

ControlTech® LINK

WIRELESS TORQUE-ANGLE SCREWDRIVER

20-2106-SO REV C
21-11

SAFETY INSTRUCTIONS

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IMPORTANT SAFETY INSTRUCTIONS



WARNING *Risk of flying particles.*

Over-torquing can cause breakage. An out of calibration screwdriver can cause part or tool breakage. Broken hand tools, sockets or accessories can cause injury. Excess force can cause crowfoot or flare nut screwdriver slippage.



- ❑ **Read this manual completely before using ELECTRONIC SCREWDRIVER**.
- ❑ To ensure accuracy, work must not move in angle mode.
- ❑ For personal safety and to avoid screwdriver damage, follow good professional tool and fastener installation practices.
- ❑ Periodic recalibration is necessary to maintain accuracy.
- ❑ **Wear safety goggles, user and bystanders.**



- ❑ Be sure all components, including all adaptors, extensions, drivers and sockets are rated to match or exceed torque being applied.
- ❑ Observe all equipment, system and manufacturer's warnings, cautions and procedures when using this screwdriver.
- ❑ Use correct size socket for fastener.
- ❑ Do not use sockets showing wear or cracks.
- ❑ Replace fasteners with rounded corners.
- ❑ **To avoid damaging screwdriver:** Never use screwdriver with power off. Always turn ON screwdriver so applied torque is being measured.



- ❑ Do not press **POWER** ⏻ while torque is applied or while screwdriver is in motion.
- ❑ Never use this screwdriver to break fasteners loose.
- ❑ Check that screwdriver capacity matches or exceeds each application before proceeding.
- ❑ Verify calibration if dropped.
- ❑ Verify calibration of screwdriver if you know or suspect its capacity has been exceeded.
- ❑ Always adjust your stance to prevent a possible fall should something give while using screwdriver.
- ❑ Do not attempt to recharge alkaline cells.
- ❑ Store screwdriver in dry place.
- ❑ Remove batteries when storing screwdriver used for periods longer than 3 months.
- ❑ Use ESD (Electrostatic discharge) on sensitive components to prevent electrostatic discharge (ESD) by safely grounding a person working with electronic equipment.



WARNING *Electrical Shock Hazard.*

Electrical shock can cause injury. Metal in handle is not isolated.
Do not use on live electrical circuits.

SAVE THESE INSTRUCTIONS

Disclaimer

Operation of ControlTech™ Wireless Screwdriver is not warranted in an EU member state if operating instructions are not in that State's language. Contact Snap-on if a translation is needed.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:
(1) This device may not cause interference, and
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Note: During high-level Electrostatic Discharge events, temporary loss of function may occur that requires operator intervention or system reset. As a precaution, discharge non-energized work area prior to contact with screwdriver.

Specifications



MSTECHHDL L-Handle Grip Attachment for CTLNKMS80M CTLNKMS80F Instruments.

DO NOT use the L-Handle Grip Attachment with the 5-100 in-oz models.

Drive Type

- ¼" Hex Female
- ¼" Square Male

Display

- DISPLAY TYPE: Dot Matrix LCD (168 x 48 Resolution)
- VIEWING ANGLE: 6:00
- BACKLIGHT: WHITE (LED)

Sealed Button Pad

POWER - ON/OFF and torque and angle re-zero

ENTER - measurement mode select and menu entry

UP – increments torque and angle settings and menu navigation

DOWN - decrements torque and angle settings and menu navigation

UNITS - units select (ft-lb, in-lb, in-oz, Nm, Kg-cm, cNm) and enter PSET (preset) menu

LCD BACKLIGHT – Illuminates all screens and last peak torque, angle recall or command sent from Control Box.

Functions

- Set - torque or angle target
- Track - real time display of torque or accumulated angular rotation with progress lights
- Peak Hold – 5 sec. flashing of peak torque or alternating peak torque/angle on release of torque
- Peak Recall - display last peak torque or peak torque/angle on button press
- Memory - display of last 1500 peak torque or peak torque/angle readings

Accuracy

- Temperature: @ 22 C (72°F)
- Angle: ±1% of reading ±1° @ angular velocity > 10°/sec < 180°/sec: ±2° @ ≤ 90°, ±3° @ > 90° and ≤ 180°

- Torque: CTLNKMS80M CTLNKMS80F

CW	CCW	
±2%	±3%	of reading, 20% to 100% of full scale
±4%	±6%	of reading, 5% to 19% of full scale

- Torque: CTLNKMS100M CTLNKMS100F

CW	CCW	
±3%	±3%	of reading, 20% to 100% of full scale
±5%	±6%	of reading, 5% to 19% of full scale

Operating Temperature: 0°F - 130°F (-18°C to 54°C)

Storage Temperature: 0°F to 130°F (-18°C to 54°C)

Measurement Drift: ANGLE: -0.12 Angular Degrees per Degree C
TORQUE: +0.01% of reading per Degree C

Humidity: Up to 90% non-condensing

Battery: Single "AA" Lithium Cell, up to 40 hours continuous operation. Alkaline or rechargeable NiMH batteries may be used (exceeds ASME battery life requirement of 10 hours continuous operation).

Default Auto Shut-off: After 2 minutes idle – (Adjustable, see Advanced Settings).

User Instructions Report Mode

- Basic Functions (Quick Start)
- Control Box Mode (Report)

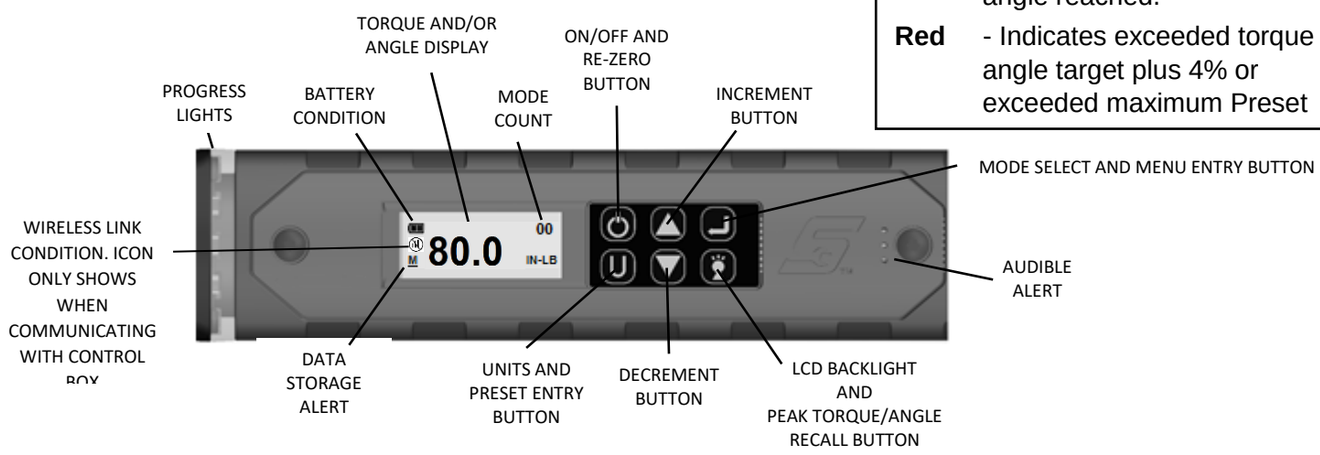
PROGRESS LIGHTS

Yellow – ½ second on/off flashing indicates 40% of target torque or angle reached. ¼ second flashing indicates 60% of target reached. Continuous on indicates 80% of target reached.

Green - Indicates target torque or angle reached.

Red - Indicates exceeded torque or angle target plus 4% or exceeded maximum Preset

Figure 1



Install fresh Lithium "AA" cell into handle of screwdriver.

Screwdriver Power On Sequence

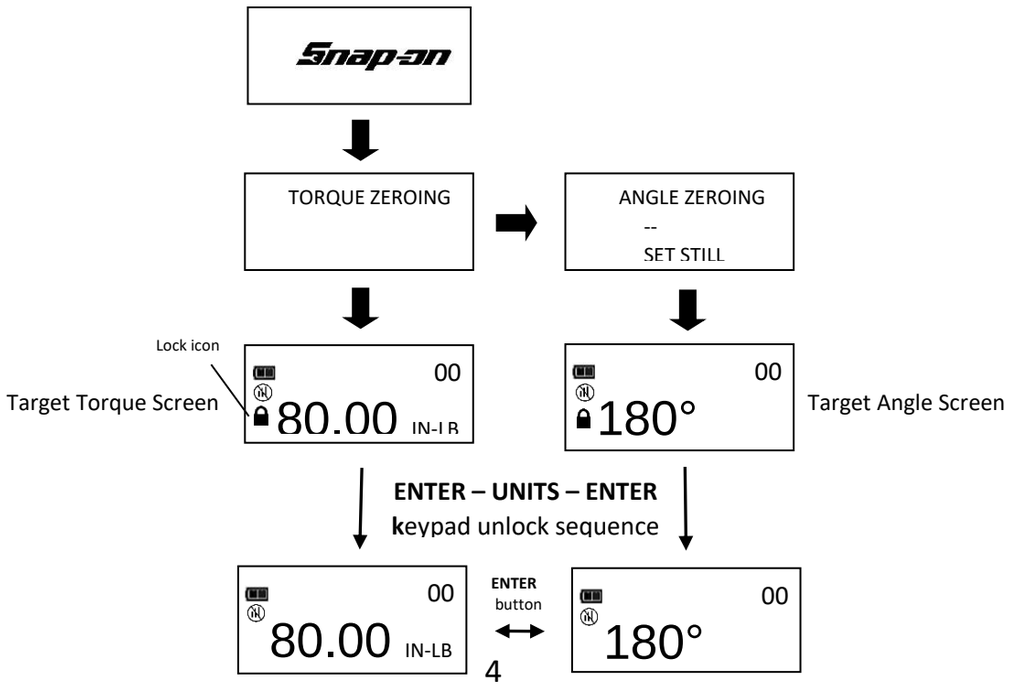
*Note: Do not turn on power to screwdriver while torque is applied, otherwise torque zero offset will be incorrect and screwdriver will indicate a torque reading when torque is released. If this occurs, re-zero screwdriver by momentarily pressing **POWER** button while screwdriver is on a stable surface with no torque applied.*

1. Turn On Screwdriver.

   While holding screwdriver still, momentarily press **POWER** button. Snap-on logo will be displayed followed by torque and angle re-zeroing screens (if angle mode has been previously selected). The target TORQUE or ANGLE screen will now be displayed depending on previous measurement mode selected.

*Note: By simultaneously pressing the **ENTER** and **UNITS** buttons, the keypad can be locked to prevent inadvertent button presses while griping the screwdriver body. The Lock Icon is displayed when the keypad is locked. To unlock the keypad, press the **ENTER** – **UNITS** – **ENTER** buttons in sequence**. ***This feature is disabled when communicating with Control Box.***

*Note: If the keypad was locked when powered down, on power up, the keypad will remain locked and will require the keypad unlock button sequence of **ENTER** – **UNITS** – **ENTER** to become functional again.*



2. Select Measurement Mode.
   Toggle between target TORQUE and ANGLE screens by repeatedly pressing **ENTER** button.

Note: If screwdriver is powered up in torque only measurement mode, angle is not zeroed until keypad is unlocked and mode is changed to angle measurement mode. The Angle Zero Required screen will be displayed:



Angle zeroing begins automatically after 2 seconds. Screwdriver should be placed on a stable surface with no torque applied.

Note: Pressing **ENTER** *button while angle is zeroing will abort zeroing function to allow user to select another measurement mode.*

Torque Mode

1. Set Target.
   Use **UP/DOWN** buttons to change TORQUE target value.
2. Select Units of Measure.
   Repeatedly press **UNITS** button while on target TORQUE screen until desired units are displayed.
3. Apply TORQUE.
   Grasp center of handle or L-Handle Attachment and slowly apply torque to fastener until progress lights display green and a ½ second audible alert and handle vibration alerts you to stop.
4. Release TORQUE.
   Note peak TORQUE reading flashing on LCD display for 5 seconds. Pressing **BACKLIGHT** button while peak torque is flashing will continue to display value until button is released. Momentarily pressing **UP/DOWN , ENTER** or **UNITS** button will immediately return to target TORQUE screen. Reapplying TORQUE will immediately start another TORQUE measurement cycle.
5. Recall Peak TORQUE Reading
   To recall last peak TORQUE measurement, press and hold **BACKLIGHT** button for approximately 3 seconds. Peak TORQUE will flash for 5 seconds.

Angle Mode

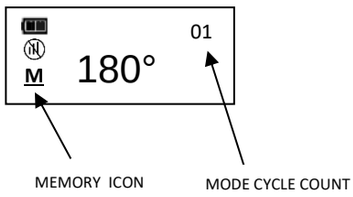
Note: When angle measurement mode is selected for first time following a power on, "ANGLE ZERO REQUIRED" message is displayed. After two seconds angle zero process begins and screwdriver must be placed on a stable surface. If **ENTER** *button is pressed before two seconds, screen will change to torque only mode, angle zero process is skipped. On 5-100 in-oz models angle the angle tracking begins when 30 in-oz of torque is achieved.*

1. Set target.
   Use **UP/DOWN** buttons to change target ANGLE value.
2. Apply Torque and Rotate Screwdriver.
   Grasp center of handle L-Handle Attachment and slowly apply torque to fastener and rotate screwdriver at a moderate consistent speed until progress lights display green and a ½ second audible alert and handle vibration alerts you to stop.
3. Release torque.
   Note alternating peak TORQUE and ANGLE readings flashing on LCD display for 5 seconds. Pressing **BACKLIGHT** button while peak values are flashing will continue to display values until button is released. Momentarily pressing **UP/DOWN , ENTER** or **UNITS** button will immediately return to target ANGLE screen. Reapplying torque (ratcheting) before target screen is displayed will continue ANGLE accumulation as screwdriver is rotated.
4. Recall Peak ANGLE Reading

To recall last peak ANGLE measurement, press and hold **BACKLIGHT** button for approximately 3 seconds. Peak TORQUE and ANGLE will be displayed alternately for 5 seconds.

Mode Cycle Count

Mode cycle count feature is used to indicate number of times screwdriver has reached target torque in torque measurement mode or target angle in angle measurement mode.



Torque and Angle Mode Cycle Counting

1. Numerical counter located in top right of target torque or target angle screen will increment after each torque or angle cycle if applied torque or angle has reached target value.
2. When toggling between torque mode or angle mode using **ENTER** button or if target is changed, numerical counter will reset back to 00. Counter WILL NOT reset when re-zeroing, on menu entry/exit or power down.
3. Memory icon will turn on indicating at least one torque or angle cycle data has been stored in memory.

Main Menu

Main menu displays screwdriver operational information.

1. From target torque or angle screen, press and hold **ENTER** button for 3 seconds.
2. Use **UP/DOWN** buttons to highlight menu selection then press **ENTER** button.

   Menu Selections:
   - EXIT - Exits Main menu and returns to target screen.
   - SHOW DATA - Displays stored torque and angle data.
   - CLEAR DATA - Clears stored torque and angle data.
   - CYCLE COUNT - Displays torque/angle cycle count screen.
   - LANGUAGE - Displays language selection menu.
   - SETTINGS - Displays advanced settings menu (see Advanced Settings Section).
   - CONFIGURE - Displays advanced configuration menu (see Advanced Configuration Section).

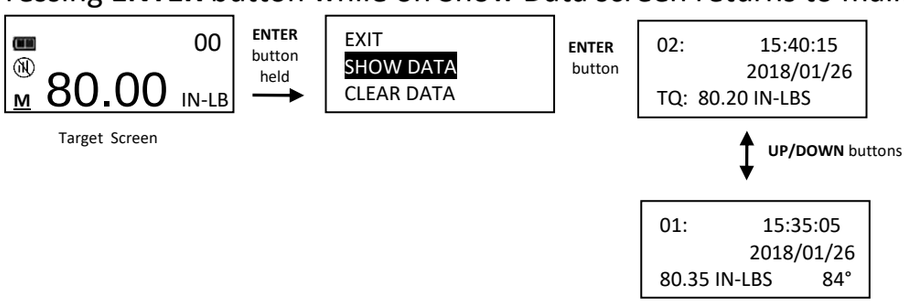
Viewing Stored Torque and Angle Data

Torque data is stored in memory after each torque cycle if applied torque has reached target value. Torque and angle data is stored in memory after each angle cycle if applied angle has reached target value. Memory Indicator is displayed when data is stored in non-volatile memory.

1. To view stored torque and angle data, from target torque or angle screen, press and hold **ENTER** button for 3 seconds.
2. Highlight SHOW DATA menu selection by pressing **UP/DOWN** buttons then press **ENTER** button to display Show Data screen.
3. In Show Data screen, scroll through each stored data record by pressing **UP/DOWN** buttons.

   Example: 02 = Show Data List Counter: TQ = Peak torque value

   01 = Show Data List Counter: TQ = Peak torque value: ANG = Peak angle value
4. Pressing **ENTER** button while on Show Data screen returns to main menu.

