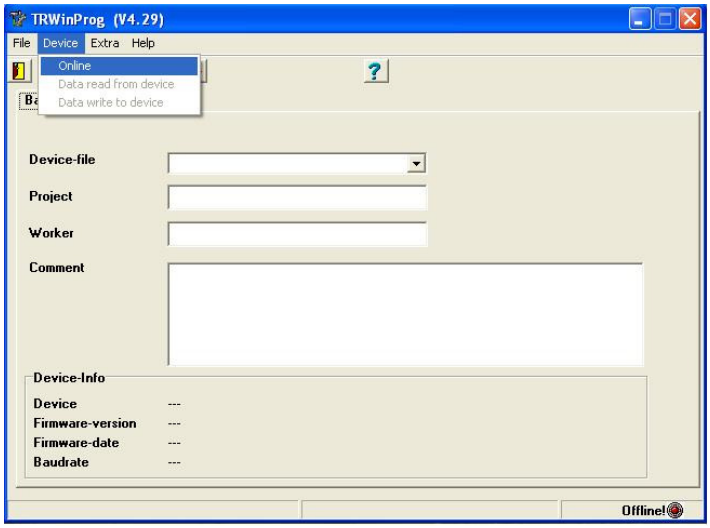
TRWinProg 101 by Chris Bowman October 10

*TR*WinProg is a Windows™ based program for serial programming of encoders. The program allows viewing of setup data stored within the encoder and allowing the user to change certain parameters.

Requirements:
A personal computer or laptop with the following:

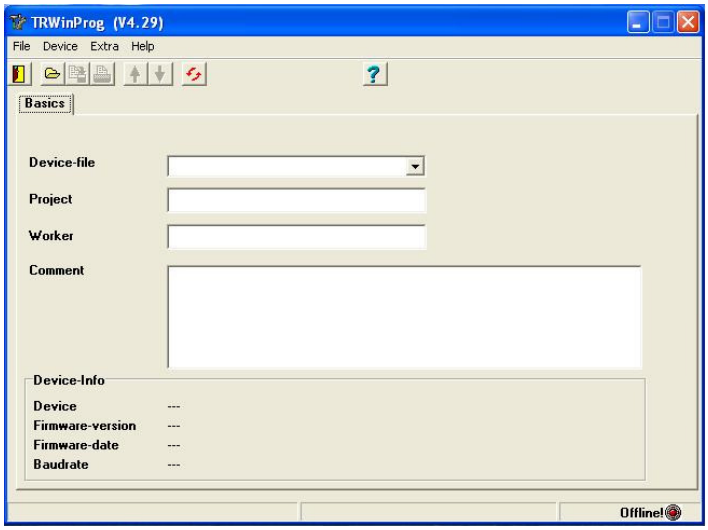
- Windows 98SE®/Me® ,Windows NT 4® / 2000® / XP®
- Encoder with TRWinProg capabilities
- TR Programming Interface

Connection: To connect to a device; Select *Online* from the *Device* pull down menu or Click on the button. Ensure that the device is wired correctly, using the appropriate pinout.



The screen contains multiple sections or Tabs, containing unique information about the connected encoder. The sections, with an explanation of each are as follows:

Basics: This tab allows for users to document changes made to default programming. Basic device hardware information can also be found on this tab.



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The following information is unique and will vary from device to device. This document is meant as an overview for basic introduction to the *TR*WinProg programming software. For more detailed information on your device, or for a more detailed description of TRWinProg, please download the appropriate manual(s) from the *TR* Customer First Website.

Incremental Encoders

Incremental: This tab allows for users to change fundamental parameters within an incremental encoder.

Number of Pulses – This value is equal to the number of Pulses the encoder will produce. This is a pre-Quadrature number. To calculate the number of Steps, multiply this value by 4.

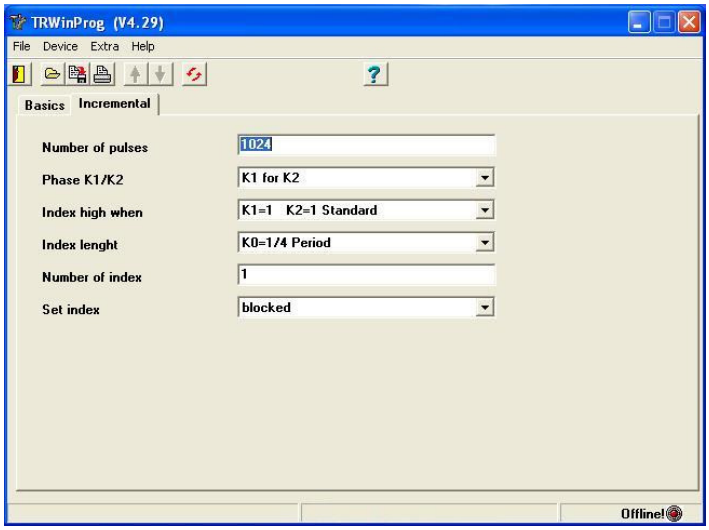
Phase K1/K2 – This parameter determines which channel, K1 (A) or K2 (B) Leads and which Lags for an encoder card to interpret Count Up or Count Down.

