



'ESL2' Series Brushless Screwdriver & Controller Operation Manual

**Screwdriver models: ESL210-ESD, ESL210S-ESD, ESL211-ESD, ESL211S-ESD
Controller model: BECT200(E)(UK)**

CAUTION - Please read, understand, and follow all operating and safety instructions in this manual before using the Tools and Controllers.

The ESL2 Series of Delta Regis 12VDC Screwdrivers is designed for exclusive use with specific Delta Regis Controllers as specified in this manual. Do not attempt to use the tools and/or controllers with any products other than as specified in this manual.

If you have any questions or concerns, please contact us at:

Delta Regis Tools, Inc.
7370 Commercial Circle
Fort Pierce, FL USA
34951

Ph +1-772-465-4302
Fx +1-772-465-4368
E-mail: sales@deltaregis.com
Website: www.deltaregis.com

Important - Installation and Safety

Warning - Failure to understand and follow proper installation guidelines, safety requirements, and operating instructions may result in malfunction, component damage, property damage, shock hazard, fire hazard, injury or death.

1. Please read and understand the operation manual and follow all safety and operation instructions.
2. Use these products in a suitable dry, indoor location. Do not use the tools and controllers in damp, wet or high temperature environments. Do not use in the presence of flammable liquids or gases.
3. Ensure that the controller has proper ventilation. Do not expose the tools and controllers to areas subject to airborne contaminants (eg. dust, metal filings).
4. Use only a properly grounded electrical outlet of the correct supply voltage to power the controller. Ensure that the supply is overload protected and of sufficient amperage capacity.
5. Use only the correct plug for the controller and outlet. Hold the plug of the power cord when connecting or disconnecting. Do not pull on the cable.
6. Do not expose the cable, tool or controller to oil, chemicals, or heat. Ensure that the cable is routed and used in such a manner as to not be subject to sharp objects that may abrade or cut the cable.
7. Locate the controller in a suitable, safe location on a steady surface. Do not place in a high location where there may be a risk of it falling. Secure the controller in position to prevent possible movement caused by pulling on the power or tool cables.
8. Do not cover the controller or stack any objects on top of or near the controller. Ensure that adequate clearance and ventilation is provided around the perimeter of the controller.
9. The 'BECT200' Controller is for use exclusively with Delta Regis brand 'ESL2' series screwdrivers as specified on the following pages. Use of the controller (or screwdriver) with any other screwdriver (or controller) may result in malfunction, damage, or injury.
10. In the event that the controller is overloaded beyond the maximum current rating, an internal fuse will disrupt power. Should the controller stop functioning, or exhibit abnormal or intermittent operation, please discontinue use immediately and send the controller to an authorized service centre for troubleshooting and repair.
11. Excessive duty cycle will cause the tool and/or controller to overheat. If this occurs, discontinue use until cooled down and reduce cycle rate. As a general rule, do not exceed 15-20 screws/minute.
12. Turn the main power switch off when the controller is not being used. Unplug the controller if it is not being used on a regular basis.
13. Do not attempt to disassemble or repair the screwdriver or controller. Repairs should only be performed by qualified technicians properly trained in the safe operation, troubleshooting, and repair of these devices. Please consult Delta Regis for the location of the nearest service depot.
14. Use only the factory specified Delta Regis brand replacement parts and accessories with these tools and controllers.
15. Any damage to the tool and/or controller resulting from misuse, abuse, or failure to follow these guidelines will void the limited product warranty.

Grounding - This controller (and AC power cord) is equipped with a 3-prong electrical receptacle/plug with ground pin. The controller must be connected to a properly grounded AC electrical outlet. Do not attempt to use this controller without a properly functioning ground connection. Never connect a live circuit to the ground pin or internal yellow-green ground wire.

