Energi Savr Node™ QS Programming Guide

Model: QSNE-4S10-D

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Out of Box Functionality

This section describes the default functionality that the unit will present when first installed.

Sensors:
- Connected to sensor group A: controls zones 1 and 2.
- Connected to sensor group B: controls zones 3 and 4.

Occupancy
- Corresponding zones will turn on when the occupancy sensor is in the occupied state (closed) and off when in the unoccupied state.

Daylight
- Corresponding zones will turn on when light sensed by photo sensor falls below the factory preset level.
- Corresponding zones will turn off when light sensed by photo sensor rises above the factory preset level.

IR
- Zones respond to On, Off, and Scene commands to the Lutron IR receiver from compatible IR transmitters (see IR Sensor literature for compatible transmitters).

QS Wallstations
- All seeTouch QS wallstations are Scene keypads by default.
- Scenes 1-16 will turn all the lights On.
- Scene Off will turn all the lights Off.

Contact Closure Input (CCI)
- The CCI behaves as an Emergency Contact Closure Input.
- If the CCI is open, the Energi Savr Node QS unit will enter Emergency Mode, which will turn on all loads and disable local zone control and control from sensors and QS devices.
- When the CCI is closed or jumpered, Energi Savr Node QS unit zones will return to the settings or levels they were at prior to entering Emergency Mode.

Troubleshooting and Maintenance Features
- After installation, each zone button will toggle the zone between on and off.
- Sensor status LEDs (‘Occ’, ‘Photo’, and ‘IR’) verify connections to control stations and sensors.

Normal Mode Operation
- Zone buttons—Used to toggle zone on and off.
Programming

The out-of-box settings of an Energi Savr Node QS unit can be changed to customize the installation. Please follow the steps described below to adjust the settings on your Energi Savr Node QS unit.

Input Programming Mode

*Note: After 10 minutes without activity on the user interface, the Energi Savr Node QS unit will automatically exit the Input Programming Mode. The Energi Savr Node QS unit will retain the latest changes.

Assign/Unassign zones to wired sensors

1. To enter Input Programming Mode, press and hold the Program button for 3 seconds. The ‘Program’ LED will blink.
2. Press Program button to sequence through each sensor input. The LED corresponding to the selected sensor input will blink. If powered by the Energi Savr Node QS unit, the sensor will flash also.*
3. For each desired zone, press & hold the Zone button until the LED changes state to assign or un-assign that zone. A blinking ‘Zone’ LED indicates that a zone is assigned.
4. To exit Input Programming Mode, press and hold the Program button for 3 seconds.

Note: Before assigning a daylight sensor to a zone, you must first unassociate any previously assigned sensors from that zone, including those in out-of-box mode.

*Only sensors powered directly from the Energi Savr Node QS unit will flash.

Sensor Overview

Occupancy Sensors

Energi Savr Node QS units are programmable to turn lights on and off based on room occupancy detected by compatible occupancy sensors. To ensure proper operation of the Energi Savr Node QS unit:

- Wire no more than 2 occupancy sensors to any one Occ connection. An auxiliary power supply must be used if the device(s) require(s) more than 50 mA.

Daylight Sensors

Energi Savr Node QS units are programmable to turn lights on and off based on daylight detected by compatible Lutron® daylight sensors. To ensure proper operation of the Energi Savr Node QS unit:

- Use only Lutron daylight sensors (EC-DIR-WH).
- Only wire one sensor to a single Photo input.

Each zone output on an Energi Savr Node QS unit can be programmed to respond to a single daylight sensor. The target setpoint for turn-on/turn-off is adjustable for each zone—one sensor may be linked to multiple zones, each zone with its own unique setpoint. Please note that:

- A daylight sensor wired to an Energi Savr Node QS unit can be assigned to control any or all zones on that Energi Savr Node QS unit.
- Daylight sensors will not turn a zone on if an occupancy sensor assigned to that zone detects that the room is vacant.
Please refer to the daylight sensor installation guide for details on sensor placement.

**Infrared (IR) Remote Receivers**

*Energi Savr Node* QS units are programmable to turn lights on and off based on signals provided by compatible Lutron® IR transmitters and received by compatible Lutron IR receivers. To ensure proper operation of the *Energi Savr Node* QS unit:

- Use only *Lutron* IR receivers (EC-DIR-WH, EC-IR-WH, CC-1BRL-WH, CC-4BRL-WH)
- See *Lutron* IR receiver literature for compatible IR transmitters.
- Only wire one receiver to a single IR input

**Advanced Button Programming**

Each *Energi Savr Node* QS unit zone has several parameters that can be set or adjusted. Follow the steps below to adjust a zone’s setting.

