

Wanco® Programmable Solar Light Towers Touchscreen Controller Guide

January 2024
Rev. B



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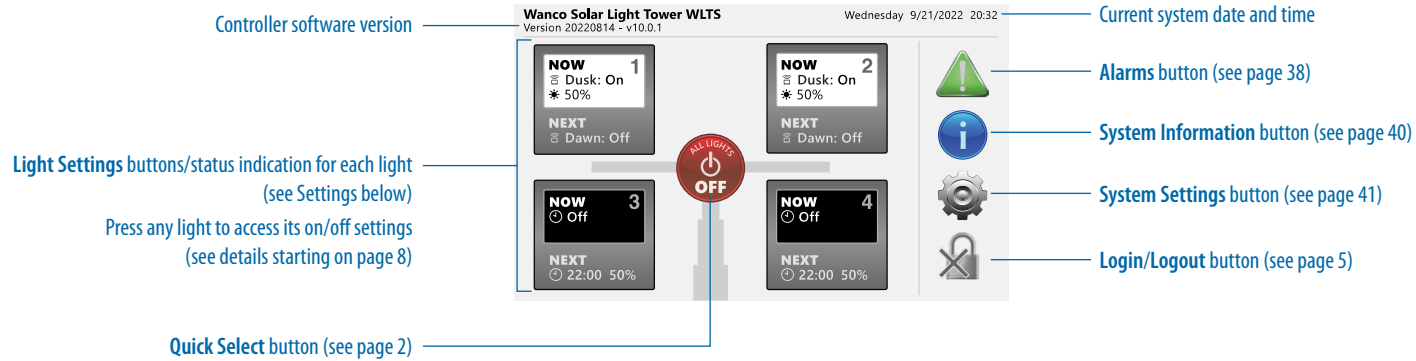
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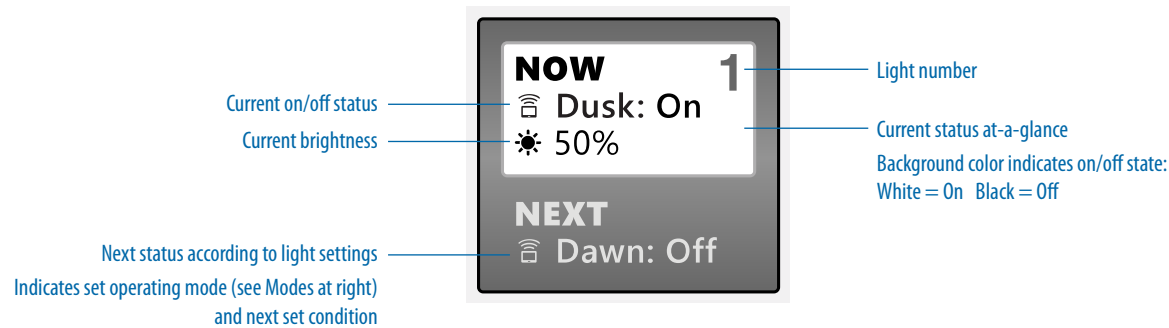
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Main Screen



Settings



Modes

MANUAL MODE

Manual on/off

PROGRAM MODE

Timer-controlled automatic on/off

Photocell sensor-controlled automatic on/off

Motion sensor-controlled automatic on/off

Main Screen Quick Select button: Turn all lights off

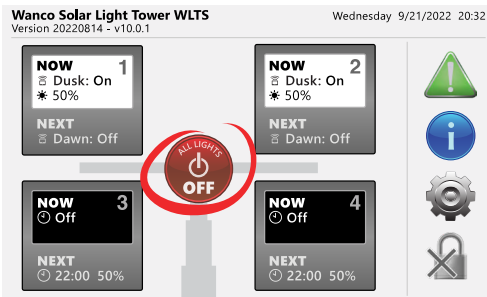
Quick Select button turns all lights off or on

The button is enabled by default, and can be disabled in the system settings (see page 55)

When using the Quick Select button to control the lights, all enabled programs are disabled (for more about Program mode, see page 20)

If one or more lights are on, the red Quick Select button turns all lights off and changes to Manual mode

Main screen: Lights set for automatic on/off

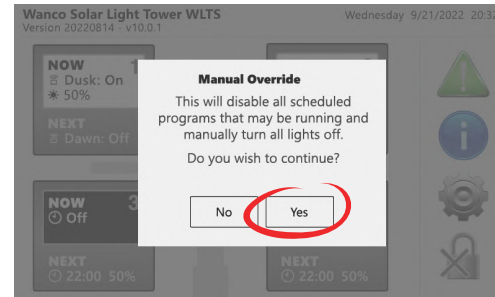


Example: Lights are in Program mode (automatic on/off)

Lights 1 & 2 are on until dawn (☀️ photocell-controlled on/off), and Lights 3 & 4 are off until 22:00 hours (🕒 timer-controlled on/off)

Press red Quick Select button to turn all lights off

Manual Override alert

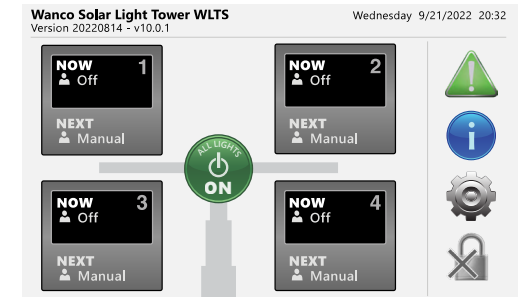


No button returns to Main screen with no changes to lights

Yes button returns to Main screen with all lights turned off

Press Yes button to continue

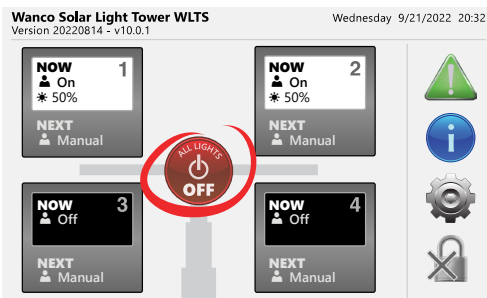
Main screen: Lights off, Manual mode



All lights are off and under manual control

All programs are disabled

Main screen: Lights set for manual on/off

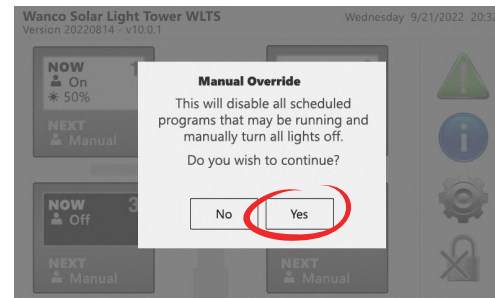


Example: Lights are in Manual (👤) mode

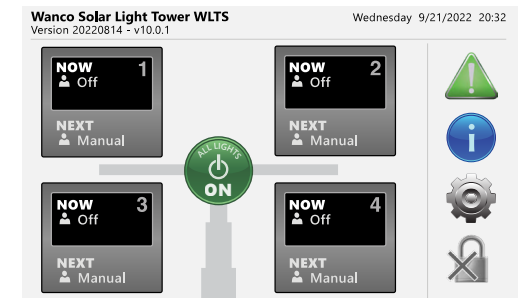
Lights 1 & 2 are on at 50% until manually changed by the operator, and Lights 3 & 4 are off until manually turned on

Press red Quick Select button to turn all lights off

Manual Override alert



Main screen: Lights off, Manual mode

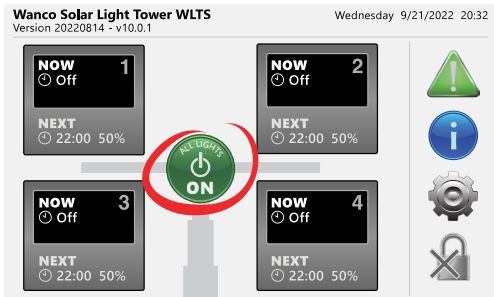


Main Screen Quick Select button: Turn all lights on

If all lights are off, the green Quick Select button turns all lights on from dusk to dawn

When lights are switched on during daylight hours, dusk-to-dawn operation is enabled but lights remain off; for more about dusk-to-dawn operation, see page 37

Main screen: Lights set for automatic on/off

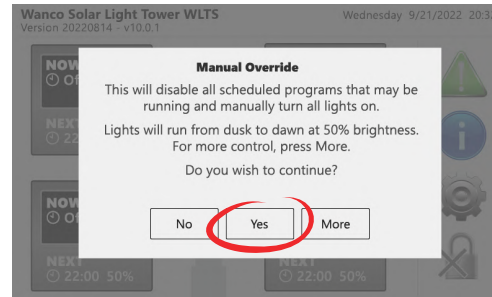


Example: Lights are in program mode (automatic on/off)

All lights are off until 22:00 hours

Press green Quick Select button to turn all lights on

Manual Override options



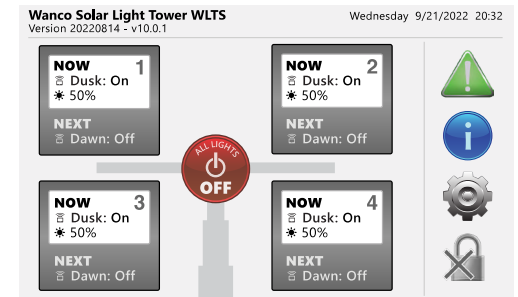
No button returns to Main screen with no changes to light settings

Yes button returns to Main screen with all lights in automatic (dusk-to-dawn) on/off operation

More button advances to Light Settings screen

Press Yes button to continue

Automatic on/off – Lights on

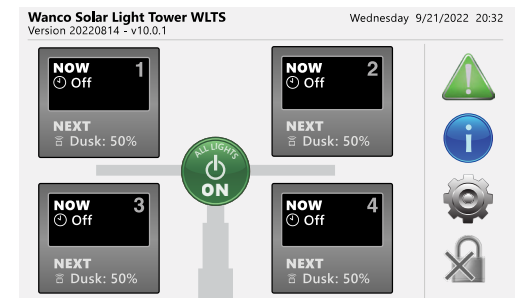


All lights are in automatic (dusk-to-dawn) on/off operation

Lights are on with decreased daylight

All programs are disabled

Automatic on/off – Lights off



All lights are in automatic (dusk-to-dawn) on/off operation

Lights remain off with sufficient daylight

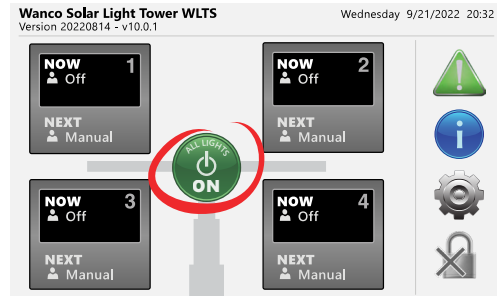
All programs are disabled

Main Screen Quick Select: More control & Quick Select mode

When using the **Quick Select** button to turn lights on, choose **More** from the manual override options to open the Light Settings screen

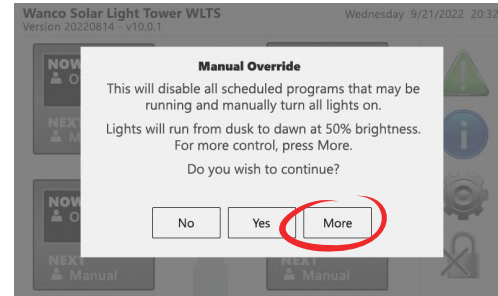
Light settings are described in detail starting on page 8

