

World's first patented Hybrid torque driver.  
Affordable, flexible system that can replace  
up to 8 conventional screwdrivers.

# HD-Series

Hybrid Torque Control System

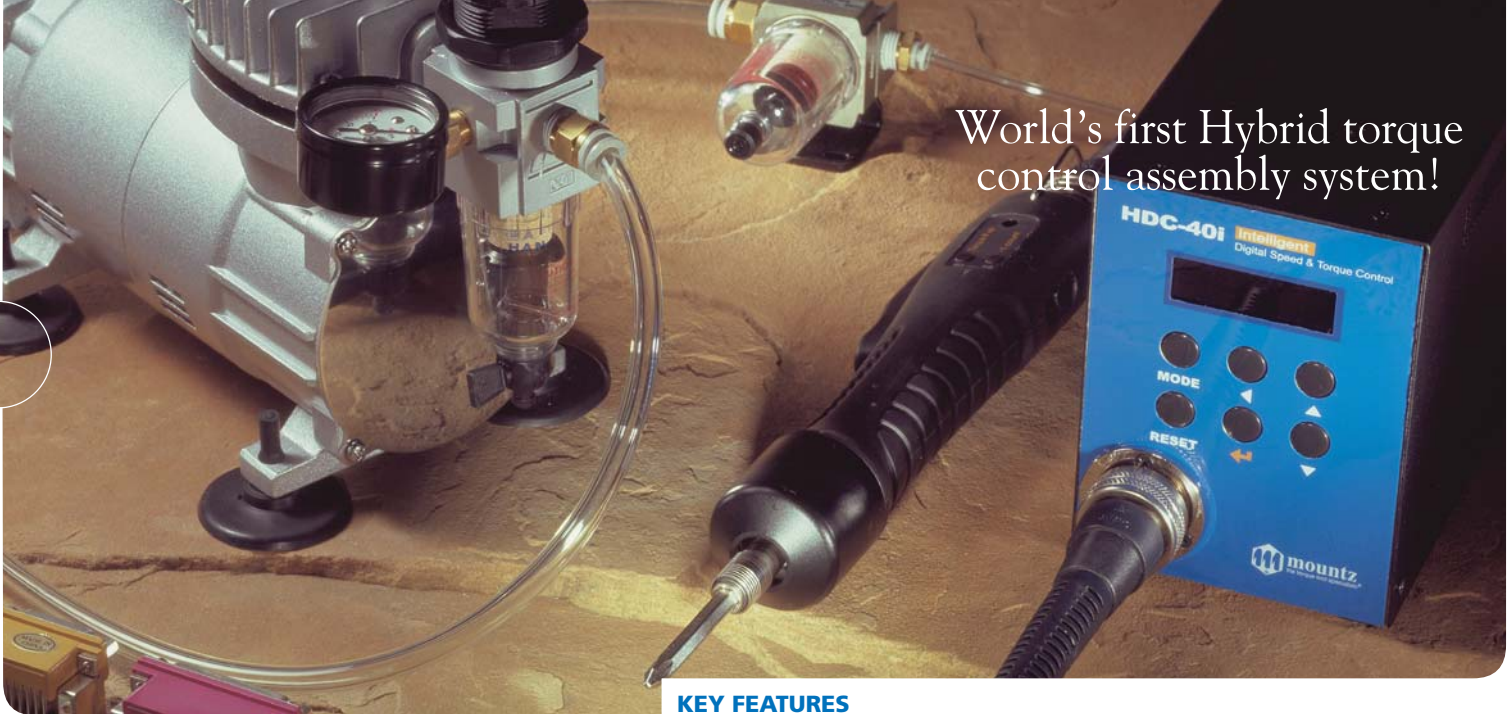


Innovation from the torque tool specialists® **NEW**



1080 North 11th Street, San Jose CA 95112  
t 408.292.2214 / t 800.456.1828  
f 408.292.2733  
e-mail: sales@etorque.com  
www.mountztorque.com

World's first Hybrid torque control assembly system!



# HD-Series

## Hybrid Torque Control System

Mountz introduces the Hybrid Torque Control System, a revolutionary change in repeatable screw fastening technology. The patented HD-Series Torque Control System is the world's first torque control tool using both air and electric power to set and control torque. The HD's precise pneumatic pressure sensor and patented algorithm allow for precision digital torque selection. It provides real-time monitoring and torque control of the tightening process. It provides repeatability of the torque applied to screws, regardless of joint characteristics and frictional differences in actual applications.