**Configure Zone Parameters**

1. Simultaneously press and hold the Program and Input buttons for 3 seconds to enter Zone Set-up Mode. ‘Program’ and Group A LEDs will flash rapidly.
2. Press Zone button to select the zone for which you wish to set parameters.
3. Use the Option button to select a parameter to set or adjust as listed below. The option LEDs will turn on to indicate your selection:

<table>
<thead>
<tr>
<th>Option LED(s)</th>
<th>Parameter</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Def’</td>
<td>Set zone to respond to wired Occupancy sensor as either Occupancy or Vacancy sensor</td>
<td>Use the ▲ and ▼ buttons to select response mode. · ‘H’ LED indicates Occupancy mode (Auto on/off). · ‘M’ LED indicates Vacancy mode (Manual on/auto off)</td>
</tr>
<tr>
<td>‘Opt1’</td>
<td>Set daylight sensor setpoint for each zone</td>
<td>Use the ▲ button to increase the set point. Use the ▼ button to decrease the set point.</td>
</tr>
</tbody>
</table>

4. Repeat steps 2 and 3 for each desired zone.
5. Simultaneously press and hold the Program and Input buttons for 3 seconds to exit Zone Set-up Mode.

**Scene Programming Mode**

**Scene Programming**

Each output zone on the *Energi Savr Node* QS unit has 16 scenes plus Off. Each scene can be programmed to turn the zone on or off, or the zone can be set to be unaffected in a scene, so that changing to that scene will not change the unaffected zone from its current level. Note: Scene Off cannot be modified. Follow the steps below and in the QS Link Input(s) Set-up section.

**Scenes 1-4**

1. Simultaneously press and hold the Program and Option buttons on the *Energi Savr Node* QS unit for 3 seconds to enter Scene Programming Mode. ‘Program’ and Group B LEDs will flash rapidly.
2. Use the Option button to select a scene to define for each zone. Option LED will be steady on, to indicate current scene selected:

**LED Legend:** ☀ = steady on ☉ = flashing ● = off

<table>
<thead>
<tr>
<th>LEDs</th>
<th>Scene #</th>
<th>LEDs</th>
<th>Scene #</th>
<th>LEDs</th>
<th>Scene #</th>
<th>LEDs</th>
<th>Scene #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Def</td>
<td>Scene 1</td>
<td>Def</td>
<td>Scene 2</td>
<td>Def</td>
<td>Scene 3</td>
<td>Def</td>
<td>Scene 4</td>
</tr>
<tr>
<td>Opt1</td>
<td></td>
<td>Opt1</td>
<td></td>
<td>Opt1</td>
<td></td>
<td>Opt1</td>
<td></td>
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<tr>
<td>Opt2</td>
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<td>Opt2</td>
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<tr>
<td>Opt3</td>
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<td>Opt3</td>
<td></td>
<td>Opt3</td>
<td></td>
<td>Opt3</td>
<td></td>
</tr>
</tbody>
</table>

3. Use the ▲ and ▼ buttons to set the selected scene to On or Off. The ‘H’, ‘M’, and ‘L’ LED group indicates your choice: all LEDs on = On; all LEDs off = Off.
4. To make a zone unaffected, press and hold the ▼ button until only the ‘M’ LED turns on.
5. Exit Scene Programming Mode: Press and hold the **Program** and **Option** buttons for 3 seconds.

**Scenes 5-16**

1. Simultaneously press and hold the **Program** and **Option** buttons on the **Energi Savr Node QS** unit for 3 seconds to enter Scene Programming Mode. ‘Program’ and Group B LEDs will flash rapidly.