Main screen: Lights off, manual off/on



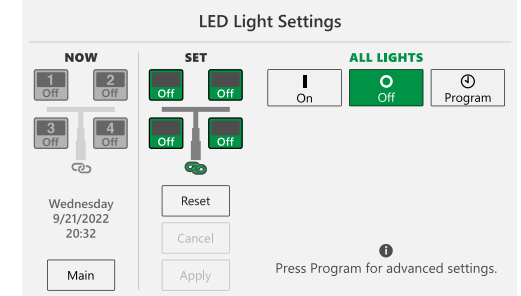
Example 1: All lights are off and operating in Manual mode

Manual Override options



More button advances to Light Settings screen

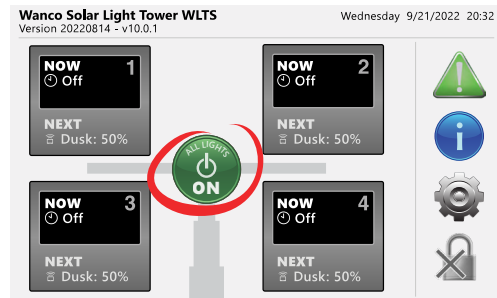
Light Settings screen: Current settings



Example 1: All lights are off and operating in Manual mode

Regardless of Manual or Program mode, when all lights are off, the Light Settings screen shows the current status: Off

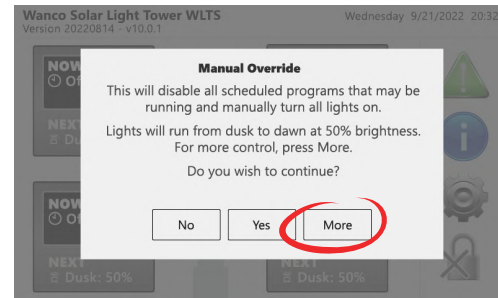
Main screen: Lights off, auto-on dusk to dawn



Example 2: All lights operating in Quick Select mode

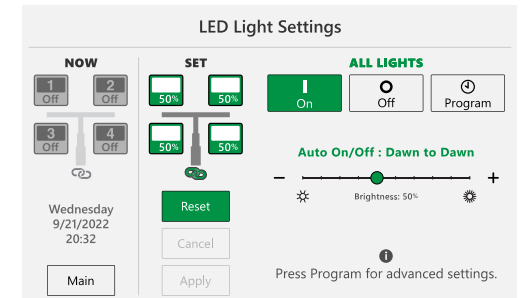
Quick Select button was previously pressed, setting the lights to the Quick Select mode: automatic dusk-to-dawn operation

Manual Override options



More button advances to Light Settings screen

Light Settings screen: Quick Select mode



Example 2: All lights operating in Quick Select mode

This special operating mode is indicated on the Light Settings screen by the active (green) state of both the On and Reset buttons
Main returns to Main screen without changing any settings
Any other button changes the settings; to cancel all changes and return to the Main screen, press Cancel

Main Screen Password protection

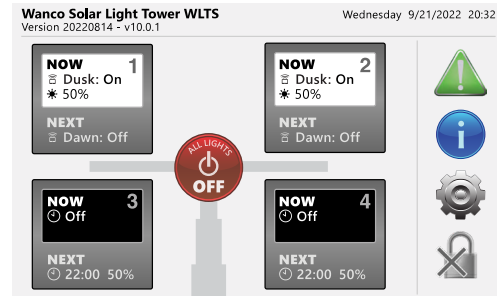
Password protection limits access only to system settings, it does not limit access to on/off controls for the lights

Password protection is disabled by default, but can be enabled in the system settings (see pages 41 and 56)

When enabled, the **Login/Logout** button (lock icon) indicates the login status

When disabled, the **Login** button is inactive

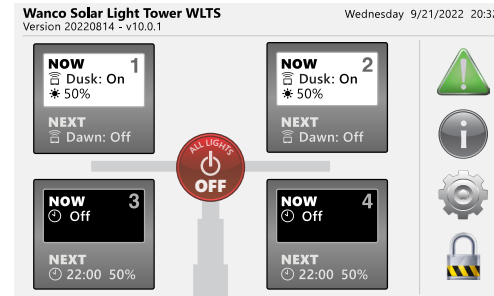
Password protection disabled



Login/Logout button inactive

All other buttons behave normally

Password protection enabled



Login/Logout button enabled, system is logged out

Information and Settings buttons are inactive; other buttons behave normally

For login, see next page

Lock icons



Password protection disabled



Password protection enabled, logged out



Password protection enabled, logged in as guest



Password protection enabled, logged in as admin/service

Login access

Guest

Guest-level login provides the user with access to only the following system information and settings:

View system alarms (page 38)

View system information (see page 40)

Turn optional beacon on/off (page 41)

Change time and date (page 42)

Adjust photocell sensitivity (see page 50)

Show/hide Quick Select buttons (page 55)

Admin/service

Admin/service-level login provides the user with access to all system information and settings

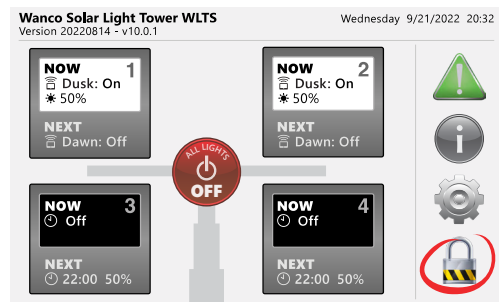
Main Screen Login

When logged out, press the **Login** button (lock icon) to log in

When logged in, press the **Logout** button (lock icon) to log out

When logged in, system timeout will automatically log out after a specified period of inactivity

Logged out



Login button shows password entry screen

Password entry screen

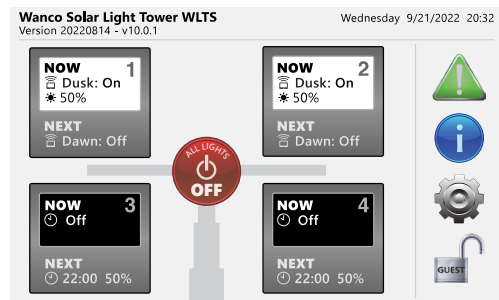


Enter button accepts the entry and returns to the previous screen

If the password is entered incorrectly, the user is not logged in

Escape button exits the login process and returns to the previous screen

Logged in: Guest

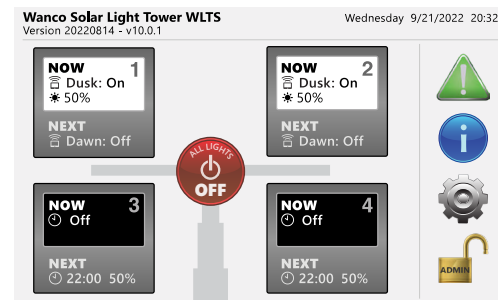


Padlock icon "unlocked" when logged in

Silver padlock indicates guest-level access

All buttons behave normally

Logged in: Admin/service



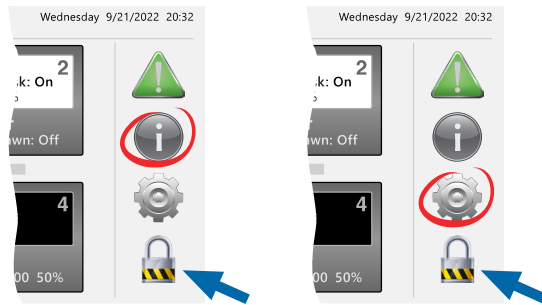
Padlock icon "unlocked" when logged in

Gold padlock indicates admin/service-level access

All buttons behave normally

Main Screen Login required

Logged out



When logged out, pressing either the **Information** button or the **Settings** button shows the password entry screen

Password entry screen

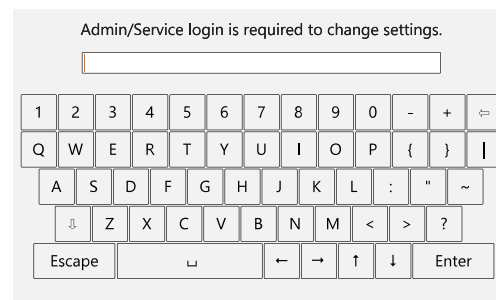


Logged in as guest

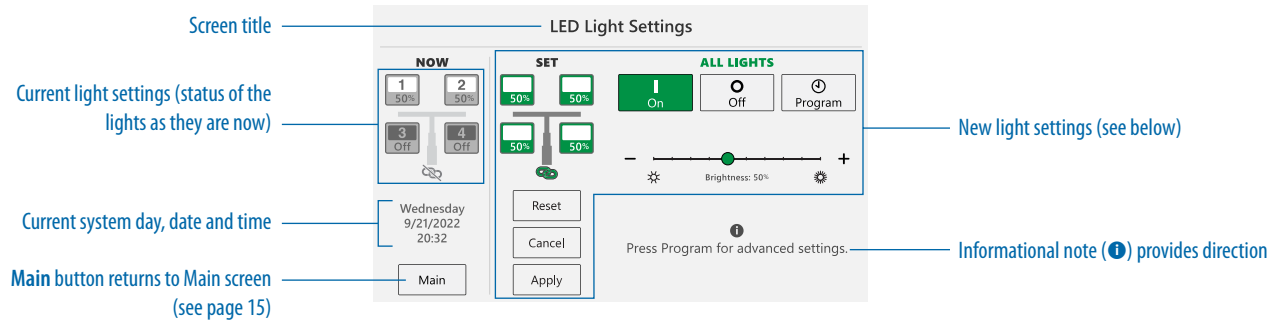


When attempting to access advanced functions with guest-level access, the “Admin/Service login is required” message is shown and the service-level password must be entered; otherwise, pressing the **Enter** button or the **Escape** button returns to the previous screen without any change to the login status

Admin/Service login is required

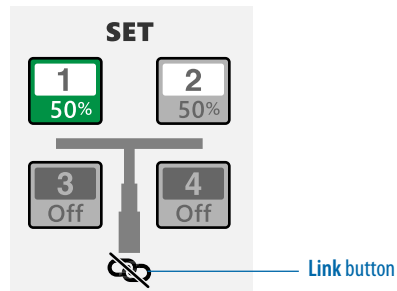


Light Settings Screen



Settings

Light buttons



Light buttons act as toggles: pressing a selected light (indicated in green) deselects it, and vice versa (see page 9)

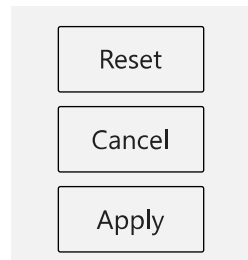
Light buttons can be toggled in any combination for easily changing settings one light at a time or multiple lights together

Selected lights are indicated in green

Settings apply to all selected lights, but do not apply to deselected lights

Link button indicates link status and toggles between linking and unlinking lights (for linking, see page 16; for unlinking, see page 17)

“Set” buttons

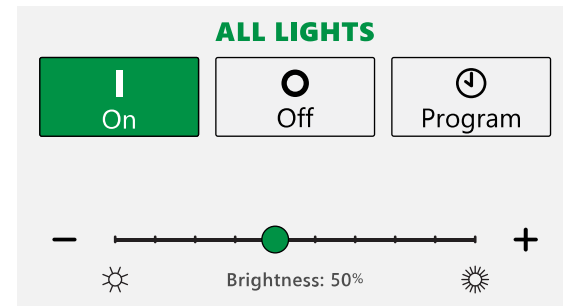


Reset button opens reset options (see page 18)

Cancel button returns to Main screen without saving new settings or applying changes

Apply button saves settings and changes current operation to the saved settings (see page 15)

Operating modes



Manual on

Manual off

Program (automatic on/off)

User can choose to turn lights on or off, or to program automatic on/off operation

