

---

# Electric Screwdriver Controller STC 30+

CE



## Operators Manual

STC 30+

Instruction part Number P32220 Issue 4

---

**Set-up:**

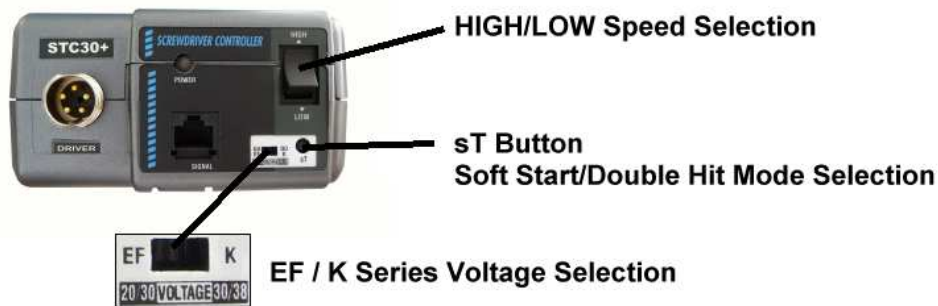
Securely place the power lead into the back of the **STC 30+ Controller**. Flip the switch on the back of the unit to turn on. Green power light should illuminate.

**Connecting Electric Screwdriver**

Before connecting the Electric Screwdriver to the **STC 30+ Controller**, make sure the slide switch in the lower bottom right of the Controller is positioned in the proper setting (EF or K). See diagram below. Only operate tool in proper "Mode" setting.

EF Mode	K Mode
Low - Output is 20VDC	Low - Output is 30 VDC
High - Output is 30VDC	High - Output is 38 VDC
Low - EF 120 RPM = 460	Low - K 450 RPM = 330
High - EF 120 RPM = 700	High - K 450 RPM = 550

Electric Drivers to use in EF Mode:	Electric Drivers to use in K Mode:
EF 120	K 450



1. Attach the power lead of the Electric Screwdriver to the **STC 30+ Controller**. Making sure the notch in the plug lines up with the notch in the Controller socket. Tighten knurled ring.
2. Select the appropriate speed for your application, using the HIGH/LOW speed button (see above).
3. Turn driver on and check for proper rotation. FOR-clockwise, REV-counterclockwise.
4. To apply torque, squeeze the lever. The driver will automatically stop when the preset torque has been reached.

**Soft Start Mode:**

Press the "sT" button in the lower bottom right (see diagram) The power light will blink once and turn **Yellow**, which indicates that you are in Soft Start mode. There are 4 different time settings for the Soft Start mode which are (0.2, 0.3, 0.5 & 0.6 seconds). When you select this mode it starts at 0.2 seconds.

The unit has EEP ROM, which allows the settings for the soft start and double hit to be kept once an operator turns off unit and then back on. Example: If the transformer is set at the 0.6 seconds setting for the soft start mode and the unit is turned off, it will keep that setting when unit is turned on

Push "ST" Button	Function	LED Light
-	Standard	<b>Green</b>
Once	Soft Start 0.2 seconds	<b>Yellow</b> light blinks Once
Twice	Soft Start 0.3 seconds	<b>Yellow</b> light blinks Twice
3 times	Soft Start 0.5 seconds	<b>Yellow</b> light blinks 3 times
4 times	Soft Start 0.6 seconds	<b>Yellow</b> light blinks 4 times
5 times	Double Hit Mode	<b>Red</b> light

**Double Hit Mode:**

The Double Hit mode is for very soft joint applications.

When an Electric Screwdriver tightens a fastener and the tool clutches off at the preset torque value. There can be some joint relaxation that can occur. The Double Hit mode has the electric screwdriver perform a second hit to stabilise the torque to allow for joint relaxation. Joint relaxation is caused by the surface of part(s) embedding or by "soft parts" such as gaskets, plastics or spongy material, which collapses under the clamping force created in a torque condition. For Hard Joint applications there is no need to use the Double Hit mode. Press the "sT" button repeatedly until the power light turns **Red**.

The clutch of the Electric Screwdriver works twice at the set torque under the "Double Hit" mode. The Double Hit will increase the repeatability accuracy at the target torque by double checking.

**OCP (Over Current Protection):**

The power will shut down automatically when the current exceeds 12 - 13A. The controller should be reset by turning off the power switch one minute and turned back on. If the current is not over the limit, power will turn on.

There is another OCP in a secondary circuit. The power will cut off for 5 seconds when the current is over 4A over 1 second or when current is over 9A over 0.5 seconds. The Transformer recovers automatically. The Transformer will also give an alarm signal by blinking Green and Orange colours on the LED light along with a beeping buzzer sound.

Description		Primary OCP	Secondary OCP	
Detection	Limit Current	12 ~ 13A	Condition A 4 Amps	Condition B 9 Amps
	Time Duration	0	1 Second	0.5 second
Protection	Transformer Shuts Down		Power Shuts Off For 5 Seconds	
Protection Signal	LED lights	No lights	Blinking Green/Orange	Blinking Orange
	Buzzer Sound	No sound	Low Beeping Sound	Higher Beeping Sound
Recovery		Turn Off Power Switch	Transformer Auto Recovers After 5 Seconds	

**Over Heat Protection:**

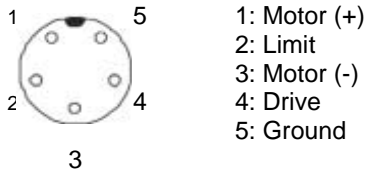
The thermistor will shut down the power supply if the unit over heats. The controller should be reset by turning off the power switch for one minute and then switching on again. If the current is not over the limit, power will turn on.



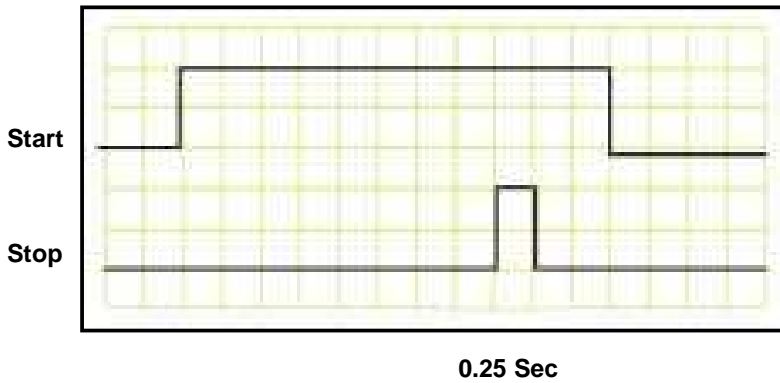
**Ratcheting Clutch Alarm:**

An alarm and break system notifies you when the ratcheting clutch occurs with an Electric Screwdriver. If the tool ratchets continuously 5 or 6 times, the STC30+ will provide a buzzer alarm along with the **RED** LED light illuminating. The output power will also cease for 5 seconds as a secondary protection.

**Transformer Output Pin Connections:**



**Timing chart for Start/Stop Signal:**



**Transformer Input voltage selection:**

**Warning**, ensure correct input voltage is selected on Transformer before power connected. (see picture below)



(Input Voltage Selector Switch)

