

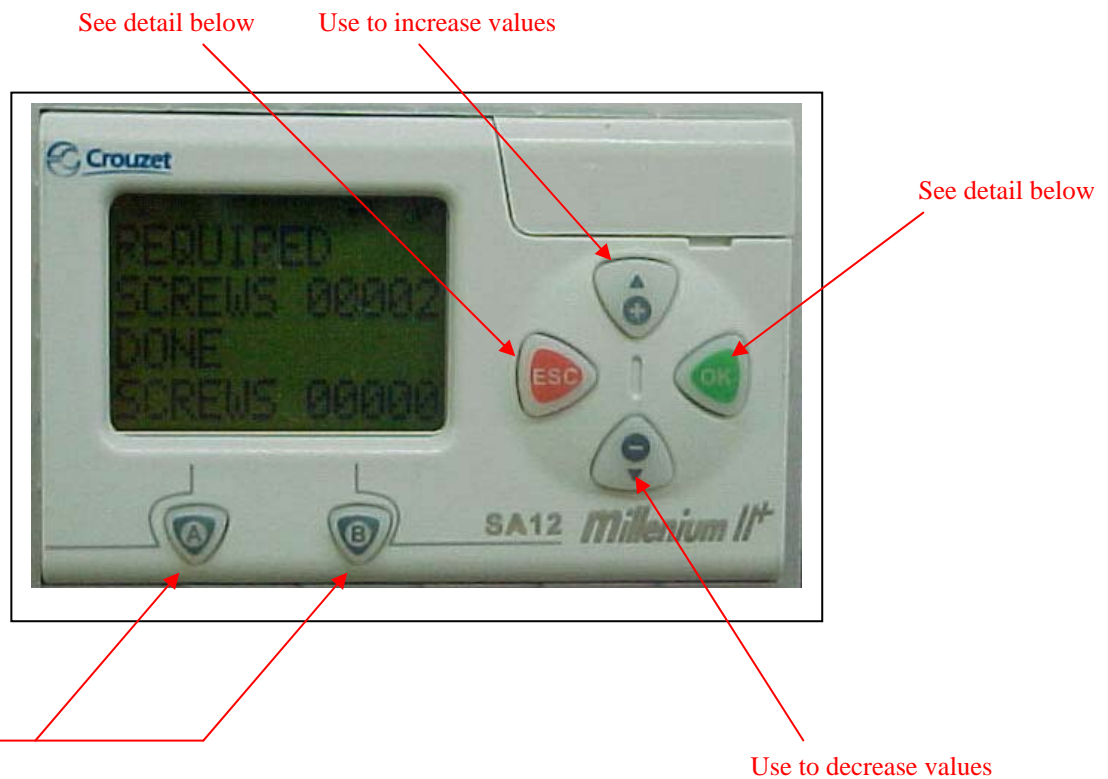
Inspector Operation Instructions EDU 1NS/PLC

Function Description: The unit has two main functions:

- 1.) Perform the functions of a standard driver controller for the FAB or RAF series drivers
- 2.) Monitor utilizing on board PLC, user information pertaining to the details of each application including the following:
 - A.) Quantity of screws per assembly or unit (Required Screws)
 - B.) Screw's completed for each assembly/unit (Done)
 - C.) Total of completed assemblies/units (Total Pieces)
 - D.) Total of acceptable and rejected screws (Wrong/Right Screws)
 - E.) Minimum and maximum run down times



PLC Button Operation:


The PLC uses six buttons for user interface. The following details the individual function for each button.






EDU 1NS/PLC Main Operating Screen

Detail "A"

Button	Description	Detail
<p>“Power Button”</p>	<p>Turns on Controller and PLC displays main operation screen</p> <p>NOTE: When the Inspector is used as a stand alone unit, upon power up the error “Warning, No Assemblies” is displayed. In order to clear this error, Pins 3 and 5 on the input connector located on the back must be shorted together. Mating connectors are included with the Inspector, however these pins are not shorted together from the factory.</p>	<p>Main operation screen shows two process summary values including:</p> <ol style="list-style-type: none"> 1.) Required screws per assembly or unit 2.) Screw completed (done) for given assembly or unit. <p>The quantity of screws per assembly or unit can be modified using the plus or minus buttons.</p> <div style="text-align: center;">  </div> <p>During production the Inspector screen must show the Main Operation Screen as shown in Detail “A” on Page 1</p>
	<p>This button is used to toggle between user defined set-up screens.</p>	<ul style="list-style-type: none"> • Push the button once to view the “Total Pieces” screen. This screen keeps a running count of how many assemblies or units have been completed during a production run. <p>To clear this running value push and hold the “B” button for 3 seconds.</p>

Button	Description	Detail
	<p>This button is used to toggle between user defined set-up screens.</p>	<ul style="list-style-type: none"> • Push the button twice to view the screen that keeps a running count of: <ol style="list-style-type: none"> 1.) “Wrong Screws” 2.) “Right Screws” <p>“Wrong Screws” are screws that have failed for a timer error. ”Right Screws” are defined as completed screws that meet the defined process criteria, i.e. torque and time settings.</p> <p>To clear these values push and hold the “B” button for 3 seconds.</p> • Push the button three times to view the “Minimum Rundown Time” screen. This defines the lower time limit for your process. Use the plus and minus buttons to change this value. • Push the button four times to view the “Maximum Time Exceeded” screen. This defines the maximum time limit for your process. Use the plus and minus button to change this value. <p>Note: Torque signal must be triggered in between preset min/max time limits in order for screw to be defined as an acceptable screw joint (Right).</p> <ul style="list-style-type: none"> • Push the button five times to view the “Setting Up Certified” screen. This screens give the user the ability to lock out the plus and minus keys on the PLC. Hold the “B” button for 3 seconds to change.

	<p>This button is used to toggle between user defined set-up screens.</p>	<p>Press this button six times and the screen returns to the main operation screen as seen in “Detail A”</p>
	<p>Error Recovery</p>	<p>Push the “ESC” button to clear both the error signals for minimum and maximum time.</p> <p>This button can also be triggered externally by closing the contact between Pin 2 and Pin 5 on the input connector located on the back of the Inspector. This can be accomplished by manual toggle button or foot switch.</p>
	<p>Continue Button</p>	<p>Push the “OK” button when the “Assembly Completed” signal is received from the inspector. This will reset the screws done counter and reengage the motor on the driver.</p> <p>Push the “OK” button anytime during the screw process to reset the screws done counter and start the process over.</p> <p>This button can also be triggered externally by closing the contact between Pin 1 and Pin 5 on the input connector located on the back of the Inspector. This can be accomplished by manual toggle button or foot switch.</p>

Additional Information: On the back of the Inspector are two connectors, labeled “Input” and “Output”. The input connector is used for signals coming from an external source i.e., toggle switch, PLC, footswitch and the output connector is used for signals coming from the Inspector. See attached detail for correct wiring.

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