Selected lights are listed in green above the buttons

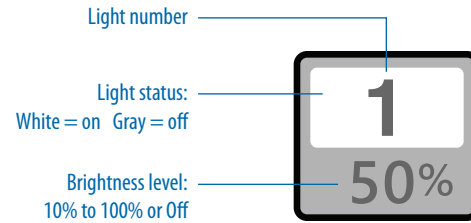
Selected mode button is indicated in green

On mode allows the user to set the desired brightness from 10% to 100%; default is 50%

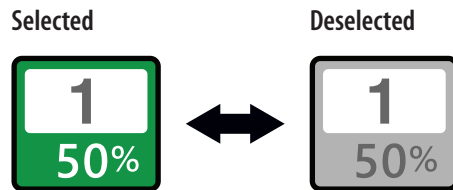
Program mode provides additional settings (see page 20)

Default mode when the screen opens is the current mode for the selected light

Light Settings Screen Light buttons



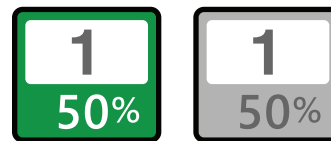
Button toggle



Buttons toggle between selected and deselected states
Settings apply to all selected lights, but do not apply to deselected lights

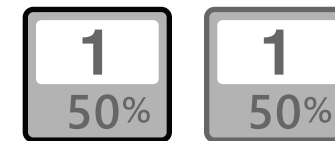
Button states

Light selection (button color)



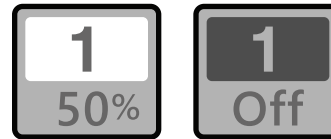
Green = selected Gray = deselected

Selectability (border color)



Black = selectable Gray = inactive/not selectable

On/off status (light color)



White = light is on Gray = light is off

Link status (light number)



Linked = no number and not selectable

Unlinked = light number is displayed and buttons are selectable

Mode (light color and brightness level)



White light & brightness shown = On mode

Gray light & "Off" shown = Off mode

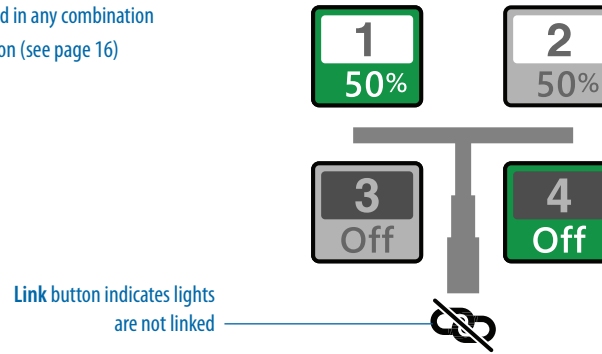
White light & no brightness = Program mode

Light Settings Screen Link button

Unlinked lights

Light buttons can be selected/toggled in any combination

To link the lights, press the Link button (see page 16)

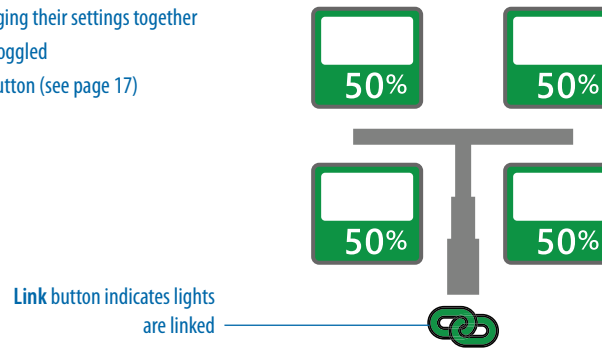


Linked lights

All lights are selected for easily changing their settings together

Linked lights cannot be deselected/toggled

To unlink the lights, press the Link button (see page 17)

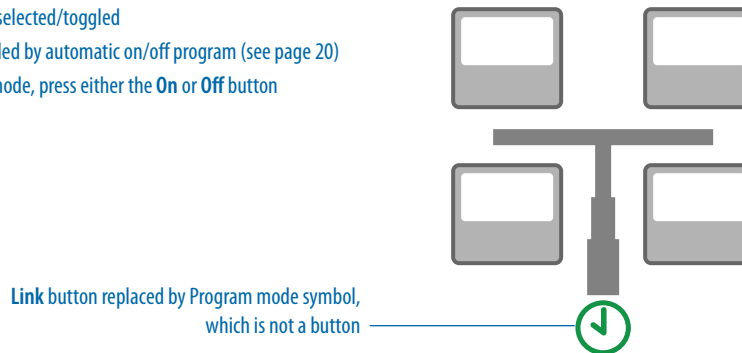


Program mode

Lights cannot be selected/toggled

Lights are controlled by automatic on/off program (see page 20)

To exit Program mode, press either the On or Off button



Light Settings Screen Lights not linked

Three operating mode choices: On, Off, and Program

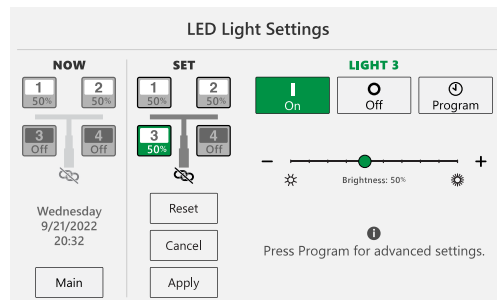
Default when the screen opens is the current operating settings for the selected light

Light buttons (under "SET" heading) are selectable in On and Off modes when lights are unlinked (as described on page 10)

Individual light buttons are not selectable when lights are in Program mode (as described on page 10)

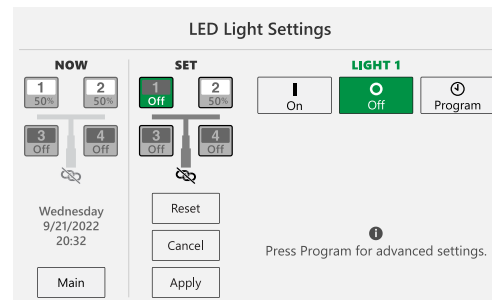
Link button opens link options (see page 16)

Operating mode (lights not linked): On

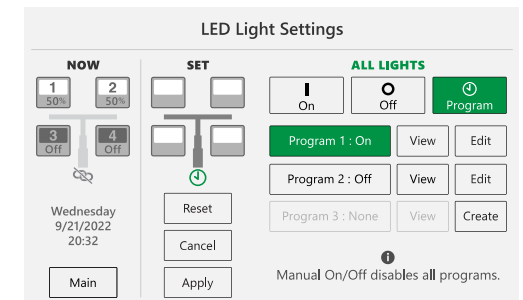


When On is first selected, the default setting is 50% brightness
Use slider or brightness buttons to adjust desired brightness setting from 10% to 100%

Operating mode (lights not linked): Off



Operating mode (lights not linked): Program



Link button replaced by the program symbol (which is not a button), light buttons are inactive and blank, indicating Program mode is selected
Title above mode buttons indicates all lights are controlled by the program

Light Settings Screen All lights linked

Three operating mode choices: On, Off, and Program

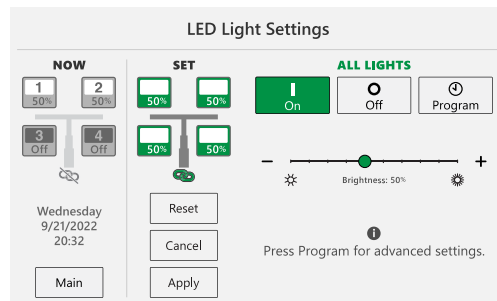
Default when the screen opens is the current operating settings for all the (linked) lights

Light buttons (under "SET" heading) do not show light numbers when lights are linked or in Program mode (as described on page 10)

Individual light buttons cannot be toggled when lights are linked or in Program mode (as described on page 10)

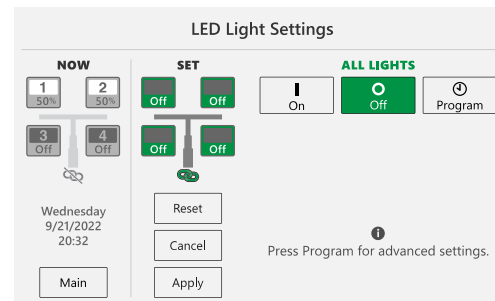
Link button immediately unlinks lights when pressed (see page 17)

Operating mode (lights linked): On

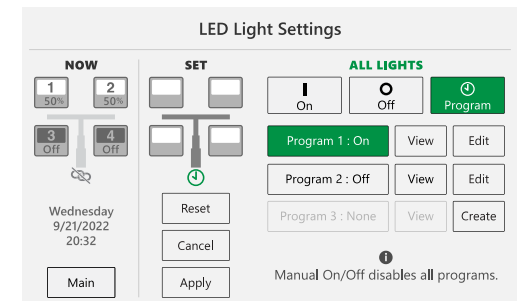


When lights are linked, all lights are selected

Operating mode (lights linked): Off



Operating mode (lights linked): Program



Link button replaced by the program symbol (which is not a button) and light buttons are blank, indicating Program mode is selected

Green title above mode buttons indicates all lights are controlled by the program

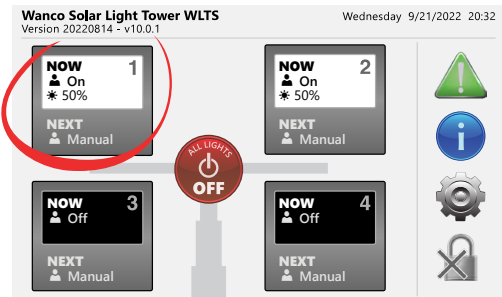
Default views Manual mode

When accessing the Light Settings screen from the Main screen, the default view varies depending on the settings of the selected light

When lights are not linked, the settings for the selected light are shown

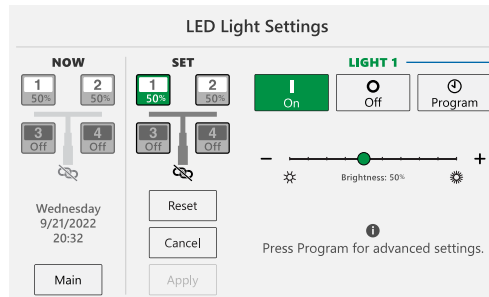
When lights are linked, the settings for all lights are shown

Example 1: Lights not linked



Lights have different manual (👤) settings, indicating that the lights are not linked

Example: Press Light 1 to view settings



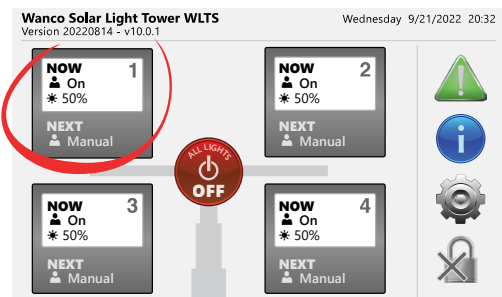
Selected light

Settings for Light 1 are shown

Light 1 selected, highlighted in green

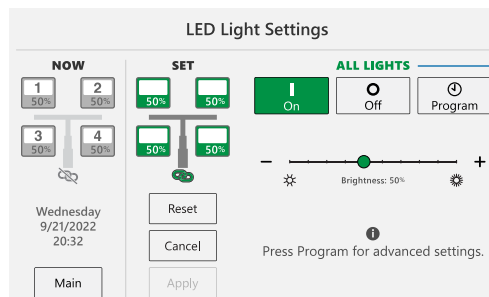
Apply button is inactive until a setting is changed (see page 15)

Example 2: Lights linked



All lights have the same manual (👤) settings, hinting that the lights might be linked

