

FT2/LTM True-Trak 20/20

Software Installation and computer Setup

April 2017



Introduction

The following describes how to install the True-Trak 2020[™] software on your computer and connect the computer to the FasTrak2[™] Portable through the computer's Ethernet port. It is assumed that you are installing this on a computer of your own. If you purchased a computer from Visi-Trak Worldwide these steps will have already been done.

Table of Contents

- 1. Obtaining Your True-Trak 2020™ Software
- Installing Your True-Trak 2020™ Software
 2.1.1.Dedicated Monitoring Computer
- 3. Determining the TCP/IP Address of the FasTrak2[™] Board
- 4. Setting Up the Ethernet Port on the Computer
- 5. Getting the Program to Talk to the FasTrak2 Board
- 6. Connecting the Cable to the Visi-Trak® Position Transducer
 - 6.1. Installation Instructions for Position Transducer
- 7. Connecting the Cable to a Viatran Pressure Transducer
 - 7.1. Cylinder Head
 - 7.2. Piston Rod
- 8. Connecting the Cycle Start for automatic shots

Obtaining Your True-Trak 2020™ Software

You should have received an Installation USB Drive with your shipment.

The drive contains the latest version of the Visi-Trak software (Example v8.14.exe). Double click this file which will create a directory on your computer named C:\Installx.xx (where x.xx is the number of the latest software version. Example C:\Install8.14).



Installing Your True-Trak 2020™ Software

Open C:\Install8.14 directory and run the "setup.exe" file.



Press the "Install New TrueTrak System" button.

1	Choose Installation Type	-		×
			He	lp 🔤
	Lastall New True Tark Original	1		
	Install New True-Trak System			
	Update Existing True-Trak System			
	Cancel			

The installation screen gives you a number of options. The first section allows you to choose which programs, if any, are started along with the main "Plot" program.

- The "Start Part Editor at TrueTrak Startup" will run the Part Setup program when you start the TrueTrak software.
- The "Start Board Monitor at TrueTrak Startup" will run the Board Monitor program, the program that communicates with the FasTrak2[™] and records the shot data, when you start the TrueTrak software.
- The "Automatically Start When the Computer Boots" option will run the True-Trak software automatically when the computer is turned ON.

True-Trak 2020 (tm) V8.14 Installati	on	-	□ ×
This program will install the TrueTrak Software into the following	directory. C	change t	his
before continuing if you would like to use a different directory.			
C:\V5\			
	·Control E		
Start Part Setups at TrueTrak Startup	Dist	Vel	Rod
Start Monitor Setups at TrueTrak Startup	Units	Units	Pitch
Start Board Monitor At TrueTrak Startup	© IN	IPS	20P
SureTrak2 Control Installed	OMM	MPS	2MM
Automatically Start When the Computer Boots	OMM	MPS	20P
Computer Type			
Monitoring Computer			
C Data Archiver			
C Local Installation			
C Office Workstation			
Recreate Machine(s) and Part(s) from an Existing Restore Poin	t	_	
Use Restore Point Browse for Restore F	Path		
	um	1	
d:\autoback\current			
	1		
Continue Cancel			

If this is a FasTrak2[™] Portable system you may not want any of these checked. In any case you can rerun this setup program again later and change the start-up programs (you must choose "Update Existing TrueTrak System" on the first screen if you are updating an existing installation).

Dedicated Monitoring Computer

For a dedicated monitoring computer you will probably want the "Part Setup" and FasTrak Board Monitor" programs to be checked and you will probably want them to automatically Start When the Computer Boots", as shown to the below

Start Part Setups at TrueTrak Startup

Start Monitor Setups at TrueTrak Startup

- Start Board Monitor At TrueTrak Startup
- SureTrak2 Control Installed
- Automatically Start When the Computer Boots

The remaining options should remain as they are.

Press the "Continue" button to begin the installation.

Computer Type	
Monitoring Computer	
O Data Archiver	
C Local Installation	
Office Workstation	
Recreate Machine(s) and Part(s) from	m an Existing Restore Point
Recreate Machine(s) and Part(s) from	m an Existing Restore Point Browse for Restore Path
Recreate Machine(s) and Part(s) from	m an Existing Restore Point Browse for Restore Path

When the installation is complete, you will see the following icon on your screen. Double clicking on this will start the main plot program.

If you chose to have any of the optional programs start at TrueTrak start-up these will also be started at this time.



Determining the TCP/IP Address of the FasTrak2[™] Board

The original IP Address, the address of the board when it is shipped from Visi-Trak Worldwide, is marked on a label on the main FasTrak2[™]board. It is shown here with a red oval.

Also shown here are the locations of switch SW8 and the two seven segment leds located on this board.