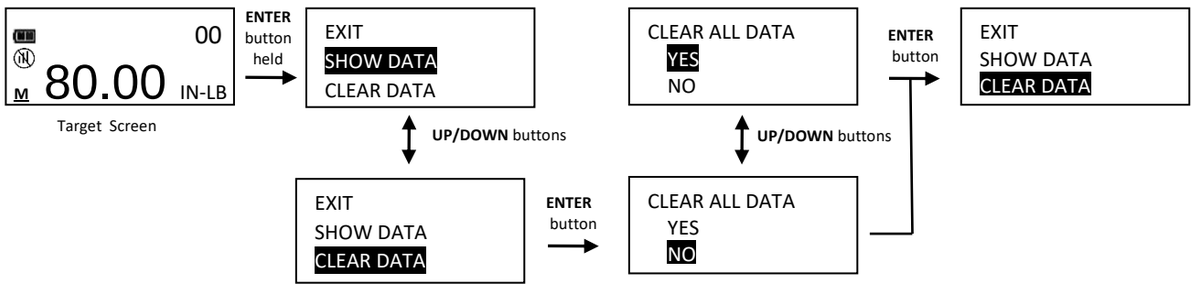


Note: A maximum of 1500 data records can be stored in memory. Memory full icon will be displayed when full. New data is stored at number 1500, moving older data down and bumping the oldest from location 01 until memory is cleared.

Note: Date and Time is blank if real-time-clock has not been set (see Setting Date and Time in the Advanced Configuration section.

Deleting Stored Torque and Angle Data

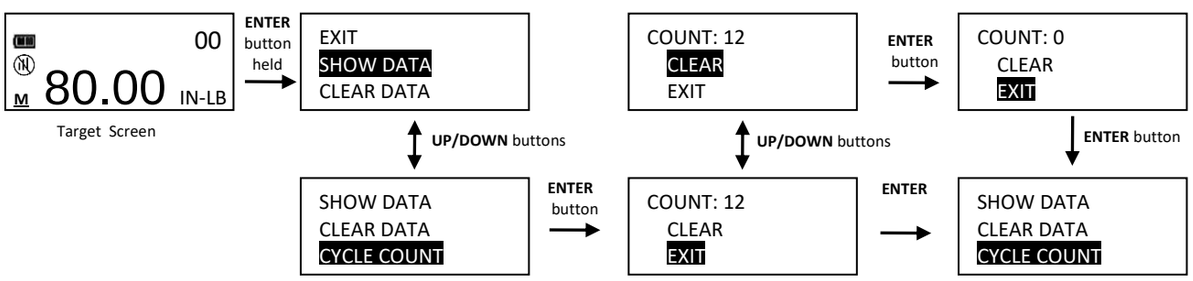
1. From target torque or angle screen, press and hold **ENTER** button for 3 seconds.
2. Highlight CLEAR DATA menu selection using **UP/DOWN** buttons then press **ENTER** button to display CLEAR ALL DATA screen.
3. In CLEAR ALL DATA screen, highlight YES menu selection to delete all stored data, or NO menu selection to exit without deleting data.
4. Press **ENTER** button after making selection.



Viewing and Clearing Screwdriver Cycle Counter

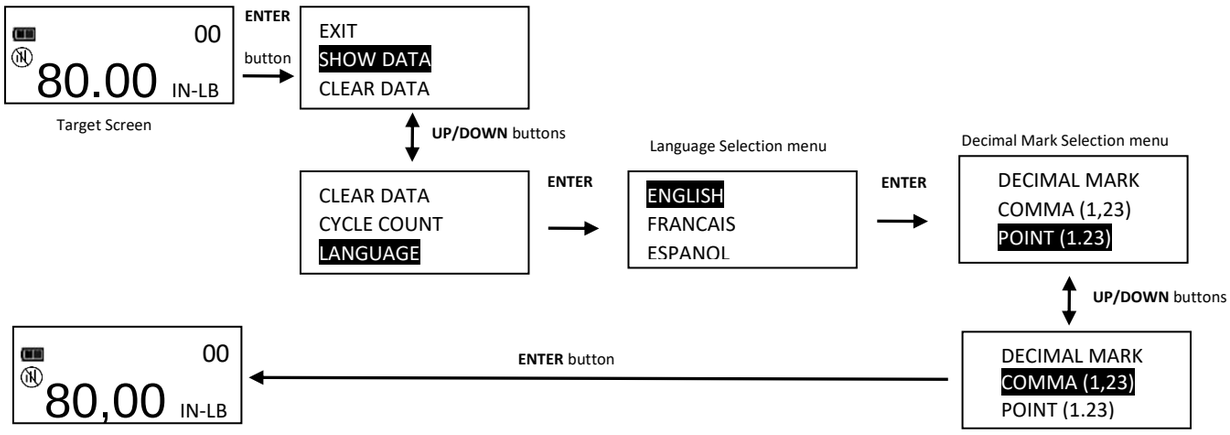
Each time torque or angle target is reached, screwdriver cycle counter is incremented. Maximum cycle count is 999999.

1. From target torque or angle screen, press and hold **ENTER** button for 3 seconds.
2. Highlight CYCLE COUNT menu selection using **UP/DOWN** buttons.
3. Press **ENTER** button to display CYCLE COUNT screen.
4. To exit CYCLE COUNT screen without clearing count, press **ENTER** button while EXIT menu selection is highlighted.
5. To reset screwdriver cycle count to 0, highlight CLEAR menu selection then press **ENTER** button.
6. EXIT menu selection is automatically highlighted after count is cleared. Press **ENTER** button to return to main menu.



Language

1. To select language menu, press **ENTER** button while LANGUAGE is highlighted then highlight desired language and press **ENTER** button.
2. Decimal Mark selection menu is displayed. Decimal separator can be a comma or decimal point. Use **UP/DOWN** buttons to select decimal separator then press the **ENTER** button.

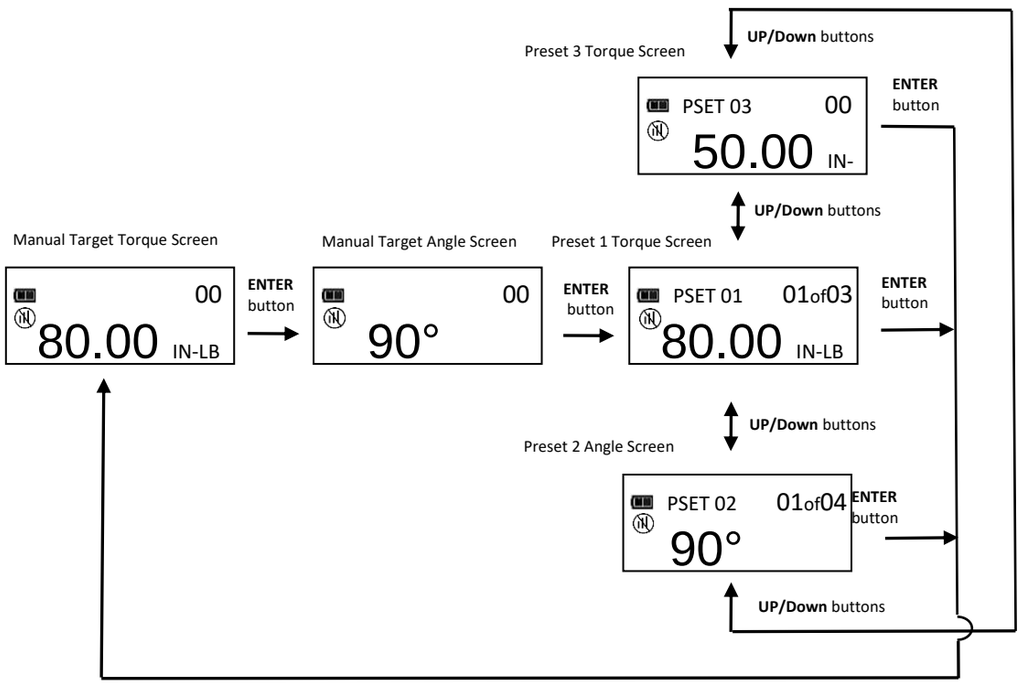


3. To exit Main menu and return to target torque or angle screen, press **ENTER** button while EXIT menu selection is highlighted.

Target Presets (PSET)

PSET function gives user ability to configure 50 preset target torque or target angle settings, each with a target, minimum, maximum (over range) and batch count value. PSETs are stored in non-volatile memory so that they are retained while power is off.

*Note: After adding a Preset (see below), navigate between manual target torque, angle mode and PSET screen by repeatedly pressing **ENTER** button. While PSET screen is displayed, press **UP/DOWN** buttons to select additional configured PSETs.*

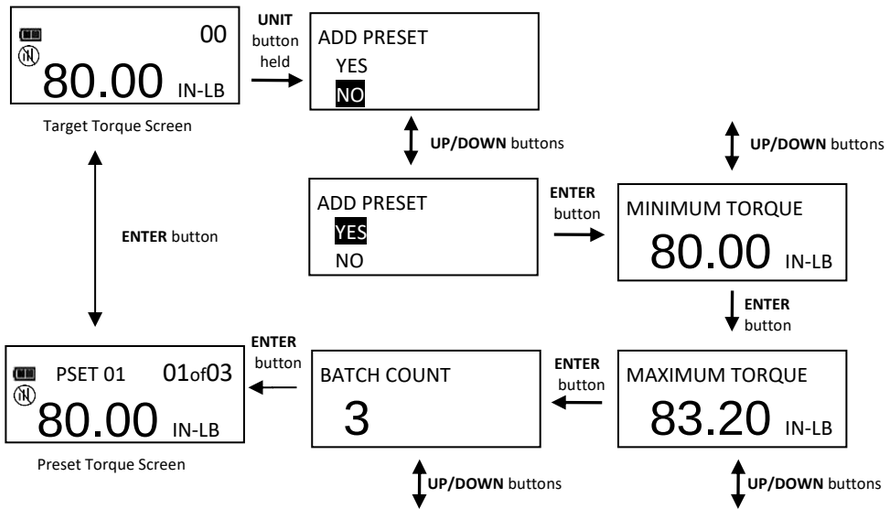


Note: Presets with a non-zero batch count are displayed as 01ofXX. Batch count up to 99 can be inputted.

Adding a Torque Preset

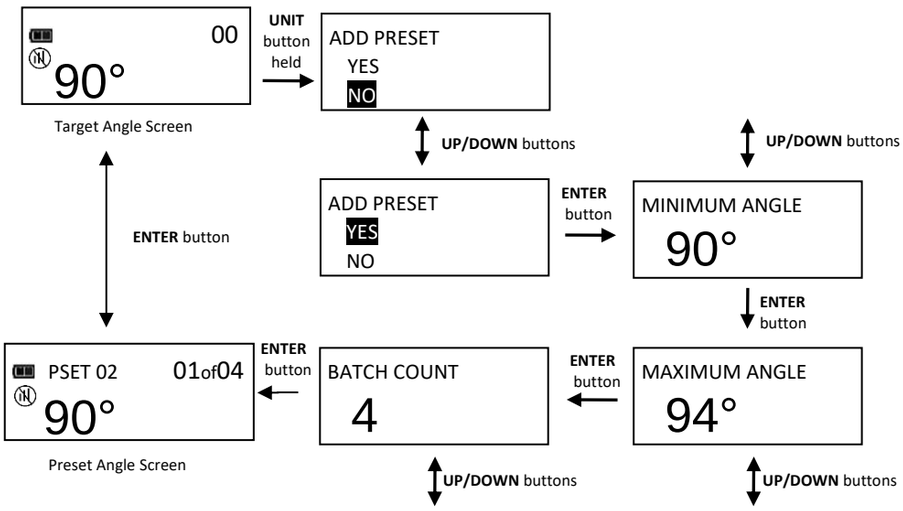
1. From manual target torque screen, select units of measure.
2. Press and hold **UNITS** button for 3 seconds.
3. ADD PRESET confirmation screen is displayed. Highlight YES menu selection using **UP/DOWN** buttons then press **ENTER** button**.** NO menu selection returns to main menu without adding a PSET.
4. MINIMUM TORQUE screen is displayed. MINIMUM TORQUE is value at which green progress lights, audible alert and vibrator turn on. Initial MINIMUM TORQUE value is the manual TARGET TORQUE value. MINIMUM TORQUE can be set to any value from screwdriver minimum torque range to full scale torque range by pressing **UP/DOWN** buttons. Once desired minimum torque value has been set, press **ENTER** button**.**

5. MAXIMUM TORQUE screen is displayed next. MAXIMUM TORQUE is torque value above which red progress lights turn on. Initial MAXIMUM TORQUE value will be TARGET TORQUE value or MINIMUM TORQUE value (whichever is larger) plus 4%. Maximum torque value can be set greater than MINIMUM TORQUE value to 10% above screwdriver maximum range by pressing **UP/DOWN** buttons. Once desired maximum torque value has been set, press **ENTER** button**.**
6. BATCH COUNT screen is displayed next. Default value is zero. Batch count range is 0 to 99. Press **UP/DOWN** buttons to increment/decrement batch count. Mode Count increments each time target torque is reached if a batch count of zero is entered. Mode Count decrements if a non-zero batch count is entered and resets to batch count value when count reaches zero. Once desired batch count value has been set, press **ENTER** button**.**
7. PSET target screen is displayed labeled with next available PSET number from 01 to 50.
8. To enter additional torque presets, repeatedly press **ENTER** button until target torque screen is displayed and repeat steps above.



<u>Adding an Angle Preset</u>

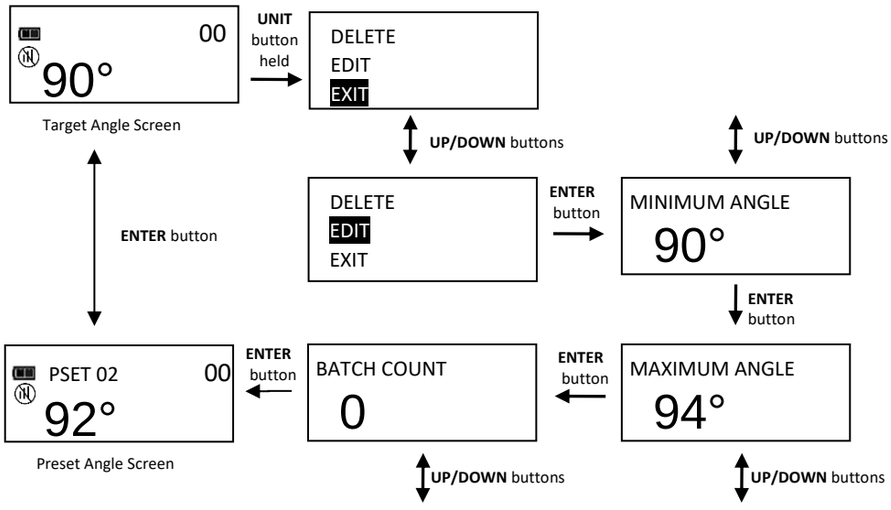
1. From manual target angle screen, press and hold **UNITS** button for 3 seconds.
2. ADD PRESET confirmation screen is displayed. Highlight YES menu selection using **UP/DOWN** buttons then press **ENTER** button**.** NO menu selection returns to main menu without adding a PSET.
3. MINIMUM ANGLE screen is displayed. MINIMUM ANGLE is value at which green progress lights, audible alert and vibrator turn on. Initial MINIMUM ANGLE value is TARGET ANGLE value. MINIMUM ANGLE can be set from 0 to 360° by pressing **UP/DOWN** buttons. Once desired minimum angle value has been set, press **ENTER** button**.**
4. MAXMUM ANGLE screen is displayed next. MAXIMUM ANGLE is angle value above which red progress lights turn on. Initial MAXIMUM ANGLE value will be TARGET ANGLE or MINIMUM ANGLE (whichever is larger) plus 4. MAXIMUM ANGLE value can be set to any value greater than MINIMUM ANGLE by pressing **UP/DOWN** buttons. Once desired value has been set, press **ENTER** button**.**
5. BATCH COUNT screen is displayed next. Default value is zero. Batch count range is 0 to 99. Press **UP/DOWN** buttons to increment/decrement batch count. Mode Count increments each time target angle is reached if a batch count of zero is entered. Mode Count decrements if a non-zero batch count is entered and resets to batch count value when count reaches zero. Once desired batch count value has been set, press **ENTER** button**.**
6. PSET target screen is displayed labeled with next available PSET number from 01 to 50.
7. To enter additional angle presets, repeatedly press **ENTER** button until target angle screen is displayed and repeat steps above.



Editing a Preset

Edit PSET function gives user ability to edit stored PSETS on screwdriver.