Example: Press Light 1 to view settings



Selected lights

Settings for all lights are shown

All lights selected, highlighted in green

Default views Program mode

When accessing the Light Settings screen from the Main screen, if the lights are in Program mode, the Light Settings screen is shown in Program mode

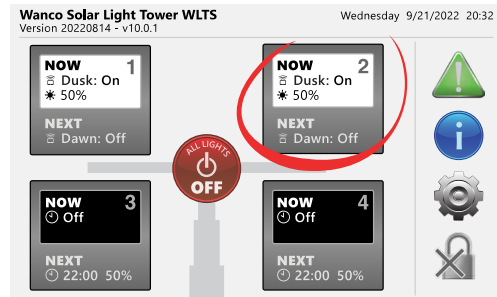
More than one program may be active

For more about Program mode, see page 20

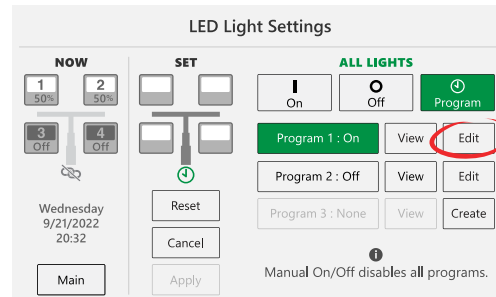
The on and off settings for individual programs and lights can be reviewed or changed by pressing the **View** or **Edit** buttons

For an overview of light settings in Program mode, see page 24

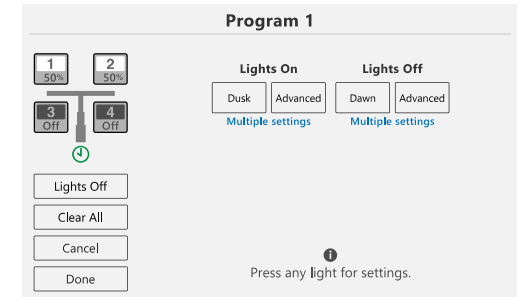
Program mode: Example 1



Lights 1 and 2 have different settings than Lights 3 and 4
All lights are operating automatically (☺ and ☹) in Program mode
Press any light to view settings

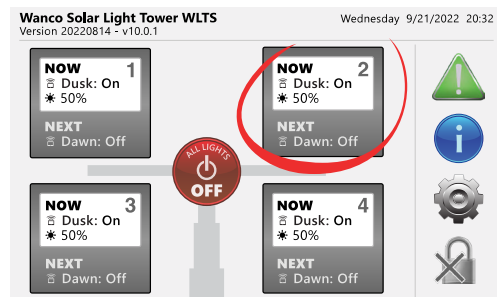


Program mode shown, Program 1 active and controlling lights (all indicated in green)
Press Program 1 Edit button to change settings of active program

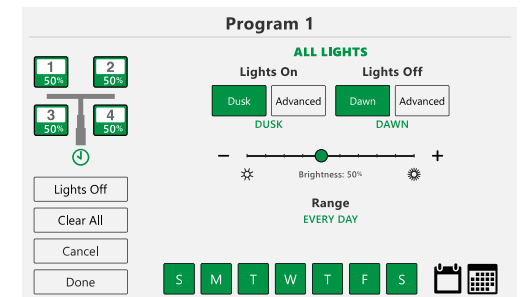
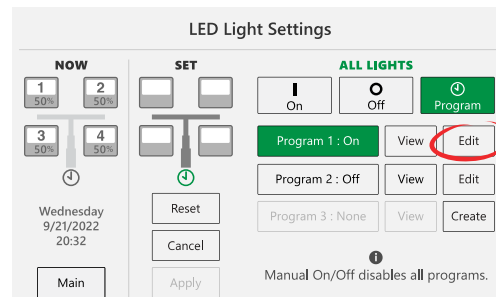


Because the settings for the lights are not all the same, no lights are selected and "Multiple settings" is indicated
Press any light button to view or change the light's settings (see pages 25 and 26)

Program mode: Example 2



All lights have the same settings
All lights are operating automatically (☺) in Program mode
Press any light to view settings



Because the settings are the same for all the lights, all lights are selected (highlighted in green) and their settings are shown
Press any button to change settings for the selected lights

Light Settings Screen Apply and Main

Apply button saves and activates all changes

Main button returns to Main screen

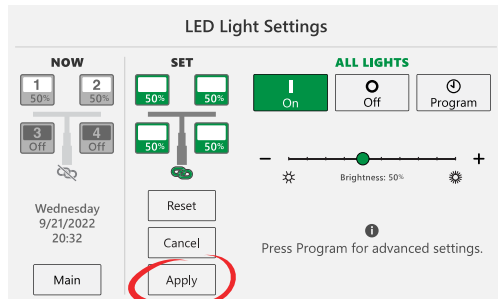
When the user presses the **Apply** button, the new settings take effect immediately, though they may not always be visible. For example:

During daylight hours, the user sets the lights to turn on at dusk and then presses **Apply**

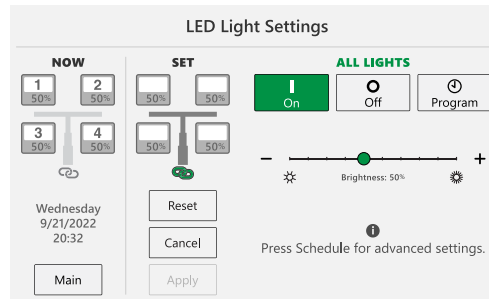
Because the sun is still shining, the lights are off and it appears the settings didn't take effect

However, upon returning to the Main screen, the user can see the **NEXT** setting is Dusk

Settings changed but not applied



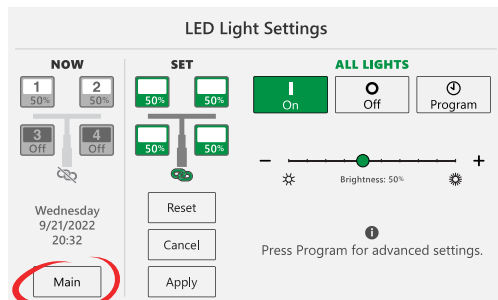
New settings applied



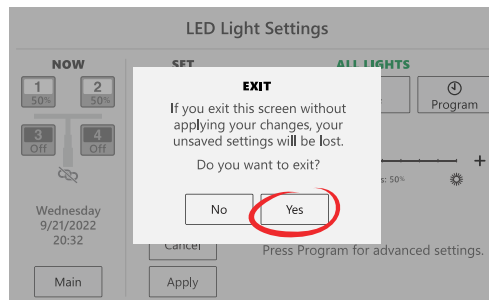
When changes are applied, the current (**NOW**) settings are updated and the **Apply** button becomes inactive

If the lights are not linked, the user can view the settings for each light (by toggling the light buttons) without making changes; the **Apply** button remains inactive until a setting is changed

Settings changed but not applied



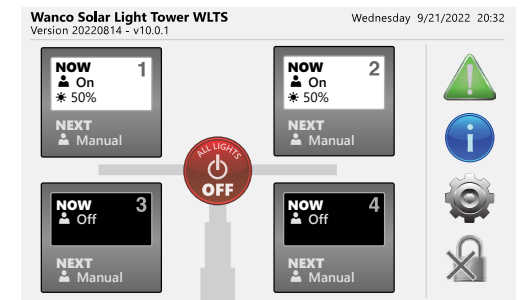
Exit alert



Yes button returns to Main screen without applying changes

No button closes the alert

Main screen



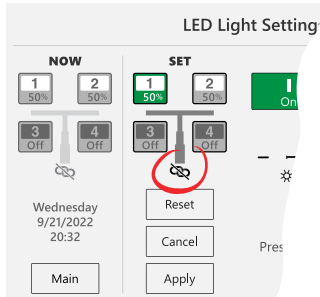
Light Settings Screen Link options

Linking the lights lets the user adjust the settings for all lights at the same time

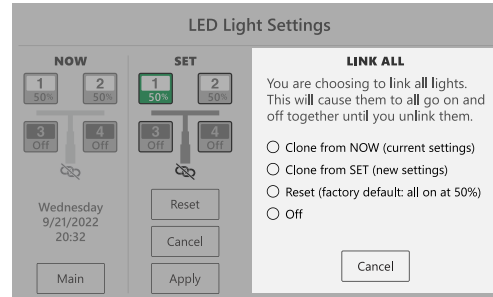
When changing from unlinked to linked, "clone" options easily duplicate the current settings of any light

Link button opens link options

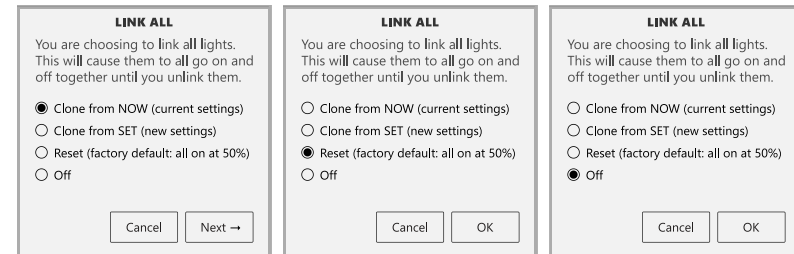
Light Settings screen: Lights unlinked



"Link all" selection



Options for changing settings when linking lights

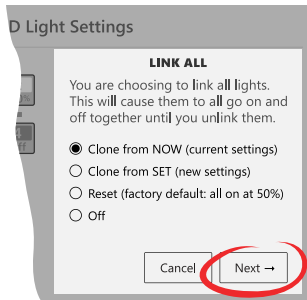


Next button advances to the next step in the process

OK button returns to Light Settings screen with settings accepted and all lights linked

Cancel button closes the options and returns to Light Settings screen without any changes

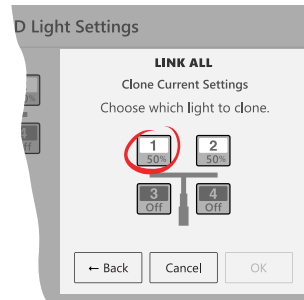
"Link all" selection: Clone settings



Example: Choose "Clone from NOW"
The next steps are the same when "Clone from SET" is selected



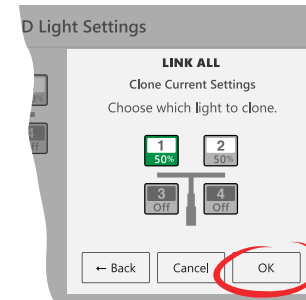
Select a light to clone



Press any light to select it and copy its settings
Back button returns to options
Cancel button closes the options and returns to Light Settings screen without any changes



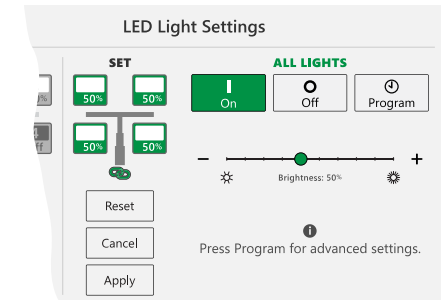
Clone settings and link lights



OK button copies settings from the selected light to all lights and returns to Light Settings screen with selected settings accepted and all lights linked
Individual light buttons cannot be deselected/toggled when lights are linked
Only the new settings are affected; the current (NOW) settings are unaffected until the user presses the Apply button



