



FEATURES

- >PRESETABLE/SIX DECADES
- >BUILT-IN COMPARATOR
- >MULTIPLEXED BCD
- >3T PARALLEL BUFFERED BCD
- >LEADING ZERO BLANKING
- >ZERO DETECTION-DISPLAY HOLD
- >QUADRATURE INPUT
- >INDEX INPUT
- >CASCADE CARRY OUT
- >AUTOMATIC STOP

DESCRIPTION

The Model 410 was designed primarily to interface to optical encoders with quadrature output having either 5 Volt or 12 Volt Signal. The 410 will count up when Phase A leads Phase B and it will count down when Phase A lags Phase B. The Index Detector will clear the counter to zero or to a preset number. The preset number is entered via Positive Logic BCD Switches. In addition, a limit can be set also with Positive Logic BCD Switches. Both limit and preset are of the latching type, meaning a single pulse is required to enter the switch data into the registers of the 410. When the count equals the limit, a pulse or a latched signal is available at the rear connector. This latched signal can be used to Reset, Preset, Stop, Counter Hold or Display Hold on 410. The Latched Output can then be cleared by a single negative pulse.

DISPLAY: Standard display is 6 digits 0.40" high. For applications requiring larger displays, a 5 Digit 0.6" high is available. In this case, the MSD is omitted. Colors other than Red are also available.

POWER SUPPLY: The 410 operates from 12Vdc +/- 10% at 180mA; an optional internal 115/230 VAC 50-60 Hz Module is available. When "3T" BCD is selected, the Power Supply must be 12Vdc or external VAC (see ordering information).

TRISTATE BCD: Full parallel with input and output enable logic controls for easy "Bussing" to other systems. This is an option in addition to the standard multiplexed BCD feature.

HOUSING: High impact black cycolac 94 V0 U.L. Rating front matte finish.

SWITCHES: Switches for the Limit/Counter Preset are of the BCD positive type with common anode diodes built-in. A set consists of 6 switches with end plates, front is front mount, rear is rear mount.

SPECIFICATIONS AT 25°C

Input Frequency-----	200 KHz	Maximum
Count Pulse Width-----	400ns.	Minimum
Hold Pulse Width-----	3µs.	Minimum
Reset Pulse Width-----	3µs.	Minimum
Zero Pulse Width-----	5µs	Min.
Carry Pulse Width-----	5µs	Min.
Equal Pulse Width-----	5µs	Min.
Preset Pulse Width-----	500µs.	Minimum
Power Supply-----	12 +/- 10%	Vdc
Power Consumption-----	150mA	
Operating Temperature-----	0 to +60°C	
Storage Temperature-----	-20 to +85°C	

APPLICATIONS

- >BATCHING CONTROL
- >WIRE REELING COIL WINDING
- >CUTTING CONTROL
- >LINEAR/ROTATIONAL MEASUREMENTS
- >AUTOMATIC PLOTTING MACHINE
- >AUTOMATIC POSITIONERS
- >TOTALIZERS LEVEL CONTROL
- >MOTOR SPEED CONTROL
- >AUTOMATIC SLOW DOWN-STOP

ORDER INFORMATION

MODEL 410 X X X

SWITCHES	! ! !	POWER SUPPLY/BCD
-0---None-----	! ! !	!-0--None (12Vdc Operation)-
-1---1 Set Front----	! ! !	!-1-115/230 VAC-----
-2---2 Sets Front----	! ! !	!-2-3T BCD(12Vdc Operation)-
-3---1 Set Rear-----	! ! !	!-3-3T BCD w/External Pwr---
-4---2 Sets Rear-----	! ! !	

DISPLAY TYPE

!-----0-----0.40" Red-----

Connectors Included !-----1-----0.50" 5 Digit Only--

SPECIFICATIONS AND PRICE SUBJECT TO CHANGE WITHOUT NOTICE