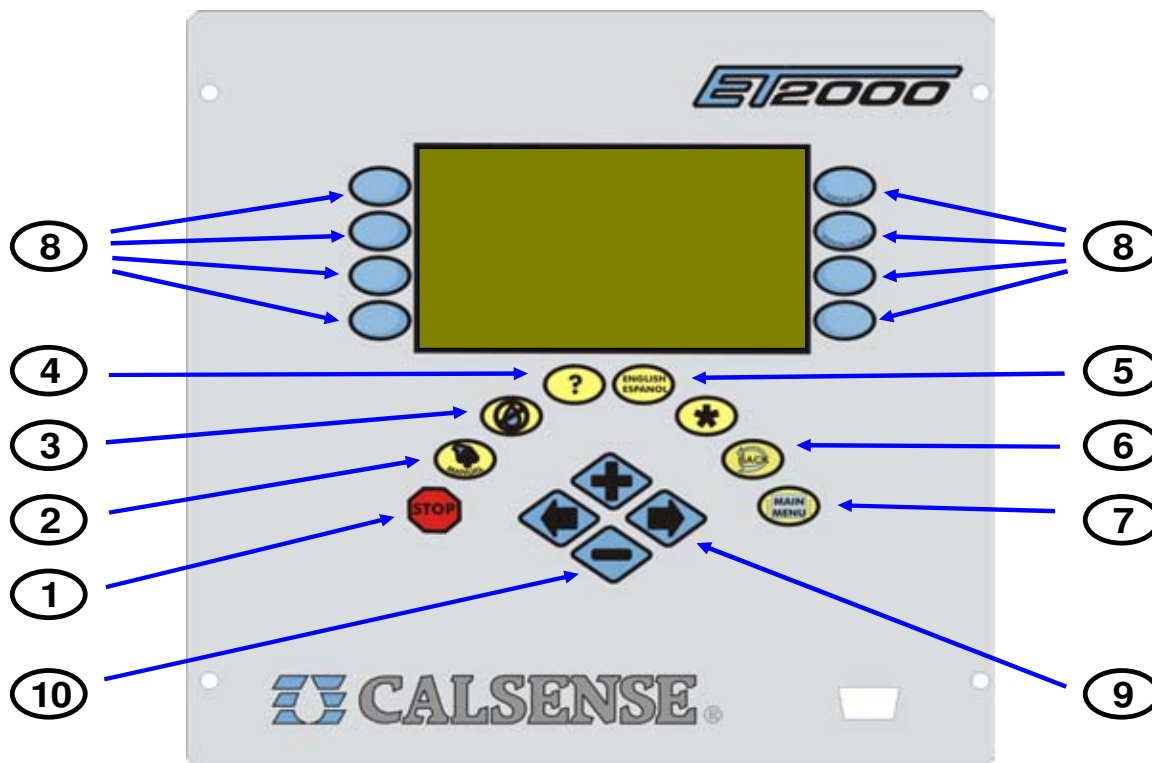


MOISTURE SENSOR

ET2000 (400 SERIES) MOISTURE SENSOR SETUP



- 1 STOP** – The STOP key will stop any currently running Scheduled watering Cycle, Manual Cycle, Test Cycle, Manual Special Sequence.
- 2 MANUAL** – The MANUAL key will perform Manual Water, Test, Master Valve Override and Manual Special Sequence.
- 3 NO WATER** – The NO WATER key will turn the controller Off and set No Water Days.
- 4 ?** – The ? key is used to access the controller Help screens.
- 5 ENGLISH / ESPAÑOL** – The ENGLISH / ESPAÑOL key allows you to toggle the displayed text between English and Spanish.
- 6 BACK** – The BACK key will go back to the previous screen.

