



Reference 52295: 3/8" Drive Multi Angle Digital Torque adapter
4 to 203 Nm

Reference 52142: 1/2" Drive Multi Angle Digital Torque adapter
4 to 203 Nm



WARNING

Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.

INTRODUCTION

This instruction manual is intended for your benefit. Please read and follow the safety, installation, maintenance and troubleshooting steps described within to ensure your safety and satisfaction. The contents of this instruction manual are based upon the latest product information available at the time of publication. Due to continuing improvements, actual product may differ slightly from the product described herein. Tools required for assembly and servicing are not included.

IMPORTANT SAFEGUARDS



WARNING - TO AVOID DAMAGING DIGITAL TORQUE ADAPTER

- Never operate digital torque adapter when powered OFF. Always power adapter ON prior to applying torque.
- Never use this digital torque adapter to loosen fasteners as damage may occur.
- Do not exceed the rated maximum torque value for the digital torque adapter as breakage and/or a loss of accuracy could occur.
- Always verify the calibration of the digital torque adapter if you know or suspect its capacity has been exceeded.
- Always pull - do not push - on the drive tool (ratchet) handle that is connected to the digital torque adapter.
- Adjust your stance to prevent a possible fall while applying torque.
- Apply torque slowly and grasp the center of the handle. Do not apply load to the end of the handle.
- Avoid applying excessive torque, turn the ratchet slowly and steadily as you apply torque. Pay attention to the LED light and sound indicators.
- Never submerge the digital torque adapter in water or any other liquid.
- If the tool gets wet, immediately wipe it dry with a soft, clean towel.
- Do not expose this wrench to dust or sand as this could cause serious damage.
- Use the digital torque adapter only for its intended purpose as described in this manual.
- Do not use the digital torque adapter if it is not working properly or if it has suffered any damage.
- Do not disassemble the digital torque adapter.
- Do not expose the digital torque adapter to extreme temperatures, humidity, direct sunlight.
- Do not shake violently or drop digital torque adapter.
- Do not use this tool as a hammer.
- Position batteries in proper polarity.
- Do not mix batteries of different type.
- Never clean the digital torque adapter with soap or solvents.
- Use a soft, dry, clean cloth to clean the digital torque adapter and LCD panel.
- Do not apply excessive force to the LCD display panel.
- Store in a clean dry place.
- Keep this tool away from magnets.

PRODUCT SPECIFICATIONS

Drive size: 3/8 or 1/2 inch (depending of reference#)

Accuracy:

CW: $\pm 1\%$

CCW (4-39Nm) $\pm 4\%$

CCW (40-203Nm) $\pm 2\%$

Memory presets: 10

Display resolution: 0.1 Nm

Operation mode: Peak/Trace

Unit selection: kg-cm, kg-m, lb-in, lb-ft, N-m

Battery: (1) DC 3V, CR2032

Ambient temperature range:

Operating: $-10^{\circ}\text{C} - 60^{\circ}\text{C}$ ($13.9^{\circ}\text{F} - 139.9^{\circ}\text{F}$)

Storage: $-20^{\circ}\text{C} - 70^{\circ}\text{C}$ ($-4^{\circ}\text{F} - 157.9^{\circ}\text{F}$)