1. From Preset screen to be edited, press and hold **UNITS** button for 3 seconds.
2. CHANGE PRESET screen is displayed.
3. Highlight EDIT selection using **UP/DOWN** buttons then press **ENTER** button.
4. MINIMUM TORQUE or MINIMUM ANGLE screen is displayed. Value can be changed by pressing **UP/DOWN** buttons. Once desired torque or angle value has been set, press **ENTER** button**.**
5. MAXMUM TORQUE or MAXMUM ANGLE screen is displayed next. Value can be changed by pressing **UP/DOWN** buttons. Once desired torque or angle value has been set, press **ENTER** button**.**
6. BATCH COUNT screen is displayed next. Value can be changed by pressing **UP/DOWN** buttons. Once desired batch count value has been set, press **ENTER** button**.**
7. PSET target screen is displayed labeled with same PSET number.

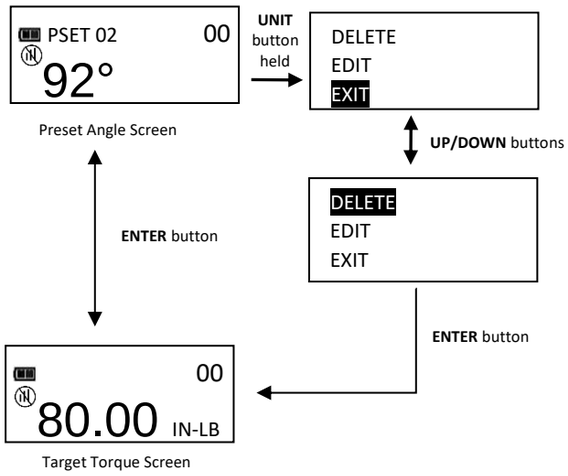


*Note: Pressing **ENTER** button while EXIT menu selection is highlighted will exit without editing PSET.*

Deleting a Preset

Delete PSET function allows user to remove stored presets from screwdriver.

1. From Preset screen to be deleted, press and hold **UNITS** button for 3 seconds.
2. CHANGE PRESET screen is displayed.
3. Highlight DELETE menu selection using **UP/DOWN** buttons and press **ENTER** button**.**
4. Target screen is displayed and deleted PSET is no longer available for selection.



Note: Pressing **ENTER** *button while* EXIT *menu selection is highlighted will exit without deleting PSET.*

Note: When a PSET is deleted, all other stored PSET's will retain their original PSET numbers. When a new PSET is entered, it will be assigned first available PSET number in sequence.

- Advanced Settings

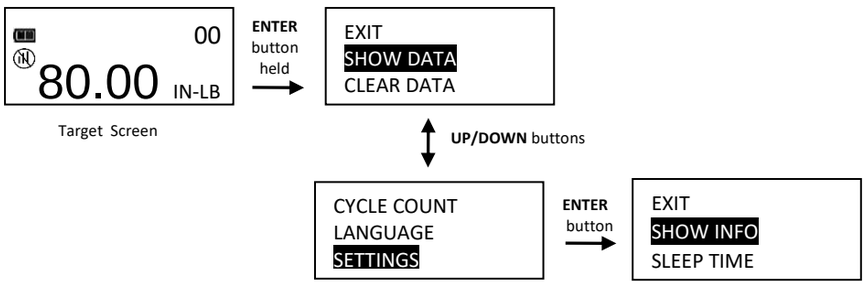
Accessing Advanced Settings

Advanced settings are accessed from SETTINGS menu selection on main menu.

1. From target torque or angle screen, press and hold **ENTER** button for 3 seconds.
2. Highlight SETTINGS menu selection using **UP/DOWN** buttons.
3. Press **ENTER** button to display Settings menu.

   Menu Selections:

   - EXIT - Exits Settings menu and returns to target screen.
   - SHOW INFO - Displays screwdriver operational information.
   - SLEEP TIME - Displays power down interval setup screen.
   - LCD CONTRAST - Displays LCD contrast setup screen.
   - KEY BEEP - Displays button press beep enable/disable setup screen.
   - TARGET BEEP - Displays target beep enable/disable setup screen.
   - AUTO BACKLIGHT - Displays auto backlight enable/disable screen to turn on backlight during measurement.
   - TOGGLE BACKLGHT - Displays **BACKLIGHT** button toggle or timeout enable/disable screen.
   - VIBRATOR CONFIG - Displays vibrator ON/OFF configuration for when target reached.
   - BATTERY TYPE – Displays the battery type selection screen.
4. To exit Settings menu and return to target torque or angle screen, press **ENTER** button while EXIT menu selection is highlighted.



Note: All user configurable settings are stored in non-volatile memory and are retained while power is off.

Show Info

Show Info menu selection displays screwdriver operational information.

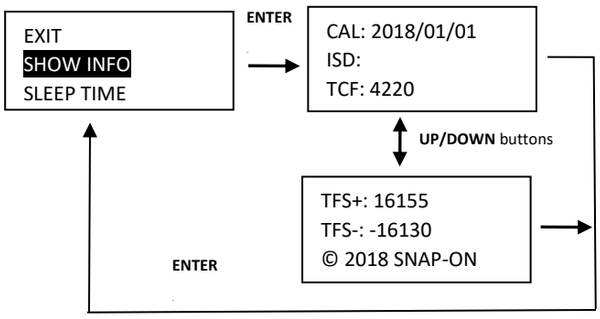
1. From Settings menu, press **ENTER** button while SHOW INFO selection is highlighted.
2. SHOW INFO screen is displayed.
3. **UP/DOWN** buttons are used to scroll screen.

   Operational Information:

   - SN: Serial Number of Instrument.
   - CAL: Date of last screwdriver calibration.
   - ISD: In-Service Date (remains blank until real-time-clock set).
   - TCF: Torque Calibration Factor.
   - ACF: Angle Calibration Factor.
   - VER: Software version.
   - RADIO ID: Radio Name
   - #: Asset Tag
   - OVR CNT: Overtorque Counter tracks how many times an over-torque event occurred on screwdriver (torque >125% of full scale).
   - TQZ: Torque Zero Offset.
   - ANZ: Angle Zero Offset.
   - AFS+: Angle Zero Offset at CW Torque Full Scale.

- AFS-: Angle Zero Offset at CCW Torque Full Scale.
- TFS+: CW Torque Full Scale.
- TFS-: CCW Torque Full Scale.
- Copyright

4. Pressing **ENTER** button exits Show Info screen and returns to Settings menu.

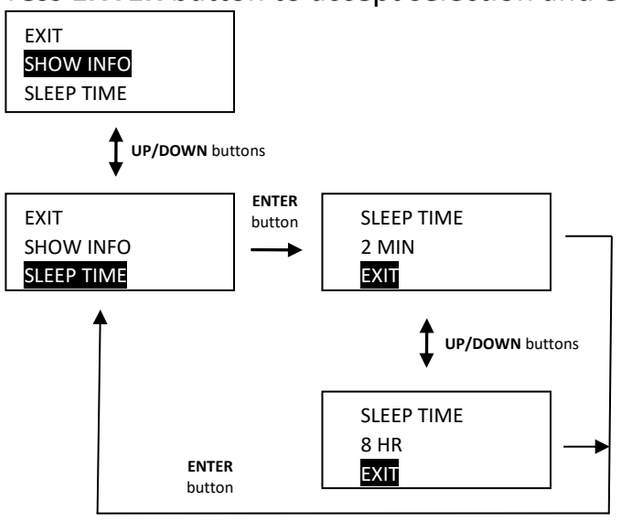


Setting Sleep Time

This function will allow user to set interval screwdriver enters power-down state following last applied torque or button press.

1. From Settings menu, use **UP/DOWN** buttons to highlight SLEEP TIME selection then press **ENTER** button.
2. SLEEP TIME screen is displayed.
3. Use **UP/DOWN** buttons to select sleep interval.

   Selectable Intervals:
   - 2 MIN (factory default)
   - 5 MIN
   - 10 MIN
   - 30 MIN
   - 1 HR
   - 2 HR
   - 8 HR
4. Press **ENTER** button to accept selection and exit to Settings menu.

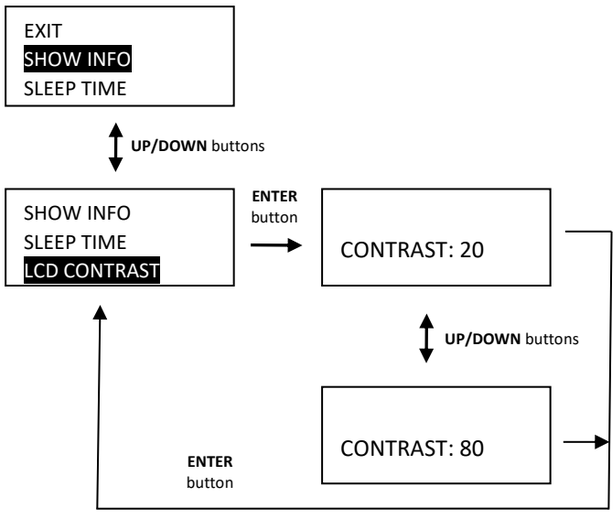


Setting LCD Contrast

This function will allow user to set LCD contrast for optimal viewing.

1. From Settings menu, use **UP/DOWN** buttons to highlight LCD CONTRAST selection then press **ENTER** button.
2. CONTRAST screen is displayed.
3. Use **UP/DOWN** buttons while viewing display to change contrast to desired level.

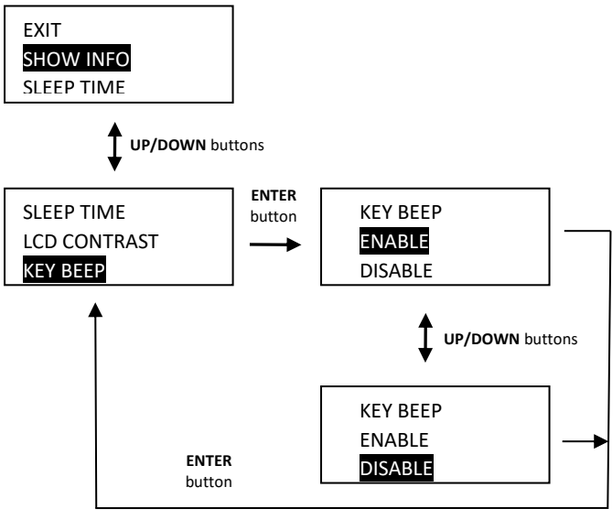
   Selectable levels: 20 to 80 in increments of 5 (factory default = 40).
4. Press **ENTER** button to accept selection and exit to Settings menu.



Key Beep Setup

This function will allow user to enable or disable audio feedback when a button is pressed.

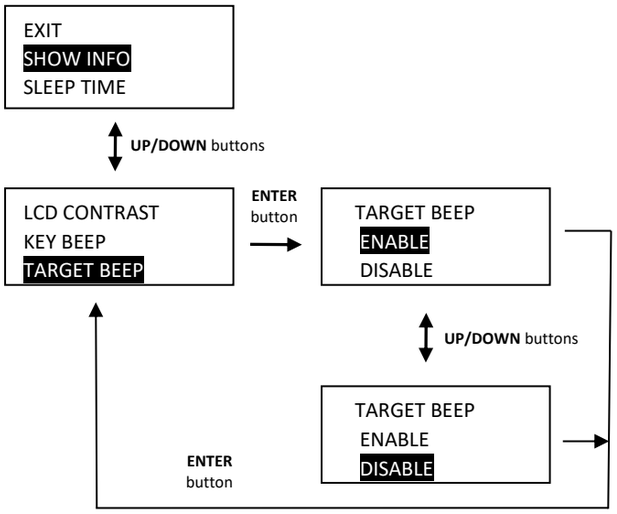
1. From Settings menu, use **UP/DOWN** buttons to highlight KEY BEEP selection then press **ENTER** button.
2. KEY BEEP screen is displayed.
3. Use **UP/DOWN** buttons to highlight ENABLE (factory default) or DISABLE selection.
4. Press **ENTER** button to accept selection and exit to Settings menu.



Target Beep Setup

This function will allow user to enable or disable audio feedback when target torque or angle is reached. Audio feedback occurs on torque or angle over range (red LED) regardless of this setting.

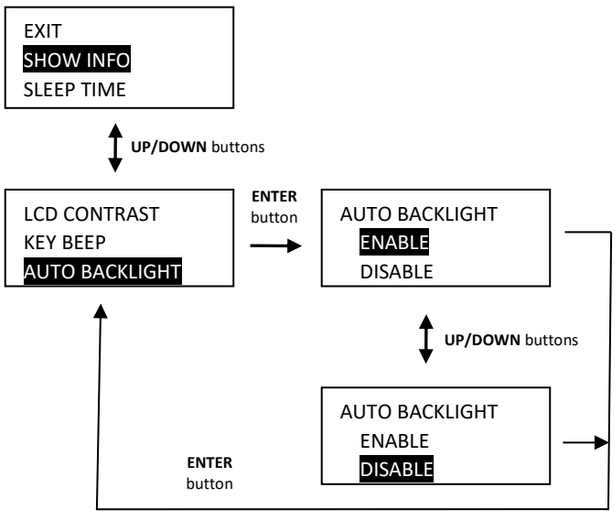
1. From Settings menu, use **UP/DOWN** buttons to highlight TARGET BEEP selection then press **ENTER** button.
2. TARGET BEEP screen is displayed.
3. Use **UP/DOWN** buttons to highlight ENABLE (factory default) or DISABLE selection.
4. Press **ENTER** button to accept selection and exit to Settings menu.



Auto Backlight Setup

This function will allow user to enable or disable backlight from turning on during torque or angle measurement.

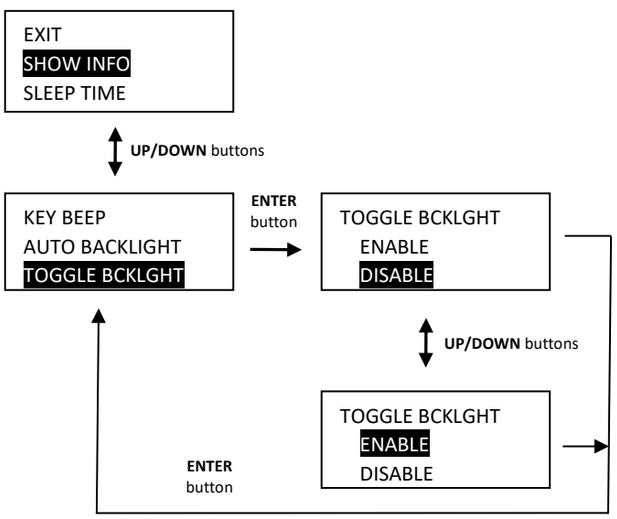
1. From Settings menu, use **UP/DOWN** buttons to highlight AUTO BACKLIGHT selection then press **ENTER** button.
2. AUTO BACKLIGHT screen is displayed.
3. Use **UP/DOWN** buttons to highlight ENABLE (factory default) or DISABLE selection.
4. Press **ENTER** button to accept selection and exit to Settings menu.



Toggle Backlight Setup

This function will allow user to enable or disable backlight toggle function. If toggle mode is disabled, **BACKLIGHT** button turns on backlight and it automatically turns off after five seconds following any last button press. If toggle mode is enabled, a **BACKLIGHT** button press will turn on backlight and it will remain on until next **BACKLIGHT** button press.

1. From Settings menu, use **UP/DOWN** buttons to highlight TOGGLE BACKLGHT selection then press **ENTER** button.
2. TOGGLE BACKLGHT screen is displayed.
3. Use **UP/DOWN** buttons to highlight ENABLE or DISABLE (factory default) selection.
4. Press **ENTER** button to accept selection and exit to Settings menu.



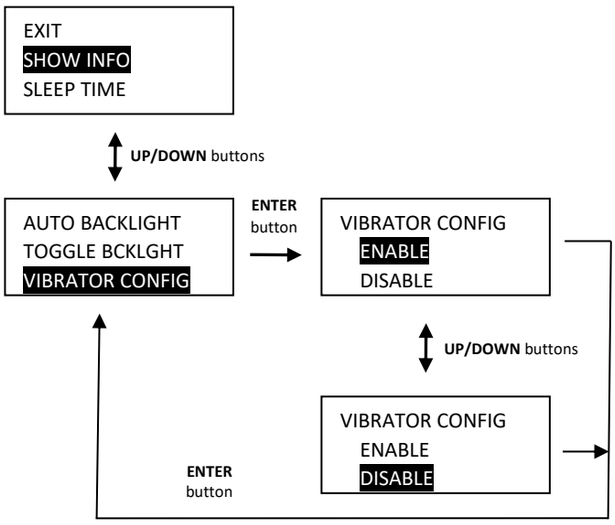
*Note: Backlight will turn off when screwdriver powers down either by **POWER** button press or sleep time.*

Note: If toggle backlight is enabled and backlight is on, backlight will remain on during and after applying torque.

Vibrator Configuration

This function will allow user to configure vibrator for On or Off when target is reached for preference and/or battery power savings.