- 7 MAIN MENU** – The MAIN MENU key is used to access the different program features of the controller.
- 8 MENU KEYS** – MENU keys select the different features of commands in the different screens and are adjacent to the left and right side of the controller's display screen. The text in the screen will point towards the MENU key that needs to be pressed.
- 9 LEFT / RIGHT ARROW KEYS** – The LEFT / RIGHT ARROW keys move the highlighted cursor around the different screens when setting up or editing the controller's features and options.
- 10 PLUS / MINUS KEYS** – The PLUS / MINUS keys increase or decrease values or answer Yes or No questions in the different screens.

MOISTURE SENSOR

1. Press the **MAIN MENU** key.
2. Press the **WEATHER** menu key (Figure 1).

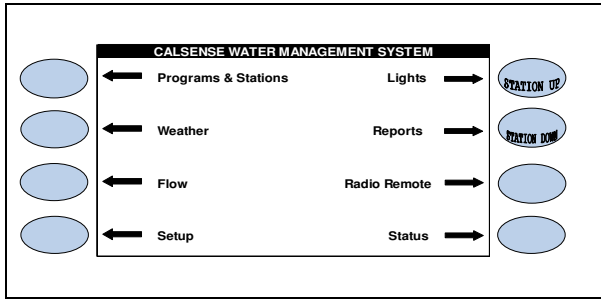


Figure 1

The WEATHER SETUP screen (Figure 2).

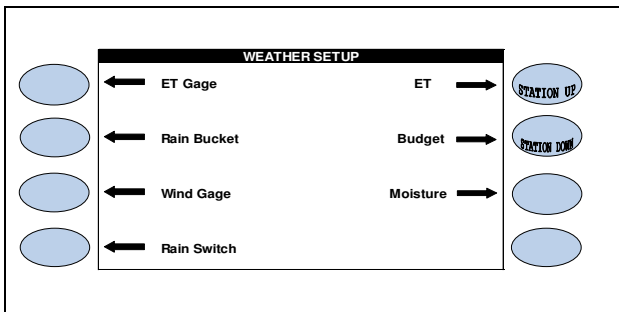


Figure 2

3. Press the **MOISTURE** Menu key.

The MOISTURE SENSING SETUP screen (Figure 3).

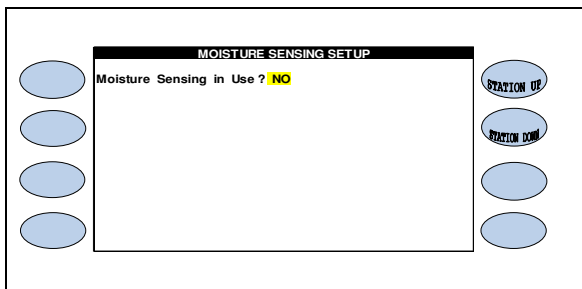


Figure 3

The default setting is NO. If you are currently using Moisture sensors on this controller then change the setting to YES.

4. Press the **PLUS** or **MINUS** keys to change the settings.

The MOISTURE SENSOR SETUP screen will change to reveal the Use by Program settings. (Figure 4).

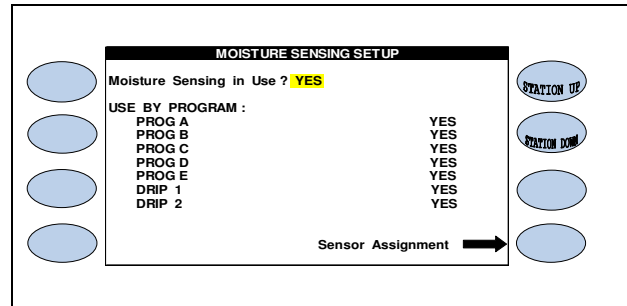


Figure 4

5. Press the blue **ARROW** keys to move the cursor to the next entry.

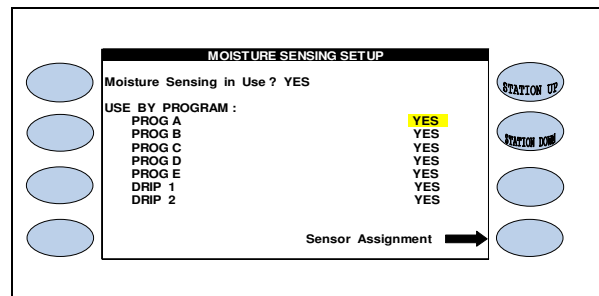


Figure 5

To change the Use by Program,

6. Press the **PLUS** or **MINUS** keys. (Figure 5).
7. Press the blue **ARROW** keys to move the cursor to the next entry.