Pressing SW8 causes the ip address to scroll across the leds.

The following pictures show the sequence of changes to the leds as they would appear if you tilted your head to the right, which makes it easier to decipher the address as it scrolls. 192.168.254.99.

Setting Up the Ethernet Port on the Computer

The following is a description of how to connect a FasTrak2[™] Portable to a separate computer.

If you have an integrated monitoring computer then the computer and the FasTrak2[™] board are located inside the same cabinet and are normally connected by an orange cat5 crossover cable that goes directly from the FasTrak2[™] board to the "FasTrak2 Direct Connection" Ethernet port on the computer. Otherwise, the steps shown here are the same that are performed by Visi-Trak Worldwide personnel before an integrated system is shipped.

Plug a normal Cat5 Ethernet patch cable into the Ethernet port on the computer.



On the computer, open the Network Connections dialog. <u>Right click on the Network icon</u> and select Open Network and Sharing Center.



Click Local Area Connection

View your active networks	Connect or disconnect
Unidentified network Public network	Access type: No Internet access Connections: Local Area Connection 4

If you have more than one port and don't know which you are going to use, try plugging and unplugging the Ethernet cable from the port on the Visitrak Board.

You should see which Network disappears and reappears, that means that in this case Local Area Connection 4 is the one connected to the Visitrak Board.



When you double click on the icon for the Ethernet port the properties dialog for that port will appear.

Connection		
IPv4 Connect	ivity:	No Internet access
IPv6 Connect	ivity:	No network access
Media State:		Enabled
Duration:		01:02:45
Speed:		100.0 Mbps
Speed: Details]	100.0 Mbps
Speed: Details	Sent —	100.0 Mbps
Speed: Details Activity Bytes:	Sent — 10,392	100.0 Mbps

If you are connecting directly to the FT2 Portable uncheck all but the

"Internet Protocol (TCP/IP)".

Click once on the "Internet Protocol (TCP/IP)" to highlight it and then press the "Properties" button.

Re Re	altek PCIe GBE	Family Controll	er #4	
This conn	ection uses the	following items	:	onfigure
	File and Printer S QoS Packet Sch Link-Layer Topol Reliable Multicas nternet Protocol nternet Protocol	haring for Micr eduler ogy Discovery ogy Discovery t Protocol Version 6 (TC Version 4 (TC	Mapper I/O [Responder P/IPv6) P/IPv4)	s Driver
Ins	tall	Uninstall	P	roperties
Descrip Transm wide an across	tion nission Control Pr rea network prot diverse intercon	otocol/Interne ocol that provi nected networ	t Protocol. Th des communic ks.	e default ation

The Internet Protocol Properties dialog will appear. It will probably be set to obtain an IP address automatically.

Click the "Use the Following IP Address" button.

Enter an IP address for the computer.

The first three numbers of this address, "192.168.254" in this example, must be the same as those of the FasTrak2 board. The last number must be different. In this example the FasTrak2 board has an address of 192.168.254.99.

For the computer the last number can be any number except 99 (in the range 1 to 255).

For this example 192.168.254.100 for the address.

eneral	
You can get IP settings assigned his capability. Otherwise, you r or the appropriate IP settings.	automatically if your network supports leed to ask your network administrator
Obtain an IP address autor	matically
• Use the following IP addres	ss:
IP address:	192 . 168 . 254 . 100
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	
Obtain DNS server address	automatically
Ouse the following DNS served as a served of the served	er addresses:
Preferred DNS server:	
Alternate DNS server:	
Validate settings upon exi	t Advanced

Press the "OK" button to close the Internet Protocol Properties dialog.

Shalling Shalling	General
onnect using:	Connection
Realtek PCIe GBE Family Controller #4	IPv4 Connectivity: No Internet access
Continu	IPv6 Connectivity: No network access
is connection uses the following items:	Media State: Enabled
	Duration: 01:02:45
 Glent for Microsoft Networks File and Printer Sharing for Microsoft Networks 	Speed: 100.0 Mbps
🗹 📮 QoS Packet Scheduler	Details
🗹 🔺 Link-Layer Topology Discovery Mapper I/O Driver	
 Link-Layer Topology Discovery Responder Link-Layer Topology Discovery Responder 	
Heiladie Multicast Protocol	
 Internet Protocol Version 6 (TCP/IPv6) 	Activity
Internet Protocol Version 6 (TCP/IPv6) Internet Protocol Version 4 (TCP/IPv4)	Activity
	Activity Sent Received
	Activity Sent — Received Bytes: 10.392 20.550
	Activity Sent Received Bytes: 10,392 20,550
Internet Protocol Version 6 (TCP/IPv6) Internet Protocol Version 4 (TCP/IPv4) Install Uninstall Properti Description Transmission Control Protocol/Internet Protocol. The defa wide area network protocol that provides communication across diverse interconnected networks.	Activity Sent — Received Bytes: 10,392 20,550

Press the "Close" button to close the Local Area Connection Properties.