Key Benefits	
<b>Productivity/ Flexibility</b>	Increase productivity with one tool instead of 2 - 8 tools. Perfect for cell based manufacturing environments, change torque via front panel, PLC or direct connection to I/O on controller.
<b>Quality</b>	Visual digital torque & speed control. Built in screw counter, error detection, fastening strategy setting and customized software package provide documented fastening and control.
<b>Cost</b>	Less than half the cost of conventional DC control tools - state of the art technology at a fraction of the price. Replace 2 - 4 tools with 1 Hybrid system.

### KEY FEATURES

#### Controller

- Programmable digital torque setting with memory for 8 preset torque settings.
- Real-time monitoring and torque control of the tightening process.
- Selectable speed up to 1,700 rpm.
- Programming and monitoring with PC software.
- Programmable multi-sequence operation.

#### Brushless Electric Screwdrivers

- Various models that range from 0.3 - 39 lbf.in
- Electric Screwdrivers feature a high performance brushless motor design that provides durability and reduces the standard maintenance costs for electric screwdrivers.
- ESD housing and bit tip control to 1 ohm, (cable not ESD).
- Low inertial force provides smooth reaction-less operation with little G force to assembled parts.
- Low noise, vibration and maintenance.

#### I/O Interface & Settings

- 25P I/O interface to a PLC or 8 direct sensor ports.
- Hybrid systems can be "Daisy Chained" together for screw counting in a master/slave scenario.
- Sensor ports for preset selection and screw counting.
- Input via sensor ports for presets.
- Input / Output for PLC.
- Can be connected to Scout II.

#### Built-in Screw Counter

- Detection of fastening error and displays error condition.
- Visual assembly fastener count (count up or down), including total count.
- Real time monitoring by PC program.
- Detects - cross threading, omissions, unfinished rundowns and cycle complete.
- 0 to 99 screws.

#### Screw Counting Selections

- Auto.
- Start (Continuous on).
- Start Pulse with time limit.
- Start Pulse and Finish pulse.

#### Preset Parameter Settings

- Three selectable units of measure: Lbf.in, N.m, Kgf.cm
- Selectable settings for Torque, Speed, Min & Max Angle, and Soft Start time.
- Maximum angle control and verification
- Minimum angle control and error reporting

#### Motor Run Time Limits

- Motor run time limits, forward and reverse.
- Motor stall time limit.
- Sleep time.
- Motor acceleration for soft start.

#### LED Display Selections

- Preset and Speed.
- Preset and Torque.
- Converted Torque Idle & Target Torque (Running) Count setting and remaining screw count.
- Count setting and remaining screw count (Idle + Preset and Torque (Running)).
- Count setting and remaining screw count + Preset and Torque (Alternating).

#### Output Signal Types

- Count complete
- Torque up and Count complete.
- Alarm, screw missing.

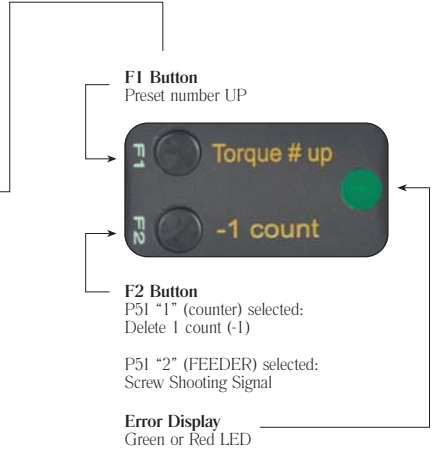


800.456.1828



### BRUSHLESS ELECTRIC SCREWDRIVER (use with HDC40i Controller)

Model	Driver Type	Item #	Torque Ranges		RPM		Grip Dia.	Length	Drive Size	Weight
			lbf.in	cN.m	High	Low				
HD150-A	Lever Start	145741	4.4 - 13	49.1 - 147	1700	500	1 1/4"	9 2/3"	1/4" F/Hex	15.5 oz.
HD150P-A	Push-to-Start	145742	4.4 - 13	49.1 - 147	1700	500	1 1/4"	9 2/3"	1/4" F/Hex	15.5 oz.
HD220-A	Lever Start	145743	6.1 - 19.1	68.7 - 215.8	1250	400	1 1/4"	9 2/3"	1/4" F/Hex	15.5 oz.
HD220P-A	Push-to-Start	145744	6.1 - 19.1	68.7 - 215.8	1250	400	1 1/4"	9 2/3"	1/4" F/Hex	15.5 oz.
HD450-A	Lever Start	145745	8.7 - 39	98.1 - 441.4	600	300	1 1/4"	9 2/3"	1/4" F/Hex	18 oz.
HD-450P-A	Push-to-Start	145746	8.7 - 39	98.1 - 441.4	600	300	1 1/4"	9 2/3"	1/4" F/Hex	18 oz.