This will allow you to set up the programs that you want to use Moisture Sensors on.

8.  Next Press the **SENSOR ASSIGNMENT** Menu key.

The MOISTURE SENSOR ASSIGNMENT SCREEN (Figure 6).

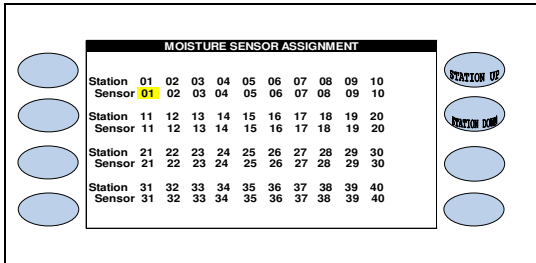





Figure 6

A representative station for each different climatic and plant material zone on the controller is given a sensor and is known as a Master station. Slave stations are stations without sensors and are assigned to a master station which share similar water requirements. The choice of groups of stations controlled by the same sensor is done at the controller within the MOISTURE SENSOR ASSIGNMENT screen.

9.  Press the **PLUS** or **MINUS** keys to change the entry.

10.  Press the blue **ARROW** keys to move the cursor to the next entry.

Once all of the Moisture Sensors have been set up properly,

11.  Press the **MAIN MENU** key.

The MAIN MENU screen (Figure 7).

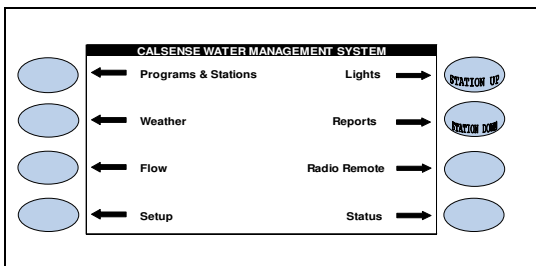



Figure 7

Next you will have to enter the settings for each Moisture sensor assigned to a station.

12.  Press the **PROGRAMS & STATIONS** Menu key (Figure 7).

The PROGRAMS & STATIONS screen (Figure 8).

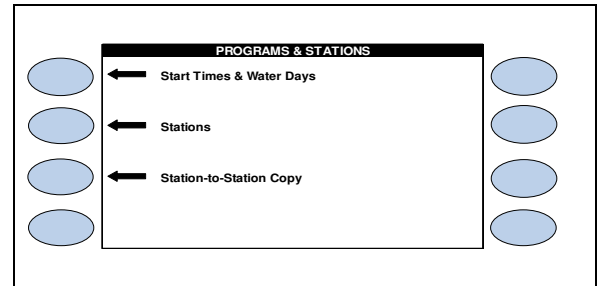



Figure 8

13.  Press the **STATIONS** Menu key (Figure 8).

This will take you to the STATION PROGRAMMING screen (Figure 9).

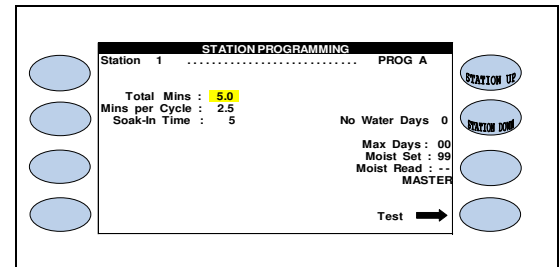



Figure 9

14.  Press the blue **ARROW** keys to move the cursor to the **MAX DAYS** entry.

MAX DAYS: This entry is used to automatically bypass the moisture sensors of individual stations, separate program stations or all stations, for one to thirty-one days. Stations will receive their maximum programmed water time. The controller will display the number of days remaining in override and can be cleared at any time. After the programmed Maximum Water has elapsed, the system will automatically return to moisture sensing operation. (Figure 10).