Light Settings screen: Lights linked

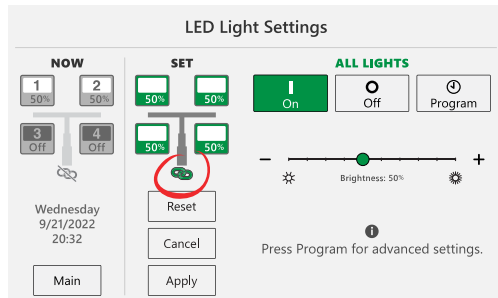


Light Settings Screen Unlink

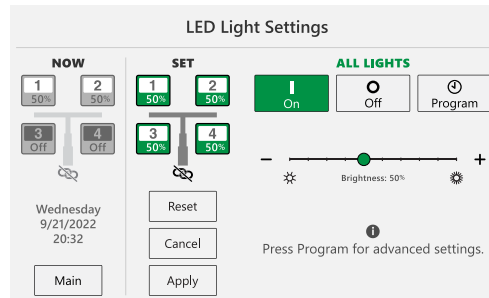
Unlinking the lights lets the user adjust the settings for each light independently

Link button unlinks the lights

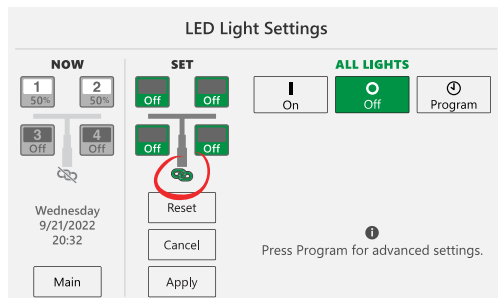
Unlink: Lights on



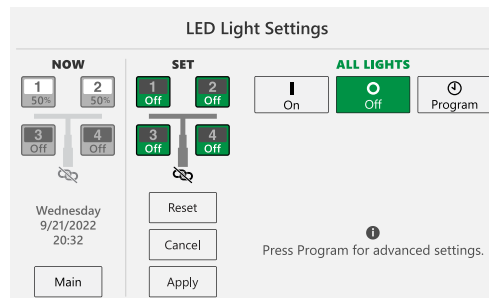
Unlinked: All lights on



Unlink: Lights off



Unlinked: All lights off



After unlinking, the settings for all four lights remain as they were when they were linked, and all four lights are selected

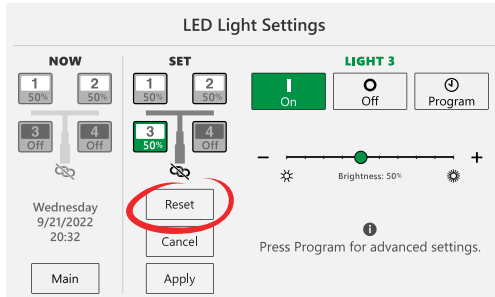
Light buttons can be toggled in any combination for easily changing settings one light at a time or multiple lights together

Only the new settings are affected; the current (NOW) settings are unaffected until the user presses the **Apply** button

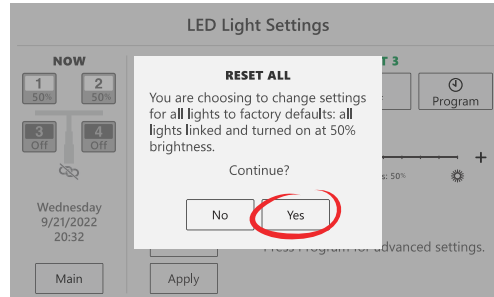
Light Settings Screen Reset

Reset button restores factory default settings for all four lights, linking them and turning them all on at 50% brightness

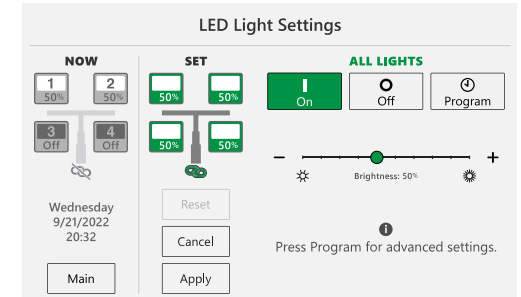
Reset



Reset options



After reset



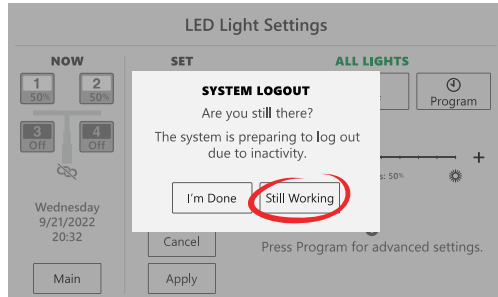
After reset, all lights are linked and turned on at 50% brightness
Only the new settings are affected; the current (NOW) settings are unaffected until the user presses the **Apply** button

Light Settings Screen Logout alert

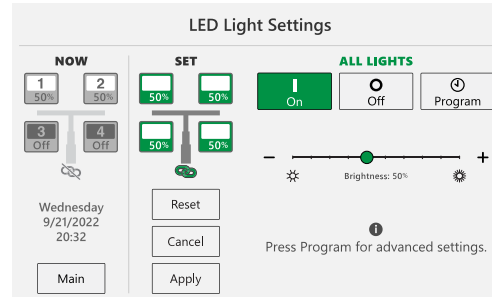
Before timing out, the controller presents a visual alert

If the user fails to respond, the controller times out and returns to the Main screen without applying changes

Logout alert



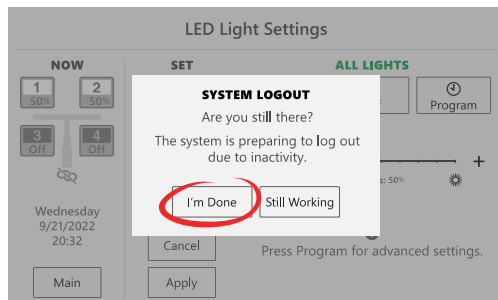
Light Settings screen



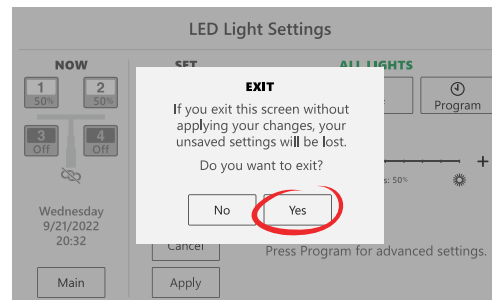
Alerts the user that the controller will time out unless the user interacts with the controller

Still Working button closes the alert

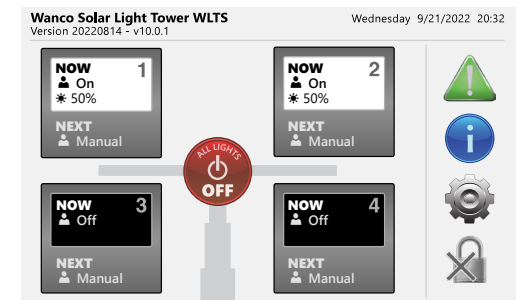
Logout alert



Exit alert



Main screen



I'm Done button returns to Main screen without applying changes

Alerts the user that unsaved settings will be lost unless the user takes action

No button closes the alert

Yes button returns to Main screen without applying settings

Program Mode

Program mode provides settings for automatic on/off operation

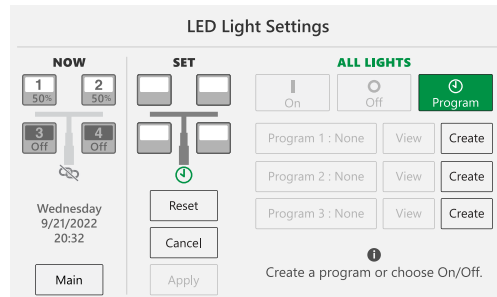
Three separate programs can be independently configured, activated, and deactivated (see page 21)

Each program can be scheduled for different days or dates

For a program's settings to take effect, the program must be 1) created, 2) activated, and 3) applied

Informational note (i) provides different direction depending on program status

No programs created



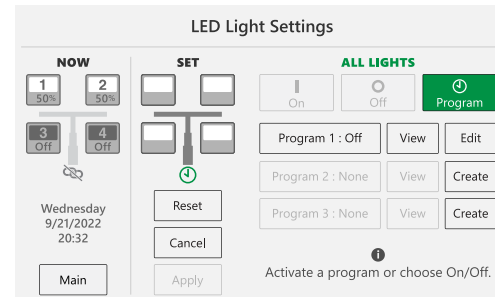
Create button allows user to set up a new program

Numbered Program buttons (Program 1, 2, 3) are disabled until the user creates programs

View buttons are disabled until the corresponding program has been created

Apply button is disabled until at least one program is activated or the operating mode is changed to manual On or Off

Program 1 created, not active



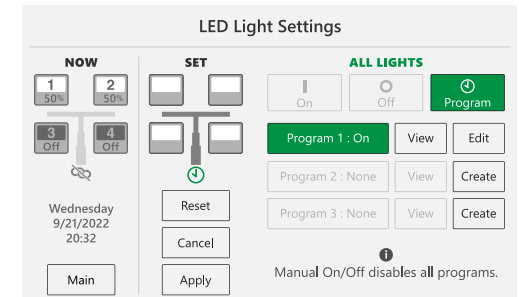
Program 1 button is enabled and its status changed from "None" to "Off"

The corresponding View button is enabled

The corresponding Create button is changed to "Edit"

Program 1 button acts as a toggle, turning the program on and off; the button label indicates the current status

Program 1 activated



When a program is turned on, its Program button is green and the Apply button is enabled

Program Mode continued

Each light can have different on and off settings; selected days, date range, and specific calendar dates apply to all lights in the program

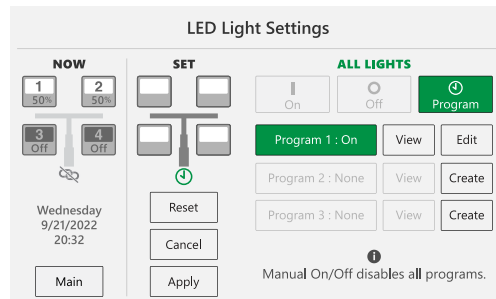
Each program can have different days, date range, or calendar dates

Each program can be active or inactive independent of other programs

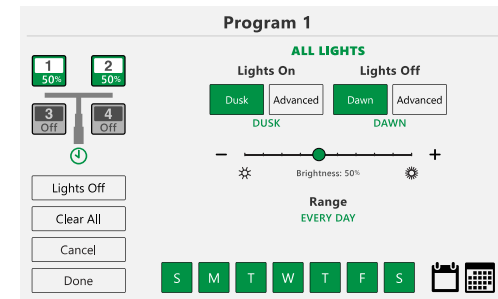
When multiple programs are active, no program will turn the lights off when another program has them simultaneously turned on (i.e., for conflicting programs, the “on” state always overrides the “off” state)—this ensures the lights will not turn off unexpectedly, but could cause battery power to be depleted faster than expected (see low-voltage alarm on page 38)

Default settings for a new program are: all lights off, seven days a week; all settings can be changed

Light Settings screen: Program mode



Program screen



Example programs

Single program: Four examples

Set all lights for dusk-to-dawn operation only on weeknights

Set all lights to operate from sunset until an hour after dawn, every night from November 1 through March 15

Set Lights 1 and 2 for dusk-to-dawn operation, while Lights 3 and 4 turn on at 10 p.m. and off at 5 a.m.

Set Light 1 to turn on at 10% brightness from dusk till dawn, and Lights 2, 3, and 4 to turn on at 50% brightness from 8 p.m. till midnight, only on October 3rd and 4th.