### BRUSHLESS ELECTRIC SCREWDRIVER (use with HDC30i Controller)

Model	Driver Type	Item #	Torque Ranges		RPM		Grip Dia.	Length	Drive Size	Weight
			lbf.in	cN.m	High	Low				
HD012-E	Lever Start	145747	0.3 - 1	3 - 11.7	1100	500	1 1/8"	7 7/8"	4mm HIOS	7.8 oz.
HD025-E	Lever Start	145748	0.7 - 2.1	7.8 - 24.5	1100	500	1 1/8"	7 7/8"	4mm HIOS	7.8 oz.
HD035-E	Lever Start	145749	0.9 - 3	9.8 - 34.3	1100	500	1 1/8"	7 7/8"	4mm HIOS	7.8 oz.
HD045-E	Lever Start	145756	1.3 - 3.9	14.7 - 44.1	750	400	1 1/8"	7 7/8"	4mm HIOS	7.8 oz.
HD060-E	Lever Start	145757	1.3 - 5.2	14.7 - 58.8	1000	500	1 1/4"	8 2/3"	4mm HIOS	9.9 oz.

**NOTE!**  
Brushless screwdrivers are also available for Automation and Vacuum models.

### HDC40i CONTROLLER

Model: HDC40i Hybrid Controller  
Item # 145740  
For driver models: HD150, HD220 & HD450

### HDC30i CONTROLLER

Model: HDC30i Hybrid Controller  
Item # 145739  
For driver models:  
HD012, HD025, HD035, HD045 and HD060

### GENERAL SPECIFICATIONS (Both Models)

Input (Air Pressure):  
Min 4.5 Bar (62.26 PSI) / Max 6 Bar (87 PSI)

Angle Control: 0.1 - 10 turns

Preset Parameters:  
Torque, Speed, Soft Start & Angle in 8 preset numbers

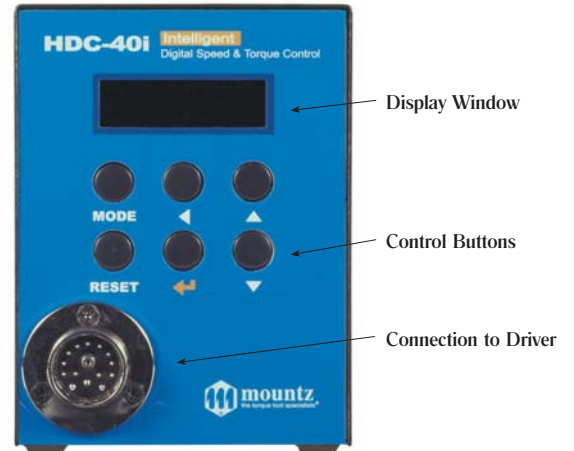
Auto detection of the connected driver: Auto detection of the offset value from the EEPROM on the driver

Error display: Error display by code no. in system, communication & pattern error group

Fastening Quality Control: OK/NG monitoring of screw fastening by preset pattern of angle and/or time

Screw Counter: Save the total screw number, and monitoring the number of OK fastening screws. The controllers can be "Daisy Chained" together for screw counting in a master/slave scenario.

PC based program for parameter settings, monitoring and real time output



### HDC40i SPECIFICATIONS

Input (Electric): AC120VC ~ 220V, 50-60Hz

Output (Electric): DC40V, 3A

Fuse: AC250V 10A

Dimension (WxLxH): 3 3/4" x 8 3/4" x 5"