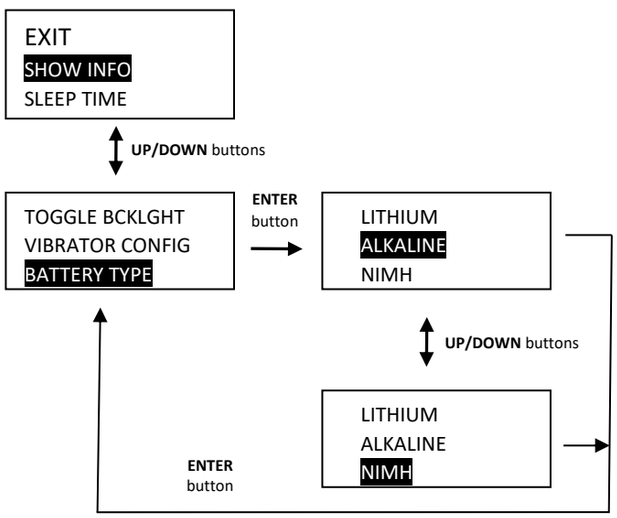
1. From Settings menu, use buttons to highlight VIBRATOR CONFIG selection then press **ENTER** button.
2. VIBRATOR CONFIG screen is displayed.
3. Use **UP/DOWN** buttons to toggle ON or OFF selection.
4. Press **ENTER** button to accept selection and exit to Settings menu.



Battery Type Selection

This function will allow user to configure the battery discharge thresholds for the type of battery used.

1. From Settings menu, use **UP/DOWN** buttons to highlight BATTERY TYPE selection then press **ENTER** button.
2. BATTERY TYPE screen is displayed.
3. Use **UP/DOWN** buttons to select the type of battery being used.
4. Press **ENTER** button to accept selection and exit to Settings menu.



Note: Screwdriver is configured for Lithium battery shipped from factory. If Lithium battery is replaced with Alkaline or rechargeable Nickel-Metal Hydride (NIMH), battery type should be changed so battery level icon and LOW battery warnings function optimally. Battery life (REPLACE) will not be impacted, however 50% and Low will be optimized to show most accurate linear discharge time.

- Advanced Configuration

Accessing Advanced Configuration

Advanced configuration is accessed from CONFIGURE menu selection on main menu.

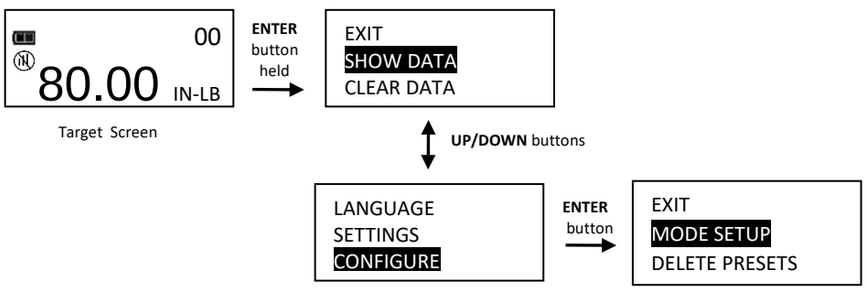
Note: If screwdriver has been locked (see Preset Lock and Job Mode), a password entry is required to enter Configure menu.

1. From target torque or angle screen, press and hold **ENTER** button for 3 seconds.
2. Highlight CONFIGURE menu selection using **UP/DOWN** buttons.
3. Press **ENTER** button to display Configure menu.

   Menu Selections:

   - EXIT - Exits Configure menu and returns to target torque or angle screen.
   - MODE SETUP - Displays screwdriver mode setup menu.
   - PRESET LOCK - Displays Preset lock menu.
   - DELETE PRESETS - Displays delete all presets menu.
   - JOB MODE - Displays Job mode menu.
   - CALIBRATION - Displays screwdriver calibration menu (password protected).
   - SET DATE/TIME - Displays clock date and time entry screens.
   - CHANGE PASSWD - Displays change password menu.
   - ASSET TAG - Displays user configurable 15-character string.

4. To exit Configure menu and return to target torque or angle screen, press **ENTER** button while EXIT menu selection is highlighted.



Note: All user configurable settings are stored in non-volatile memory and are retained while power is off.

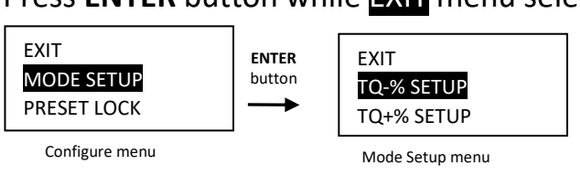
Mode setup menu allows user configure target torque and angle minus and plus tolerances and enable/disable Torque THEN Angle mode and Torque AND angle mode.

1. From Configure menu, press **ENTER** button while MODE SETUP selection is highlighted.
2. Mode Setup menu is displayed.

   Menu Selections:

   - EXIT - Exits Mode setup menu and returns to Configure menu screen.
   - TQ-% SETUP - Displays target torque minus tolerance entry screen.
   - TQ+% SETUP - Displays target torque plus tolerance entry screen.
   - ANG-% SETUP - Displays target torque minus tolerance entry screen.
   - ANG+% SETUP - Displays target torque plus tolerance entry screen.
   - THEN DISABLED - Displays THEN Mode enable/disable screen.
   - AND DISABLED - Displays AND Mode enable/disable screen.

3. Use **UP/DOWN** buttons to highlight menu selections.
4. Press **ENTER** button while EXIT menu selection is highlighted to return to Configure menu.

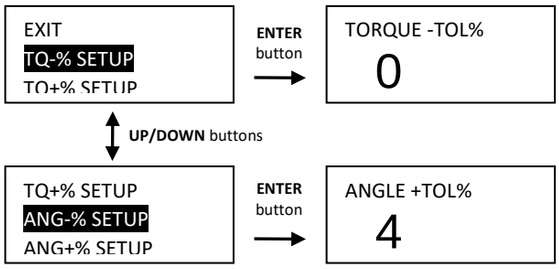


Setting Target Tolerances

This function will allow user to set plus and minus tolerances for torque and angle targets.

Note: These tolerances are used for manual modes only. Preset tolerances are defined by Minimum and Maximum values.

1. From Mode Setup menu, use **UP/DOWN** buttons to highlight tolerance selection to setup (TQ-%, TQ+%, ANG-% ANG+%) then press **ENTER** button.
2. Tolerance screen is displayed.
3. Use **UP/DOWN** buttons to change tolerance value. Range is 0 to 10% (factory default for minus tolerance is 0% and 4% for plus tolerance).
4. Press **ENTER** button to accept selection and exit to Mode Setup menu.



Note: Green progress lights turn on at target minus -% TOL.

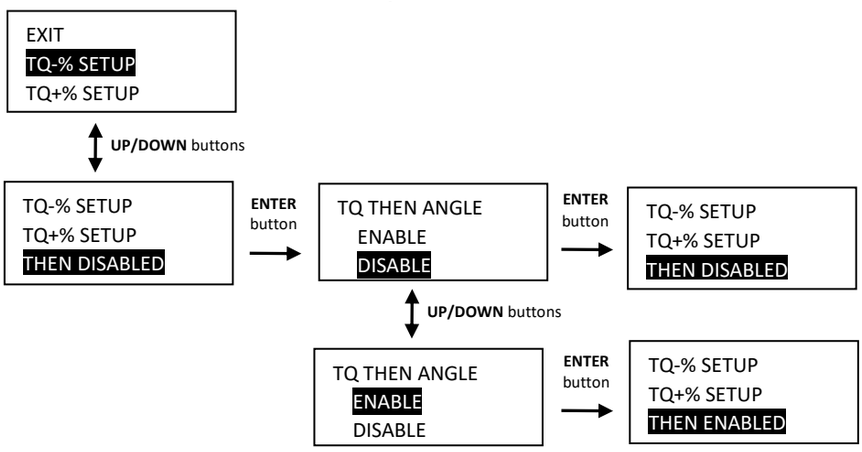
Note: Red progress lights turn on above target plus +% TOL.

Note: Plus tolerance is added to minimum Preset value to define initial maximum value when a Preset is first added.

Enable/Disable Torque THEN Angle Mode

This function will allow user to enable or disable Torque THEN Mode.

1. From Mode Setup menu, use **UP/DOWN** buttons to highlight THEN DISABLED (factory default) selection then press **ENTER** button.
2. TQ THEN ANGLE enable/disable screen is displayed.
3. Use **UP/DOWN** buttons to select ENABLE or DISABLE selection.
4. Press **ENTER** button to accept selection and exit to Mode Setup menu.

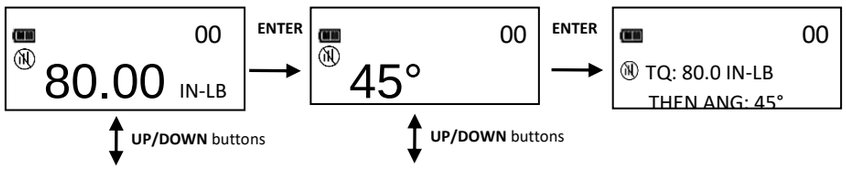


Note: Menu selection indicates current configuration (ENABLED or DISABLED).

Torque THEN Angle Mode

Torque THEN Angle mode is setup by first setting a target torque and units then a target angle before selecting Torque THEN Angle mode. In Torque THEN Angle mode, when applied torque reaches target torque, screwdriver automatically switches to angle mode for angle measurement. Progress lights indicate applied torque progress while torque is measured and angle when angle is measured. If torque is below target torque when angle reaches target angle, green progress lights will not turn on and if angle exceeds maximum angle, red progress lights turn on indicating a potential problem with fastener.

1. From target torque screen, use **UP/DOWN** buttons to set target torque and **UNITS** button to select torque measurement units then press **ENTER** button.
2. Angle target screen is displayed. Use **UP/DOWN** buttons to set target angle then press **ENTER** button.
3. Torque THEN Angle mode screen is displayed.
4. Apply torque until target is reached then rotate screwdriver to target angle.



*Note: **UNITS** button can be used to select torque units while on Torque THEN Angle screen.*

Note: Torque cycle is not recorded in memory unless both torque and angle reach targets.

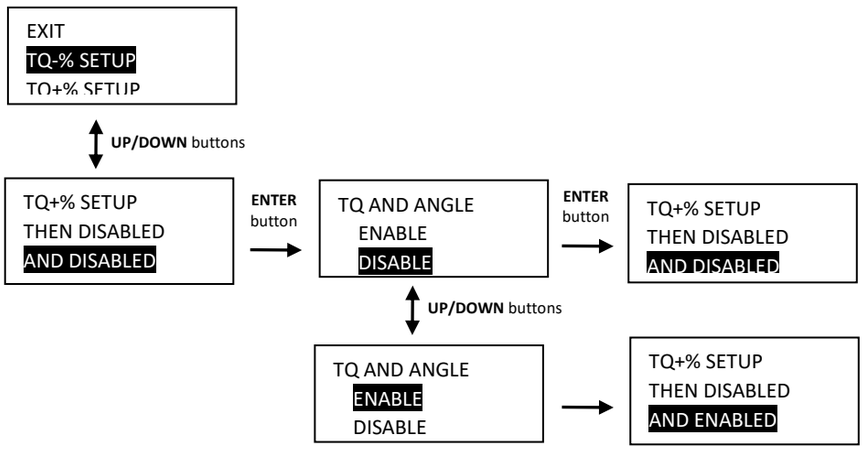
Note: Red progress lights turn on if torque exceeds 110% of screwdriver *full scale or if angle exceeds target + plus tolerance while in manual mode.*

Note: Torque THEN Angle Presets are entered by pressing and holding Units button while on Torque THEN Angle screen. MAXIMUM TORQUE defaults to full range plus 10%. Refer to "Adding a Torque Preset" and "Adding an Angle Preset" in Basic section for parameter entry.

Enable/Disable Torque AND Angle Mode

This function will allow user to enable or disable Torque AND Mode.

1. From Mode Setup menu, use **UP/DOWN** buttons to highlight AND DISABLED (factory default) selection then press **ENTER** button.
2. TQ AND ANGLE enable/disable screen is displayed.
3. Use **UP/DOWN** buttons to select ENABLE or DISABLE selection.
4. Press **ENTER** button to accept selection and exit to Mode Setup menu.



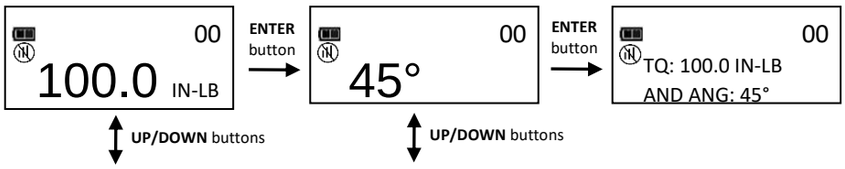
Note: Menu selection indicates current configuration (ENABLED or DISABLED).

Torque AND Angle Mode

Torque AND Angle mode is setup by first setting a target torque and units then a target angle before selecting Torque AND Angle mode. In Torque AND Angle mode, torque and angle are measured simultaneously. Yellow progress lights track torque measurement. When both torque and angle reach their targets, green progress lights turn on and torque and angle data record is stored. If either of measurements exceed their upper tolerance, red progress lights turn on.

1. From target torque screen, use **UP/DOWN** buttons to set target torque and **UNITS** button to select torque measurement units then press **ENTER** button.
2. Angle target screen is displayed. Use **UP/DOWN** buttons to set target angle then press **ENTER** button until Torque AND Angle mode screen is displayed.

3. Apply torque and rotate screwdriver until both targets are reached.



*Note: **UNITS** button can be used to select torque units while on Torque AND Angle screen.*

Note: Torque THEN Angle Presets are entered by pressing and holding Units button while on Torque THEN Angle screen. Refer to "Adding a Torque Preset" and "Adding an Angle Preset" in Basic section for parameter entry.

Note: Torque cycle is not recorded in memory unless both torque and angle reach targets.

Note: Red progress lights turn on if torque exceeds target + plus tolerance or if angle exceeds target + plus tolerance while in manual mode.

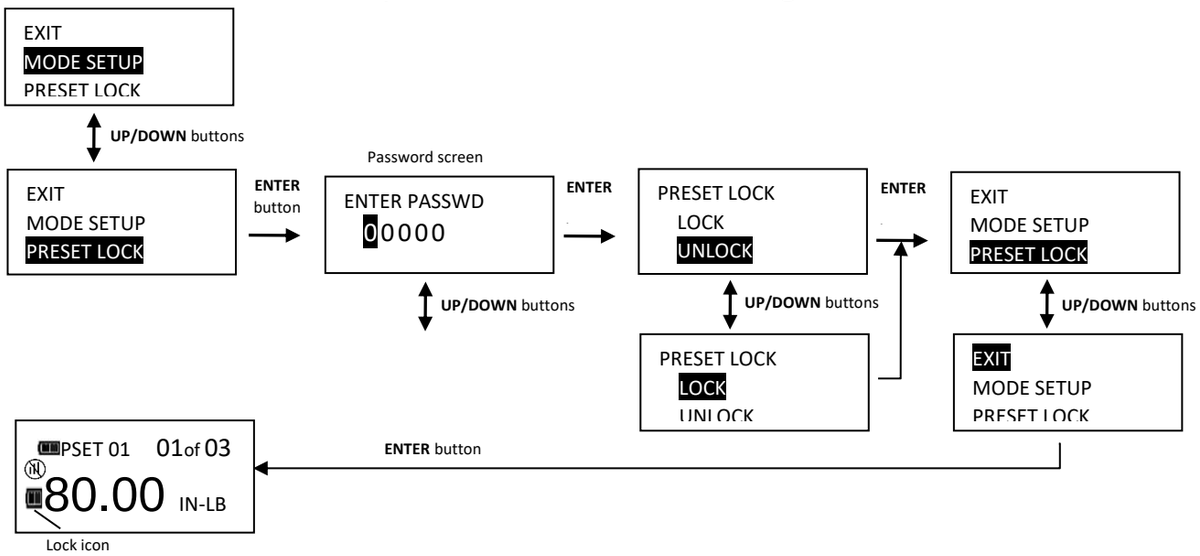
Note: Red progress lights turn on if torque exceeds maximum torque or if angle exceeds maximum angle in Preset mode.

Preset Lock

Preset Lock function allows user to lock screwdriver so that only configured presets are accessible. No other presets can be configured and manual target torque and angle modes are not accessible when locked.

Note: Password entry is required to enable Preset Lock. When locked, password entry is required to re-enter Configure menu (refer to ControlTech™ Wireless Screwdriver Calibration manual for default password).

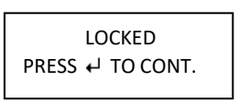
1. From Configure menu, use **UP/DOWN** buttons to highlight PRESET LOCK selection then press **ENTER** button.
2. Preset Lock enable/disable screen is displayed.
3. Use **UP/DOWN** buttons to select LOCK or UNLOCK selection.
4. Press **ENTER** button to accept selection and exit to Configure menu.