-

Getting the Program to Talk to the FasTrak2 Board

Make sure the Ethernet cable connects the computer to the FT2 Portable and that the

FT2

Portable is turned on.

Start the True-Trak program on the computer.



If the "FasTrak2" program is running, pull down the "File" menu and choose "Exit and STOP Monitoring" to shut the program down.

F2 Set Dac	File View Connect Help		29 (S. 20) (S.	94 - 347 - 6577), i i
F3 Null Valve	Minimize mm Status	Machine	Part	Monitor Status
F4 Valve Test	Fuit and OTOD Manitarian I Connected	F20	omar	No Response to Unload
F5 Test Alarms	Exit and STOP Monitoring		errier.	
F6 Status and Menu				
F7 Terminal	1			
F8 Realtime				
F9 Globals				
F10 Control Mods				

Pull down the "Monitor" menu and choose "FasTrak Board Setup".



When the FasTrak Board Setup dialog appears, check the "Address" of the FasTrak2 board, pointed to on the picture below, and make sure it is the same as the actual address of the FasTrak2 board that you are trying to connect to.

Press the "Save Changes" button at the bottom of the dialog and then close the dialog.

R FasTrak2 Board Setup				
This Computer C:\V5				
Boards At This Computer				
Board Number BoardAddress	TCP Port	New Delete Board Number	e	
1 192.168.254.9	9 20000	1 2 3 4 5 6 7 8 • • • • • • • • • • •		
		TCP Address 192.168.254.99		
		TCP Port 20000		
	Machines At T	his Computer		
Machine	Board Numb	e		
E20	1	Board Number		
M20	1	1 2 3 4 5 6 7 8		
		• • • • • • • • • • •		
		Save Changes		

Pull down the "Monitor" menu and choose "FasTrak Board Monitor".



The FasTrak Board Monitor program will appear and should immediately connect with the FasTrak2 Board. This is indicated by the word "Connected" under the "Comm Status".

F2 Set Dac	File View Connect Help		
F3 Null Valve	Board Address Comm Status	Machine Part	Monitor Status
F4 Valve Test	• 1 192,168,254,99 Connected	E20 VISITRAK	Uploading
F5 Test Alarms			- prise
F6 Status and Menu			\checkmark
F7 Terminal			
F8 Realtime			Monitor Status
F9 Globals			Upload Complete
F10 Control Mods			

If this is the first time you have connected to this FasTrak2 board you will see the "Monitor Status" display "Uploading..." for a second or two and then it will display "Upload Complete".

Connecting the Cable to the Visi-Trak® Position Transducer





Installation Instructions for Position Transducer

The Transducer has already been pre-tested at the factory and a small sticker should be located on the face. This sticker provides the recommended gapping distance between the rod and the transducer. Any tape located on the sides of the transducer body may prevent proper insertion of the transducer into the transducer mounting block due to the close tolerances that exist.

Carefully insert the sensor into the proper hole of the transducer mounting block and rotate until the flat edge of the sensor lines up with the permanent alignment key and inset the sensor until it touches the rod. Once in place and tighten the nylon tip set screw as shown in the image bellow.





Model	Pitch	Resolution	Max Gapping
A49-VT20P	0.05"	0.0125"	0.020" (0.51mm)
A49-VT10P	0.1"	0.025"	0.040" (1.02mm)
A49-VT1MM	1mm	0.25mm	0.015" (0.38mm)
A49-VT2MM	2mm	0.5mm	0.035" (0.89mm)
pitch			h►
12V Leading Channel 0V			
12 Trailing Channel 0י	2V V		

Sensor Specifications	
Supply Voltage	12V ± 10%
Supply Current	28mA Typ. (50mA Max)
Linear Speed	500 IPS Max
Operating Temp.	-40°C to 85°C
Output Waveform	50% Duty Quadrature
Red Wire	Supply Voltage
Black Wire	Ground
Yellow Wire	Leading Channel
Purple Wire	Trailing Channel

Connecting the Cable to a Viatran Pressure Transducer





Cylinder Head

The main function of the head is to enclose the pressure chamber from the other end.

Piston Rod

The piston rod is typically a hard chrome-plated piece of cold-rolled steel which attaches to the piston and extends from the cylinder through the rod-end head.



Connecting the Cycle Start for automatic shots

A signal from the DCM has to trigger an input in Visitrak Automatic start cycles, this signal can

be for example the Die Lock ready from the DCM.

