number associated with it.
- If the attached cable is not recognised then there will be yellow warning triangle associated to it.
- To install the Device drivers for the attached cable if it has not been recognised, you will need to select the unrecognised device and right click to select 'Update Driver Software...'. In the window that opens it will ask 'How do you want to search for the driver software?', select the option 'Browse my computer for driver software', and then select the search location of the cable drivers required; for a Leica USB Cable you will



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need to search for 'C > Program Files > MBS Software > MBS Floor Plans > Leica USB Drivers', for a Serial to USB convertor cable you will need to search for 'C > Program Files > MBS Software > MBS Floor Plans > RS USB Drivers. Then Click 'Next'.

- You may incur a warning box, telling you that Windows cannot verify the origin of the driver that you are requesting to install, and whether you wish to install. If this appears you will need to select 'Yes and that you wish to install anyway'.
- Once successful driver installation has occurred your cable will not appear with a yellow warning triangle next to it, and Windows will assign a COM port number to the device.
- This COM port number is required to be entered into the 'COM Port' section of the Floor Plans package.



## Connecting your Leica Flexline TS02 – TS06 – TS09 to MBS Floor plans

1. Open MBS
2. Select: **Device > Total Station > Communications**
3. In the dialogue box that appears:
  - select the appropriate Instrument type from the drop down list
  - select the established COM channel from the Serial Port drop down list
  - also ensure that:
    1. Baud Rate = 9600
    2. Data Bits = 8
    3. Parity = None
4. Click 'OK' once these parameters have been set correctly.
5. The dialogue box will disappear and the Total Station will be connected, if there is a problem during the initiation of this connection then an error will appear. Re-check the steps above.
6. If communication fails repeatedly, please contact us for more support.