2. Press and hold the **Option** button on the **Energi Savr Node QS** unit for 10 seconds to access Scenes 5-16. Scene selections are indicated by flashing Option LEDs as shown in the chart below:

   **LED Legend:** ○ = steady on  ● = flashing  ● = off

<table>
<thead>
<tr>
<th>LEDs</th>
<th>Scene #</th>
<th>LEDs</th>
<th>Scene #</th>
<th>LEDs</th>
<th>Scene #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Def</td>
<td>Scene 5</td>
<td>Def</td>
<td>Scene 6</td>
<td>Def</td>
<td>Scene 7</td>
</tr>
<tr>
<td>Opt1</td>
<td></td>
<td>Opt1</td>
<td></td>
<td>Opt1</td>
<td></td>
</tr>
<tr>
<td>Opt2</td>
<td></td>
<td>Opt2</td>
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<td>Opt2</td>
<td></td>
</tr>
<tr>
<td>Opt3</td>
<td></td>
<td>Opt3</td>
<td></td>
<td>Opt3</td>
<td></td>
</tr>
<tr>
<td>Def</td>
<td>Scene 9</td>
<td>Def</td>
<td>Scene 10</td>
<td>Def</td>
<td>Scene 11</td>
</tr>
<tr>
<td>Opt1</td>
<td></td>
<td>Opt1</td>
<td></td>
<td>Opt1</td>
<td></td>
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<tr>
<td>Opt2</td>
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<td>Opt2</td>
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<td>Opt2</td>
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<tr>
<td>Opt3</td>
<td></td>
<td>Opt3</td>
<td></td>
<td>Opt3</td>
<td></td>
</tr>
<tr>
<td>Def</td>
<td>Scene 13</td>
<td>Def</td>
<td>Scene 14</td>
<td>Def</td>
<td>Scene 15</td>
</tr>
<tr>
<td>Opt1</td>
<td></td>
<td>Opt1</td>
<td></td>
<td>Opt1</td>
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<tr>
<td>Opt2</td>
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<tr>
<td>Opt3</td>
<td></td>
<td>Opt3</td>
<td></td>
<td>Opt3</td>
<td></td>
</tr>
</tbody>
</table>

3. Use the ▲ and ▼ buttons to set the selected scene to On or Off. The ‘H’, ‘M’, and ‘L’ LED group indicates your choice: all LEDs on = On; all LEDs off = Off.

4. To make a zone unaffected, press and hold the ▼ button until the ‘Zone’ LED turns off and the ‘M’ LED turns on.

5. If necessary, you may press and hold the **Option** button on the **Energi Savr Node QS** unit for 10 seconds to return to Scenes 1-4.

6. Exit Scene Set-up Mode: Press and hold the **Program** and **Option** buttons for 3 seconds.
**QS Link Input(s) Setup**

To assign a seeTouch® QS Wallstation or GRAFIK Eye® QS unit to any Energi Savr Node QS unit zone on the QS link, follow the steps below.

**seeTouch QS Wallstation - Scenes and Scenes + Off**

1. Simultaneously press and hold the top and bottom buttons on the wallstation for 3 seconds. The QS link enters Programming Mode. The sensor Group A and Group B LEDs and the ‘H’, ‘M’, and ‘L’ LEDs on the Energi Savr Node QS unit(s) will flash sequentially in groups.

2. Use the **Option** button to select the scene wallstation type. A blinking LED indicates the selection:
   - ‘Def’ LED indicates a ‘scene + off’ wallstation (wallstation has a specific Off button)
   - ‘Opt 1’ LED indicates a ‘scene’ wallstation (wallstation has no Off button)

3. To save the wallstation type, press and hold the **Option** button for 3 seconds. The LED for the selected wallstation type will flutter for 1 second, then remain steady.

4. To assign desired zone(s) to a wallstation, press and hold the **Zone** button for each desired zone for 3 seconds. A blinking ‘Zone’ LED indicates an assigned zone.

5. Simultaneously press and hold the top and bottom buttons on the wallstation for 3 seconds to save the settings.

   To un-assign Energi Savr Node QS unit zones from a specific wallstation, press and hold the **Zone** button for the assigned zone(s) for 3 seconds. The ‘Zone’ LED will turn off to indicate success. Repeat for each desired wallstation-to-zone set-up that you wish to un-assign.

**seeTouch QS Wallstation - Zone Toggle Type**

1. Simultaneously press and hold the top and bottom buttons on the wallstation for 3 seconds. The QS link enters Programming Mode. The sensor Group A and Group B LEDs and the ‘H’, ‘M’, and ‘L’ LEDs on the Energi Savr Node QS unit(s) will flash sequentially in groups.

2. Use the **Option** button to change the wallstation type to zone toggle. A blinking LED will indicate the selection. Select ‘Opt 2’.

3. To save the wallstation type, press and hold the **Option** button for 3 seconds. The LED for the selected wallstation type will flutter for 1 second, then go to an on state.

4. To assign a specific wallstation button(s) to an Energi Savr Node QS unit zone, press the wallstation button you wish to assign (e.g. press button 1 – LED blinks slowly).

