# CALSENSE
CALIFORNIA SENSOR CORPORATION

CS3000 Quick Start Guide
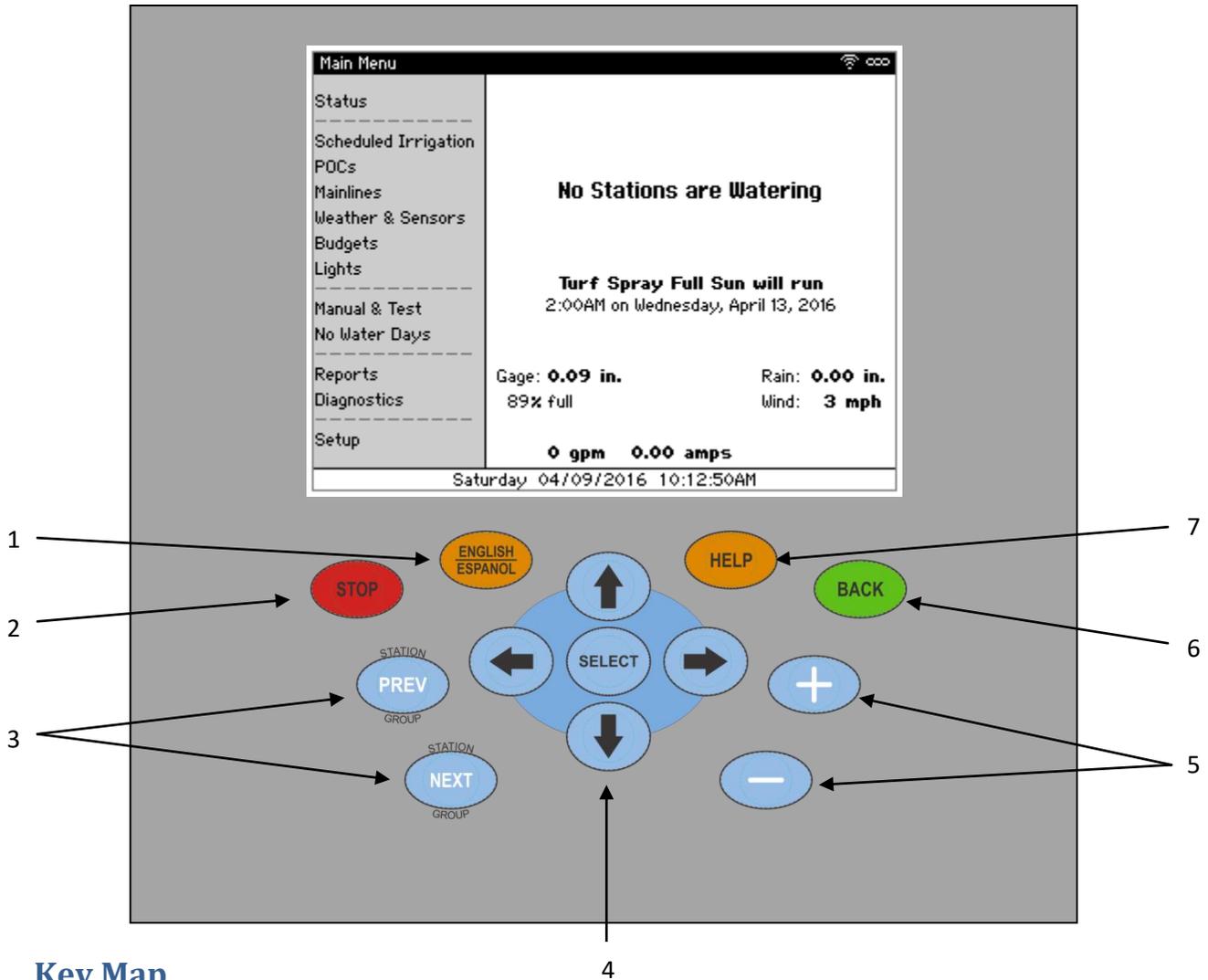
Key Map

1. **ENGLISH/ESPANOL** – Change screen text from English to Spanish and vice versa

2. **STOP** – Stop any currently running irrigation

3. **PREV/NEXT** – Selects the Previous or Next menu item

4. **←↑→↓/SELECT** – Move the cursor position around in the different programming and reports screens and selects a main menu field or a particular programming field. **SELECT** also provides dropdown menus for certain fields or numeric keypad for others.