Note: If LOCK is selected without a Preset configured, following screen is displayed:



Note: When Preset Lock is enabled, Clear Memory function is disabled and displays following Locked message if attempted:

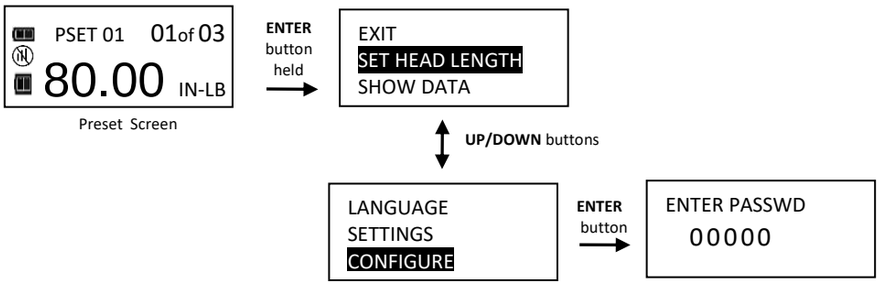


Note: When Preset Lock is enabled, Clear Cycle count function is disabled and displays Locked message if attempted.

Preset Unlock

When Preset Lock is enabled, a password is required to access Configure menu. Refer to ControlTech™ Wireless Screwdriver Calibration Manual for Configure password.

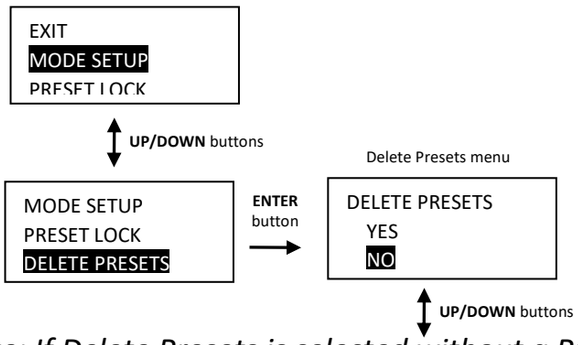
1. From target torque or angle screen, press and hold **ENTER** button for 3 seconds.
2. Highlight CONFIGURE menu selection using **UP/DOWN** buttons.
3. Press **ENTER** button to display Password screen.
4. Follow password entry procedure found in ControlTech™ Wireless Screwdriver Calibration manual.



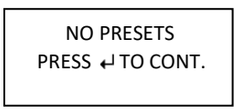
Delete Presets

Delete Presets function allows user to delete all presets at once.

1. From Configure menu, use **UP/DOWN** buttons to highlight DELETE PRESET selection then press **ENTER** button.
2. Delete Presets confirmation screen is displayed.
3. Use **UP/DOWN** buttons to select YES or NO selection.
4. Press **ENTER** button to accept selection and exit to Configure menu.



Note: If Delete Presets is selected without a Preset configured, following screen is displayed:

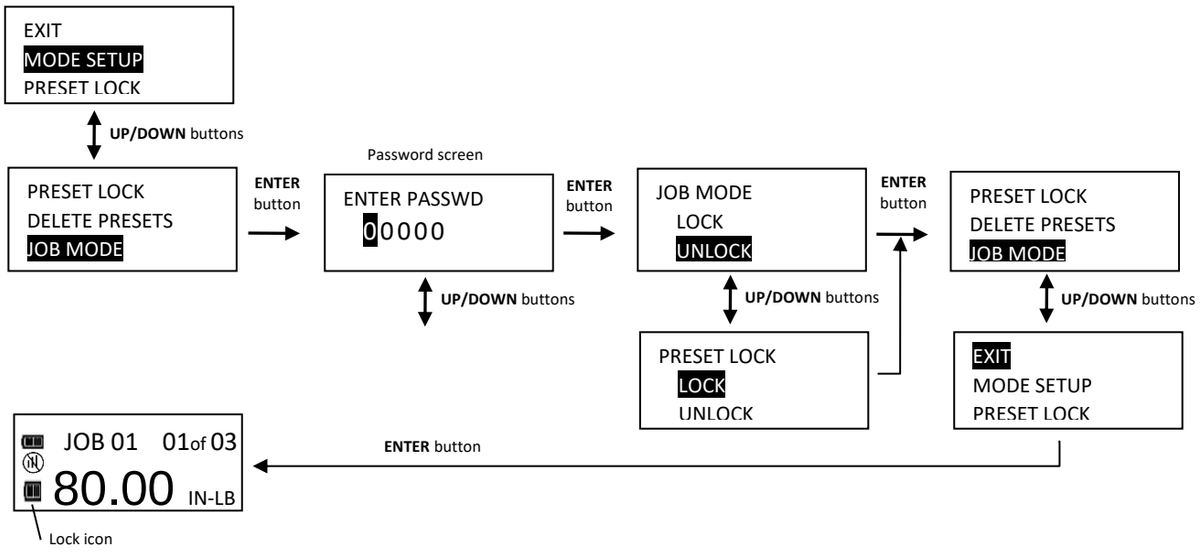


Job Mode

Job Mode function allows user to enable or disable screwdriver preset Job mode. When in Job mode, screwdriver executes presets in order configured and automatically switches to next preset when batch count reaches zero. Screwdriver is locked and Preset lock icon is displayed when Job mode is enabled.

Note: Password entry is required to enable Job Mode. When enabled, password entry is required to re-enter Configure menu (refer to ControlTech™ Wireless Screwdriver Calibration manual for default password).

1. From Configure menu, use **UP/DOWN** buttons to highlight JOB MODE selection then press **ENTER** button.
2. Job Mode enable/disable screen is displayed.
3. Use **UP/DOWN** buttons to select ENABLE or DISABLE.
4. Press **ENTER** button to accept selection and exit to Configure menu.



Note: When JOB mode is enabled, "JOB" is displayed in place of "PSET" on target screen.

Note: A batch count of zero is displayed as 01of01 when Job mode is enabled and screwdriver *remains on 01 after target is reached if only one preset is enabled.* Screwdriver *automatically switches to the next ordered preset if more than one preset is configured.*

Setting Date and Time

Set Date/Time function allows user to set real-time-clock date and time for time stamping data records, recording last calibration date and notifying user of an expired calibration interval.

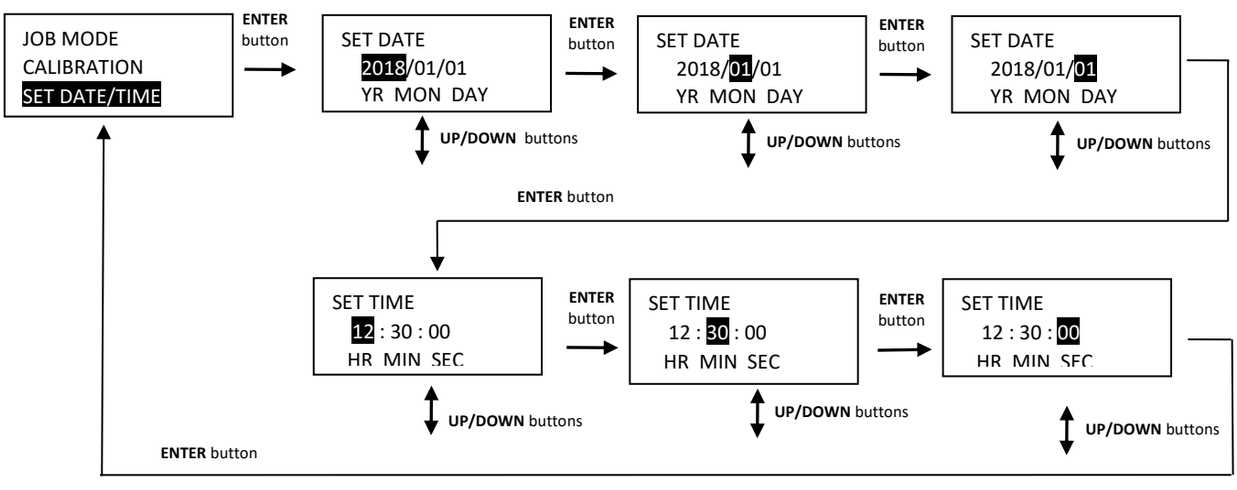
Note: When date and time is set for first time, In-Service date is also set and is used for calculating initial calibration interval (see "Setting Calibration Interval" in Advanced Configuration section).

1. From Configure menu, use **UP/DOWN** buttons to highlight SET DATE/TIME selection then press **ENTER** button.
2. SET DATE screen is displayed with year highlighted.
3. Use **UP/DOWN** buttons to set year then press **ENTER** button to highlight month.
4. Use **UP/DOWN** buttons to set month then press **ENTER** button to highlight day.
5. Use **UP/DOWN** buttons to set day then press **ENTER** button.
6. SET TIME screen is displayed with hour highlighted.
7. Use **UP/DOWN** buttons to set hour then press **ENTER** button to highlight minutes.
8. Use **UP/DOWN** buttons to set minutes then press **ENTER** button to highlight seconds.
9. Use **UP/DOWN** buttons to set seconds then press **ENTER** button.
10. Clock is set and Configure menu is displayed.

Note: Year selection will scroll up from ~~2014~~2018. Month selection will scroll from 1 to 12. Day selection will scroll from 1 to 31.

Note: Hour selection will scroll through 0 to 23. Minute and Second selections will scroll through 0 to 59.

Note: If batteries are removed from screwdriver for longer than 20 minutes, clock will revert to default settings and must be re-entered at power on.

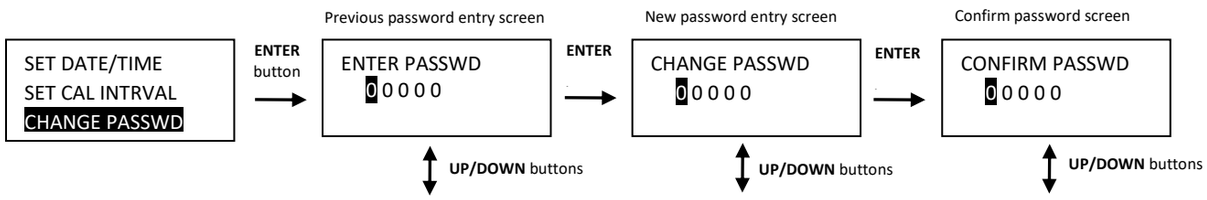


Change Password

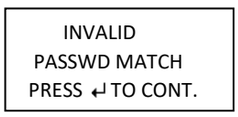
Change Password function allows user to change password to a new password. Default password is required to initially change password. Refer to ControlTech™ Wireless Screwdriver Calibration Manual for default password.

1. From Configure menu, use **UP/DOWN** buttons to highlight CHANGE PASSWD selection then press **ENTER** button.
2. Initial password entry screen is displayed.
3. Enter default password if changing for first time, otherwise enter current user password using **UP/DOWN** buttons to change each digit followed by **ENTER** button.
4. Change password password entry screen is displayed.
5. Enter new password using **UP/DOWN** buttons to change each digit followed by **ENTER** button.
6. Confirm password entry screen is displayed.
7. Re-enter new password using **UP/DOWN** buttons to change each digit followed by **ENTER** button.

*Note: Pressing **POWER** button at any time aborts password change sequence.*



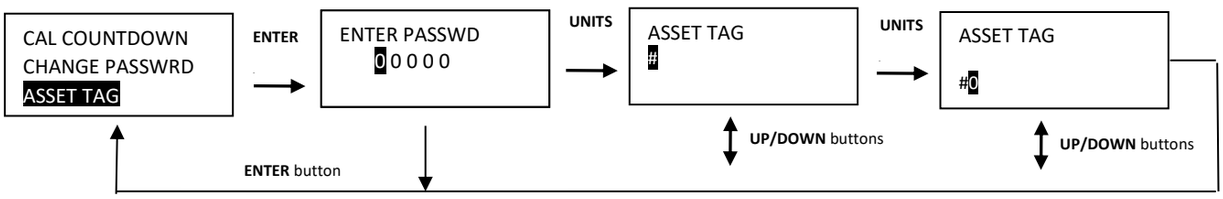
Note: If an invalid password is entered during confirmation step, Invalid Password Match screen is displayed and new password is not accepted.



Asset Tag

This function displays a configurable 15-character string. When configured, Asset Tag string is included in torque record sent to mobile device each time a target torque or angle is completed.

1. From Configure menu, use **UP/DOWN** buttons to highlight ASSET TAG selection then press **ENTER** button.
2. ASSET TAG screen is displayed.
3. Press **UNITS** button to highlight next character.
4. Use **UP/DOWN** buttons to select character.
5. Press **ENTER** button to accept selection and exit to Configure menu.

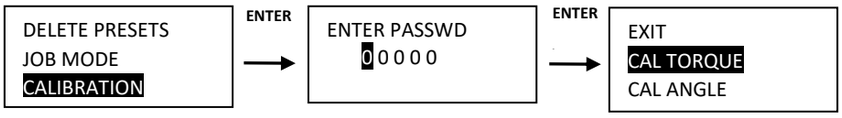


Note: Available characters for Asset Tag: 0-9, A-Z, space # _ % ‘ ( ) + , - .

Note: Use mobile app to configure Asset Tag via wireless (Contact factory for software).

Calibration

Calibration menu is password protected. Refer to *ControlTech™ Wireless Screwdriver Calibration manual*.



Screwdriver can be configured to display a Calibration Need message when a calibration interval has expired and/or when a number of torque cycles have been completed. Screwdriver can be set to lock out any more torque cycles until screwdriver is re-calibrated.

Calibration Menu Selections:

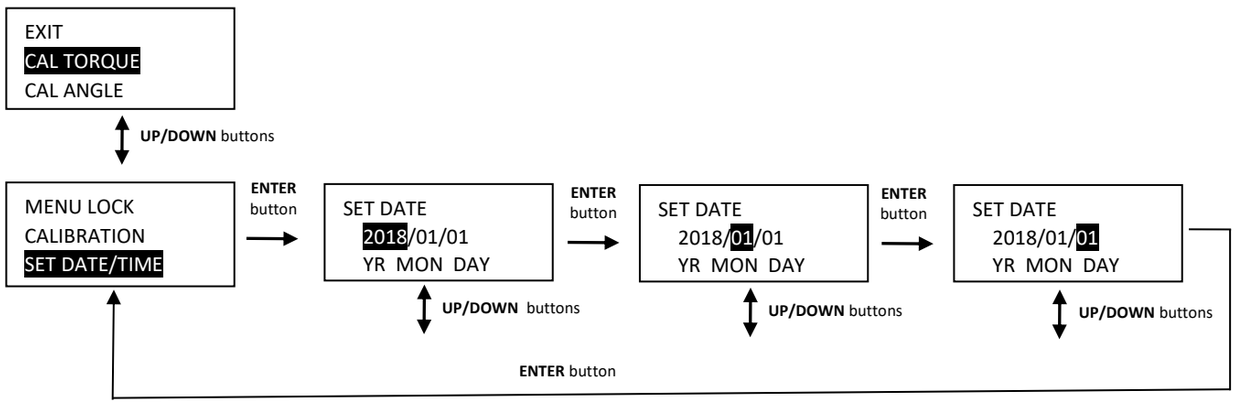
- EXIT - Exits Calibration menu and returns to Configure menu.
- CAL TORQUE – Torque Calibration function (Refer to *ControlTech™ Wireless Screwdriver Calibration manual)*.
- CAL ANGLE – Angle Calibration function (Refer to *ControlTech™ Wireless Screwdriver Calibration manual)*.
- CHECK TORQUE – Torque Certification function (Refer to *ControlTech™ Wireless Screwdriver Calibration manual)*.
- CHECK ANGLE – Angle Certification function (Refer to *ControlTech™ Wireless Screwdriver Calibration manual)*.
- SET CAL DATE – Displays Set Calibration Date screen.
- CAL CYCLE COUNT – Displays Calibration Cycle Count.
- ENABLE CAL CNT – Enable Calibration Needed Warning Cycle Count and Lock Cycle Count.
- SET CAL INTRVAL – Displays Set Calibration Needed interval screen.
- CAL COUNTDOWN – Displays Set Calibration Needed warning days before lockout screen.

Setting Calibration Date

If a screwdriver does not require re-calibration, Set Calibration Date function allows user to set Calibration Date used to calculate CAL NEEDED interval.

1. From Calibration menu, use **UP/DOWN** buttons to highlight SET CAL DATE selection then press **ENTER** button.
2. SET DATE screen is displayed with year highlighted.
3. Use **UP/DOWN** buttons to set year then press **ENTER** button to highlight month.
4. Use **UP/DOWN** buttons to set month then press **ENTER** button to highlight day.
5. Use **UP/DOWN** buttons to set day then press **ENTER** button.
6. Clock is set and Calibration menu is displayed.