Multiple programs: Example 1

In Program 1, set all lights to operate at 50% brightness during the night shift, which ends at 11:30 p.m., only on weeknights

In Program 2, set all lights to operate at 10% brightness from 11:30 p.m. till dawn, only on weeknights

In Program 3, set all lights to operate at 10% brightness from dusk to dawn, only on weekends

Multiple programs: Example 2

In Program 1, set all lights for dusk-to-dawn operation at 50% brightness, only on weeknights

In Program 2, set two lights for operation from 10 p.m. to 5 a.m. at 20% brightness, only on weekends

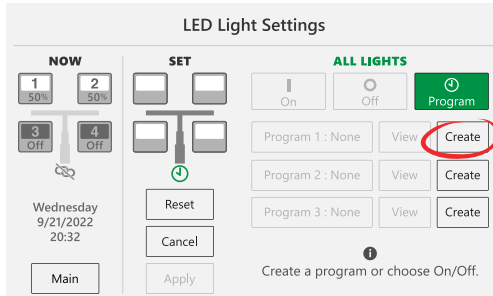
In Program 3, set all lights for operation from 30 minutes before sunset till 15 minutes after dawn at 50% brightness on Halloween weekend and Superbowl weekend

Program Mode Create and edit

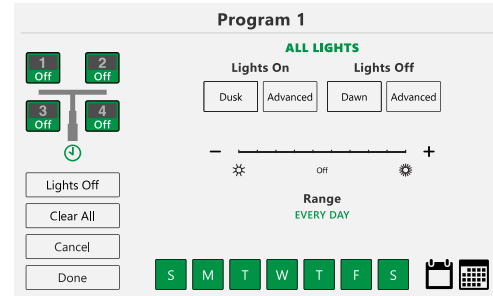
Create buttons open the Program screen for creating a new program

Edit buttons open the Program screen for editing an existing program

Program mode: Create program



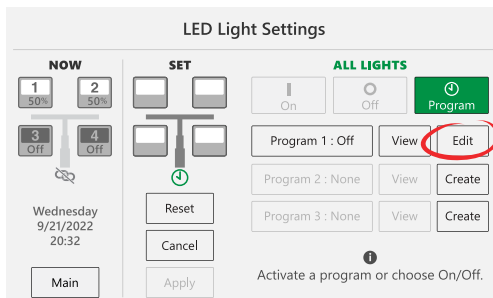
Program screen: Create Program 1



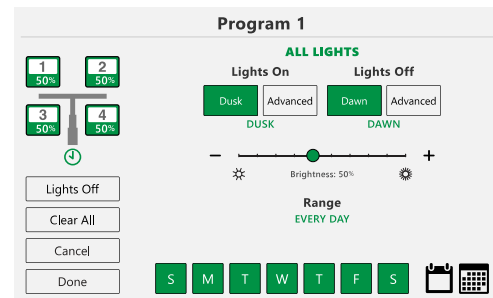
Default for a new program is all lights off, all seven days selected, with on and off settings not set

All settings can be changed as desired

Program mode: Edit program



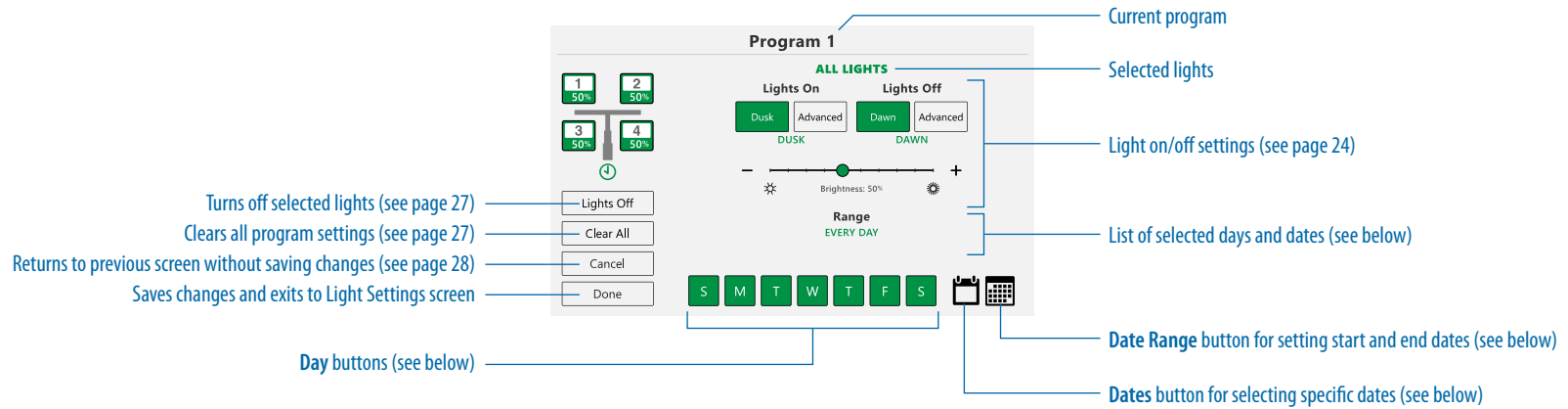
Program screen: Edit Program 1



Default view for an existing program has all lights selected if their settings are the same, or Light 1 selected if settings vary

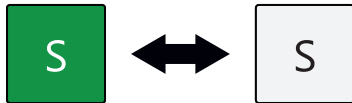
To view the settings for any single light, deselect all other lights

Program Screen

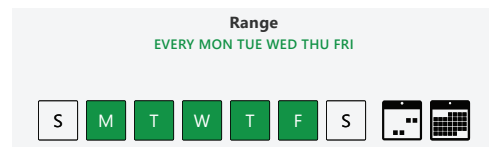


Days of the week

Day buttons



Buttons toggle between selected and deselected states
 Selected days of the week are green
 Each button toggles independently of the others; select any or all, in any combination



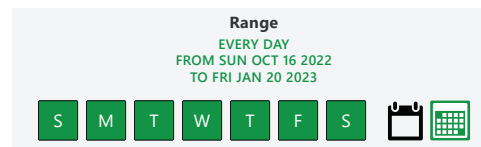
Selected days are listed under "Range" heading
 Selected days apply to all lights

Date range

Date Range button



Use the **Date Range** button to set a start date and an end date
 With both dates set, the **Date Range** button is green



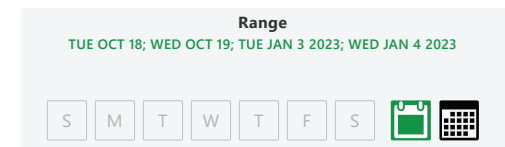
Start and end dates are listed under "Range" heading
 If no days are selected before setting the date range, the default is all days; the user can deselect up to six days, but at least one day must remain selected
 Date range and selected days apply to all lights

Dates

Dates button



Use the **Dates** button to select one or more specific calendar dates
 Dates can be consecutive and/or nonconsecutive
 With dates set, the **Date Range** button is green



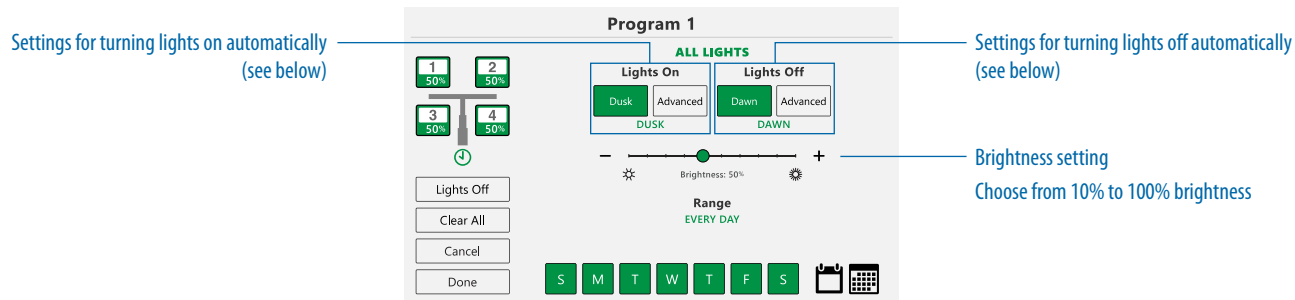
Selected dates are listed under "Range" heading
 Day buttons are disabled
 Selected dates apply to all lights

Program Screen Lights on/off

Each light can have its own on and off settings

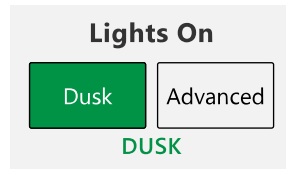
Select multiple lights to apply the same settings to more than one at a time

For efficient programming, select lights before choosing on and off settings



Settings

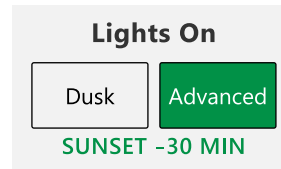
Lights On: Dusk



Dusk setting selected, indicated in green

Lights turn on automatically when photocell sensor detects decrease in ambient light, such as at dusk

Lights On: Advanced



Advanced setting configured, indicated in green

See below for Advanced On options

For details, see page 33

ADVANCED OPTIONS:

Time of day

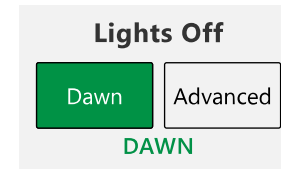
Sunset

minutes before sunset

minutes after dusk

Motion detection (with optional motion sensor)

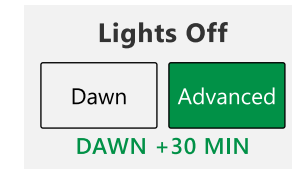
Lights Off: Dawn



Dawn setting selected, indicated in green

Lights turn off automatically when photocell sensor detects increase in ambient light, such as at dawn

Lights Off: Advanced



Advanced setting configured, indicated in green

See below for Advanced Off options

For details, see page 36

ADVANCED OPTIONS:

Time of day

hours after dusk

minutes after dawn

minutes after motion detection

(with optional motion sensor)

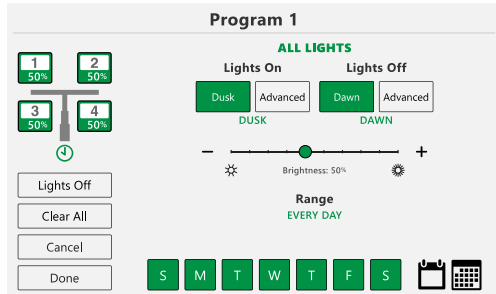
Program Screen Multiple settings: viewing

Because each light can have its own on/off settings, the displayed settings may indicate “Multiple settings”

To view settings for any single light, deselect all other lights

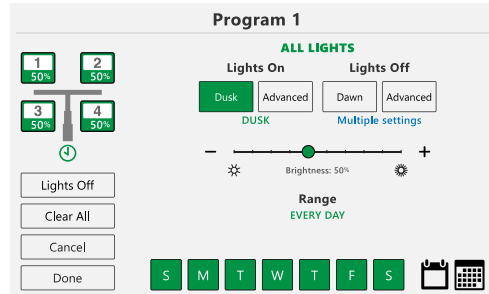
See examples below

Example: Same settings for selected lights



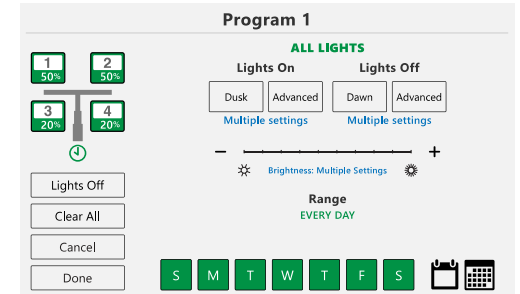
On/off settings clearly indicated

Example: Multiple off settings



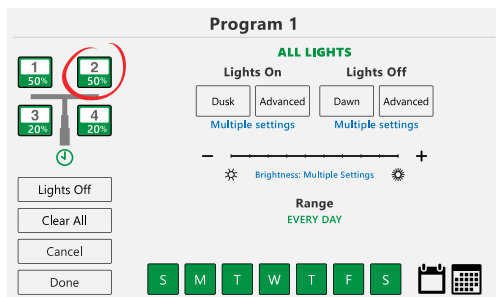
On and brightness settings clearly indicated
Multiple off settings for selected lights

