ProtoTRAK® EMX /ELX

Offline Programming Manual

For CNC models:

- ProtoTRAK EMX
- ProtoTRAK ELX

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1.0 Introduction

The ProtoTRAK Offline Programming System allows you to write, edit, and inspect programs for your ProtoTRAK using most standard IBM compatible computers.

Programming with the Offline system is essentially the same as programming through the ProtoTRAK keyboard with a few differences. This manual will provide installation instructions for the offline and highlight the differences in programming between using the offline and the control pendant. The basic programming instruction is left to the programming, operating, and care manual you received with your ProtoTRAK CNC.

2.0 Offline Computer Requirements

The ProtoTRAK Offline is designed to run on an IBM compatible PC, Pentium II or higher, 256 MB RAM, and at least 10 MB hard disk free space. The software will run on Windows 98, Windows ME, Windows 2000, Windows XP, and Windows Vista.

You may need to install Microsoft .NET Framework version 2.0 or later in order for certain features to work properly. The site is located at:
http://msdn2.microsoft.com/en-us/netframework/
From there, click on the Downloads link, and then click on .NET Framework version 2.0. They have the standard download (x86) that works for most Windows operating systems, ranging from Windows 98 to Windows Vista. They also have a version specifically meant for 64-bit operating systems (x64).
At the time of print, the only features that are dependant on this are the context help windows.

3.0 Installing the ProtoTRAK Offline Programming System

If you purchased the USB Memory option along with the ProtoTRAK EMX / ELX, then the offline software is included within the USB thumb drive. You can run the software from the thumb drive, or copy it to a folder within your hard drive if you prefer.

Otherwise, you can go to www.southwesternindustries.com and download the latest version of the EMX / ELX offline software.

Follow the instructions from the webpage to properly install the software onto your PC (this will change as time goes on).

4.0 Programming with ProtoTRAK Offline Programming System

To use your ProtoTRAK Offline software on your computer, open the directory that you chose to copy the software into, and double click on the file PTOL-user Interface.exe. You may want to create a shortcut icon on your desktop, if you prefer.

The ProtoTRAK Offline will begin and you will see a screen that looks like Figure 4.0 below.

Figure 4.0 *The first Offline Screen.*

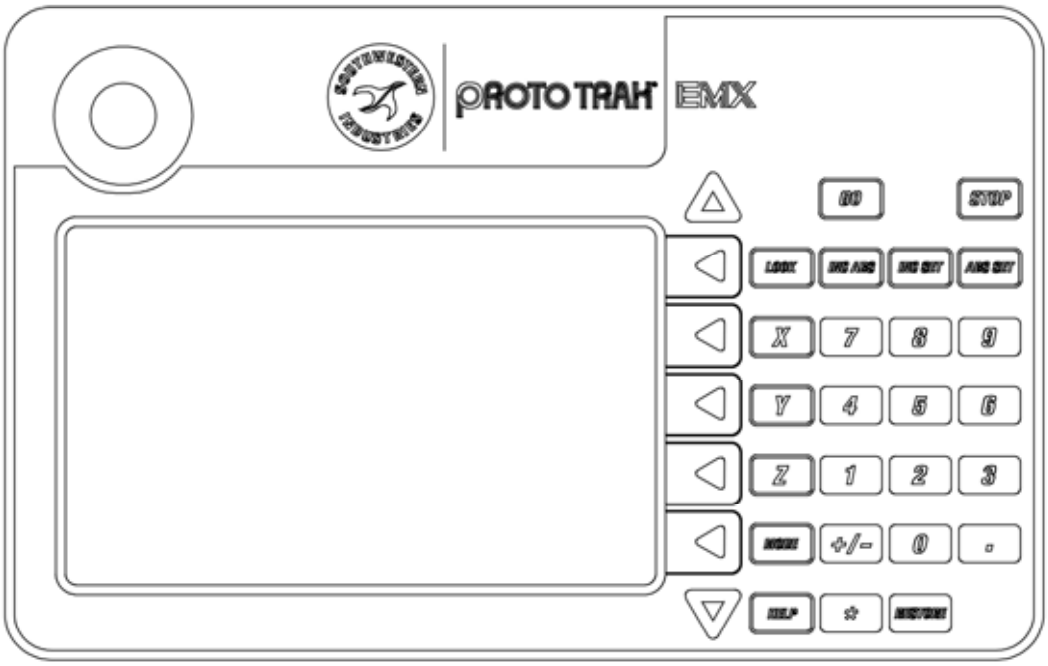
The offline software is able to accommodate both the EMX and ELX controls.

