

HF-Series Operation Instructions

Rev 1.1 (2/14/17)



RoHS

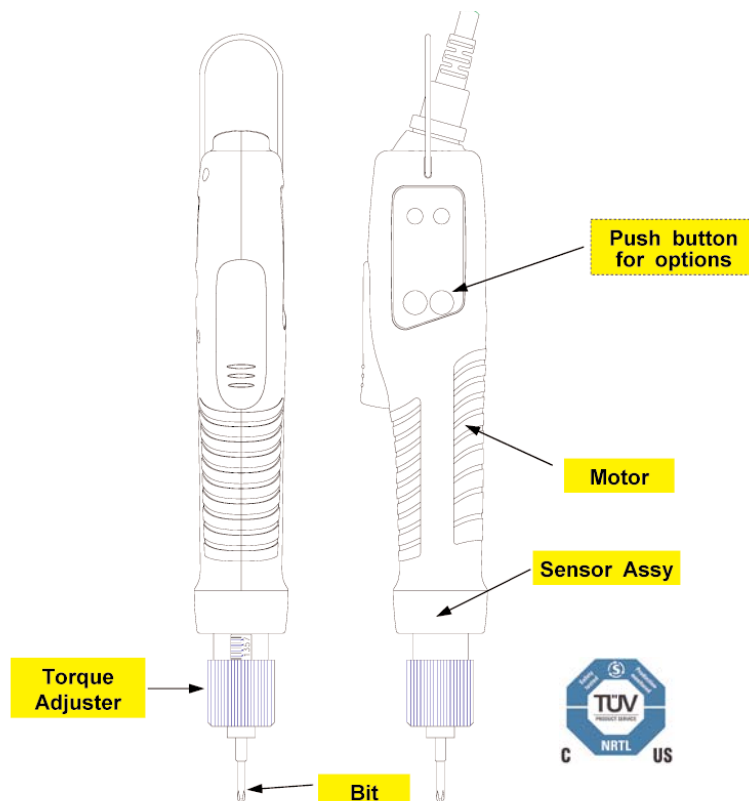
CE



HF-Series Operation Instructions

Introduction

- Various models that range from 17.4 - 87 lbf.in
- High performance Swiss Maxon brushless motor design provides durability and reduces the standard maintenance costs for electric screwdrivers.
- Designed for high production environments. Minimal heat build-up even when tool is operated continuously.
- Adjustable RPM setting on the tool. A selectable Soft Start mode from 0.2-0.6 seconds.
- Over Heat Protection (OHP) and Over Current Protection (OCP) protect driver from damage or malfunction. Features a LED display that signals the tool status for the operator to view.
- Can be connected with the Scout Screw Counter.
- External torque adjustment scale.
- Requires HTC35 transformer (power supply).
- All models are ESD designed and prevent the occurrence of electrostatic discharge, which improves production yields, manufacturing costs, product quality, product reliability, reputation and profitability.



HF-Series Operation Instructions

General Operation for HF-Series models

1. Attach power tool cable to the HF screwdriver and the transformer. Make sure notch in plug lines up with the notch on the socket. Tighten knurled ground ring.
2. Plug in power cord to the back of the transformer and power outlet. Flip power switch to "ON" position located on the back of transformer.
3. Select a bit. Retract the bit collar. Insert the bit and release the retracted collar. To avoid damaging fasteners, make sure the proper bit is suitable for the head of the fastener.
4. The torque limit is determined by the tension of the coil spring housed in the torque adjustment nut. The tighter the coil spring is wound the higher the torque limit is raised. See Charts on page 15 to determine the appropriate torque adjustment setting.
5. Rotate the torque adjustment nut to set the torque limit. Turn clockwise to increase torque and counter clockwise to decrease torque. The scale adjacent to the Torque Adjustment Nut is a reference guide. The torque output from the driver can change depending on various fastening factors like friction, type of joint, and the type material being used like a washer.
6. Turn driver on and check for proper rotation. FOR-clockwise, REV-counterclockwise.
7. To apply torque, squeeze the lever (Push-to-Start models - place light downward pressure on the nose of the driver). The driver will automatically stop when the preset torque has been reached.
8. To remove the screw, turn the FOR/REV switch to REV