Index High When – This parameter determines when the Index (Z) Pulse will be active.

Index Length – This parameter determines the length the Index (Z) Pulse will be active.

Number of Index – This parameter determines the number of Index (Z) Pulses in a rotation.

Set Index – This parameter determines if the Index is Blocked or Not Blocked.



Absolute Encoders

Basic-Parameters: This tab allows for users to change fundamental parameters within an absolute encoder.

Count Direction – This parameter sets how the position value will change, Increasing / Decreasing in the Clockwise direction, while looking at the shaft end of the encoder.

Total Number of Steps – This parameter sets the total count the encoder will make before the position value returns back to Zero (0).

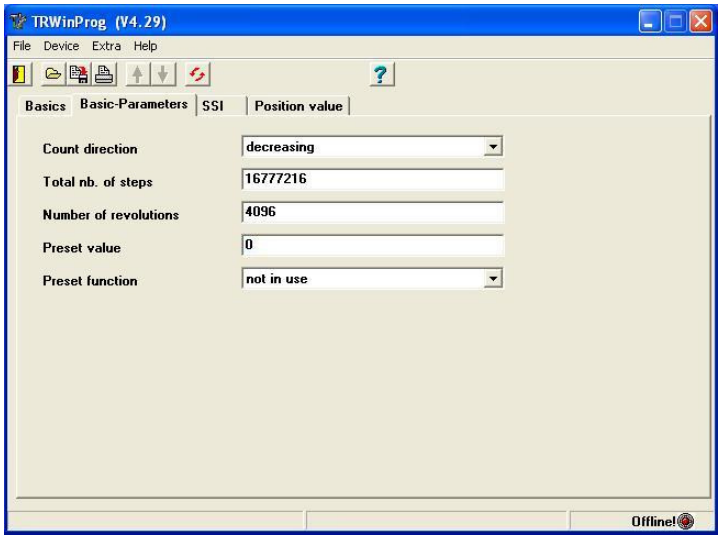
Number of Revolutions – This value represents the total number of revolutions the encoder will make before the value returns back to Zero (0).

**NOTE: The following equation can be used to calculate the number of Steps per Revolution.*

$$\text{Total Number of Steps} = \text{Measuring units per revolution} * \frac{\text{Number of Revolutions Numerator}}{\text{Number of Revolutions Denominator}}$$

Preset Value(s) – The value programmed into the encoder processor, and loaded as the current absolute position when the Preset Pin(s) is activated.

Preset Function – This parameter allows for users to enable/disable the Preset Pin(s) on the encoder.



The other tabs are specific to the encoder communication interface and other options on that encoder. For more detailed information on your device, or for a more detailed description of TRWinProg, please download the appropriate manual(s) from the *TR* Customer First Website.

Linear Transducers/Encoders

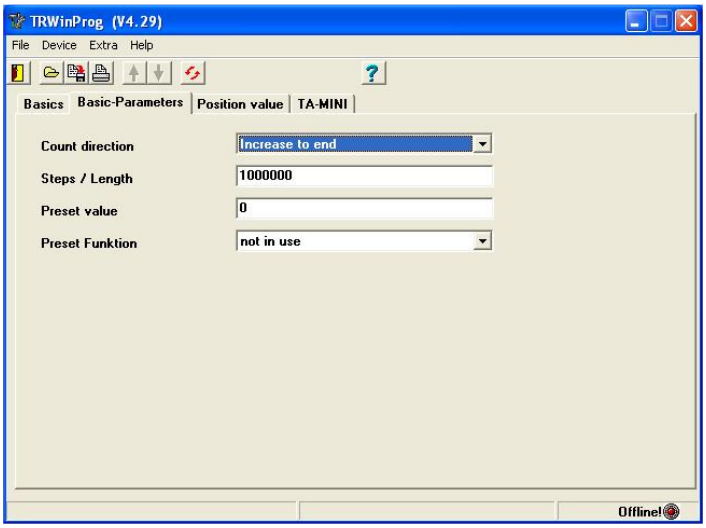
Basic-Parameters: This tab allows for users to change fundamental parameters within an absolute encoder.

Count Direction – Increase from Electronics to End / Decrease from Electronics to End.

Steps / Length – This parameter sets the number of positions across the entire measuring length of the unit.

Preset Value(s) – The value programmed into the encoder processor, and loaded as the current absolute position when the Preset Pin(s) is activated.

Preset Function – This parameter allows for users to enable/disable the Preset Pin(s) on the encoder.



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TR Electronic Center of Technical Excellence will work with you to develop custom ***TR***aining to meet your needs.

For Further Information Contact:

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