Auto shut-off: 80 seconds

Torque range: 4-203 Nm

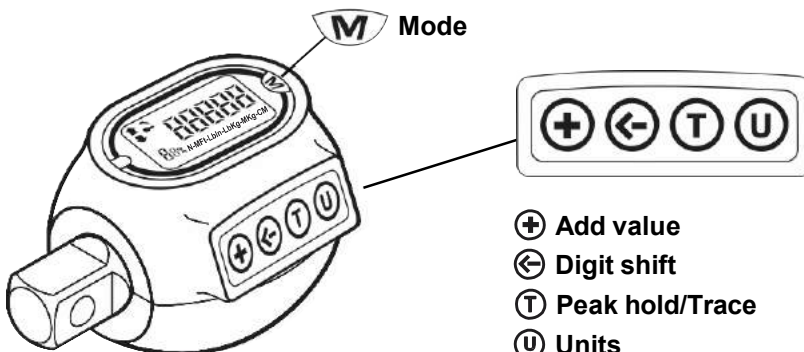
PRODUCT FEATURES



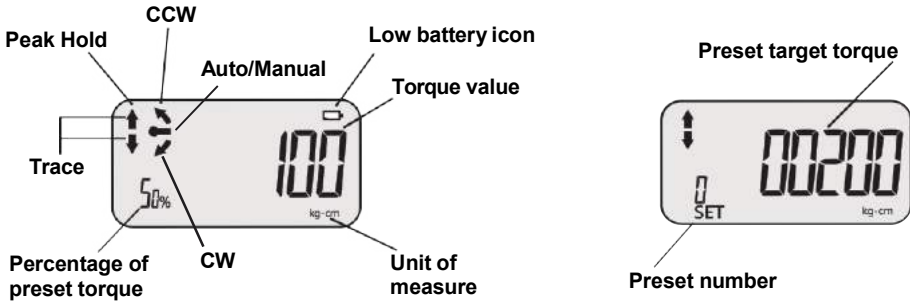
The SBV Digital Torque Adapter displays fastener torque specification settings, torque readings and peak hold measurements.

- Digital torque readout.
- Selectable for five torque units of measure: lb-ft, lb-in, kg-cm, kg-m and N-m.
- +/- 1% CW and +/- 4% accuracy (4-39Nm) or +/- 2% accuracy (40-203Nm)
- Clockwise (CC) and counterclockwise (CCW) operation indicated on display.
- Peak torque hold mode and Tracking torque mode selectable.
- White LED backlight for easy reading.
- Reversible LCD display viewing orientation.
- Multiple preset torque value indicators: audible buzzer, vibration alarm, red LED warning light.
- Displays percentage of preset torque value attained.
- Power saving automatic sleep mode activates after 3 minutes of inactivity.
- Uses one (1) DC 3V, CR2032 battery.
- Batteries & storage case included.

CONTROLS



LCD DISPLAY INDICATORS



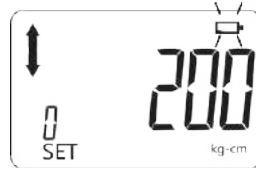
LOW BATTERY VOLTAGE INDICATION

When battery voltage drops below 2.6 volts, a low battery warning icon will appear on the LCD display.



Battery voltage under 2.6V

When the battery voltage drops below 2.4 volts, the low battery warning icon will begin to flash, indicating that immediate battery replacement is required.



Battery voltage under 2.4V

POWERING ON DIGITAL TORQUE ADAPTER

Press Mode button to turn digital torque adapter on and activate auto-zeroing process.

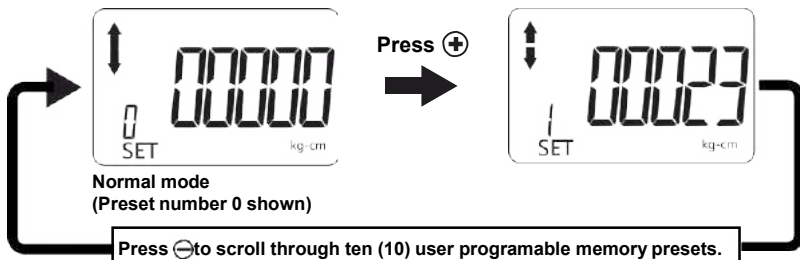


CAUTION:

Make sure the displayed applied torque value is zero during the auto-zeroing period. Otherwise a torque offset will be included.

SELECTING MEMORY PRESETS

Select 1 of 10 user programmable memory presets.



SELECTING UNITS OF MEASURE

1. With the unit on, press the \odot (Digit shift) key to display the “normal mode” screen.
2. Press the \odot (Digit shift) key to activate the “set torque value” screen (far right digit flashes).
3. Press the \cup (Units) key to toggle the Units of measure indicator until the desired unit of measure is displayed.
4. Five different unit selections are available: kg-cm, k-gm, in-lb, ft-lb, and N-m.

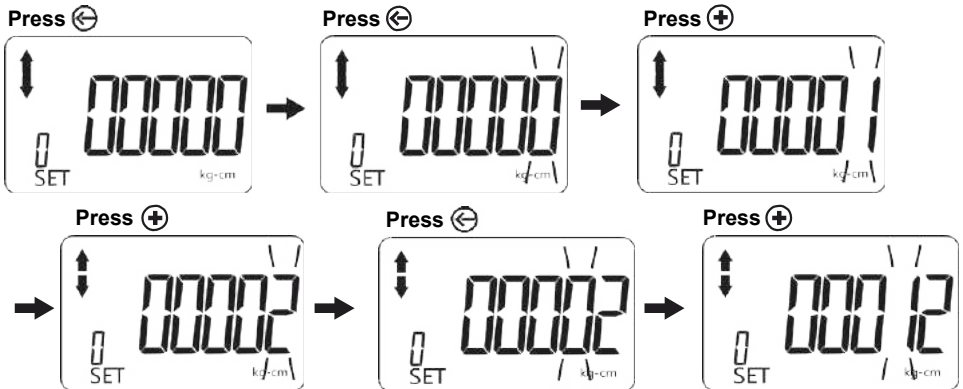


NOTE:

When you change units, any target torque setting you have already entered will now be displayed in the new unit value.