torque adjustment nut

Alarm Display by LED

no	LED information	LED display	Reset
1	Motor RUN before torque up	● Green (Left)	Auto OFF by motor stop
2	TORQUE UP	● Orange (Left) Torque up and stop	Auto OFF by trigger Off
3	Over Voltage input over 37V	●●↔●● Green & Red lights blinks	Auto OFF under 37V
4	Overload	●● Two Orange light blinks	Auto reset after 5s
5	Overheat(over 80°C_motor)	●● Two Orange light blinks	Auto reset lower than 80°C
6	Driver Lock by ext. signal	●● Two Green lights blinks	Auto reset by signal off

Power Supply for HF-Series

Model: HTC35 Transformer
Item # 145824

Specifications:

Max. Output: 4A
Output VDC: 35V
Input VAC: 110/230V
Size inches (W x D x H): 5 1/8" x 7 1/3" x 2 1/2"
Weight: 2.6 lbs.



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HF-Series Adjustable Speed & Soft Start Settings

These models feature an adjustable RPM setting on the tool. The RPM settings can be adjusted to the preset increments as shown label (see image on the right).

These models also feature a selectable Soft Start mode (from 0.2, 0.4 & 0.6 seconds).



How to Adjust Speed Setting

1. Press and hold the Speed button for 2 seconds.
2. Two LEDs will display colors that show the current speed selection of the brushless screwdriver.
3. Position the F/R slide switch in R or F to increase (+) or decrease (-) RPM setting of the tool. Slide switch to "R" position to increase speed. Slide switch to "F" to decrease speed. Then press the Speed button until the target speed is selected. The two LEDs will display colors that show the current speed selection (see table below for reference) **Note!** The RPM settings can only be adjusted to the preset increments as shown on the label (see chart below).
4. By starting the screwdriver, the selected speed is saved automatically.



To adjust the settings the Program Lock Key must be is plugged into the HTC35 Transformer.

Program Lock Key - Item # 145774

The Program Lock Key protects from incidental or operator tampering of the programmable settings on the side of select HF-Series models. To adjust the settings the Program Lock Key must be is plugged into the HTC35 Transformer.

Speed Selection Chart

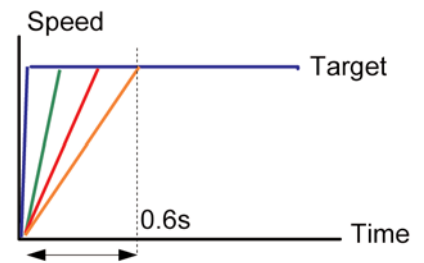
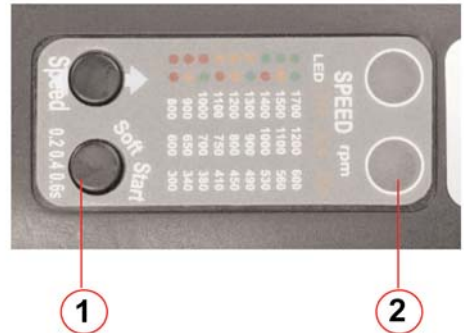
Model	LED	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	● ●
	Button	1th	2nd	3rd	4th	5th	6th	7th	8th	9th
HF50N	RPM	600	650	700	750	800	900	950	1000	1050
HF100N	RPM	150	200	250	300	350	400	450	500	550

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How to Adjust Soft Start Setting

There are 3 different time settings for the Soft Start mode which are (0.2, 0.4 & 0.6 seconds). The default setting is OFF. For those fastening applications that require a slow start and then ramp up the speed of the electric screwdriver. The soft start function can prevent damage to screw heads.