The softkey selections may be made either with your computer's mouse or using the function (F) keys on the keyboard. For example, pressing F5 will allow you to either “Go To Mill,” or “Go To LATHE” to emulate either of the controls.

The next section will give you the keyboard equivalents for the hard keys on the ProtoTRAK CNC display.

To quit the ProtoTRAK Offline application press the PAUSE BREAK key on your computer keyboard. Be sure to save programs and tools before quitting. If the ProtoTRAK does not respond to the PAUSE BREAK key press, it could be that you inadvertently deselected the ProtoTRAK window. Simply mouse click anywhere within the ProtoTRAK screen and press PAUSE BREAK again.

4.1 ProtoTRAK EMX / ELX Keyboard Equivalents



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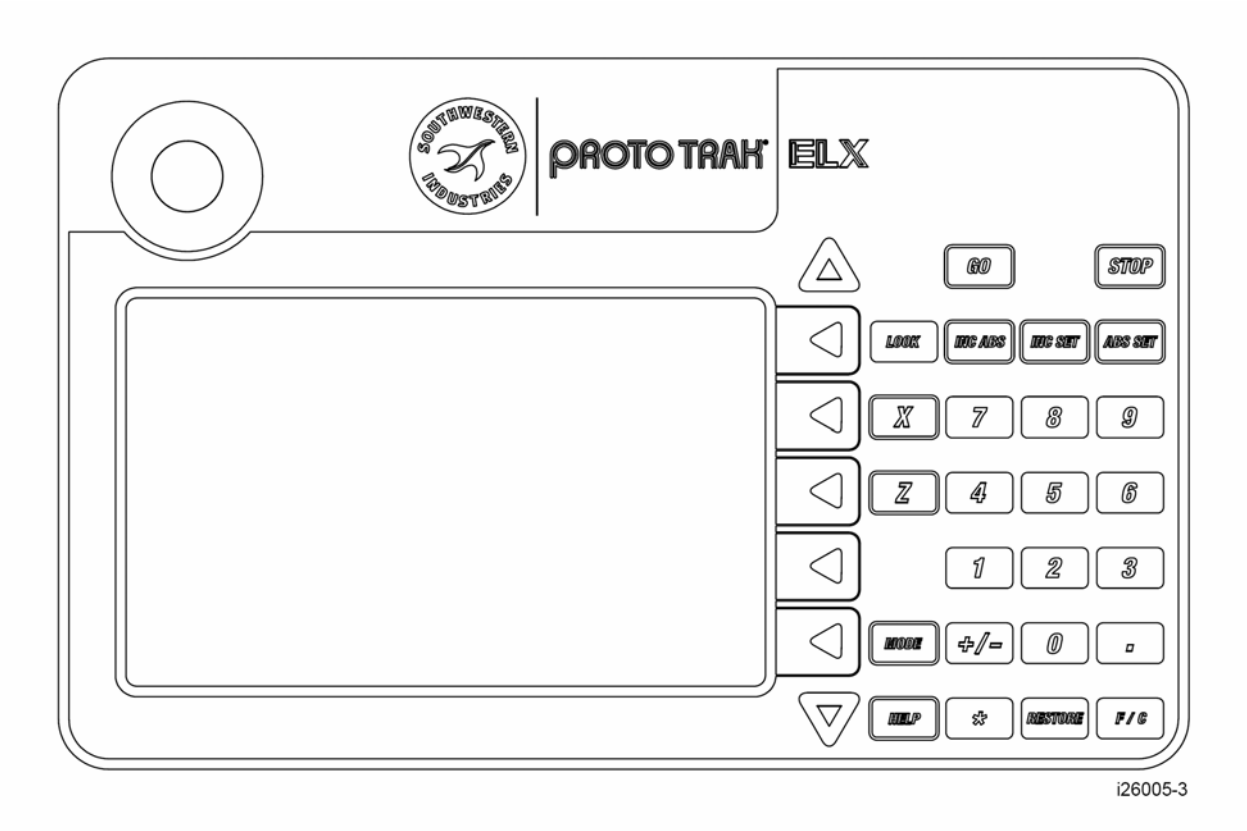
ProtoTRAK ELX Key	Keyboard Equivalent
GO	Alt + G
STOP	Alt + S
5 Menu Softkeys	F1 – F5
INC SET	Alt + I
ABS SET	Alt + A or Enter
MODE	Alt + M or ESC key
X	X
Z	Z

