



EN6001 – Soft Touch Configuration

700244

This application note describes how to configure an EN6001 for operation with a Soft Touch system. For more information on the EN6001 consult 700230E on EntronControls.com.

This document applies to version 7.02 and higher.

Sequence of Operation

1. The Weld Schedule is initiated in the EN6001 by FS1 or FS2.
2. The Valve output SV1 signals the Soft Touch to close the electrodes.
3. Once continuity is sensed by the Soft Touch, it outputs a signal to the EN6001 to PI1 or PI3 which must be configured for Second Stage / Before Squeeze.
4. PreSqueeze / Squeeze Time begins.
5. The Weld 1 segment begins.

Configuring the EN6001

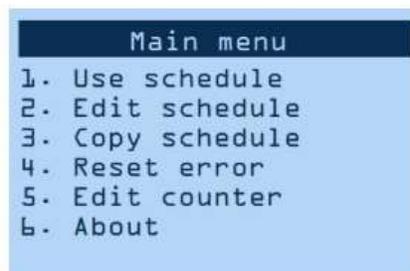
Use the procedure below to configure the EN6001 to operate with Soft Touch.

1. Become familiar with the membrane button functions used throughout this procedure.

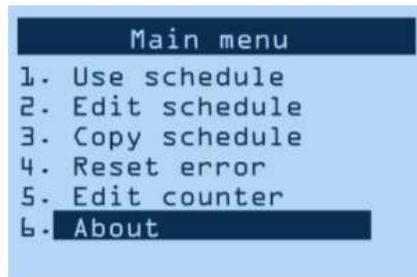


KEYPAD FUNCTIONS	
	The ESCAPE key. Used to return to the previous menu.
   	The ARROW keys. Used to navigate. If in the menu screens, the down and right arrows move the cursor/selection down, while the up and left arrows move the cursor/selection up. If in the Status screens, the up and left arrows navigate to the previous Status screen, while the down and right arrows navigate to the next Status screen.
	The ENTER key. Used to select menus and confirm changes to parameters.
 	The PLUS and MINUS keys. Used to make changes to parameters. If the input for the parameter to be changed is a number, PLUS will increase the number by one and MINUS will decrease the number by one. If the input for the parameter to be changed is a menu of different options, either key can be used to scroll through the menu options. Holding the buttons down will cause the control to increment/decrement at a faster rate.
	The FUNCTION key. Used to navigate from the Status screens to the Main Menu.
	Enables weld current. If not on, then an ER35 (Panel no-weld error) is displayed.

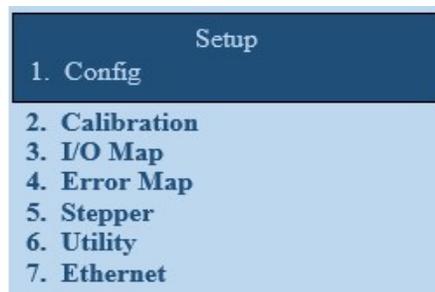
2. Press the **ESC** button until a Status page is displayed. From any Status page press **F** to display the Main Menu.



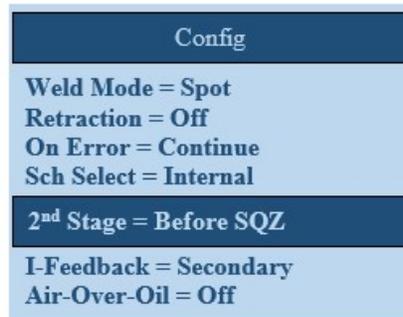
3. **Arrow Down** to highlight **ABOUT**. Hold the **+** button and press **ENTER** to display the Setup menu.