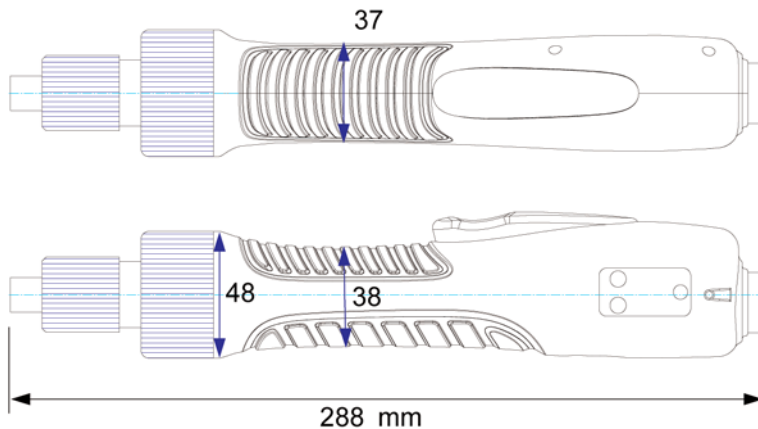
1. Press and hold the Soft Start button for 2 seconds.
2. Two LEDs will display colors that show the current soft start selection of the brushless screwdriver.
3. Press Soft Start button until the target time is selected.
4. By starting the screwdriver, the selected soft start setting is saved automatically.



② LED color	Soft start time
OFF	No use
● Green	0.2 sec
● Red	0.4 sec
● Orange	0.6 sec

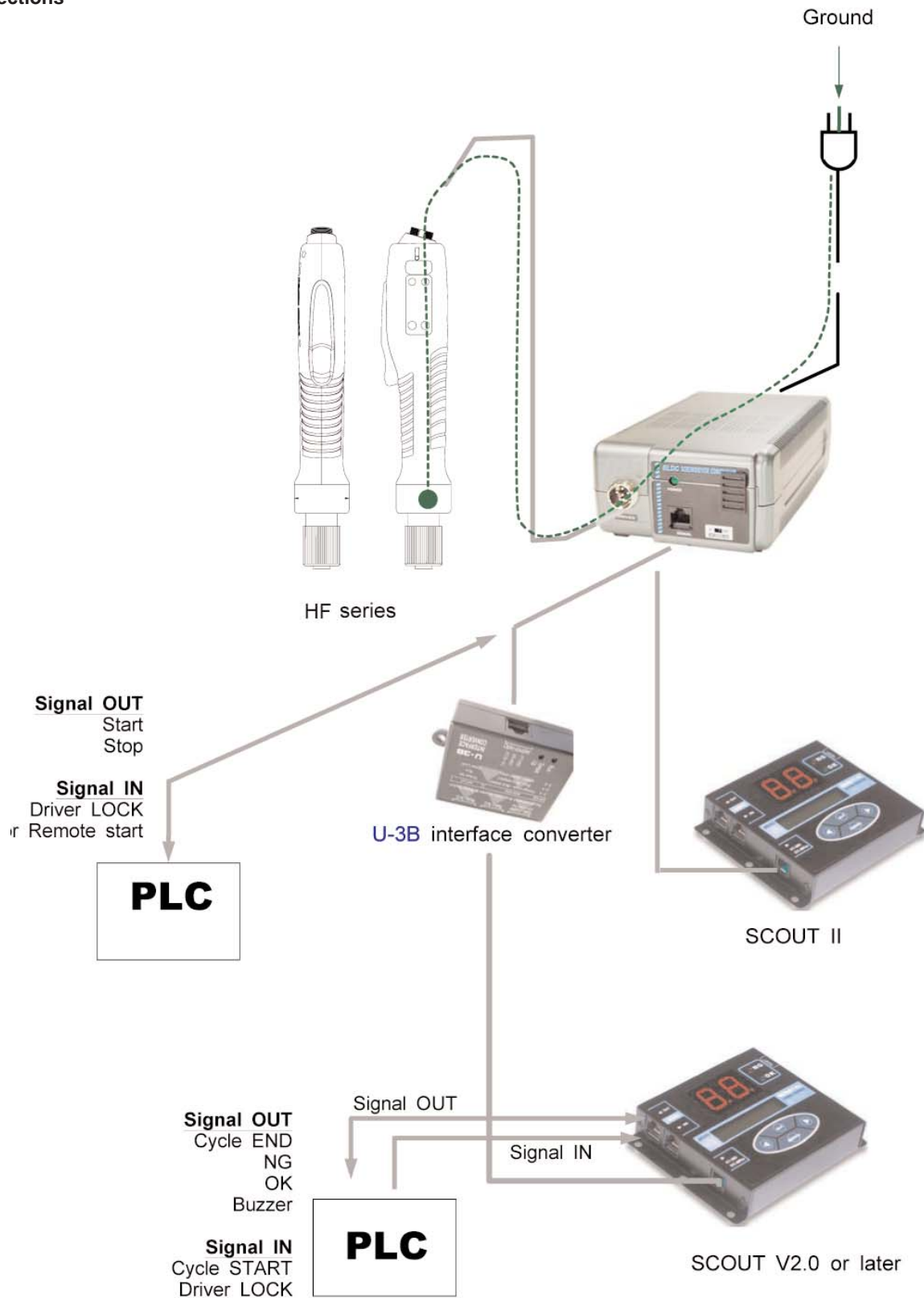
The Soft Start button is “wrap around” button meaning you can toggle through the settings continuously by pressing the button (OFF - 0.2s-0.4s-0.6s).

