

Running TLR 4.6 thru a USB port

If you do not have a serial port for connecting to the TCU you can connect to a USB/Serial adaptor. The TLR software will only work when connected to COM port 1 or COM port 2. You must manually configure your USB/Serial adapter to one of these ports in order for the TLR software to connect.

1. Install the USB software supplied with your adapter if requested by your operating system.
2. Open the Device Manager by going to "Control Panel" then "System" then by clicking on the "hardware" tab and finally clicking the "Device Manager" button.
3. Expand the "Ports (COM & LPT) section by clicking on the "+"
4. You should see an entry similar to "USB Serial Port (COM9)". Double click on this entry to open up its details.
5. Click on the "Port Settings" tab and then the "Advanced" button.
6. Click on the pull down menu "COMM Port Number" and choose either COM1 or COM2, whichever entry is not listed as "(in use)".

Running TLR 4.6 in Windows XP

With Windows XP, you may have to run the TLR program in DOS mode.
There are 2 ways to accomplish this:

- 1) If not already, copy the TLR program to a folder in the root directory of your hard drive (C:\TLR)
Reboot the laptop and hit the F8 key as soon as windows starts booting up.
You will be given a choice of how to boot, choose "command prompt only"
This will boot the laptop to a DOS command prompt.
Type in the following at the C:\ prompt:
CD TLR
TLR46
This will run the TLR program.
If it is the first time running the program it will ask you for a display type and a Serial port.
Choose VGA and COMM PORT 2
- 2) If the laptop has a floppy drive, you can create a boot disk to start the laptop and run the program:
Put a blank floppy disk in the drive
Open "My Computer"
Right click on the A: drive
Select "Format"
Select the checkbox for "Create an MS DOS startup disk"
Once completed, copy over the TLR program to the floppy disk
Reboot the laptop with the floppy disk in the drive
Type in the following at the A:\ prompt:
TRL46
This will run the TLR program.
If it is the first time running the program it will ask you for a display type and a Serial port.
Choose VGA and COMM PORT 2

If the program still refuses to talk to the TCU, try the following:

-Your aircraft Master Power Switch must be on to supply the TCU with power

-From the directory you are running the TLR program, delete the file called TLR.CFG

Run the TLR program again.

You will be asked again for Video Type and COM Port.

Try entering in a different COM port (If you used Comm1 previously, try Comm2 this time, and Vice Versa)

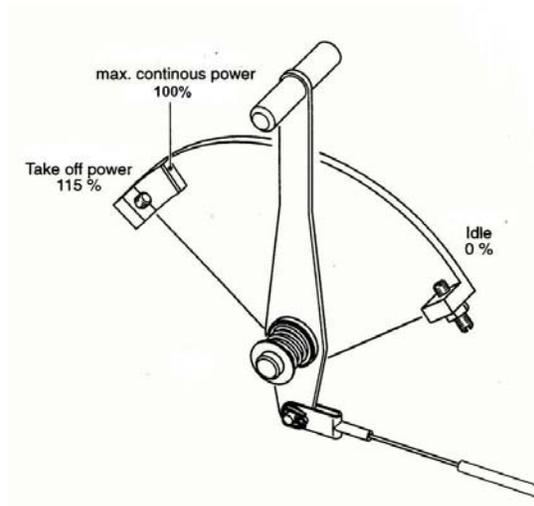
Throttle Calibration with TLR 4.6

When installing your 4.6 TCU and after any work has been done to the carburetors where throttle arm position may have been adjusted, such as carburetor pneumatic balance, you must perform a "Throttle Calibration"

1. Connect a laptop to the serial port on your TCU wiring harness and run the TLR 4.6 software (see attached information on software installation and configuration).
2. At the main program screen, press **T** (for Throttle) on your keyboard.
3. Place your throttle at the **IDLE** position.
4. Press **ENTER** on your keyboard.
5. Place your throttle at the **115% FULL THROTTLE** position.
6. Press **ENTER** on your keyboard.

This will bring transmit this calibration information to your TCU and return you to the Main Menu. To verify that your calibration was successful, perform the following steps:

1. At the Main Menu of the TLR46 software, press **M** (for MONITOR) on your keyboard
2. Verify that the % number listed under LOAD is at **0% at IDLE** and **115% at FULL THROTTLE**. (a variance of +/- 3% is acceptable).



3. **Note:** you can now "find" the 100% (max cruise) position of your cockpit throttle lever. Observe the percentage readout in the TLR program and move your cockpit throttle lever/vernier control until the 100% position is reached. Now make a reference mark on your lever (or adjust the gate if you have one) and now you know the max cruise throttle position.

Warning; do not attempt to "set" the 100% position by pressing "enter" on your keyboard. That action is **ONLY** for the "idle" and "full throttle" position

4. Press "Esc" on your keyboard to return to the main menu.
5. Press "Q" to quit the DOS window.