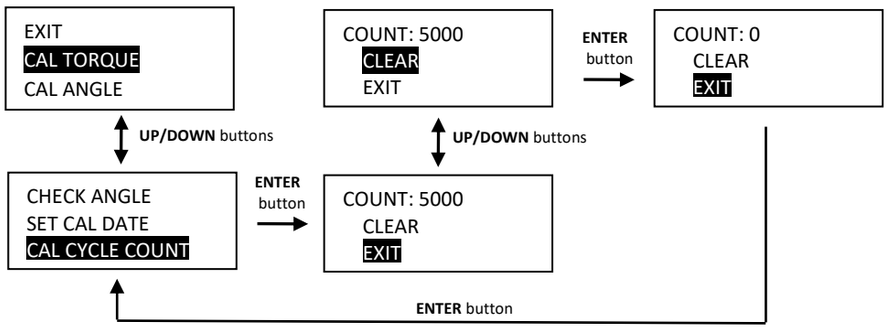
Note: Year selection will scroll up from 2018. Month selection will scroll from 01 through 12 and roll over from 12 to 01 and down from 01 to 12. Day selection will scroll from 01 through 31 and roll over from 31 to 01 and down from 01 to 31.



Calibration Cycle Count

Each time torque or angle target is reached, screwdriver calibration cycle counter is incremented. Maximum cycle count is 999999.

1. From Calibration Menu, highlight CAL CYCLE COUNT menu selection using **UP/DOWN** buttons.
2. Press **ENTER** button to display CAL CYCLE COUNT screen.
3. To exit CAL CYCLE COUNT screen without clearing count, press **ENTER** button while EXIT menu selection is highlighted.
4. To reset screwdriver cal cycle count to 0, highlight CLEAR menu selection then press **ENTER** button.
5. EXIT menu selection is automatically highlighted after count is cleared. Press **ENTER** button to return to main menu.



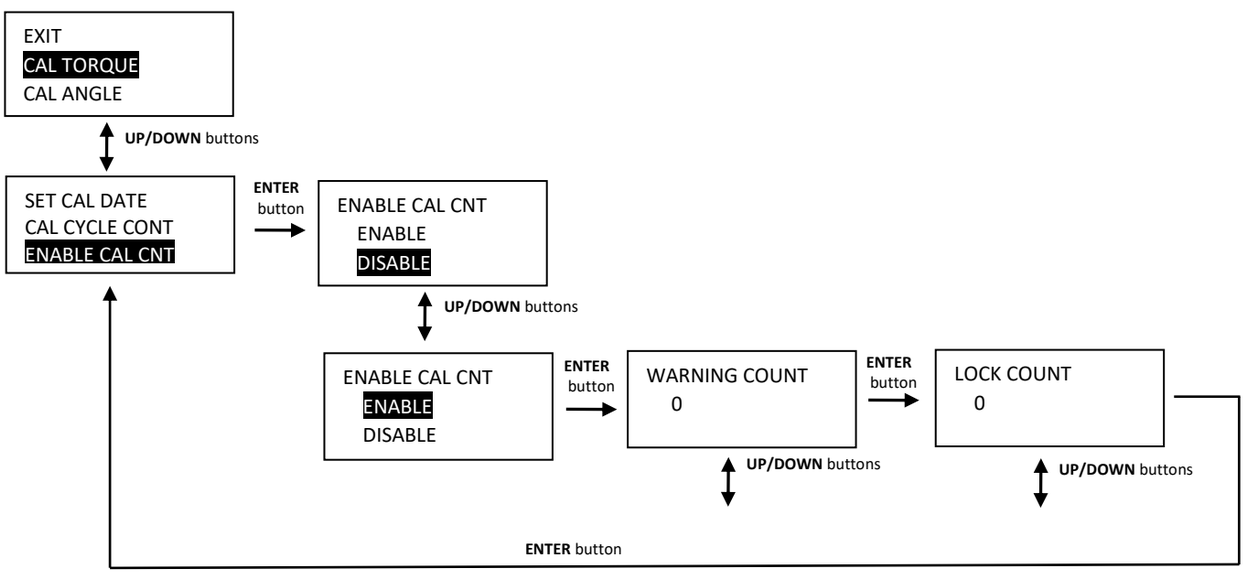
Note: Cal Cycle Count is automatically reset to zero when screwdriver is recalibrated.

Note: If screwdriver does not require calibration and SET CAL DATE function is used to update calibration date, Cal Cycle Count should be manually cleared.

Enable Calibration Count

This function allows user to enable number of calibration cycles before CAL NEEDED message is displayed on screwdriver. When enabled, a calibration warning count can be set to display number of cycles left before screwdriver should be calibrated. A calibration lock count can be set to lock screwdriver from any more use when lock count is reached.

1. From Calibration Menu, select ENABLE CAL CNT, press **ENTER** button.
2. From ENABLE CAL CNT screen, press **UP/DOWN** buttons to select **ENABLE**.
3. From WARNING COUNT screen, press **UP/DOWN** buttons to set cycle count value, press **ENTER** button.
4. From LOCK COUNT screen press **UP/DOWN** buttons to set lock cycle count value, press **ENTER** button.



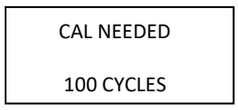
Note: Maximum value for warning and lock counts is 5000.

Note: If Enable Cal Count is disabled, warning count and lock count are set to zero and a CAL NEEDED message is not displayed by cal cycle count.

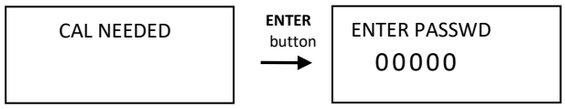
Note: If warning count is set to zero and lock count is non-zero, CAL NEEDED screen is displayed when cal cycle count reaches lock count and no warning count displayed.

Note: If warning count is set to non-zero and lock count is zero, CAL NEEDED screen is displayed when cal cycle count reaches warning count and no warning count displayed and screwdriver does not lock.

Note: If both warning count and lock count are non-zero, CAL NEEDED screen is displayed when cal cycle count reaches warning count and number of cycles until lock count is displayed:



*Note: If cal cycle count reaches non-zero lock count, applying torque immediately turns on red LEDs and vibrator. If **ENTER** button pressed, password screen is displayed:*



Setting Calibration Interval

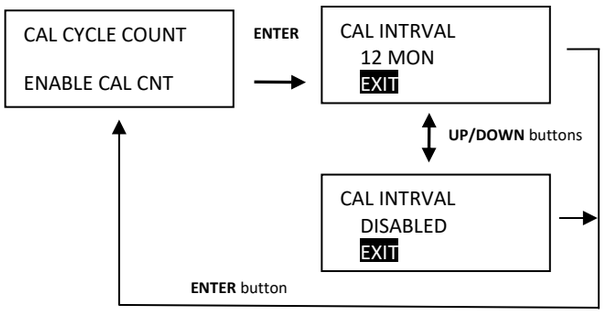
This function allows user to set calibration interval for when "CAL NEEDED" message will be displayed.

1. From Configure menu, use **UP/DOWN** buttons to highlight SET CAL INTRVAL selection then press **ENTER** button.
2. CAL INTERVAL screen is displayed.
3. Use **UP/DOWN** buttons to change calibration interval.

   Selectable Intervals:

   - 12 MON (factory default)
   - 6 MON
   - 3 MON
   - DISABLED

4. Press **ENTER** button to accept selection and exit to Configure menu.



Note: Clock Date and Time must be set before calibration interval will function. If batteries are removed from screwdriver for longer than 20 minutes, clock will revert to default settings and must be re-entered at power on.

Note: Calibration interval is calculated from either IN-Service Date or last Calibration date (see SHOW INFO menu in Operation Manual) depending on which is more recent date. When clock Date is greater than IN-Service or Last Calibration date, plus Cal Interval, "CAL NEEDED" message will be displayed.

*Note: If screwdriver is not locked (see Set Calibration Needed Countdown section below), pressing **ENTER** button will continue to target menu or applying torque will immediately display torque or angle measurement and return to target menu when released.*

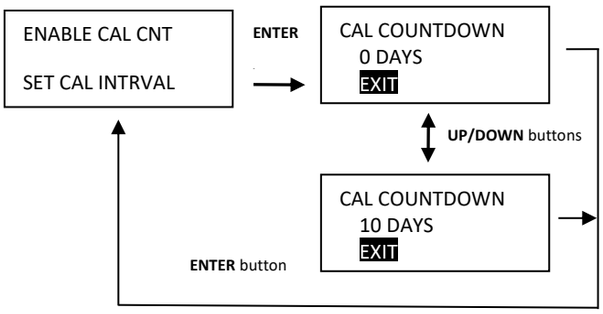
Note: If an invalid date is entered and Calibration interval is enabled, an unintended "CAL NEEDED" message may be displayed. Either disable calibration interval or enter a correct date.

Setting Calibration Needed Countdown

This function will allow user to set number of days when "CAL NEEDED" message will be displayed along with days remaining before a screwdriver lock out occurs due to calibration interval expiring.

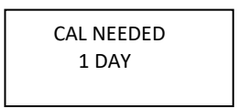
1. From Calibration menu, use **UP/DOWN** buttons to highlight CAL COUNTDOWN selection then press **ENTER** button.
2. CAL COUNTDOWN screen is displayed.
3. Use **UP/DOWN** buttons to change calibration countdown.

   Range: 0 to 10 days.
4. Press **ENTER** button to accept selection and exit to Configure menu.



Note: Clock Date and Time must be set and Cal interval enabled before calibration countdown will function (see Setting Date and Time Setting Calibration Interval).

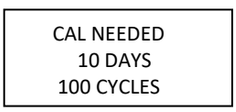
Note: Calibration Countdown is number of days before screwdriver is locked out from use following an expired Cal interval. Maximum count is 10 days. Countdown number of days before lockout is displayed below "CAL NEEDED" message:



*Note: "CAL NEEDED" message will be displayed on power up and after a re-zero. Applying torque while countdown is remaining, torque or angle is immediately displayed. Red LEDs and buzzer turn on if Cal interval has expired. Pressing **ENTER** button after Cal interval has expired will display Password Entry screen.*

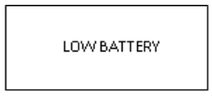
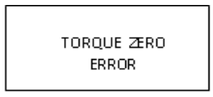
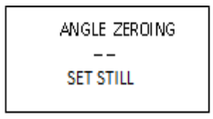
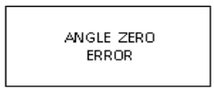
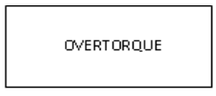
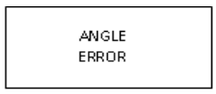
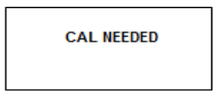
Note: An entered Cal Countdown value of 0 days will disable calibration countdown and if Cal interval is enabled, screwdriver does not lock when CAL NEEDED" message is displayed.

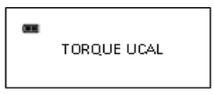
Note: Calibration Countdown and Calibration Cycles can be enabled simultaneously. Both number of days and number of cycles before screwdriver is locked can be displayed:



- Troubleshooting

Note: If any of following issues persist, return screwdriver to an authorized Snap-on repair center.

Issue	Possible Cause	Resolution
Screwdriver does not turn on when **POWER** ⏻ button pressed.	Dead/No batteries	Replace batteries
	Software glitch	Cycle power using end-cap
Torque reading out of spec.	Calibration required	Recalibrate
	Incorrect head length entered	Enter correct offset head length
Screwdriver did not retain settings while batteries were removed.	Batteries removed before setting were saved in non-volatile memory.	Clear data, re-enter settings and press and hold **POWER** ⏻ button to power down screwdriver before removing batteries.
Buttons do not function.	Keypad locked.	Press the **ENTER** button followed by the **UNITS** button then the **ENTER** button again.
	Low battery	Press **ENTER** button to continue using screwdriver and replace batteries soon.
	Dead battery	Press **POWER** ⏻ button to turn off screwdriver and replace batteries.
	Torque applied while zeroing	Remove torque and re-zero
	Screwdriver over torqued	Recalibrate
	Screwdriver improperly calibrated	Recalibrate
	Torque sensor failure	Return to Factory
	Screwdriver moving during zeroing	Place screwdriver on stable surface
	Gyro unstable	Return to Factory
	**ENTER** button pressed during angle zeroing (Aborted zeroing to access menus)	Press **POWER** ⏻ button to re-zero
	Over 125% of full scale torque applied	Cycle power using **POWER** ⏻ button and recalibrate
	Screwdriver rotated too fast during angle measurement	Press POWER button to re-zero
	Calibration interval exceeded or invalid date entered with calibration interval enabled	Calibrate screwdriver or press **ENTER** to continue. Disable calibration interval if not required.
	Memory error	Clear data memory. If persists, return to Factory

Issue	Possible Cause	Resolution
	Torque uncalibrated	Calibrate torque
	Angle uncalibrated	Calibrate angle

- CALIBRATION

Contact your Snap-on sales representative for calibration services or refer to TECHANGLE® Screwdriver Calibration Manual.

- CERTIFICATION

This torque screwdriver was calibrated at factory using torque measurement instruments that are traceable to National Institute of Standards and Technology (N.I.S.T.). Torque parameters comply with ISO 6789:2003 and ASME B107:300-2010 (B107.29). Note: no U.S. or International Standards exist for angle screwdrivers. Angle calibration was performed on an angle gage with ±1 degree accuracy at each 45 degree indexing point throughout 180 degrees of rotation.

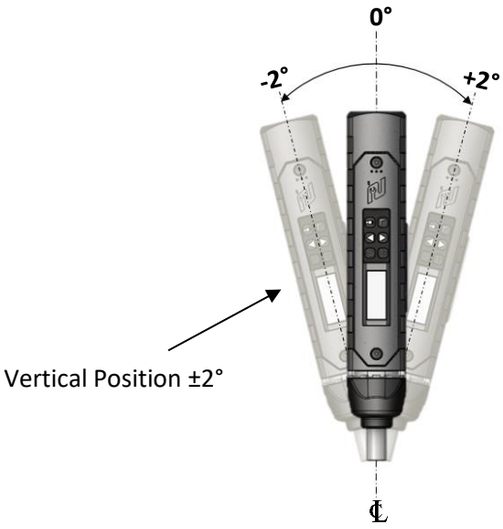
IMPORTANT! Calibration events are recorded in screwdriver memory which provides evidence to void factory

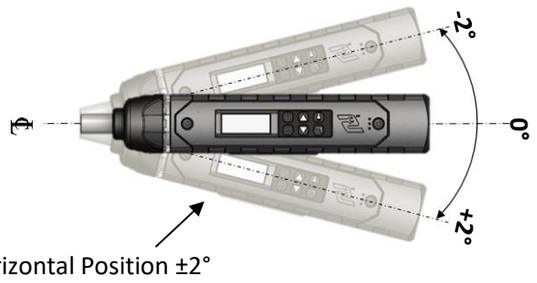
- MAINTENANCE / SERVICE

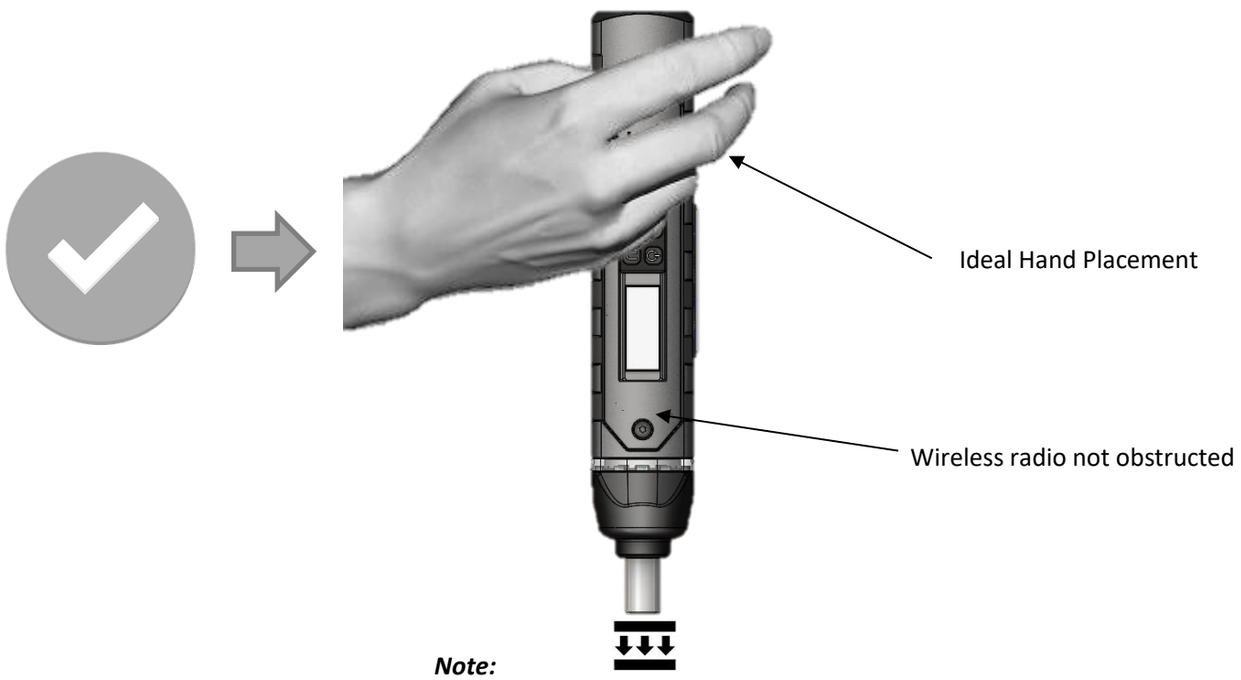
Clean screwdriver by wiping with a damp cloth. DO NOT use solvents, thinners or carburetor cleaners. DO NOT immerse in anything.
Service and repairs are to be done by Snap-on Service Centers only. Contact your Snap-on Tools representative.