Dimensions



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Connections



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Accessories

The EZ-Glider torque arms are designed to improve production and quality control during the assembly process. The arms securely keep electric or pneumatic drivers in perpendicular alignment to help prevent side loading or cross threading occurring during the assembly process. The EZ-Glider helps remove the operator's influence in the assembly process and strengthens quality control.



The ergonomic design of the EZ-Glider torque arms reduces RMI (repetitive motion injury) and CTS (carpal tunnel syndrome). The effortless handling of the torque arm provides comfortable tool operation and increased production. The torque arm can be installed in space-restricted areas



Torque Cover protects the HF-Series from incidental or operator tampering of torque setting. Allows for color-coding of specific torque values in production areas.

Black Torque Cover (Item # 145903)



Right Angle Adapter. Easily mounts onto nose of driver.



Scout screw counter helps manufacturers detect and eliminate costly screw-fastening errors during the assembly process. Using a screw counter is like putting the eyes and ears of a quality control manager where they are needed most - right on the assembly area. The scout is designed to detect cross threading, omissions, unfinished rundowns and cycle complete. The screw counter takes the control of the assembly process out of the operator's hands.

Item # 145790

Screw presenters are small, tabletop devices used to organize and automate work areas and production cells. Screw presenters make assemblers and the assembly process more efficient by mechanically presenting a screw to a fixed pick up point. The inexpensive screw presenter is an alternative tool instead of the cumbersome and very expensive screwfeeder systems.



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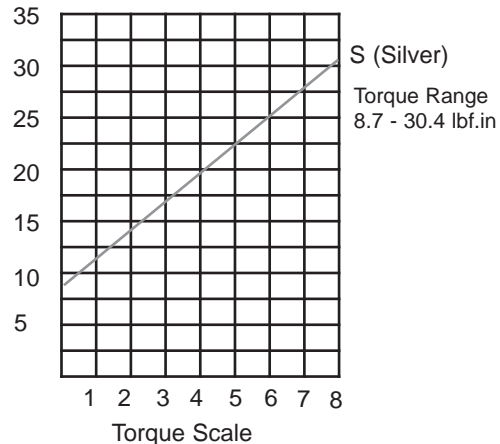
Torque Charts

These charts are meant to be used as guidelines for setting the torque on the HF-Series electric screwdrivers. The drivers have a torque scale on the torque adjustment nut showing reference numbers. These numbers determine the approximate torque setting. Refer to the charts to determine the reference number setting for your torque requirement.

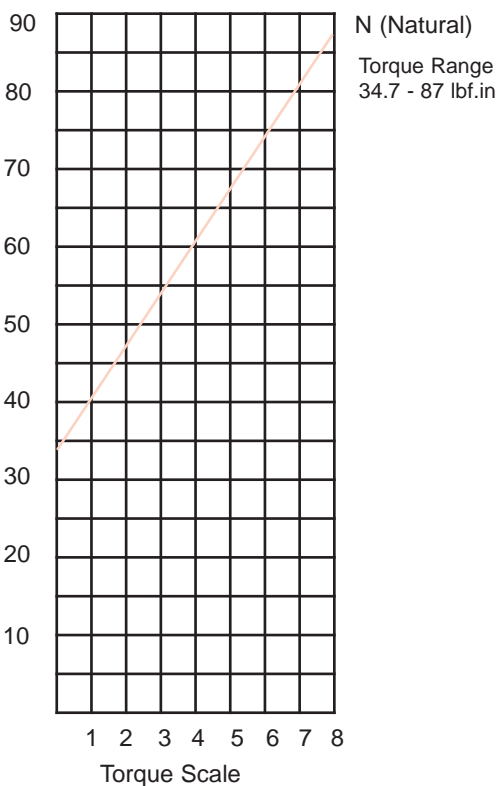
How to Read the Torque Charts

Torque ranges (lbf.in) approximate tightening torque, operated with no load at maximum speed