5. **+/−** – Increase or decrease values on programming screens

6. **BACK** – Returns to the previous screen

7. **HELP** – Display different help based upon the status or menu screens and highlighted cursor position on programming screens

Setting Date and Time

The controller defaults to the Pacific Standard time zone. Based on your location, you may need to adjust the time zone and set the clock accordingly. To set the date and time:

1. From the Main Menu, use ↓ to navigate to **Setup** and press **SELECT**. The Setup menu displays.
2. Use ↓ to navigate to **Date & Time** and press **SELECT**. The Date & Time screen displays (Figure 1).

Figure 1 - Date & Time screen

3. Use **+/−** to adjust the time zone if necessary. Based on your time zone, the controller automatically determines whether it observes daylight saving time or not.
4. Use ←↑→↓ to navigate to the date and time and use **+/−** to change values to set the current date and time.
5. Once the time is correct, navigate to and select **Set Date & Time** to save the change.
6. Once done, press **BACK** to return to the Main Menu.

Discovering 2-Wire Decoders

If this controller has the 2-Wire option and uses 2-Wire decoders to operate POCs or stations, perform the following steps to discover the decoders and assign stations to each decoder. If you don't have a 2-Wire option, skip to Using Station Groups.

Note: Prior to performing these steps, verify that the 2-Wire decoders are properly wired to the 2-Wire cable per the 2-Wire decoder installation diagram included with each decoder.

1. From the Main Menu, use ↓ to navigate to **Setup** and press **SELECT**. The Setup menu displays.
2. Navigate to **2-Wire** and press **SELECT**. The 2-Wire dialog displays (Figure 2).
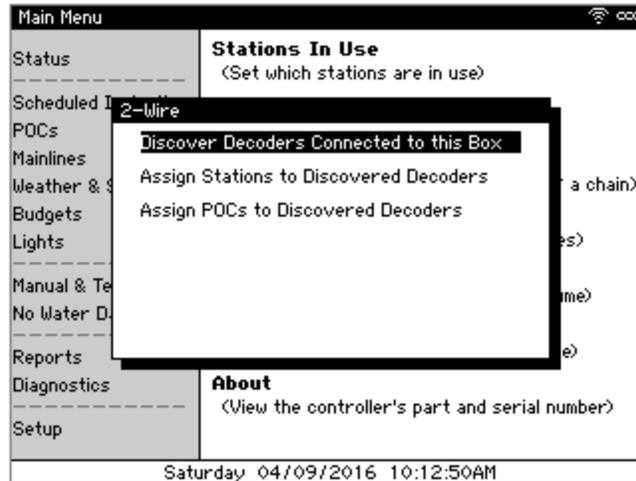
Figure 2 - 2-Wire dialog

3. Select **Discover Decoders Connected to this Box** and press **SELECT**. The controller scans the 2-Wire cable, discovering all decoders attached to this controller.

Assigning Stations Numbers to 2-Wire 2-Station and Moisture Sensor Decoders

1. From the 2-Wire dialog, navigate to and select **Assign Stations to Discovered Decoder** if it doesn't automatically appear. The Station Assignment screen displays (Figure 3). The pane on the left displays the 2-Station and Moisture Sensor decoders discovered while the right shows each's station assignments.
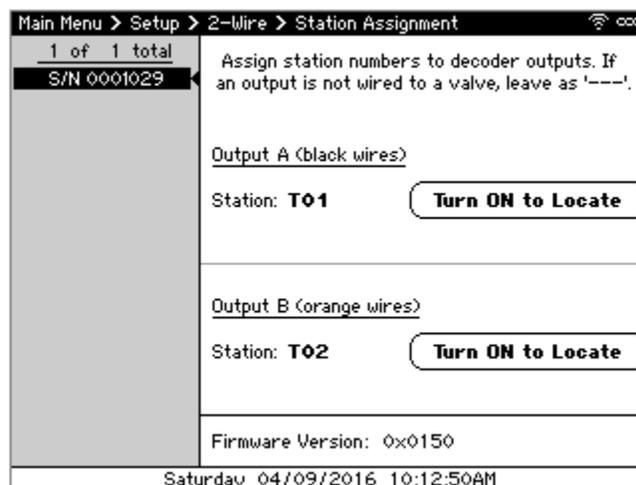
Figure 3 - Station Assignment screen

2. Using ↑↓ to highlight a decoder to edit and press **SELECT**. The cursor moves to the Station field on the right.
3. Use ←↑→↓ to navigate through the screen and the **+/−** to assign the appropriate station number to each of the decoder outputs. If no station is attached to an output, leave it as **---**.
4. Press **BACK** to save the changes.
5. Repeat steps 2-4 for each decoder attached to the controller.

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6. When done, press **BACK** to return to the Main Menu.