Example: Multiple on, off, and brightness settings

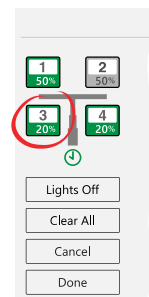


On/off settings not clear
No green Lights On or Lights Off buttons indicates the following:
At least one selected light has different on settings
At least one selected light has different off settings
No green Brightness button indicates at least one selected light has different brightness setting

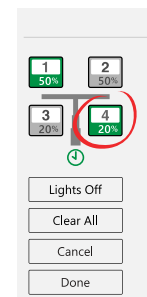
Example: Settings for several selected lights



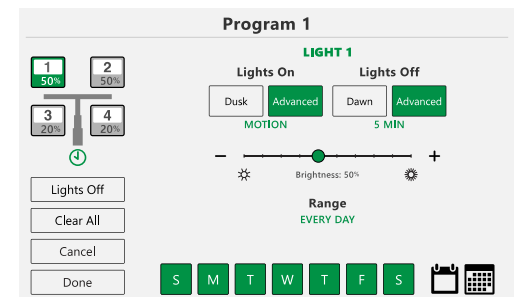
With all lights selected, “Multiple settings” is displayed
Press Light 2 button to deselect it



Deselect Light 3



Deselect Light 4



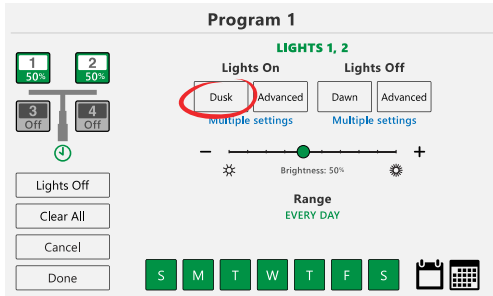
Only Light 1 selected
On, off, and brightness settings for Light 1 clearly indicated

Program Screen Multiple settings: changing

Changing an on or off setting for selected lights is as easy as pressing a button—use care, as changes cannot be undone

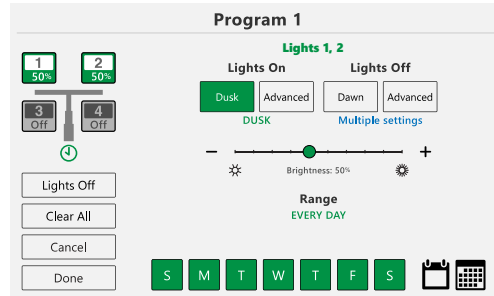
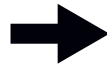
See examples below

Example 1: Change multiple Lights On settings to Dusk



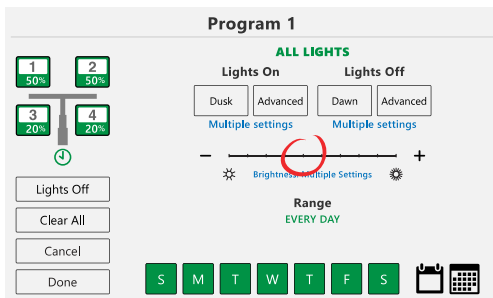
Selected lights have multiple on settings

Press the **Dusk** button to set selected lights to turn on at dusk



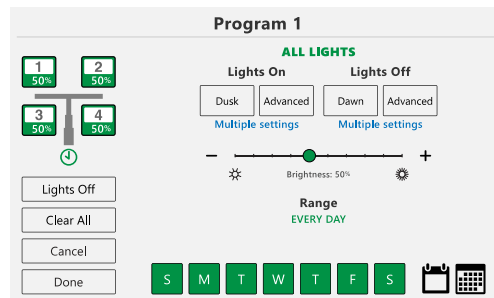
After pressing the new Lights On setting, selected lights have the same setting: on at dusk

Example 2: Change multiple Brightness settings to 50%



Selected lights have multiple brightness settings

Press the **Brightness** slider to choose 50% brightness



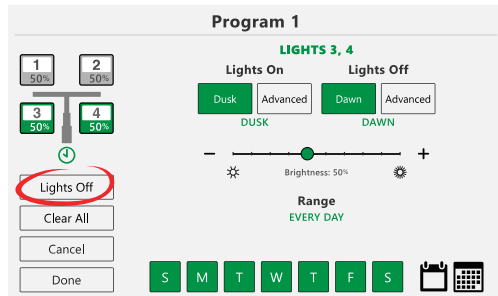
After pressing a new brightness setting, selected lights have the same brightness setting: 50%

Program Screen Lights Off and Clear All

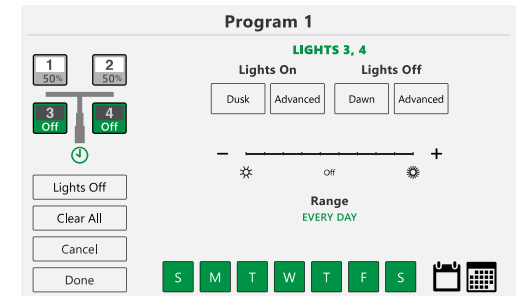
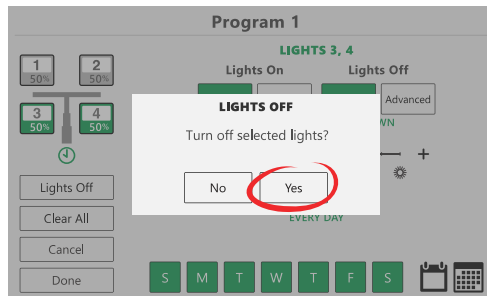
Lights Off button turns off lights that have brightness previously set

Clear All button clears all settings—on, off, brightness, days, and dates—for the displayed program; other programs are unaffected

Lights Off

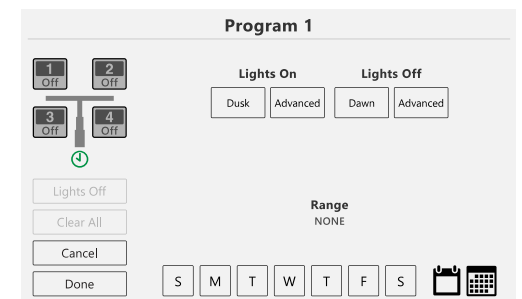
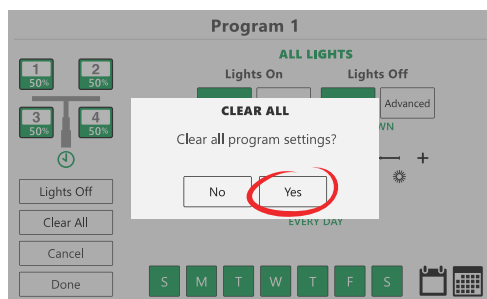
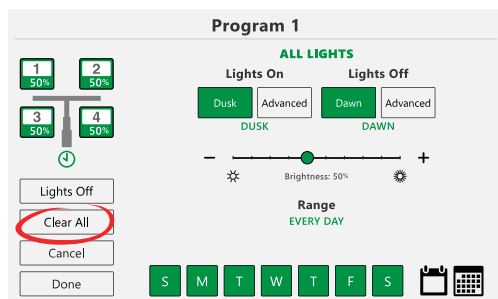


Selected lights are on at 50% brightness



Selected lights are turned off

Clear All



All program settings cleared, no lights selected
Lights Off and Clear All buttons inactive

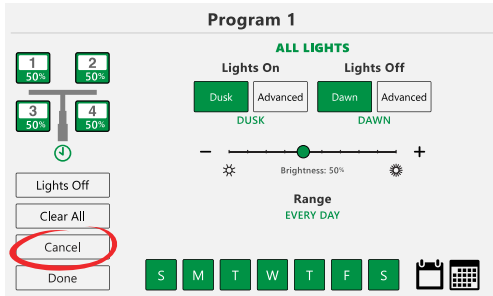
Program Screen Cancel and Done

Cancel returns to the Light Settings screen without saving changes

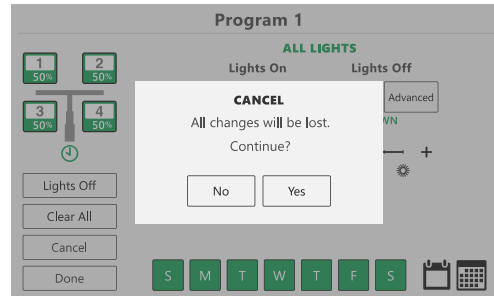
Before exiting the Program screen, Cancel alerts user that all changes will be lost

Done saves changes and returns to the Light Settings screen

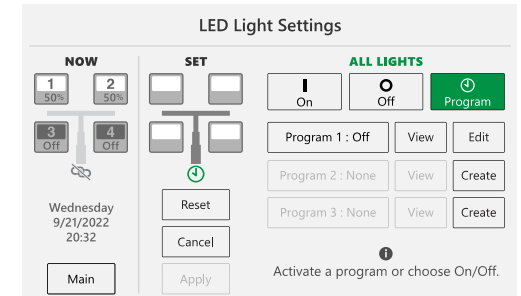
Example: Program screen – Cancel changes



Cancel confirmation

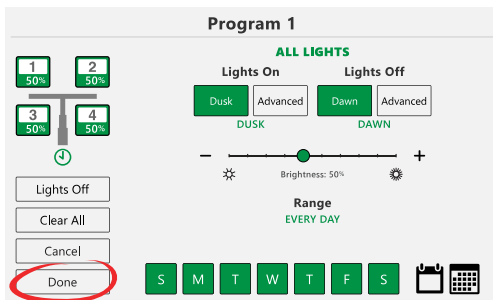


Light Settings screen

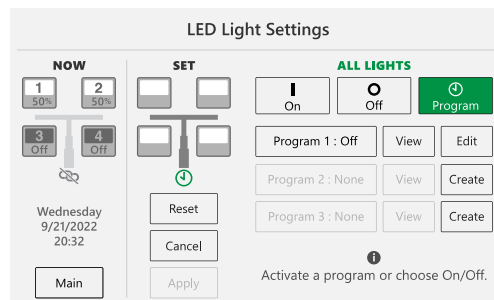


Changes to Program 1 canceled, previous settings retained

Example: Program screen – Save changes



Light Settings screen



Changes to Program 1 saved
Program not activated, changes not applied

Program Date range

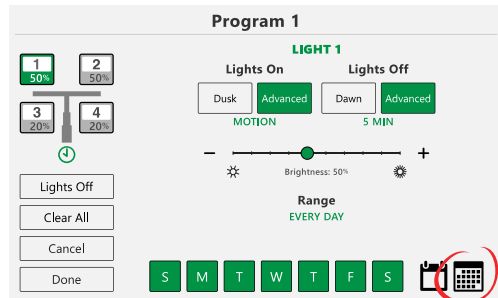
Date range provides two toggled calendars for choosing start and end dates for the program

Start and end dates are inclusive: an active program starts at midnight (0:00:00) on the start date and runs through the entire end date, stopping at 23:59:59

Clearing both dates (start and end) ensures the program will run continuously until it is deactivated or modified, or the operating mode is changed to manual on/off

Current system date and time are shown (below the calendars) for reference

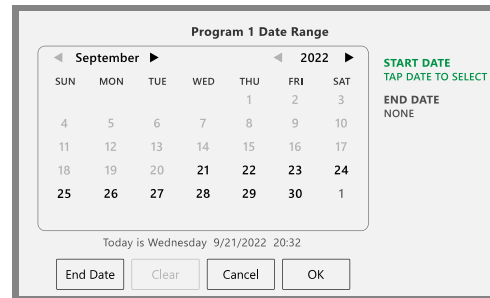
Program screen



Press **Date Range** button to enter start and end dates



Date Range screen: No dates selected



DEFAULTS:

