

TVFocus Software for Digital Indicator

Digital Indicator

Digital Indicators with a special cable and *TVFocus* software is the simplest way to monitor your focus position on a Windows PC.

TVFocus Software

Designed to work with Tele Vue's Digital Indicator kits and special RS232 cable, *TVFocus* is software that displays focuser position on your computer.

Software Feature Highlights

- Continuous or momentary position readout
- Up to four preset positions (saved between sessions)

This feature is handy when swapping filters that change the point of best focus or when using non-parfocal eyepieces

- Yellow and green indicators when you are approaching or have achieved a preset focus position
- Zero reset allows you to zero the indicator at any point

System Requirements

- Tele Vue digital indicator and indicator to RS232 cable
- Computer with 386, 486, Pentium or greater CPU
- Windows 95/98/Me/NT/2000/XP or greater operating system
- Free serial port or a free USB port with USB-to-serial port adapter

Install

- Click (or copy/paste into browser) URL to the self-extracting archive file (2.85 MB):

http://televue.com/download/TVFocus_setup.exe

Download it to a folder on your computer.

- In the download folder, run the executable archive to extract files to a temporary directory
- Execute *setup.exe* in the temporary directory and the program will install and register itself
- You can delete the extracted files in the temporary directory after install

Uninstall

- In Start/Settings/Control Panel find *Programs and Features* (or *Add/Remove* in older versions of Windows)
- Select *TVFocus* and click the [Uninstall] (or [Remove]) button to uninstall

Instructions and Usage Tips

Digital Indicator and RS232 Cable

- The instructions for the RS232 cable explain how to mount the cable interface in the digital indicator's battery compartment. Make sure to mount the interface with the smooth side-up (image right).
- Mount the indicator with cable on the telescope, following the instructions for the digital indicator kit.
- Plug the serial port side of the cable into your computer's serial port or serial-to-USB adapter.

Smooth side of interface

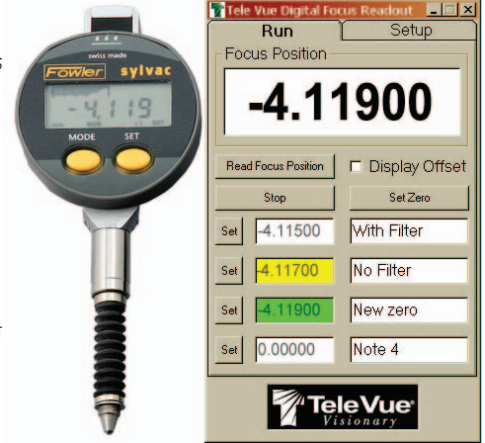


Digital Indicator and TVFocus Software

- A default install will place *TVFocus* software in *Start/Programs/TVFocus* on your computer's menu system. Start the software from there. You should now see the software's dialog box display with **Setup** and **Run** tabs.
- At the **Setup** tab, select the COM port connected to the RS232 cable and press the [**Connect**] button. If the LCD display on the indicator does not become active, you may have selected the wrong port: press [**Disconnect**] and try another port.

Troubleshooting

- You can find COM ports available your PC by clicking Control Panel (under *Start* or *Start/Settings*) and selecting *System*. Select the Hardware tab and then click [**Device Manager...**]. On the menu tree, expand *Ports (COM & LPT)*. Native ports on the PC are usually COM1 and COM2. If you are using a USB-to-serial adapter, its name will show up on the list with its assigned port number.



Digital indicator (left) and Indicator to computer RS232 cable (right)



Digital Indicator and TVFocus Software

Troubleshooting (continued)

- If a connection can not be made with any COM port, check that the cable interfaces are tight (on the indicator the smooth side should be inserted facing up, when looking down at the LCD display).
- Referring to the instructions that came with the digital indicator, select units of measure and set it for normal mode (usually the default mode). If you use the preset values in the **Run** tab (explained below), it is advisable to use the same units of measure each time you start the digital indicator.
- The *Night Vision* checkbox in **Setup** causes the backgrounds of all applications to turn black and the text to turn deep red. This color scheme helps preserve your night-vision and is recommended for use only in the dark.
- The *Poll Time* selector in **Setup** determines how often the display is updated. Decreasing the value here will cause the **Run** tab display to update faster, but may cause software on your computer to run slower. The value here will persist between sessions.



• On the **Run** tab, press the **[Read Continuously]** button to begin reading focus positions. Adjust the focuser on your scope to cause the indicator plunger to compress and expand. The large **Focus Position** display should update with the position of the plunger. You can return to the **Setup** tab to change the update rate with the *Poll Time* selector.

• Clicking any of the four Set buttons in the **Run** tab will save the current focus position and highlight the associated position box in green. You can enter a reminder note in the text box to the right of the set focus position. You can enter text past the visible width of the box. These preset positions and notes are saved for the next time you start the program. For the presets to have meaning in the next session, you must keep the digital indicator set to the same units of measure.

• The *Display Offset* checkbox and **[Set Zero]** button in the **Run** tab work together to create a virtual zero point. Clicking **[Set Zero]** makes the current focus position a virtual zero point. Checking the *Display Offset* checkbox causes the **Focus Position** to display the offset position from the virtual zero point. It will also change the values in the preset boxes to reflect the offset distance from the virtual zero point to the preset focus points. In this mode, the reading on the digital indicator will differ from that of the **Focus Position** display. Uncheck the *Display Offset* checkbox to return to the initial zero point.