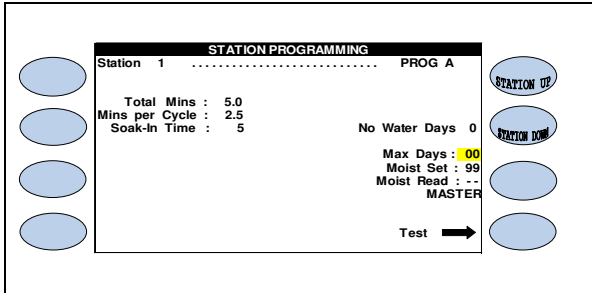


Figure 10

15. Press the **PLUS** or **MINUS** keys to change the entry.
16. Press the blue **ARROW** keys to move the cursor to the **MOIST SET** entry.

MOIST SET: The Calsense Moisture Sensor has its own numerical system of moisture readings. Typically it reads between the range of 45 (dry) to 85 (wet). By keeping moisture set points at 99, the sensors are never allowed to read above the set point value, and the controller waters the full programmed time. This occurs for the Master station as well as all slave stations assigned to the Master Station. After a few weeks, the slave areas should be checked and readjusted if necessary. If the slave area is too dry, adjust its maximum time to 25% more. If the area is too wet, decrease it by the same percentage. In both cases, the area should be rechecked after another few weeks, with adjustments made until the proper irrigation level is achieved (Figure 11).

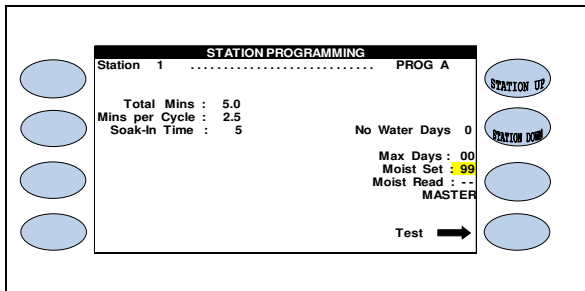


Figure 11

MOIST READ: This entry is non-changeable. The Calsense Moisture sensor is not an On / Off switch. It will never irrigate more than what is programmed on the controller. As a moisture sensor reading goes above the determined moisture set point, the controller irrigates less of the programmed time until

it may not water at all. As the controller irrigates less, the moisture level reading drops below the moisture set point. Once this occurs, and the controller hits another start time it will automatically begin to irrigate more of the programmed time to where it may water the full programmed amount (Figure 12).

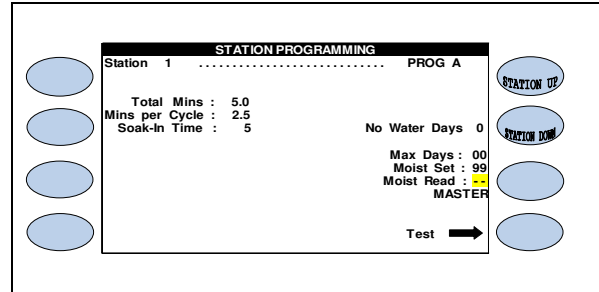


Figure 12

17. Press the **TEST** Menu key to test the station that you are currently on, If you want to test a different station use the **STATION UP** or **STATION DOWN** keys to the right of the display screen (Figure 13).

This will only test the station selected, **but will not** get a reading from the moisture sensor.