SETTING PRESET VALUES

1. With the unit on, press the \odot (Digit shift) key to display the “normal mode” screen.
2. Press the \odot (Digit shift) key to activate the “set torque value” screen (far right digit flashes).
3. Press the \oplus key until the desired first digit value is displayed (0 through 9).
4. Press the \odot (Digit shift) key to move to the next higher digit position.
5. Repeat steps three (3) and four (4) as needed to enter the desired target torque value.

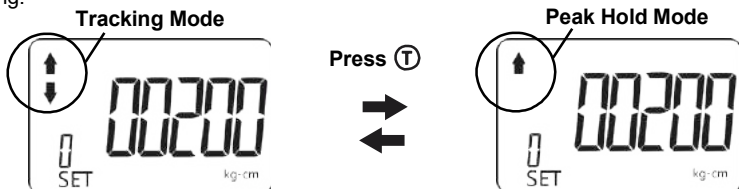


ATTENTION

If the value of the presetting being programmed exceeds 120% of the rated maximum torque capacity of the adapter, the value will be automatically reset to zero.

SELECTING PEAK HOLD/TRACKING MODES

In Track mode - The display will register “real-time” torque as it is applied. This is useful when you are able to observe the digital display while applying torque to a fastener. Watching the torque value increase can assist you in applying torque evenly and safely, especially as you approach your target torque setting.

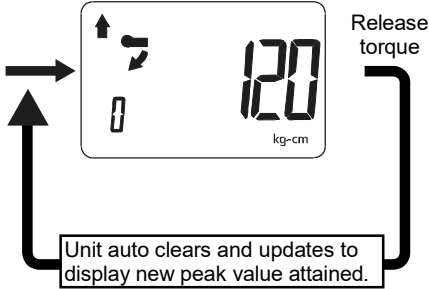
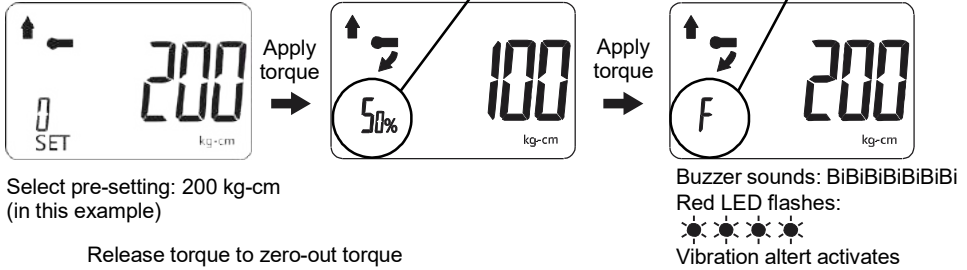


PEAK HOLD MODE OPERATION

In Peak hold mode, the digital display shows the maximum torque applied, which can be helpful for verifying that the correct torque was applied when the digital display is not visible during use. This mode is also handy when using the adapter to calibrate a torque wrench.

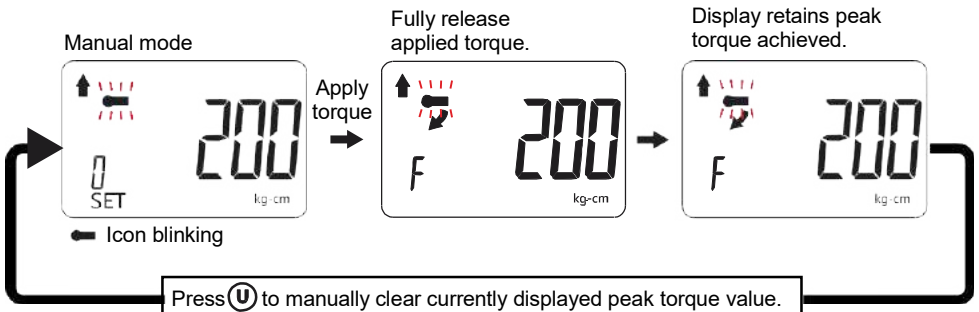
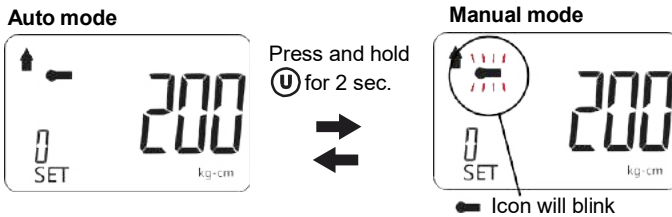
AUTO MODE:

