



VAN F.

**BELKNAP**

COMPANY, INC.

A DIVISION OF HANK THORN COMPANY, INC.

**THE LEADER IN SPECIALTY TORQUE APPLICATIONS**

# Electronic Dial Torque Wrench

## Operating Procedure Page 1

### POWERING ON

Do not apply torque when you power up. Press and hold the "Clear Hold-Power" button. If the battery is critically low, the wrench will not turn on. If the wrench turns on and then shuts off immediately, the batteries are probably low. All previously stored settings (units, target value, target %) are stored even when the power is off and the batteries are not installed.

### APPLYING TORQUE

Pull the torque wrench until desired torque is displayed on the LCD, while keeping a perpendicular plane on the target nut (bolt, etc.). Rotate the display for easy viewing.

### TARGET TORQUE VALUE

TO VIEW: Press either the "-" or "+" button once to display the current torque value. The target value will be displayed for 3 seconds.

TO CHANGE: Press either the "-" or "+" button and hold to decrease or increase the current torque value. The longer you press and hold, the faster the display will change.

### DETERMINING WHEN TARGET TORQUE IS REACHED

LISTEN for the buzzer. LOOK at the LCD display. WATCH for the lights.

Target torque REACHED: The yellow light illuminates.

Target torque WITHIN 2%: The green light illuminates and the buzzer sounds.

Target torque OVER 2%: The red light illuminates and the buzzer sounds intermittently.

### CHANGING TARGET TORQUE ZONE

Press and hold the "Clear Hold-Power" button, then press the "-" button to change the zone. Can be set from  $\pm 1\%$  to  $\pm 10\%$ . 2% is the default.

### CHANGING UNITS — IN LB., FT LB., NM

Press and hold the "Clear Hold-Power" button, then press the "+" button to change the UNIT. For security, it takes two button presses to change the units. When you change units, the target torque value will also be changed to the new units' value. The unit selected will become the default unit when the wrench is turned off and on again.

### MODES OF OPERATION

TRACK Display tracks up and down as torque is applied.

PEAK HOLD Display holds the highest torque applied.

AUTO CLEAR Display automatically clears when wrench starts new torque application.

### CHANGING THE MODE — PEAK HOLD, TRACK

Press the "Mode" button to change between Peak Hold and Track mode.

The letters "PH" in the LCD will illuminate when in Peak Hold mode.



*Continued on reverse...*



# Electronic Dial Torque Wrench

## Operating Procedure Page 2

### ADJUSTING THE LCD CONTRAST

Press and hold the "Mode" button, then press and hold the "-" button until the desired contrast is achieved, changes happen very slowly. This is useful when the temperature is very cold or very hot, but normally will not need to be changed.

### MANUAL POWER OFF

Press and hold the "Clear Hold-Power" button for 3 seconds. The wrench will also turn itself off after 3 minutes without use.

### AUTOMATIC POWER OFF

Automatically powers off after 30 minutes of non-use.

### 9-VOLT BATTERY INSTALLATION

When battery is low, a "BATT" icon will illuminate. If battery is critically low, the wrench will not turn on. Depending on the model, the batteries are located in either the handle or the case. Use of externally rechargeable batteries is acceptable.



## COMPUTER DOWNLOAD CAPABILITY (-P Models)

### SENDING DATA TO A COMPUTER

Set the wrench to Peak Mode. (See *Changing the Mode — Peak Hold, Track*)

Plug the RS232 cable into your computer's phone jack.

Windows XP or earlier:

Go to Start > All Programs > Accessories > Communications > Hyper Terminal

Data Transfer: Standard ASCII format

Protocol: 9600 Bps, 8,1,n

Information Sent: See *RS232 Data Download Example* below.

### RS232 Data Download Example

Comma Separated Values

+015.1 , ft.lb. , +040.0 , 2% , Low

Actual Torque Applied	Unit of Torque Setting	Target Torque Value Setting	Target Torque Zone Setting	Target Torque Result
+015.1	ft.lb.	+040.0	2%	Low

### RECHARGING BATTERIES

You can use the wrench when the power adapter is charging the batteries, when using external power without batteries, and while the RS232 cable is plugged into and transferring data to a computer.