Assigning POCs to 2-Wire POCs Decoders

1. From the 2-Wire dialog, navigate to and select **Assign POCs to Discovered Decoder** if it doesn't automatically appear. The Station Assignment screen displays (Figure 4). The pane on the left displays the 2-Station and Moisture Sensor decoders discovered while the right shows each's station assignments.
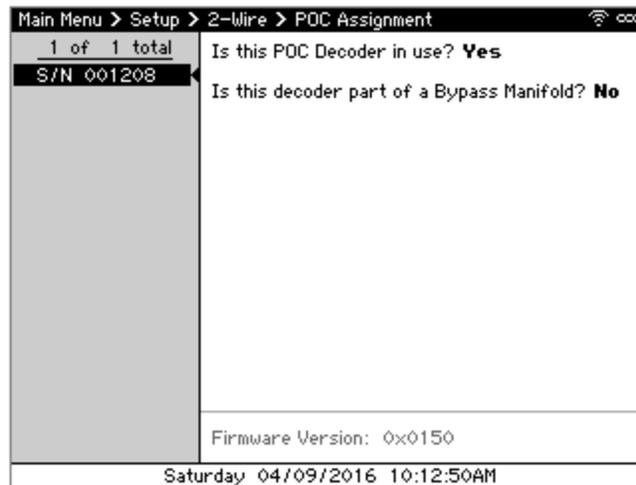

Figure 4 – POC Assignment screen

2. Using ↑↓ to highlight a decoder to edit and press **SELECT**. The cursor moves to the "Is this POC Decoder In Use" field on the right.
3. Use ←↑→↓ to navigate through the screen and the **+/−** to select whether the decoder is in use and whether it's part of a 2- or 3-stage bypass manifold.
4. Press **BACK** to save the changes.
5. Repeat steps 2-4 for each decoder attached to the controller.
6. When done, press **BACK** to return to the Main Menu.

Using Station Groups

Stations that share the same irrigation and/or landscape characteristics are grouped together using Station Groups. To add and edit Station Groups:

1. From the Main Menu, navigate to **Scheduled Irrigation** and press **SELECT**. The Scheduled Irrigation menu displays.

2. Navigate to and select **Station Groups**. The Station Groups screen displays (Figure 5). The panel of the left shows the list of Station Groups and includes the ability to add new groups.
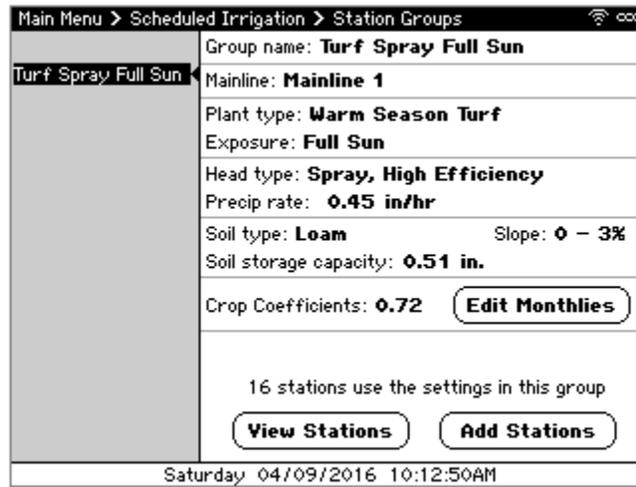
Figure 5 - Station Groups screen

3. Using ←↑→↓ to highlight the Station Group to edit and press **SELECT**. The cursor moves to the Group Name field on the right.

4. Use ←↑→↓ to navigate through the screen and the **+/−** to change values. The various settings on this screen include:

- **Group Name** – A name which describes the stations assigned to that group. By default, the name will automatically take on the plant type, head type, and exposure.
- **Mainline** – The mainline the stations in this group are physically connected to
- **Plant type** – The type of plant material, such as **Warm Season Turf**
- **Exposure** – The amount of sun exposure, such as **Full Sun**
- **Head Type** – The type of sprinkler head or drip emitter, such as **Spray, High Efficiency**
- **Precip Rate** – The precipitation rate associated with the head type
- **Soil Type** – The type of soil such as **Loam**
- **Slope** – The slope percentage
- **Soil storage capacity** – The root zone working water storage associated with the plant material and soil type
- **Crop coefficients** – The monthly crop or landscape coefficient associated with the plant material