Peak Hold Mode



MANUAL MODE:

Toggle screen from Auto mode to Manual mode.



TRACKING MODE OPERATION

In Tracking mode, the display will register torque as it is applied in real-time. This allows you to observe the digital display while applying torque to a fastener. Watching the torque value increase can assist you in applying torque evenly and safely, especially as you approach your target torque setting.

Tracking Mode



Select pre-setting: 200 kg-cm

ATTENTION

If the value of the selected presetting is zero, a default value of 120% of the rated torque capacity of the adapter will automatically be loaded as the target torque



Apply torque to reach preset torque value
(200 kg-cm in this example)



At 50% of Target torque:

- Percentage of preset torque value is displayed

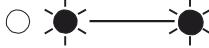


Apply torque



At 70% of target torque:

- Percentage of preset torque value is displayed
- Buzzer sounds: Bi---Bi---Bi---
- Red LED flashes:



Apply torque



At 90% of target torque:

- Percentage of preset torque value is displayed
- Buzzer sounds: Bi-Bi-Bi-Bi
- Red LED flashes:



Apply torque



At 100% of target torque:

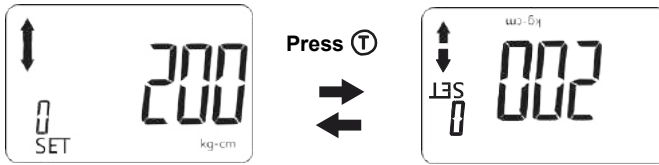
- Percentage of preset torque value is displayed
- Buzzer sounds: BiBiBiBiBiBiBi
- Red LED flashes:



- Vibration alert activates

CHANGING ORIENTATION OF DISPLAY

Press and hold **T** button for 2 seconds to toggle the orientation of the display readout.



POWERING OFF DIGITAL TORQUE ADAPTER

Press and hold Mode button for 2 seconds to turn unit off.

NOTE: This tool will automatically enter sleep mode after 3 minutes of inactivity.

BATTERY INSTALLATION AND REPLACEMENT



1. Requires one (1) DC 3V, CR2032.
2. Unscrew battery cover fastener with a jewelers' phillips screwdriver.
3. Remove the battery cover.
4. Remove the old battery.
5. Clean battery terminals.
6. Install fresh battery in the digital torque adapter (with the "+" sign end facing upward).
7. Replace the battery cover and screw tight.

Note

- Remove battery if stored for a long period of time.
- Oil, water, dirt and sweat can prevent a battery's terminals from making electrical contact. Wipe both terminals before installing batteries.

Battery disposal

Only dispose of battery when fully discharged.

DO NOT dispose of battery in a fire.

Dispose of expended batteries and packaging materials in an environmentally responsible manner.

CALIBRATING A TORQUE WRENCH USING DIGITAL ADAPTER

1. Set your torque wrench to a value of approximately 25% of its maximum capacity. For example, if your torque wrench has a maximum capacity of 150 lb-ft, set it to 40 lb-ft.
2. Program the digital torque adapter for a torque value that matches the torque wrench setting. In our example, you would set the adapter for 40 lb-ft. Ensure the adapter is in the "peak" mode as this will make it easy to reference actual torque versus the torque indicated on the wrench.
3. Connect the pre-set torque wrench and the your calibration adapter (not included) to the digital torque adapter. Secure the calibration adapter in a bench vise. Ensure the calibration adapter is securely tightened in the vise.
4. Turn the torque wrench smoothly and steadily, applying torque to the calibration adapter until your torque wrench reaches the preset value, either by "clicking" (micrometer style torque wrench), or displaying the desired setting (digital or dial torque wrench).
5. Read the peak torque value shown on the digital torque adapter. Adjust your torque wrench and repeat the procedure until the torque wrench and digital torque adapter show identical torque values.