Weight: 4.6 lbs

Preset selection capability: Front panel or 25P I/O

### HDC30i SPECIFICATIONS

Input (Electric): AC120VC 220V, free voltage

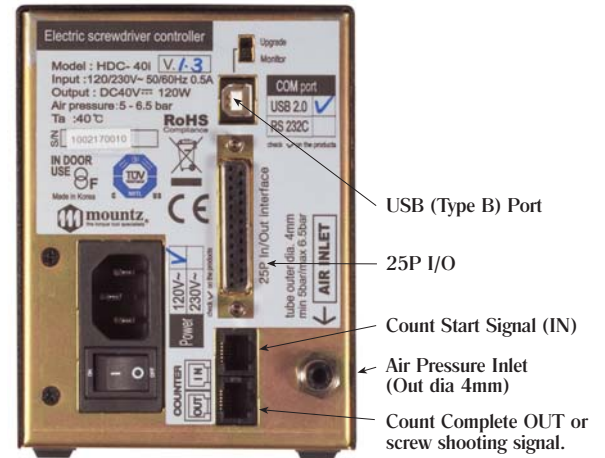
Output (Electric): DC30V, 1.5A

Fuse: AC250V 5A

Dimension (WxLxH): 3 1/2" x 7 1/8" x 5"

Weight: 3.5 lbs

Preset selection capability: Front panel or 25P I/O



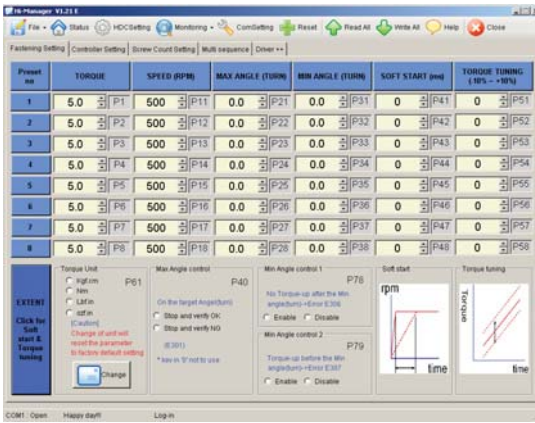
HDC40i & HDC30i Controller



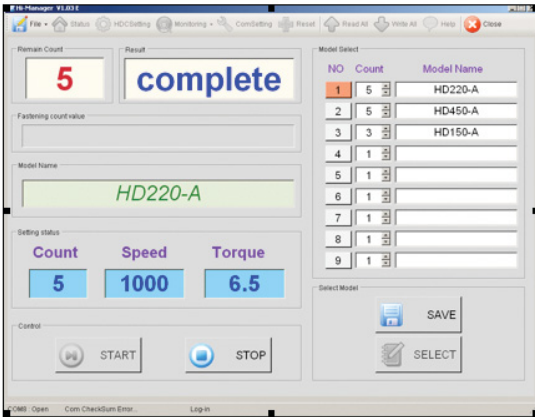
Increase productivity with one tool instead of 3-4 tools. The convenience of selecting the control settings with the touch of a button and offering built-in error proofing systems, adds value to the quality control process.



USB cable for connecting Controller to PC.  
Item # 770319



**THE HDC Controller enables an ability to define various fastening parameters.**  
 Four units of torque measurements: (ozf.in, lbf.in, N.m, & kgf.cm)  
 6 preset parameter settings & 8 preset torque settings  
 Maximum angle control and verification  
 Minimum angle control and error reporting



**Screw count monitoring in real time.**  
 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. Screw counters verify that all fasteners have been installed and were seated to the tools preset torque setting. These units take the control of the assembly process out of the operator's hands.

## MINI AIR COMPRESSOR

Oil free mini air compressor with auto pressure switch with one-touch male connector (for tube OD 8mm), unit can support 1 - 4 Hybrid Controller Systems

1/8HP, Start at 70PSI, Stop at 90PSI  
 Flow: 20LPM  
 Weight: 9.5 lbs.  
 120V  
**Model: MAC-20**  
**Item # 145737**



**NOTE!**  
 The HDC40i & HDC30i Hybrid Controllers require a constant PSI regulation. Should be used with MAC-20.

## ACCESSORIES

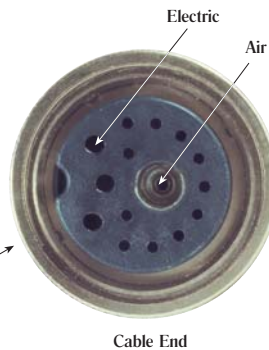
Item #	Model
773816	One-Touch Male Connector (1/4 RPT, Tube OD 4mm)
773817	One-Touch Male Connector (1/4 RPT, Tube OD 8mm)
773818	One-Touch Union Tee (Tube OD 8mm)
773819	One-Touch Straight Union (Tube OD 8mm)
773820	One-Touch Plug-in-Reducer, (8mm Plug to 4mm Tube)
773821	Tubing - Polyurethane Clear (4mm OD X 2.5mm ID, 20 Meter Roll)
773822	Tubing - Polyurethane Clear (4mm OD X 2.5mm ID, 33 Meter Roll)
773823	Tubing - Polyurethane Clear (8mm OD X 5mm ID, 20 Meter Roll)
773824	Tubing - Polyurethane Clear (8mm OD X 5mm ID, 33 Meter Roll)