5. To add the stations that share these characteristics to the Station Group, navigate to and select **Add Stations**. The Add Stations screen displays (Figure 6).
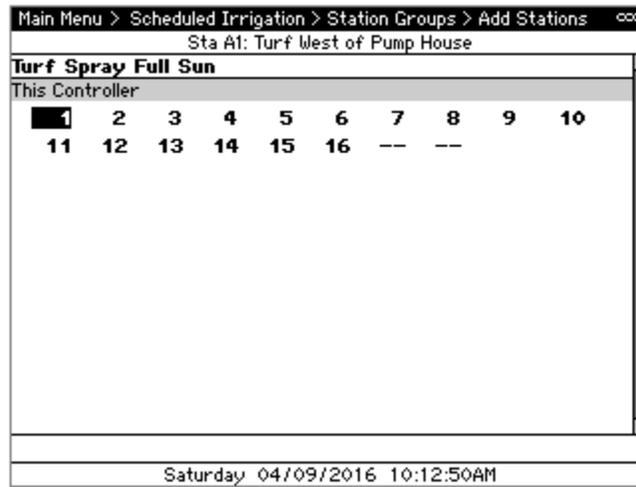
Figure 6 - Add Stations screen

6. Use **SELECT** or **+/−** to add or remove stations from the Station Group.
7. When you're done, press **BACK** to save the changes.
8. If additional groups are required, press **BACK** and navigate to and select **<Add New Group>** to create additional groups and repeat steps 3-7 to define the characteristics and add stations.
9. When done, press **BACK** to return to the Main Menu.

Setting a Schedule

1. From the Main Menu, navigate to **Scheduled Irrigation** and press **SELECT**.
2. Navigate to and select **Start Times and Water Days**. The Start Times and Water Days screen displays (Figure 7). The pane on the left displays the Station Groups on this controller while the right shows the settings for each.
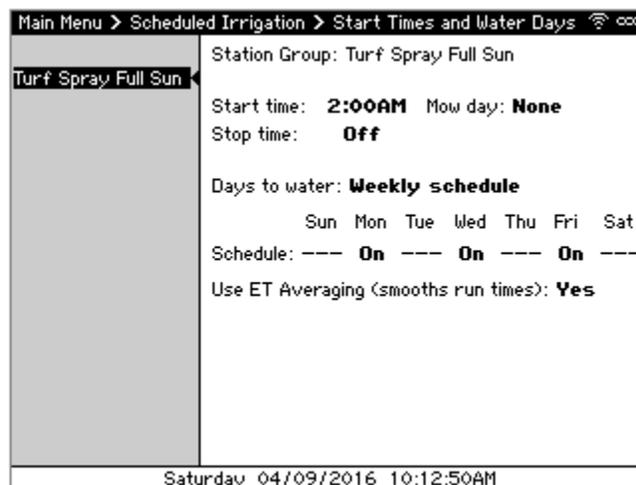
Figure 7 - Start Times and Water Days screen

3. In be pane on the left, select the Station Group to set a schedule for and press **SELECT**.
4. Use ←↑→ to navigate through the screen and **+/−** to change values. The various settings are as follows:
   - **Start time** – The time when the irrigation starts
   - **Mow day** – A day when irrigation is skipped to allow for maintenance
   - **Stop time** – The time when irrigation will stop, even if there is time remaining
   - **Days to water** – The days irrigation will run
5. Press **NEXT** to move to the next schedule and repeat step 4 to set the schedule.
6. When done, press **BACK** to return to the Main Menu.

Adjusting Individual Stations

1. From the Main Menu, navigate to **Scheduled Irrigation** and press **SELECT**. The Scheduled Irrigation menu displays.
2. Navigate to and select **Stations**. The Stations screen displays (Figure 8). The pane on the left displays the stations attached to this controller while the right shows the settings for each.

Figure 8 - Stations screen

1. Press **SELECT** to enter the right side to adjust the schedule.
2. Use ←↑→↓ to navigate through the screen and **+/−** to change values, setting the following values:
   - **Expected flow rate** – The expected rate at which this station flows
   - **Square footage** – The square footage, used for budgetary purposes
   - **Distrib. uniformity** – The distribution uniformity or application efficiency of the zone
3. Press **NEXT** to move to the next station and repeat step 2 to set the individual station's settings.
4. Once done, press **BACK** to return to the Main Menu.