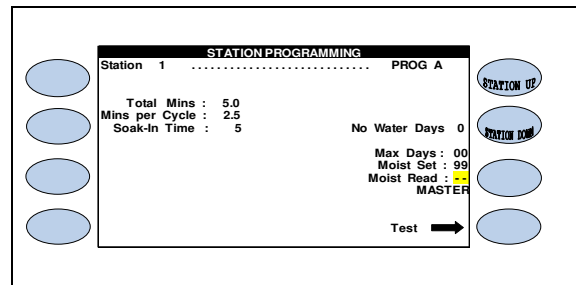


Figure 13

If you want to retrieve a current reading from the moisture sensor,

18. Press the **MANUAL** Menu key. This will take you to the **MANUAL IRRIGATION** screen (Figure 14).

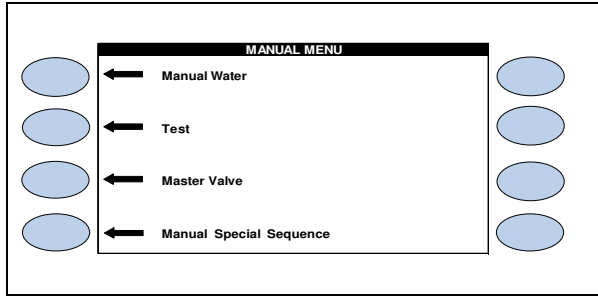



Figure 14

19.  Press the **TEST** Menu key.

The VALVE TESTING screen (Figure 15).

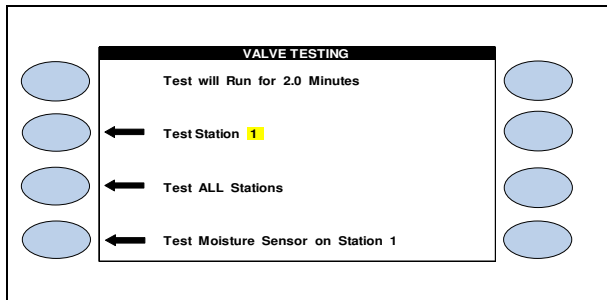



Figure 15

20.  Press the blue **ARROW** keys to move the cursor to the **TEST MOISTURE SENSOR ON STATION** Entry (Figure 16).

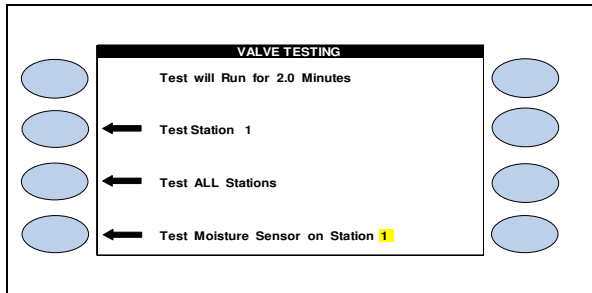




Figure 16

Note: The only stations you can test moisture sensors on are the Master Stations.

21.  Press the **PLUS** or **MINUS** keys to change the station entry.

22.  Press the **TEST MOISTURE SENSOR ON STATION** Menu key to activate test.

The screen will show “READING SENSOR ON” which ever station you selected. After a brief test the STATION PROGRAMMING screen will appear with the new Moisture sensor reading displayed (Figure 17).

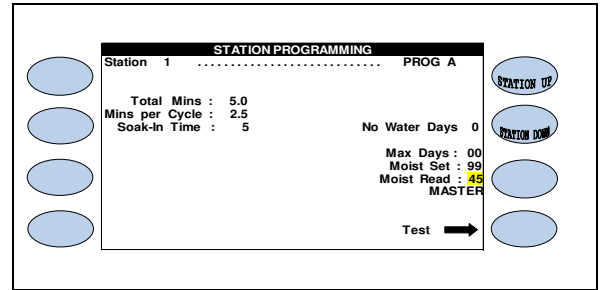



Figure 17

23.  Press the **MAIN MENU** key to return to the MAIN MENU screen (Figure 1).



2075 Corte del Nogal, Suite P, Carlsbad CA 92011

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