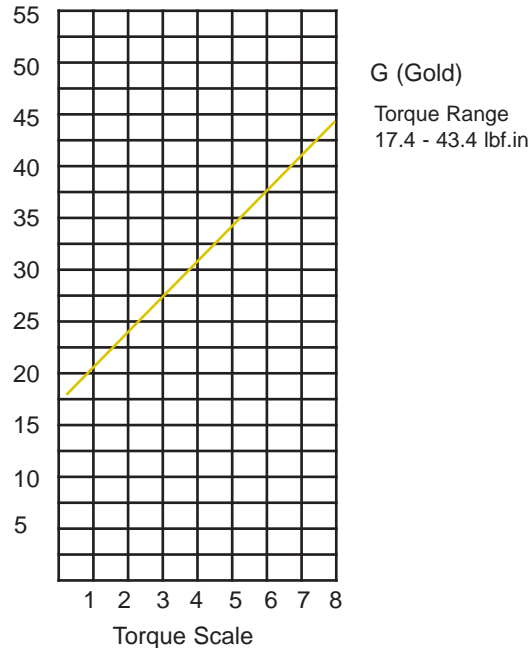
lbf.in HF35



lbf.in HF100



lbf.in HF50



HF-Series Operation Instructions

Testing Power Tools:

1. Application Method: Use a torque analyzer in “Peak Mode” with a rotary transducer between the power tool and the actual application. This is the best way to test since you are using the actual joint as the test station. You will see the actual torque applied to the fastener. **Caution:** Variances in tool performance may occur do to the addition of the rotary transducer.
2. Simulated Method: Always use a quality joint rate simulator (run down adapter) with a torque analyzer when testing power tools in a simulated application. Use Joint rate and Breakaway methods to obtain most accurate torque readings in a simulated rundown.

Care

1. The HF-Series screwdrivers are a precision torque control instrument and should be handled with care at all times.
2. Only use the transformers listed in the Mountz catalog or website for appropriate HF-Series driver model (If you have any questions regarding the appropriate transformer set-up, contact Mountz Customer Service Department).
3. Operate under safe conditions. Do not place in operation where such objects as hair, strings, clothing, etc. can become tangled in the rotating bit.
4. Keep away from moisture. Never use in high humid, moist or damp environment.

Service

Mountz Inc. features an experienced calibration and repair staff. Our trained technicians can calibrate and repair most any tool. Mountz provides rapid service with quality that you can trust as we offer three state-of-the-art calibration lab and repair facilities that can calibrate up to 20,000 lbf.ft.

Since 1965, Mountz’s in-depth knowledge of torque is reflected in our tool’s craftsmanship and our ability to provide solutions to both common and uncommon torque applications. We perform calibrations in accordance with ANSI/NCSL-Z540. Mountz is dedicated solely to the manufacturing, marketing and servicing of high quality torque tools.

Tool Service & Repair Capability

Torque Wrenches: Click, Dial, Beam, Cam-Over & Break-Over

Torque Screwdrivers: Dial, Micrometer, Preset & Adjustable

Torque Analyzers/Sensors: All brands

Electric Screwdrivers: All brands

Air Tools: All brands

Impact Wrenches, Drills, Pulse Tools, Grinders, Percussive Tools,
Air Screwdrivers, Nutrunners, DC Controlled Nutrunners

Torque Multipliers: All brands

Mountz Service Locations

Eastern Service Center

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Foley, AL 36535
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Fax: (251) 943-4979

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Twitter: @mountztorque

Download a “Service Form” and include a copy when you send the tools in to be serviced.

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