Model Numbers and Specifications

Model Number ⁽¹⁾	Start Type	Range In.Lbs	Range Nm	Speed (RPM) Hi / Lo	Screwdriver Bit Type	Length in / mm	Grip Dia. in / mm	Weight lbs / g
ESL210-ESD	Lever	0.07 - 1.32	0.01 - 0.147	1000 / 700	4mm 	6.5 / 165	0.9 / 23	0.4 / 170
ESL210S-ESD	Lever	0.07 - 1.32	0.01 - 0.147	280 / 200	4mm 	6.5 / 165	0.9 / 23	0.4 / 170
ESL211-ESD	Lever	0.44 - 3.08	0.05 - 0.343	1000 / 700	4mm 	6.5 / 165	0.9 / 23	0.4 / 170
ESL211S-ESD	Lever	0.44 - 3.08	0.05 - 0.343	280 / 200	4mm 	6.5 / 165	0.9 / 23	0.4 / 170
Controller for above tools								
BECT200 ⁽²⁾	Input 100-240VAC, 50/60hz, 1A ; Output 12/9VDC, 30W					105 x 52 x 31 mm		0.3 / 140

⁽¹⁾ To specify screwdriver without ESD safe housing, remove suffix '-ESD' from part number.

⁽²⁾ Controller includes standard North American power cord. Add suffix 'E' for EU cord, suffix 'UK' for UK cord.

Product Overview / Operation



Set-up and Tool Operation

1. Plug the screwdriver cable into the tool and secure the connector nut. Repeat at the controller end.
2. With the controller's power switch OFF, insert the power cord into an appropriate AC receptacle.
3. Insert the required screwdriver bit into the screwdriver's bit holder.
4. Turn on the power switch. Select desired speed (Hi/Low) via the switch on the side of the controller.
5. Grip the screwdriver around the housing diameter so that the index finger can comfortably operate the start lever with the remainder of the fingers securely holding the body of the screwdriver. Maintain a firm grip to prevent the driver from spinning in the hand during operation.
6. To install a fastener, position the tip of the driver bit properly into the screw head. Press and hold the start lever - the driver will turn on (rotate CW) and rundown the fastener. When the tool reaches the preset torque, the driver will shut off. Release the trigger once the driver has completed this cycle and shut off. To stop the screwdriver before rundown completion, release the start lever.
7. To reverse out a fastener, with the start lever released, push the reverse button with the thumb.

Adjusting Screwdriver Output Torque

The torque adjusting nut at the nose of the tool is used to set the output torque of the driver. Rotate the nut clockwise (covering increasing numbers on the scale) to increase torque output and ccw to decrease. **The numeric scale is for reference only and does not indicate actual torque values.** Setting the driver to provide a specific torque value requires torque testing equipment and auditing/verification of the installed fastener. Make adjustments through a series of gradual increases, starting below the desired torque level. Once the desired torque setting is achieved, install the torque lock sleeve to help avoid accidental changes in adjustment. The driver's output torque should be checked/verified on a regular basis. Frequency of verification will depend on the user's specific application and quality control requirements.

Service

Controllers are not user serviceable. Any repairs must be performed by a Delta Regis authorized service center. Please consult Delta Regis Tools for further information and the location of the nearest authorized service center. Repairs to brushless screwdrivers must be performed by trained personnel, knowledgeable and qualified in the repair of DC electric screwdrivers. Use only genuine Delta Regis parts when servicing these products. Do not attempt to modify the tools or controllers.

Warranty

Delta Regis Screwdrivers and Controllers are warranted for one year from the date of purchase against defects in material and workmanship. In addition, the brushless motor in the screwdriver is warranted for three years from the date of purchase against defects in material and workmanship. This warranty does not cover damage due to transportation, abuse, misuse, or improper service. Our sole remedy is to repair or replace (at our discretion) any unit found to be defective due to defects in material or workmanship. It is the responsibility of the user to return any product thought to be defective, freight prepaid, to our warehouse for inspection and evaluation.

There is no warranty of merchantability or fitness of purpose. In no event will Delta Regis Tools, Inc. be liable for business interruptions, loss of profits, harm, injury, damage, personal injury, cost of delay, or any other special, indirect, incidental, or consequential losses, costs, or damages.