NOTES: - If display shows persistent "**TORQUE ZERO ERROR**" at power on, screwdriver is damaged and must be returned for repair
- If display shows **“ANGLE ERROR”** in angle mode, fastener rotation speed has exceeded capacity of screwdriver.
- Screwdriver must be held still during angle zeroing. Motion is indicated by alternating dashes **“- -”** on display
- Remove battery when stored for extended periods (Note: clock will revert to default settings).

- Hand Placement / Screwdriver Position

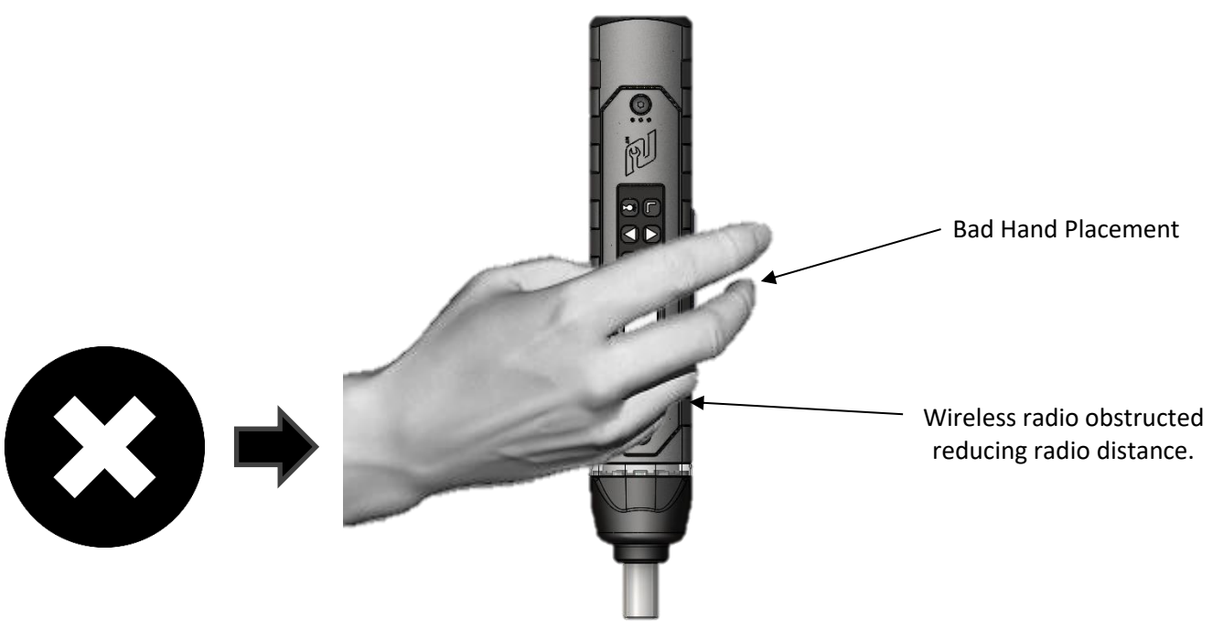






Note:

Apply minimal down-force on Screwdriver when applying torque and or angle.

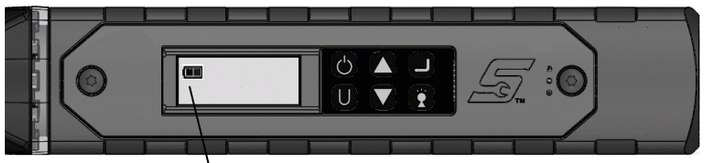


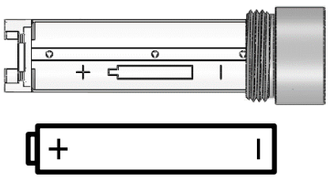
- Battery Replacement

Note: When replacing battery, real-time-clock will maintain date and time for 20 minutes.

Note: Turn Battery End Cap counter-clockwise to unscrew.

Battery should be installed in carrier prior to carrier installation into screwdriver.
Battery negative contact should be oriented towards carrier spring.





100% BATTERY

50% BATTERY

LOW BATTERY

LOW BATTERY

REPLACE BATTERY

REPLACE BATTERY

UNSCREW END CAP

INSERT NEW CELL

*Note: When Replace Battery screen is displayed screwdriver will no longer operate until battery is replaced. Only **POWER** button functions which immediately turns off screwdriver.*

- Memory Indicators

DATA IN MEMORY		Less than 50 torque and angle records stored in memory.
MEMORY FULL		50 torque or angle records stored in memory. New records will not be recorded until memory is cleared.
MEMORY ERROR		Memory read or write error.

- Lock Indicator

LOCKED		Preset/Keypad/Menu Locked.

- Wireless Link Indicators

WIRELESS LINK DOWN		Screwdriver not connected to mobile device
WIRELESS LINK UP		Screwdriver connected to mobile device

OPTIONAL/AVAILABLE ACCESSORIES

- MSTECHHDL Extension Handle (Supplied with CTLNKMS80M and CTLNKMS80F Models)
- GMB3042 ¼" Hex to ¼" Ball Detent Square Adaptor (2 inch)
- GMB3046 ¼" Hex to ¼" Ball Detent Square Adaptor (6 inch)
- GMB3041 ¼" Hex Insert to Ball Detent Square Adaptor (1 inch)
- TMC109A ¼" Square to ¼" Ball Detent Hex Locking Collet
- TMBS8A ¼" Chrome Square Socket w/ ¼" Hex Opening
- TMXK2 ¼" Chrome Extension (2 inch)
- TMXK4 ¼" Chrome Extension (4 inch)
- TMXK60 ¼" Chrome Extension (6 inch)
- TA3 Chrome Square Drive Adaptor, ¼" to 3/8" Square Drive
- Insert bits
    - Phillips: SDM221C- PH#1
    - Phillips: SDM222CZ- PH#2
    - Torx: SDMT6A- T6
    - Torx: SDMT7A- T7
    - Torx: SDMT8D- T8
    - Torx: SDMT9D- T9
    - Torx: SDMT10D- T10
    - Torx: SDMT15D- T15
    - Torx: SDMT20D- T20
    - Pozi: SDM251C- PZ#1
    - Pozi: SDM252C- PZ#2
    - Square: BTS0- SQ#0
    - Square: BTS1- SQ#1
    - Square: BTS2- SQ#2
    - Dbl Square: BTSS2- DSQ#2
    - Hex: SDM2704D- 1/16"
    - Hex: SDM2705D- 5/64"
    - Hex: SDM2706D- 3/32"
    - Hex: SDM2707D- 7/64"
    - Hex: SDM2708D- 1/8"
    - Hex: SDM2709D-9/64"
    - Hex: SDM2710D- 5/32"
    - Hex: SDM2712D- 3/16"
    - Hex: SDM2716D- ¼"
    - Met Hex: SDMM2702B- 2mm
    - Met Hex: SDMM27025B- 2.5mm
    - Met Hex: SDMM2703B- 3mm
    - Met Hex: SDMM2704C- 4mm
    - Met Hex: SDMM2705C- 5mm
    - Met Hex: SDMM2706C- 6mm
    - Valve: SDMV208- N/a
    - Flexdrive: FDH-14 – ¼" Female Square x ¼" Female Hex

IMPORTANTES INSTRUCTIONS DE SECURITE



DANGER : *Risque de projection de particules.*

L'application d'un couple excessif peut entraîner une rupture. L'utilisation d'un tournevis mal étalonnée peut entraîner une rupture de la pièce ou de l'outil lui-même. Des outils, douilles ou accessoires endommagés peuvent provoquer des blessures.



- ❑ **Lire l'intégralité de ce manuel** avant d'utiliser la TOURNEVIS ELECTRONIQUE.
- ❑ Lors du travail en mode d'angle, la pièce doit rester immobile afin de garantir la précision de l'outil.
- ❑ Afin de garantir votre sécurité personnelle, ainsi que pour éviter d'endommager ce tournevis, suivre à la lettre les bonnes pratiques professionnelles de travail relatives à l'utilisation des outils et à l'installation de systèmes de fixation.
- ❑ Un ré-étalonnage périodique est nécessaire pour maintenir le niveau de précision.
- ❑ **L'utilisateur et les personnes situées à proximité doivent porter des lunettes de sécurité.**
- ❑ S'assurer que tous les composants, incluant tous les adaptateurs, prolongateurs, les douilles et les douilles supportent un couple égal ou supérieur au couple employé.



- ❑ Respecter scrupuleusement l'ensemble des avertissements, des recommandations de prudence ainsi que les procédures énoncées par le fabricant pour l'ensemble des équipements et des systèmes associés avant d'utiliser ce tournevis dynamométrique.
- ❑ Ne pas utiliser de douilles qui présenteraient des signes d'usure ou des fissures.
- ❑ Remplacer les dispositifs de fixation si leurs angles sont arrondis.
- ❑ **Afin d'éviter d'endommager du tournevis :** ne jamais utiliser ce tournevis lorsqu'elle est hors tension. Toujours METTRE LA CLE SOUS TENSION afin que le couple appliqué puisse être mesuré.



- ❑ Ne pas appuyer sur le bouton **« MARCHE/ARRET »** ⏻ pendant une opération de serrage ou lorsque le tournevis est en mouvement.
- ❑ Ne jamais utiliser ce tournevis pour desserrer un système d'attache.
- ❑ Vérifier au cas par cas que la capacité de serrage du tournevis est égale, ou dépasse, les besoins spécifiques à l'application considérée avant l'utilisation proprement dite.
- ❑ Vérifier l'étalonnage si l'outil fait une chute sur le sol.
- ❑ Vérifier l'étalonnage du tournevis si vous savez ou que vous suspectez qu'elle a été utilisée au-delà de ses spécifications.
- ❑ Ajuster votre posture pour éviter une chute dans le cas d'une rupture.
- ❑ Ne jamais **tenter derecharger des piles alcalines**.
- ❑ Entreposer le tournevis dans un endroit sec.
- ❑ Retirer les piles avant d'entreposer le tournevis pour des périodes supérieures à 3 mois.



DANGER ***Risque de décharge électrique.***

Une décharge électrique peut entrainer des blessures. Le manche en plastique n'est pas isolé. Ne pas utiliser sur des circuits électriques sous tension.

CONSERVER CES INSTRUCTIONS

Dégagement de responsabilité

L'emploi de ce tournevis ControlTech™ n'est pas garanti à l'intérieur d'un état membre de l'Union Européenne si les instructions de fonctionnement ne sont pas dans la langue de l'état en question. Contacter Snap-on si vous avez besoin d'une traduction.

INSTRUCCIONES DE SEGURIDAD IMPORTANTES



ADVERTENCIA *Riesgo de partículas despedidas.*

El exceso de torsión puede provocar roturas. Un destornillador acodado mal calibrado puede producir la rotura de la herramienta o de parte de ella. El uso de herramientas manuales, tubos o accesorios rotos pueden ocasionar lesiones.



- ❑ Lea **la totalidad de este manual** antes de utilizar el DESTORNILLADOR ELECTRÓNICA
- ❑ Para asegurar la precisión, el movimiento no debe realizarse en ángulo.
- ❑ Por motivos de seguridad personal y para evitar dañar el destornillador, siga las prácticas profesionales aceptadas para el uso de herramientas e instalación de piezas de fijación.
- ❑ Será necesario recalibrar la herramienta de forma periódica para asegurar su precisión.
- ❑ **Utilice gafas de seguridad, tanto para usted como para los observadores.**



- ❑ La capacidad nominal de todos los componentes, incluidos los adaptadores, las extensiones, los destornilladores y los tubos, deberá ser mayor o igual al par de torsión que se quiere aplicar.
- ❑ Cuando utilice el destornillador, respete todas las advertencias, precauciones y procedimientos del equipo, el sistema y el fabricante.
- ❑ Utilice un tubo del tamaño adecuado para la pieza de fijación.
- ❑ No use tubos desgastados o agrietados.
- ❑ Reemplace las piezas de fijación con esquinas redondeadas.
- ❑ **Para no dañar el destornillador:** nunca la use apagada. ENCIÉNDALA siempre para medir el par de torsión que se ejerce.



- ❑ No oprima el botón de **ENCENDIDO** ⏻ mientras el destornillador aplica torsión o está en movimiento.
- ❑ No utilice el destornillador para extraer piezas de fijación atascadas.
- ❑ Antes de comenzar, compruebe que la capacidad nominal del destornillador sea mayor o igual a la aplicación.
- ❑ Si se le cae la herramienta, verifique la calibración.
- ❑ Verifique la calibración si sabe o sospecha que se superó su capacidad.
- ❑ Ajuste tu posición para no caerse si algo cede.
- ❑ No intente recargar las pilas alcalinas.
- ❑ Mantenga el destornillador en un lugar seco.
- ❑ Retire las baterías si no va a utilizar el destornillador por períodos superiores a 3 meses.



ADVERTENCIA *Riesgo de descarga eléctrica.*

Las descargas eléctricas pueden producir lesiones. El mango de plástico no está aislado. No utilizar en circuitos eléctricos activos.

CONSERVE ESTAS INSTRUCCIONES

Descargo de responsabilidad

El funcionamiento del destornillador ControlTech™ no está garantizado en los países miembros de la UE si las instrucciones de funcionamiento no figuran en el idioma del país en cuestión. Póngase en contacto con Snap-on si necesita una traducción.

WICHTIGE SICHERHEITSHINWEISE



WARNUNG *Gefahr von herumfliegenden Partikeln.*

Ein Überdrehen kann zum Bruch führen. Ein Schraubendreher außerhalb der Kalibrierung kann zur Beschädigung des Werkstücks oder Werkzeugs führen. Defekte Hand-Werkzeuge, Stecknüsse oder Zubehörteile können zu Verletzungen führen.

- ❑ Vor dem Gebrauch des ELEKTRONISCHER SCHRAUBENDREHER ist **diese Anleitung vollständig** durchzulesen.



- ❑ Um die Genauigkeit zu gewährleisten, darf sich das Werkstück im Winkelmodus nicht bewegen.
- ❑ Zur persönlichen Sicherheit und Vermeidung von Beschädigung des Schraubendreher ist ein sorgfältiger Umgang mit Werkzeugen und Befestigungsmitteln erforderlich.
- ❑ Zur Erhaltung der Genauigkeit ist eine regelmäßige Kalibrierung notwendig.
- ❑ **Der Benutzer und umstehende Personen sollten Schutzbrillen tragen.**



- ❑ Sicherstellen, dass alle Komponenten einschließlich aller Adapter, Verlängerungen, Antriebsteile und Stecknüsse mindestens für die aufgewandten Drehmomente geeignet sind.
- ❑ Beim Gebrauch dieses SchraubenSchraubendreher sind alle Geräte-, System- und Hersteller-Warnhinweise, Vorsichtsmaßnahmen und Verfahren zu beachten.
- ❑ Eine Stecknuss der richtigen Größe für das Befestigungselement verwenden.
- ❑ Keine Stecknüsse mit Anzeichen von Verschleiß oder Rissen verwenden.
- ❑ Befestigungselemente mit abgerundeten Ecken ersetzen.
- ❑ **Zur Vermeidung von Schäden am Schraubendreher:** Den Schraubendreher keinesfalls im ausgeschalteten Zustand verwenden. Zuerst stets den Schraubendreher einschalten, damit das aufgebrachte Drehmoment gemessen wird.



- ❑ Nicht die Taste **EIN/AUS** betätigen, während ein Drehmoment aufgebracht wird oder der Schraubendreher in Bewegung ist.
- ❑ Den Schraubendreher keinesfalls zum Losbrechen von Befestigungselementen verwenden.
- ❑ Vor Gebrauch sicherstellen, dass die Kapazität des Schraubendrehers für den Anwendungsfall ausreichend ist.
- ❑ Wurde der Schraubendreher fallen gelassen, muss die Kalibrierung überprüft werden.
- ❑ Die Kalibrierung des Schraubendreher kontrollieren, falls seine Kapazität vermutlich überschritten wurde.
- ❑ Einen sicheren Stand einnehmen, um nicht zu stürzen, falls eine Komponente nicht standhält.
- ❑ Die Alkalibatterien nicht wiederaufzuladen versuchen.
- ❑ Den Schraubendreher an einem trockenen Ort aufbewahren.
- ❑ Die Batterien entfernen, wenn der Schraubendreher länger als 3 Monate gelagert werden soll.



WARNUNG *Gefahr eines elektrischen Schlags.*

Ein elektrischer Schlag kann zu Verletzungen führen. Der Kunststoffgriff ist nicht isoliert. Nicht an spannungsführenden Leitungen verwenden.