4. Press **Arrow Up / Down** until **CONFIG** is highlighted. Press **ENTER**.

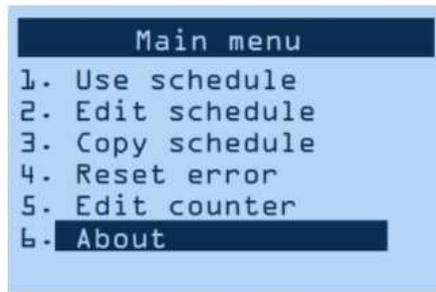


5. **Arrow Down** to highlight **SECOND STAGE**. Press **+** or **-** until **BEFORE SQZ** is displayed. Press **ENTER** to save the setting.



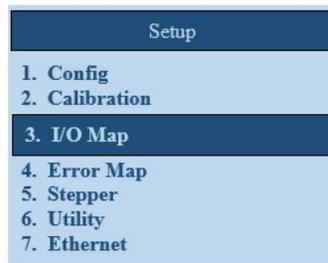
6. Press **ESC** until the STATUS page is displayed.
7. From the Status page press **F**.

8. **Arrow Down** to highlight **ABOUT**

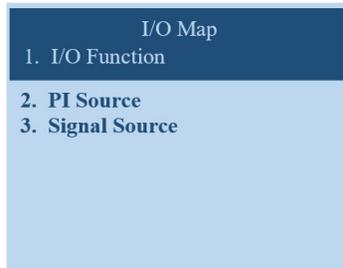


9. Hold the **+** button and press **ENTER** to display the Setup menu.

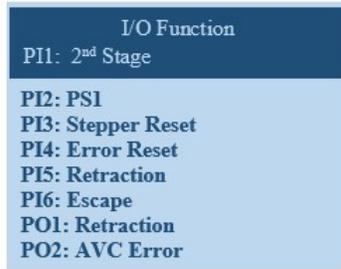
10. Press **Arrow Up / Down** until **I/O MAP** is highlighted. Press **ENTER**.



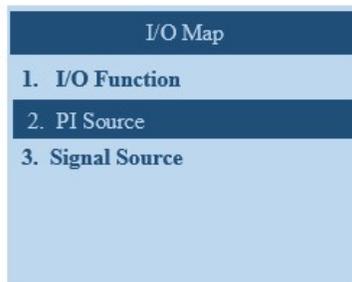
11. **Arrow Up / Down** to highlight **I/O FUNCTION**. Press **ENTER**.



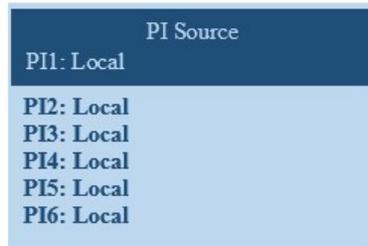
12. Select a Programmable Input 1. (If PI1 is used for another function, select PI3.) Arrow to highlight **PI1**. Press **+** until **2nd Stage** is displayed. Press **ENTER** to save the change.



13. Press **ESC** to display the I/O Map menu. Arrow to **PI Source**. Press **ENTER**.

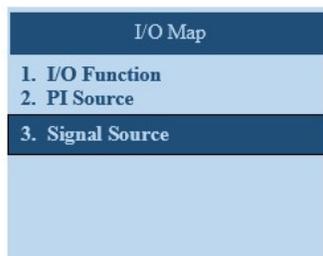


14. **Arrow** to highlight PI1 (or PI3 if it was selected above). Press **+** until **LOCAL** is displayed. Press **ENTER** to save the change.