## CABLES

The driver cable connects the driver to the HDC controller. This cable provides both air and current to the driver, as well as signals back to the controller.

**Item # 14-PELZ937**  
 For Drivers:  
 HD150  
 HD220  
 HD450

**Item # 14-PELZ942**  
 For Drivers:  
 HD012  
 HD025  
 HD035  
 HD045  
 HD060



Cable End

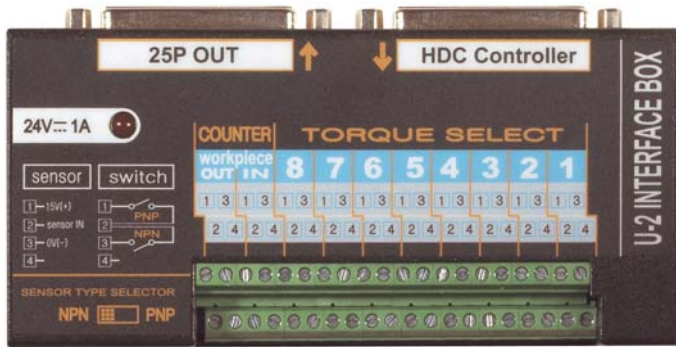


Driver End



**U-2 INTERFACE BOX**

8 Sensor ports for preset # selecting.  
 2 Sensor ports for count.  
 (Input power: 24VDC 1A)  
 Item # 145758



**AC ADAPTER FOR U-2**

AC Adapter for U2 Interface &  
 RSC-4-9 Converter  
 Not pictured.  
 Item # 145758

**CABLE 6 FT. (RS232 to USB TYPE A)**  
 Item # 145780



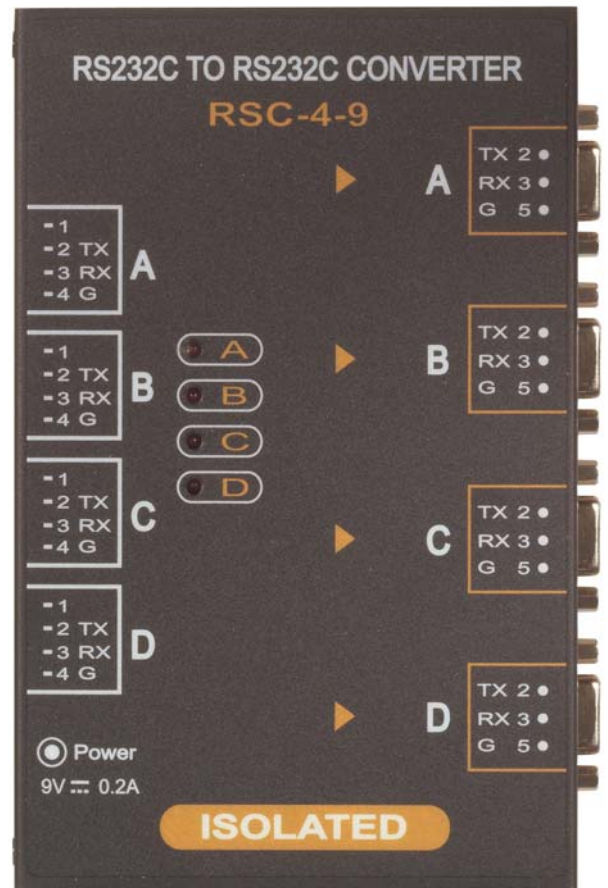
**PHOTO SENSOR SB-32W**  
 Item # 145759



**CABLE 25 PIN I/O (Male-Male)**  
 Item # 145760

**RSC-4-9 CONVERTER**

Item # 145784



**PISTOL GRIP**

Converts inline drivers to pistol grip.  
 Fits driver models:  
 HD150, HD220 & HD450  
 (driver not included)  
 Item # 145738

