

Model 4876 2680B Sensitivity Programmer

Instruction Manual # 77080

REV NR, ECO 54817
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01 CONNECTION AND POWER ON

- 1) Connect the 7-pin circular connector of the 2680B module to the “2680 I/O” DB-9 connector using the 100-18846-40 output cable (provided in 4876-KIT).
- 2) Connect power to the Model 4876 Sensitivity Programmer, using the 100-18846-30 (18VDC) external power supply (provided in 4876-KIT). The device will illuminate the POWER and DEVICE POWER LEDs. You will be greeted by a series of screens.



2680BSensitivity
Programmer

On Boot Splash Screen



Module
Connected

2680B Module Connected Screen

02 DIAGNOSTIC SCREENS

If either of the below screens are displayed, the programmer will disconnect power to the module and the “DEVICE POWER” LED will turn off.

A power out of range error will be displayed if the external power supply is not within 18VDC \pm 2V.



Power Error:VOOR
Check SUPPLY



Unit halted
Reapply power

Power Out of Range

A “Power Issue Corrected” screen will display once the correct voltage is applied.



Power Issue
Corrected

Power Issue Corrected

A “Module not connected” error can present itself during standard operation if the module becomes disconnected. In either case, correct the issue and follow the prompt.

There are two reasons for you to receive a module not connected.

- 1) There is physically no module connected.
- 2) There is a module connected but either the data lines are bad or the programmer is unable to communicate with the module.



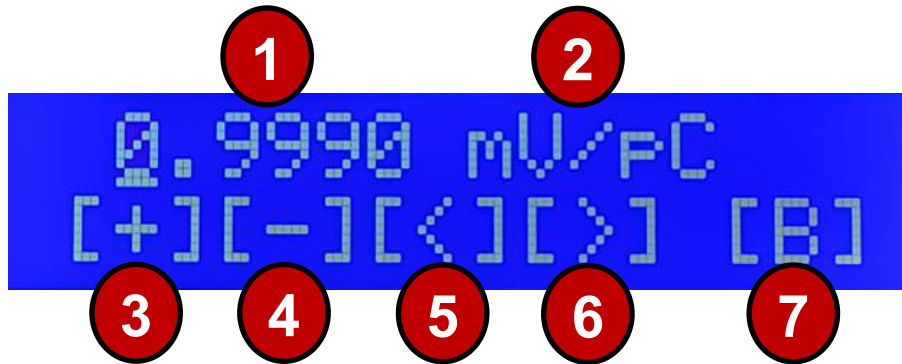
```
Module  
Not Connected
```



```
Please Press  
[↓] to connect
```

Module Not Connected

03 MAIN SCREEN AND FUNCTION DESCRIPTIONS

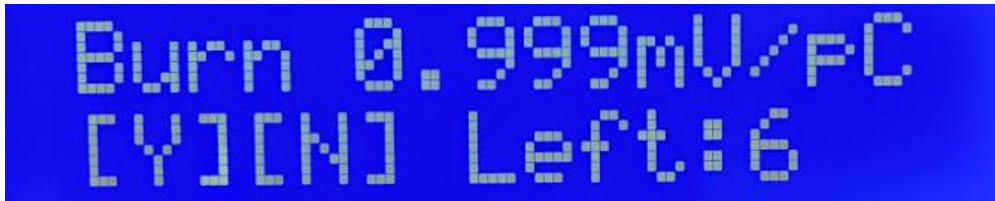


- 1** Sensitivity of the connected 2680B module. On boot the currently stored sensitivity value is read from the module and displayed. When this value is changed, the new value will be sent to the module. These values are temporary and will be lost on power cycle, unless the value is burned to the module using button (7).
- 2** Sensitivity units. On older firmware versions, the nominal sensitivity was not stored in the firmware. The programmer will assume gain if sensitivity is not read.
- 3** Increment cursor value (see note below)
- 4** Decrement cursor value (see note below)
Note (3 & 4): The value displayed is what is being sent to the module and will be rounded to the nearest hardware setting. Verify you have your desired sensitivity with calibrated equipment, using the output BNCs on the programmer.
- 5** Shift cursor Left
- 6** Shift cursor Right
Note: Pressing 5 and 6 together and holding for a short amount of time will display the firmware version information read from the module on boot.
- 7** Burn sensitivity to module. Once burned to the module, the sensitivity will be non-volatile and will persist through power cycling until a new gain is burned. See “Burn Sensitivity to Module” section.

Note: The cursor will be seen blinking with a line under its location

04 BURN SENSITIVITY TO MODULE

Upon changing the temporary sensitivity and actuating the Burn Sensitivity button (7), you will be presented with a new screen.



Burn @.999mV/FC
[Y][N] Left:6

This screen displays the current sensitivity read from the 2680B and the amount of permanent burn states left for the module. Pressing [Y]:



Are you sure?
[Y][N]

You will be prompted to confirm. By pressing [Y] again, the sensitivity programmer will tell the firmware to burn the current value into the module. You will be informed of its completion and the remaining burns left for the module.



Value Burned
Burns left = 5

If at any point you press [N], you will receive a Value not saved screen that will list the remaining burns left in the digi-pot.



Value not saved
Burns left = 3