5. Press and hold the **Zone** button for the desired zone for 3 seconds. A blinking ‘Zone’ LED indicates an assigned zone.

6. Repeat steps 4-5 for each desired button-to-zone assignment.

7. Simultaneously press and hold the top and bottom buttons on the wallstation for 3 seconds to save the settings.

   To un-assign Energi Savr Node QS unit zones from specific wallstation buttons, press and hold the **Zone** button for the assigned zone(s) for 3 seconds. The ‘Zone’ LED will turn off to indicate success.

**GRAFIK Eye QS unit - Scenes and Scenes + Off**

1. Simultaneously press and hold the top and bottom scene buttons on the GRAFIK Eye QS unit for 3 seconds. The QS link enters Programming Mode. The sensor Group A and Group B LEDs and the ‘H’, ‘M’, and ‘L’ LEDs on the Energi Savr Node QS unit(s) will flash sequentially in groups.

2. To assign desired zone(s) to a GRAFIK Eye QS unit, press and hold the **Zone** button for the desired zone for 3 seconds. A blinking ‘Zone’ LED indicates an assigned zone.

3. Simultaneously press and hold the top and bottom scene buttons on the GRAFIK Eye QS unit for 3 seconds to save the settings.
QSE-IO Association - Scene DIP configuration

The Energi Savr Node QS unit can be associated to a QSE-IO (contact closure interface) that is set in a Scene DIP configuration. This can be used to change scenes on your Energi Savr Node QS unit from third party equipment (using contact closure inputs into the QSE-IO), or to monitor scene changes on your Energi Savr Node QS unit from third party equipment (using contact closure outputs out of the QSE-IO). Consult the QSE-IO instructions for proper DIP configuration.

To associate a QSE-IO that is set in a Scene DIP configuration to an Energi Savr Node QS unit(s), follow the steps below:

1. Press and hold the **Program** button on the QSE-IO for 3 seconds to enter Programming Mode. The 5 output LEDs will cycle. The sensor Group A and Group B LEDs and the ‘H’, ‘M’ and ‘L’ LEDs on the Energi Savr Node QS unit(s) will flash sequentially in groups.

2. To assign desired zone(s) to the QSE-IO, press and hold the **Zone** button on the Energi Savr Node QS unit for each desired zone for 3 seconds. A blinking ‘Zone’ LED indicates an assigned zone.

3. To exit Programming Mode, press and hold the **Program** button on the QSE-IO for 3 seconds.

QSE-IO Association - Zone Toggle and Occupancy DIP configurations

The Energi Savr Node QS unit can also associated to a QSE-IO (contact closure interface) that is set in the Zone Toggle or Occupancy DIP configuration. In the Zone Toggle configuration, this can be used to toggle zones on your Energi Savr Node QS unit from third party equipment (using contact closure inputs into the QSE-IO), or to monitor the state (on or off) of the zones on your Energi Savr Node QS unit from third party equipment (using contact closure outputs out of the QSE-IO). In the Occupancy configuration, this can be used to associate additional occupancy sensors to the zones on your Energi Savr Node QS unit (to turn lights on and off based on room occupancy). Consult the QSE-IO instructions for proper DIP configuration.

To associate a QSE-IO that is set in a Zone Toggle or Occupancy DIP configuration to an Energi Savr Node QS unit(s), follow the steps below:

1. Press and hold the **Program** button on the QSE-IO for 3 seconds to enter Programming Mode. The first output LED will flash indicating input 1 is selected. The sensor Group A and Group B LEDs and the ‘H’, ‘M’ and ‘L’ LEDs on the Energi Savr Node QS unit(s) will flash sequentially in groups.

2. To assign desired zone(s) to input 1 of the QSE-IO, press and hold the **Zone** button on the Energi Savr Node QS unit for each desired zone for 3 seconds. A blinking ‘Zone’ LED indicates an assigned zone.

3. Press and release the **Program** button on the QSE-IO to select the next input. Repeat step 2 for the remaining inputs on the QSE-IO.

4. To exit Programming Mode, press and hold the **Program** button on the QSE-IO for 3 seconds.

To un-assign zones from the QSE-IO inputs, press and hold the **Zone** button on the Energi Savr Node QS unit for 3 seconds. The ‘Zone’ LED will turn off to indicate success.

Repeat for each zone that you wish to un-assign from its respective QSE-IO input.
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