BEWAHREN SIE DIESE ANLEITUNG AUF

Haftungsausschluss

Es besteht keine Garantie für den Betrieb des ControlTech™ Schraubendrehers in einem EU-Mitgliedstaat, wenn die Betriebsanweisungen nicht in der betreffenden Landessprache abgefasst sind. Wenden Sie sich an Snap-on, wenn eine Übersetzung benötigt wird.

ISTRUZIONI CAUTELARI IMPORTANTI



AVVERTENZA *Pericolo di schegge vaganti.*

Un serraggio eccessivo può causare rotture. Il cacciavite calibrata erroneamente potrebbe provocare la rottura de pezzo in lavorazione o dell'utensile. Utensili manuali, bussole o accessori rotti possono provocare infortuni.



- ❑ Leggere **attentamente questo manuale** prima di utilizzare il CACCIAVITE ELETTRONICA.
- ❑ Per garantire la precisione, il movimento di lavoro non deve essere angolare.
- ❑ Per la propria incolumità e per evitare di danneggiare il cacciavite, seguire le direttive di categoria per il serraggio delle viti e la meccanica professionale.
- ❑ Per mantenerne la precisione, è necessario ricalibrare l'utensile periodicamente.
- ❑ **È necessario che l'operatore e le persone circostanti indossino appositi occhiali di sicurezza.**
- ❑ Verificare sempre che tutti i componenti, compresi eventuali riduttori, prolunghe, alberini e bussole, siano omologati per una coppia uguale o superiore a quella applicata.



- ❑ Durante l'utilizzo di questo utensile, rispettare sempre tutte le indicazioni e istruzioni cautelari fornite dai rispettivi produttori di accessori e impianti.
- ❑ Per il serraggio, utilizzare sempre una bussola di dimensione adatta per quella vite.
- ❑ Non utilizzare bussole che presentino segni di usura o di rottura.
- ❑ Sostituire le viti con bordi smussati.
- ❑ **Per evitare di danneggiare il cacciavite:** non usare mai il cacciavite quando è spenta. Accenderla sempre per poter misurare la coppia di serraggio applicata a ogni uso.



- ❑ Non premere il tasto **ALIMENTAZIONE** quando il cacciavite è in tiro o in movimento.
- ❑ Non utilizzare mai questo cacciavite per allentare viti, dadi e bulloni.
- ❑ Prima di procedere, controllare che la portata del cacciavite corrisponda o superi quella richiesta per il lavoro.
- ❑ In caso di caduta accidentale, controllare la calibrazione.
- ❑ Controllare la calibrazione del cacciavite anche al solo sospetto che sia stata ecceduta la sua portata.
- ❑ Rimanere sempre in equilibrio anche nell'eventualità di un cedimento.
- ❑ Non tentare di ricaricare le celle delle batterie alcaline.
- ❑ Conservare sempre il cacciavite in un luogo asciutto.
- ❑ Estrarre sempre le batterie quando si conserva un cacciavite per un periodo superiore a tre mesi.



AVVERTENZA *Rischio scosse elettriche.*

Le scosse elettriche possono causare infortuni. Il manico in plastica non è isolato.
Non utilizzare su circuiti elettrici sotto tensione.

CONSERVARE QUESTE ISTRUZIONI

ESONERO DI RESPONSABILITÀ:

Non si garantisce l'uso della Cacciavite ControlTech™ nei Paesi membri della CEE dove le istruzioni per l'uso non sono in lingua locale. Contattare la Snap-on per l'eventuale traduzione.

BELANGRIJKE VEILIGHEIDSINSTRUCTIES



WAARSCHUWING *Risico van wegvliegende fragmenten.*

Te ver aandraaien kan breuk veroorzaken. Een verkeerd gekalibreerde schroevedraaier kan breuk van onderdelen of gereedschappen veroorzaken. Defecte handgereedschappen, doppen en accessoires kunnen letsel veroorzaken.

- ❑ Lees deze handleiding **helemaal** door voordat u de ELEKTRONISCHE SCHROEVEDRAAIER gebruikt.
- ❑ Voor een nauwkeurige prestatie mag het werkstuk in de hoekmodus niet bewegen.
- ❑ Volg voor uw persoonlijke veiligheid en om beschadiging van de schroevedraaier te voorkomen altijd de juiste professionele methoden bij het gebruik van gereedschappen en de installatie van bevestigingsmateriaal.
- ❑ Voor het behoud van de nauwkeurigheid is regelmatige kalibratie vereist.
- ❑ **Draag een veiligheidsbril, dit geldt zowel voor gebruiker als omstanders.**
- ❑ Zorg dat alle componenten (inclusief verloopstukken, verlengstukken, schachten en doppen) ten minste zijn goedgekeurd voor het gebruikte koppel.



- ❑ Neem bij gebruik van deze schroevedraaier alle waarschuwingen, aandachtspunten en procedures voor de apparatuur, voor het systeem en van de fabrikant in acht.
- ❑ Gebruik doppen van de juiste maat voor het bevestigingsmateriaal.
- ❑ Gebruik nooit doppen die versleten of gebarsten zijn.
- ❑ Vervang bevestigers waarvan de hoeken gestript zijn.
- ❑ **Voorkom beschadiging van de schroevedraaier:** Gebruik de schroevedraaier nooit terwijl hij is uitgeschakeld. Zet de schroevedraaier altijd AAN zodat het uitgeoefende koppel wordt gemeten.



- ❑ Druk niet op **STROOM** ⏻ terwijl u iets aantrekt of terwijl de schroevedraaier beweegt.
- ❑ Gebruik deze schroevedraaier nooit om bevestigers met geweld los te halen.
- ❑ Controleer of de capaciteit van de schroevedraaier voldoende is voor het beoogde gebruik voordat u aan de slag gaat.
- ❑ Controleer de kalibratie als de schroevedraaier is gevallen.
- ❑ Controleer de kalibratie van de schroevedraaier als u weet of vermoedt dat de capaciteit ervan is overschreden.
- ❑ Ga zo staan dat u niet kunt vallen als een onderdeel plotseling meegeeft.
- ❑ Probeer niet om de alkalicelbatterijen op te laden.
- ❑ Bewaar de schroevedraaier op een droge plaats.
- ❑ Verwijder de batterijen als u de schroevedraaier langer dan 3 maanden opbergt.



WAARSCHUWING *Gevaar van elektrische schokken.*

Elektrische schokken kunnen letsel veroorzaken. De kunststof greep is niet geïsoleerd.
Niet gebruiken op onder stroom staande circuits.

BEWAAR DEZE GEBRUIKSAANWIJZING

Disclaimer

Er geldt geen garantie voor het gebruik van de ControlTech™-schroevedraaier in lidstaten van de EU als de gebruiksaanwijzing niet in de taal van het land in kwestie beschikbaar is. Neem contact op met Snap-on voor vertalingen.

INSTRUÇÕES DE SEGURANÇA IMPORTANTES



ATENÇÃO *Risco de projeção de partículas.*

O torque excessivo pode causar ruptura. Uma chave de fenda descalibrada pode quebrar peças ou ferramentas. Ferramentas manuais, soquetes ou acessórios quebrados podem causar ferimentos.

- ❑ Leia **este manual completamente** antes de usar o CHAVE DE FENDA ELETRÔNICO.
- ❑ Para garantir a precisão, não se deve movimentar o chave de fenda no modo de ângulo.
- ❑ Para a segurança pessoal e para evitar danos ao chave de fenda, siga as boas práticas profissionais para o uso de ferramentas e a instalação de peças de fixação.
- ❑ A recalibragem periódica é necessária para manter a precisão.
- ❑ **Use óculos de proteção, seja como usuário ou espectador.**
- ❑ Certifique-se de que todos os componentes, inclusive todos os adaptadores, extensões, chaves de fenda e soquetes, sejam regulados para aguentar o torque aplicado.



- ❑ Cumpra todos os avisos, cuidados e procedimentos de equipamentos, sistemas e fabricantes quando utilizar este chave de fenda.
- ❑ Use um soquete de tamanho correto para a peça de fixação.
- ❑ Não utilize soquetes desgastados ou rachados.
- ❑ Substitua as peças de fixação com bordas arredondadass.
- ❑ **Para evitar danos ao chave de fenda:** Nunca utilize o chave de fenda desligado. Sempre LIGUE o chave de fenda para que o torque aplicado seja medido.



- ❑ Não aperte o botão **LIGA/DESLIGA** ⏻ ao aplicar torque ou enquanto o chave de fenda estiver em movimento.
- ❑ Nunca utilize o chave de fenda para soltar peças de fixação.
- ❑ Verifique se o chave de fenda é capaz de resistir a cada aplicação antes de prosseguir.
- ❑ Verifique a calibragem se a ferramenta cair.
- ❑ Verifique a calibragem do chave de fenda caso saiba ou suspeite que sua capacidade foi excedida.
- ❑ Ajuste sua postura para impedir uma possível queda caso algo ceda.
- ❑ Não tente recarregar as pilhas alcalinas.
- ❑ Guarde o chave de fenda em local seco.
- ❑ Remova as pilhas quando for guardar o chave de fenda por mais que 3 meses.



AVISO *Risco de choque elétrico.*

O choque elétrico pode causar ferimentos. O punho plástico não é isolante. Não utilize em circuitos elétricos energizados.

GUARDE ESTAS INSTRUÇÕES

Aviso de isenção de responsabilidade

A operação do chave de fenda ControlTech™ não é permitida em nenhum Estado-membro da União Europeia se as instruções operacionais não estiverem no idioma do Estado em questão. Entre em contato com a Snap-on se uma tradução for necessária.

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Snap-on Tools Company

EC Declaration of Conformity

The undersigned representing the following supplier:

CE

Snap-On Specialty Tools
19220 San Jose Ave.
City of Industry, CA 91748
USA

Herewith declare that the Products:

Brand:	Snap-on
Series:	ControlTech® Link Wireless Screwdriver
Models:	CTLNKMS80F CTLNKMS80M CTLNKMS100F CTLNKMS100M

These products are in conformity with the provisions of the following EC directives (and their amendments) when installed in accordance with the installation instructions contained in the product documentation.

2014/30/EU	- EMC Directive
2014/35/EU	- Low Voltage Directive (LVD)
2014/53/EU	- Radio Equipment Directive (RED)
2011/65/EU	- Restriction of certain hazardous substances (RoHS)
2012/19/EU	- Waste electrical and electronic equipment (WEEE)

And that the standards referenced below have been applied:

EN 61326-1:2013	Electrical Measurement, Control and Laboratory Equipment, EMC requirement Part 1 - General Requirement
EN 55011:2016 + A11:2020	Industrial, scientific and medical equipment. Radio-frequency disturbance characteristics. Limits and methods of measurement - Radiated Emissions
EN 61000-4-2:2009	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques – Electrostatic discharge immunity test
EN IEC 61000-4-3:2020	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test
EN 61000-4-8:2010	Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques – Power frequency magnetic field immunity test
EN IEC 63000:2018	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances
EN 61010-1: 2010+A1:2019	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements
ETSI EN 300 328 V2.2.2 (2019-07)	Wideband transmission systems; Data transmission equipment operating in the 2.4 GHZ ISM band
ETSI EN 301 489-1 V2.2.3 (2019-11)	Electromagnetic compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements

Year of CE marking: 2021

Company Authorized to Compile the Technical File:
Snap-on Tools Company
2801 80th Street
Kenosha, WI 53141-1410, USA

Authorized Representative within the European Union (EU) is:
Francesco Frezza
Snap-on Equipment
Via Prov. Carpi, 33
42015 Correggio RE
Italy

Signature: _____

Director, Engineering: Nathan Lee
Snap-on Specialty Tools
19220 San Jose Avenue
City of Industry, CA 91748
November 2021

Snap-on Tools Company

UK Declaration of Conformity

The undersigned representing the following supplier:

Snap-on Specialty Tools
19220 San Jose Ave.
City of Industry, CA 91748
USA

Herewith declare that the Products:

Brand:	Snap-on
Series:	ControlTech® Link Wireless Screwdriver
Models:	CTLNKMS80F CTLNKMS80M CTLNKMS100F CTLNKMS100M

These products are in conformity with the provisions of the following UK Statutory Instruments (and their amendments) when installed in accordance with the installation instructions contained in the product documentation.

2016 No. 1091	The Electromagnetic Compatibility Regulations 2016
2016 No. 1101	The Electrical Equipment (Safety) Regulations 2016
2017 No. 1206	The Radio Equipment Regulations 2017
2012 No. 3032	The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012
2013 No. 3113	The Waste Electrical and Electronic Equipment Regulations 2013

And that the standards referenced below have been applied:

BS EN 61326-1:2013	Electrical Measurement, Control and Laboratory Equipment, EMC requirement Part 1 - General Requirement
BS EN 55011:2016 + A11:2020	Industrial, scientific and medical equipment. Radio-frequency disturbance characteristics. Limits and methods of measurement - Radiated Emissions
BS EN 61000-4-2:2009	Electromagnetic compatibility (EMC) - Part 4-2: Testing and measurement techniques – Electrostatic discharge immunity test
BS EN IEC 61000-4-3:2020	Electromagnetic compatibility (EMC) - Part 4-3: Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test
BS EN 61000-4-8:2010	Electromagnetic compatibility (EMC) – Part 4-8: Testing and measurement techniques – Power frequency magnetic field immunity test
BS EN IEC 63000:2018	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances
BS EN 61010-1: 2010+A1:2019	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements
BS ETSI EN 300 328 V2.2.2 (2019-07)	Wideband transmission systems; Data transmission equipment operating in the 2.4 GHZ ISM band
BS ETSI EN 301 489-1 V2.2.3 (2019-11)	Electromagnetic compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements

Year of UKCA marking: 2021

Company Authorized to Compile the Technical File:
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NN16 8SN
United Kingdom

Signature: _____

Director, Engineering: Nathan Lee
Snap-on Specialty Tools
19220 San Jose Avenue
City of Industry, CA 91748
November 2021

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AUTHORIZED SNAP-ON REPAIR CENTERS

USA

Eastern Repair Center
6320 Flank Drive
Harrisburg, PA 17112
Phone: 717-652-7914
Fax: 717-652-7123

Northern Repair Center
3011 E. State Rt. 176, Dock A
Crystal Lake, Il 60014
Phone: 815-479-6850
Fax: 815-479-6857

Western Repair Center
3602 Challenger Way
Carson City, NV 89706-0753
Phone: 775-883-8585
Fax: 775-883-8590

CANADA

Western Repair Centre
7403-48 Street SE
Calgary, Alberta
Canada, T2C-4H6
Phone: 403-720-0525
Fax: 403-720-0524

INTERNATIONAL

United Kingdom Repair Center
Telford Way
Telford Way Industrial Estate
Kettering, Northants
NN16 8UN England
Phone: 44-1-536-413855
Fax: 44-1-536-413900

Australia Repair Centre
Snap-on Tools Australia PTY.LTD
80 Holbeche Road
Arndell Park NSW 2148
Australia
Phone: 61-2-9837-9155
Fax: 61-2-9837-9192

Singapore Repair Center
Snap-on Tools Singapore Pte Ltd
25 Tagore Lane, #01-01,
Singapore, 787602
Phone: 65-64515570
Fax: 65-64515574

Japan Repair Center
Snap-on Tools Japan K.K.
2-1-16 Shinkiba
Koto-ku, Tokyo 136-0082
Japan
Phone: 81-3-5463-1280
Fax: 81-3-5463-1284

Snap-on/SUN De Mexico
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Avenida Presidente Juarez
No. 2016
Col Los Reyes Zona Industrial
Tlalnepantla Edo De Mexico
CP54070 MEXICO
Phone: 52-55-53903122
Fax: 52-55-53903259

China Repair Center:
Snap-on Asia Manufacturing (Kunshan) Co. Ltd.
500 Tong Feng Road East
Kunshan, Jiangsu 215300, China.
Phone: 86-51257708282 ext. 2068

Korea Repair Center:
Snap-on Tools Korea
#201-205, Sambo Techno Tower 122
Jomaru-ro 385beon-gil,
Bucheon, Gyeonggi-do
Republic of Korea 14556.
Phone: 82-323267310
Fax: 82-323267312

India Repair Center:
Snap-on Tools Private Limited
Gat No 2328, Ganga Retreat Club Road
Off Nagar Road
Wagholi, Pune - 413207
India.

IMPORTANT ENVIRONMENTAL NOTES:



1. THIS EQUIPMENT MAY CONTAIN HAZARDOUS MATERIALS WHICH CAN BE HARMFUL TO THE ENVIRONMENT.
2. DO NOT DISPOSE OF THIS EQUIPMENT AS MUNICIPAL WASTE. RETURN IT TO DISTRIBUTOR OR A DESIGNATED COLLECTION CENTER

THANK YOU FOR CARING ABOUT OUR ENVIRONMENT!

Snap-on Tools Company
Kenosha, WI 53141-1410 USA

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