Measuring Flow

1. From the Main Menu, use ↓ to navigate to **POCs** and press **SELECT**. The POCs menu displays.
2. Navigate to **Flow Meters & Master Valves** and press **SELECT**. The Flow Meter & Master Valves screen displays (Figure 9). The pane on the left displays the POCs attached to this controller while the right shows the settings for each.
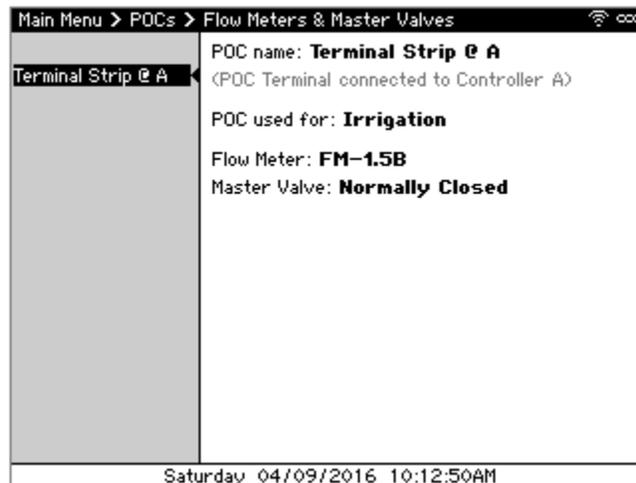

Figure 9 - Flow Meters & Master Valves screen

3. Press **SELECT** to enter the right side to adjust the schedule.
4. Use ←↑→↓ to navigate through the screen and **+/−** to change values, setting the following values:
   - **POC used for** – Either Irrigation, Non-Irrigation, or Not Used. If there is no flow meter or master valve connected to this POC, select Not Used.
   - **Flow Meter** – The flow meter type. This can be either a Calsense FM series flow meter, such as an FM-1.5B, an insertion-style flow meter (model FMBX), or a hydrometer.
   - **Master Valve** – The master valve type, either Normally Open or Normally Closed.
5. Press **NEXT** to move to the next POC and repeat step 4 to set each POC's settings.
6. Once done, press **BACK** to return to the Main Menu.

Manually Watering a Station

1. From the Main Menu, use ↓ to navigate to **Manual & Test** and press **SELECT**. The Manual & Test menu displays.

2. Navigate to **Manual Watering** and press **SELECT**. The Manual Watering screen displays (Figure 10).

Figure 10 - Manual Watering screen

3. Use ←↑→↓ to navigate through the screen and **+/−** to select the station to manually irrigate.
4. Navigate to Run station for and use **+/−** to set how long to run the station for.
5. Navigate to and select **Run Station** to activate the selected station. The valve turns on and the Irrigation Details screen displays to show the progress.

Sharing Real-Time Weather

If the controller does not have an ET Gage and Rain Bucket connected to it, you can share real-time weather to the controller using the Command Center Online web application. If you don't have an account yet, contact Calsense Product Support at (800) 572-8608 to create one. Once an account is created:

1. From the Main Menu of the controller, use ↓ to navigate to **Setup** and press **SELECT**. The Setup menu displays.

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2. Navigate to **About** and press **SELECT**. The About screen displays (Figure 11).
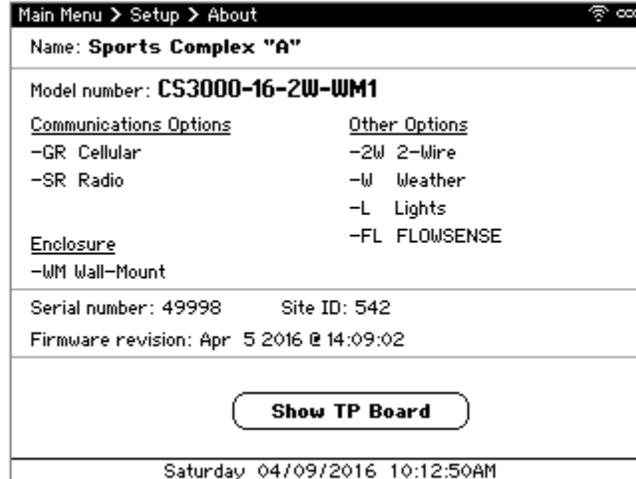
Figure 11 - About screen

3. Make note of the Site ID and Serial Number displayed on the screen.
4. Using a computer, log in to Command Center Online at www.calsense.net.
5. If the CS3000 already exists, skip to Step 7. Otherwise, tap or click **Settings** > **Site Controllers**. The Site/Controllers list displays.
6. On the CS3000 Sites heading, tap or click **[Add CS3000]**.
7. Type the Site ID and Serial Number noted in Step 3 and tap or click **Add Site**. The controller is added.
8. Tap or click **Settings** > **Weather Sharing**. The Weather Sharing list displays.
9. Locate the new site in the list and tap or click **Edit**. The Site Settings page displays.
10. Under Sharing Settings, select your ET and Rain source. If you don't have an on-site ET Gage and/or Rain Bucket, select **WeatherSense** to receive data generated by Calsense.
11. Click **Save** to save the changes. Weather Sharing will automatically occur each night shortly after 8:00 PM local time.