ENCODER TESTER

» Power supply and encoder PPV configurable.
» Analyzes incremental encoders with TTL and HTL levels.
» Portable, rechargeable battery powered.
» Frequency Range 20Hz-200KHz.
» Maximum resolutions to 12500 PPV.
» LCD Graphic Display - Intuitive Keyboard.
» Shows gaps and work cycle in real-time.

MAIN FEATURES

The *Encoder Tester* can accurately interpret the phase, work cycle, pulses per turn, speed sensor, signal level and other principal parameters for a wide spectrum of incremental encoders, in a large variety of applications and TTL or HTL power supply ranges. Once the encoder is connected to the analyzer , all important parameters are displayed through a graphic LCD display with back-light.

It can perform various functions by using a totally intuitive keyboard. The results of each analysis are shown in a series of screens in different numerical values and warning messages to the user. The real-time processing of Tester-Encoder facilitates the detection of transient faults and the quality of portability makes it a very versatile equipment.

The **Encoder Tester** has type flash memory, allowing you to save maximum and minimum values of various parameters of the encoder under test.

The encoder input signals (A, /A, B, /B, Z, /Z) and power supply outputs (5V, 24V) are made using a standard DB-9 connector.

Features	Description	Value	UNIT
	Encoder Power Supply Output	5 / 24	V
	Power Supply (4 AA Batteries)	1.2	V
Electrical	Maximum Frequency	200	KHz
	Minimum Frequency	20	Hz
	DB-9 connector (signals + power supply)		
	Dimensions	H: 174 D: 124 P: 49	mm
Mechanical	Weight	0.25	Kg
	LCD Graphic Display	128 x 64 pixels	
	Keyboard	7 Function Keys 12 Numeric Keys	

### Settings and visualization

Once the encoder is connected to the analyzer , all relevant parameters are displayed through a series of screens navigable from the keyboard operation
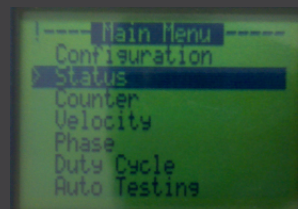
WAVES FORMS

Values and waveforms of the output signals of the encoders that deviate from the ideal is not always sources of malfunctions, wrong or faulty data; but is important have knowledge on this to determine which cases can cause problems within our system. The Encoder Tester analyzes and alerts through messages on the display if the values are permissible or not. This makes possible to evaluate the operation of the encoder without need of an oscilloscope or measuring elements that requires extensive technical knowledge.

Ideal quadrature and working cycle
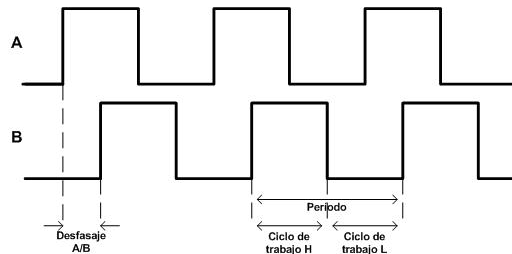
Measurement of maximum and minimum levels with oscilloscope
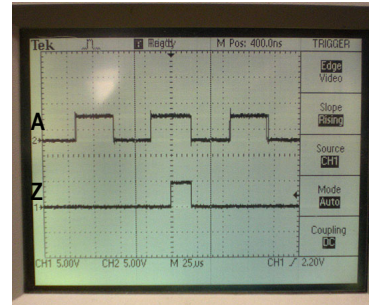
SCREENS

Screens	Description	Posts
Initiation	Shows company logo and equipment model.	-
Configuration	Here the user sets the power supply tension (5V/24V) and the number of PPR of the encoder to analyze.	5V or 24V selected PPV selected
Estatus	Shows in real time the status of the 6 signals (A, /A, B, /B, Z, /Z) and the phase angle form Z.	% Work Cycle
Counter	Shows in real time the pulse counter.	-
Velocity	Indicates in real time the velocity in PPR and RPM, and the direction of rotation. The maximun and minimum values can be saved in memory.	-
Phase	Shows the phase angle between A and B. The maximun and minimum values can be saved in memory.	Phase shift between A & B
Duty Cycle	Shows the work cycle of A or B, according to selection	High: (value) Low: (value)
Auto Testing	Tests all the parameters of the encoder, showing its condition	A A/ B B/ Z Z/

CONNECTIONS
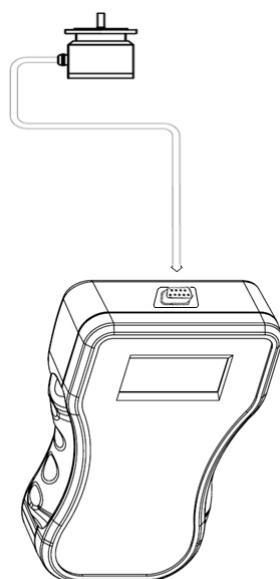
PIN	SIGNAL	TYPE
1	A	IN
2	B	IN
3	Z	IN
4	GND	OUT
5	+5V	OUT
6	/A	IN
7	/B	IN
8	/Z	IN
9	+24V	OUT

Encoder to Tester signal connections