ProtoTRAK EMX / ELX Key	Keyboard Equivalent
Numbers 0 - 9	Numbers 0 - 9
+/-	+ and -, default is positive
INC/ABS	Alt + [
IN/MM	Alt +]
LOOK	Alt + L
RESTORE	Alt + Backspace
▲	Alt + up arrow
▼	Alt + down arrow
HELP	Alt + H
BACK	Alt + B

4.2 Proto TRAK ELX Keyboard Equivalents



5.0 Opening / Saving Programs using the EMX / ELX offline software

The EMX / ELX offline software saves and retrieves files from the two different folders within the location where the offline software was copied to.[1] So, for example, if the offline software was copied to a PT6OFFLINE folder within the C drive, the location of the stored MX2 files would be "C:\PT6OFFLINE\Programs".

When you wish to transfer these files to your ProtoTRAK EMX or ELX control, you will first need to copy them onto a USB thumbdrive.[2] From there, you can take the thumb drive over to your ProtoTRAK EMX / ELX and run a service code 341 to transfer all the files into the ProtoTRAK's internal storage.

If you purchased the USB MEMORY option along with your ProtoTRAK EMX / ELX, the offline software is included within the thumb drive. The default storage directory is ready to use with your ProtoTRAK EMX / ELX control.

1. The "Programs" folder contains the mill part programs while the lathe part programs are stored in "Lathe Programs" folder.
2. The easiest way to do this is to copy over the desired folder to the root directory of the USB thumbdrive.

TRAK Warranty Policy

Warranty

TRAK products are warranted to the original purchaser to be free from defects in work-manship and materials for the following periods:

Product	Warranty Period	
	Materials	**Factory Labor**
New TRAK	1 Year	1 Year
Any EXCHANGE Unit	90 Days	90 Days

The warranty period starts on the date of the invoice to the original purchaser from Southwestern Industries, Inc. (SWI) or their authorized distributor.

If a unit under warranty fails, it will be repaired or exchanged at our option for a properly functioning unit in similar or better condition. Such repairs or exchanges will be made FOB Factory/Los Angeles or the location of our nearest factory representative or authorized distributor.

Disclaimers of Warranties

- This warranty is expressly in lieu of any other warranties, express or implied, including any implied warranty of merchantability or fitness for a particular purpose, and of any other obligations or liability on the part of SWI (or any producing entity, if different).
- Warranty repairs/exchanges do not cover incidental costs such as installation, labor, freight, etc.
- SWI is not responsible for consequential damages from use or misuse of any of its products.
- TRAK products are precision mechanical/electromechanical measurement systems and must be given the reasonable care that these types of instruments require:
- Replacement of chip scrapers and wipers is the responsibility of the customer. Consequently, the warranty does not apply if chips have been allowed to enter the mechanism.
- Accidental damage, beyond the control of SWI, is not covered by the warranty. Thus, the warranty does not apply if an instrument has been abused, dropped, hit, disassembled or opened.

Improper installation by or at the direction of the customer in such a way that the product consequently fails, is considered to be beyond the control of the manufacturer and outside the scope of the warranty.