15. Press **ESC** to display the I/O Map menu.

16. Arrow to **SIGNAL SOURCE**. Press **ENTER**.



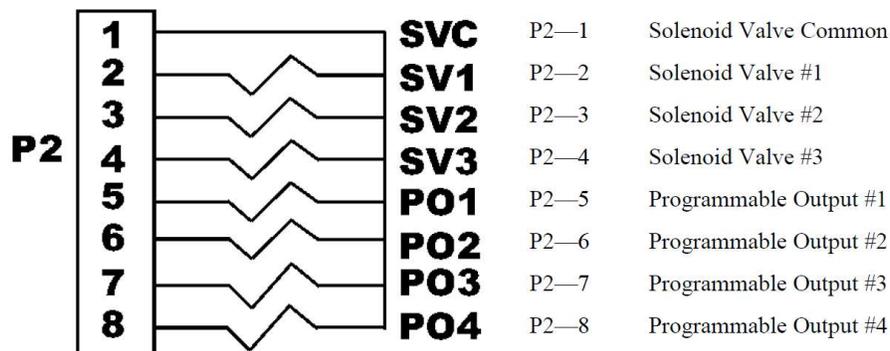
- Arrow until **2nd STAGE** is highlighted. Press **+** until **PI** is displayed. Press **ENTER** to save the change.

Signal Source	
Error Reset:	PI
TTI:	PI
Interlock:	PI
Edit Lock:	PI
Escape:	PI
Back Step:	PI
2 nd Stage:	PI

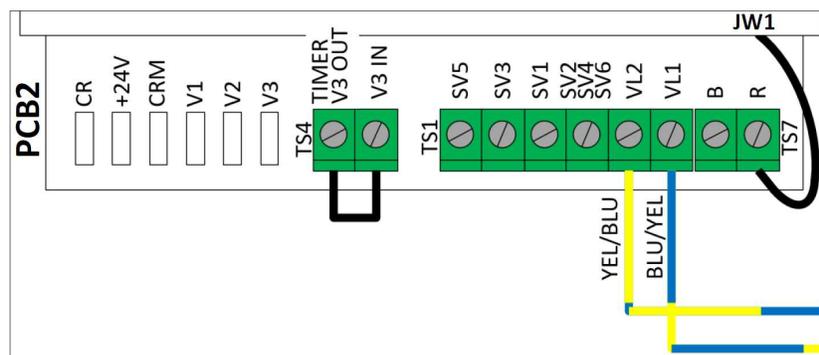
- Press **ESC** until the Main Status screen is displayed.

Wiring the EN6001 to the Soft Touch

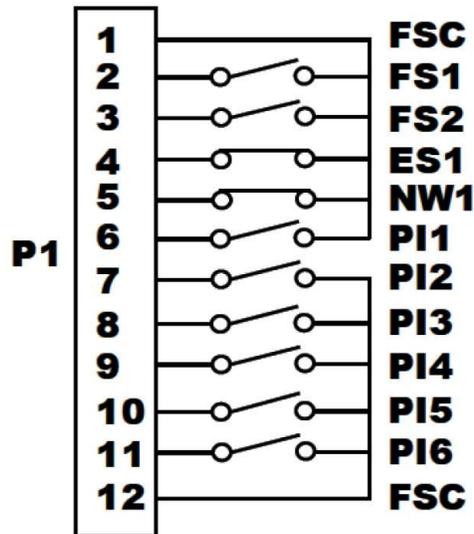
- For 24Vdc valve outputs connect SV1 (P2-2) and SVC (P2-1) to the Soft Touch Initiation.



- For 120VAC valves connect the valve to SV1 (PCB2-TS1-SV1) and SV2/SV4/SV6 (PCB2-TS1-SV2SV4SV6)



3. The EN6001 can only accept 24Vdc inputs. Connect PI1 (P1-6) and FSC (P1-12) to the Soft Touch Continuity output. If PI3 is used as described above use PI3 (P1-8) and FSC (P1-12)



<u>Terminal</u>	<u>Designation</u>
P1—1	Foot Switch Common
P1—2	Foot Switch #1
P1—3	Foot Switch #2
P1—4	Emergency Stop
P1—5	No Weld Signal
P1—6	Programmable Input #1
P1—7	Programmable Input #2
P1—8	Programmable Input #3
P1—9	Programmable Input #4
P1—10	Programmable Input #5
P1—11	Programmable Input #6
P1—12	Foot Switch Common