If no start date is already selected, calendar shows the current month

If the start date is already selected, calendar shows the month of the selected start date with the selected date highlighted

Screen always defaults to start date, even if that date is in the past

End Date button acts as a toggle: when pressed, it activates the end-date calendar and changes to **Start Date** button, which returns to the start-date calendar

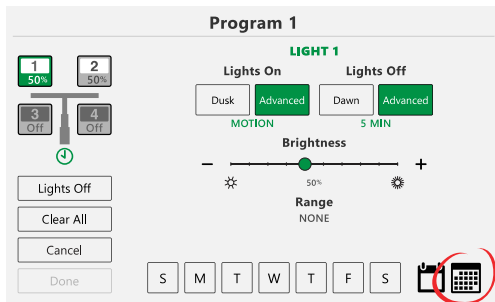
Clear button is inactive until a date is selected for the active (start or end) calendar
Clear button clears only the active selected date (start or end); the other date, if already selected, is unaffected

Cancel button returns to Program screen without saving changes

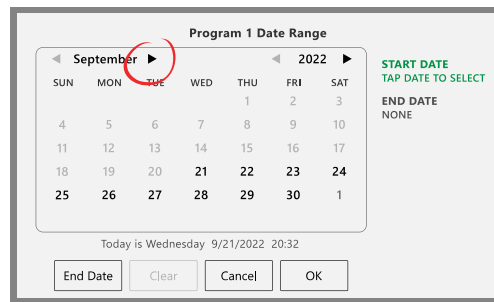
OK button is inactive when only one date (start or end) is selected

OK button saves the selections and returns to the Program screen

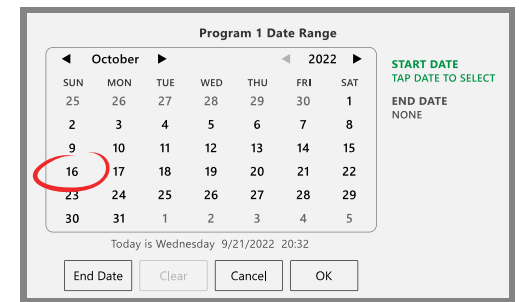
Program Date range selection



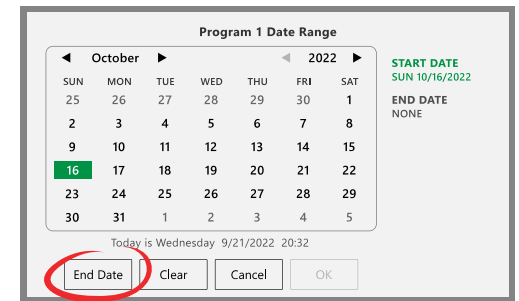
Example: Set October 16 as start date and October 30 as end date for the program to run
 Action: press **Date Range** button to choose start and end dates



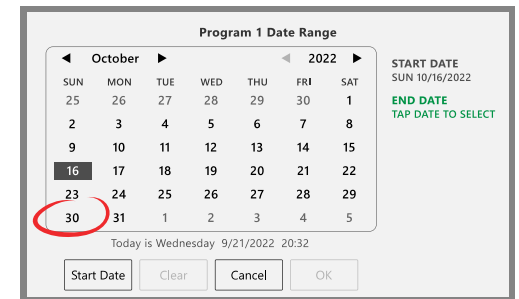
Start date is active, indicated in green
 No dates are selected, calendar shows current month (September)
 Current system date and time are listed below calendar for reference
 Action: show next month (October)



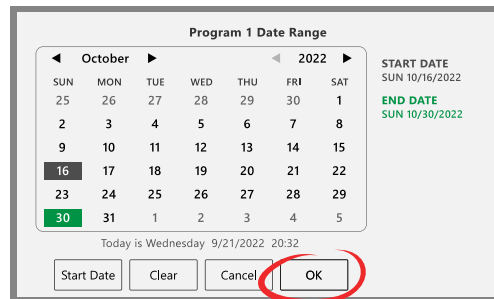
Calendar shows next month
 Action: select start date



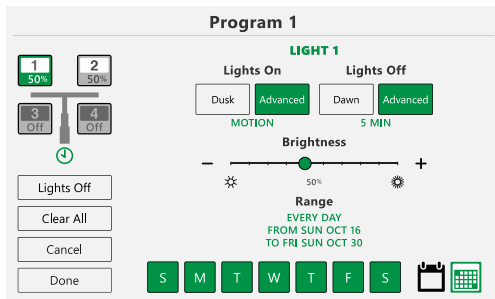
Start date is selected, listed (top right) and highlighted in calendar
 No end date is selected
 Action: toggle to show end-date calendar



End date is active, indicated in green
 No end date is selected, calendar shows selected month (October)
 Action: select end date



Both dates are selected, listed (top right) and highlighted in calendar
 Action: save settings and return to Program screen



Selected date range listed under "Range" heading, indicated in green
Date Range button is active, indicated in green
 All days of the week are automatically selected, indicated in green

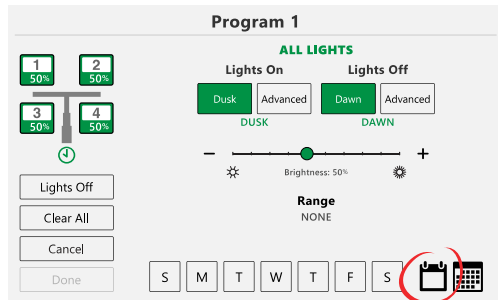
Program Date selection

Calendar for choosing one or more specific dates on which the program will be active

An active program starts at midnight (0:00:00) on each selected date and runs through the entire date, stopping at 23:59:59

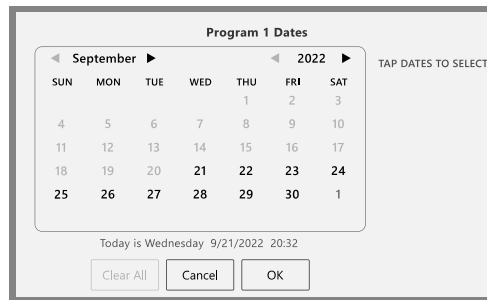
An active program runs uninterrupted through consecutive selected dates

Program screen



Press the **Dates** button to select one or more dates for the program to run

Dates screen: No dates selected



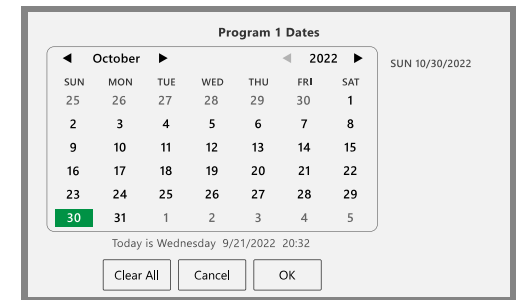
Default month is the current month if no dates are already selected; or, if dates are already selected, the month of the first selected date
Multiple dates can be selected

Clear All button is inactive until the user selects a date

Cancel button returns to Program screen without saving changes

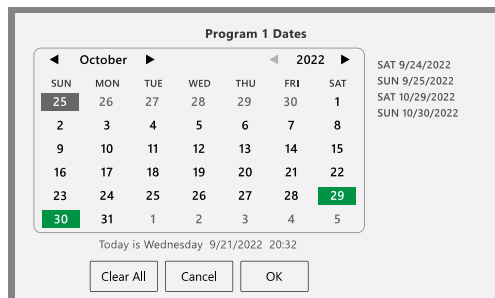
OK button saves selections and returns to the Program screen

Dates screen: One date selected



Selected date listed (top right) and highlighted in calendar
Clear All button clears the selected date

Dates screen: Several dates selected

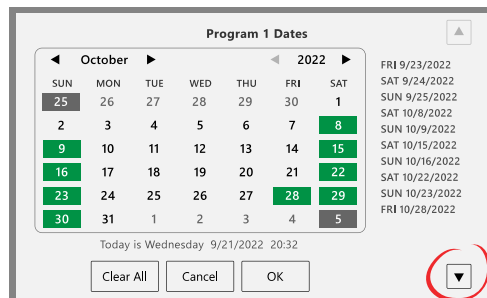


Selected dates listed in ascending chronological order and highlighted in calendar

In the calendar, selected dates in the current month are highlighted green, and in other months are highlighted in gray

Clear All button clears all selected dates—use care, as this cannot be undone

Dates screen: Many dates selected – top of list

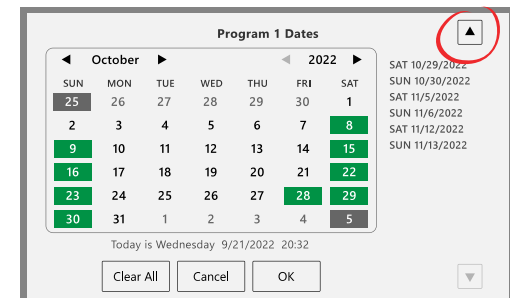


The list shows up to 10 selected dates at a time

When more than 10 dates are selected, **Up/Down** (▲/▼) buttons appear, which let the user scroll through the list one page at a time; the respective button becomes inactive when the start or end of the list is reached

Scrolling through the list does not affect the month shown in the calendar

Dates screen: Many dates selected – bottom of list

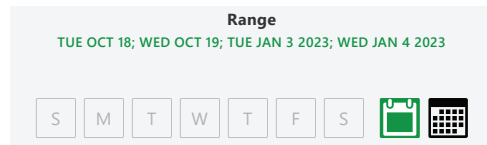


Program Dates and days

When specific dates are selected using the **Dates** calendar (page 31), the **Day** buttons become inactive: the program will only run on the selected dates, overriding the ability to choose days of the week for the program to run

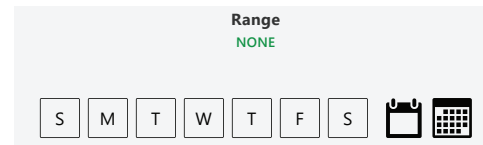
To re-enable the ability to run the program on specific days of the week, it is necessary to either **clear** the selected dates (by first pressing the **Dates** button and then the **Clear All** button on the Dates screen) or **deactivate** the dates by setting start and end dates for the program to run (using the **Date Range** button and then the start- and end-date calendars)

Dates selected



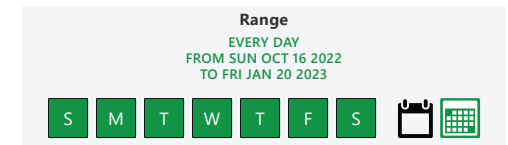
Dates button is active
Day buttons are inactive

Dates cleared



With no dates selected, all dates cleared, or all dates deactivated, the **Day** buttons are active and selectable

Dates deactivated, date range set



If no days are selected before setting the date range, the default when exiting the Date Range screen is that all days are selected; the user can then deselect up to six days

Dates and Date Range buttons

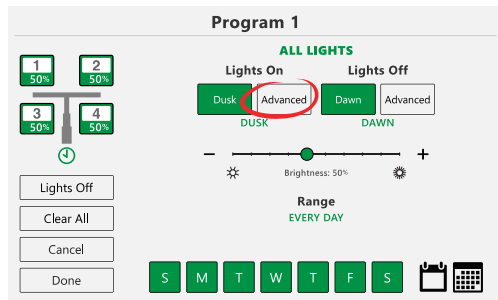


It is not possible to select specific dates and also set a date range; if one of these buttons is active, the other cannot be active

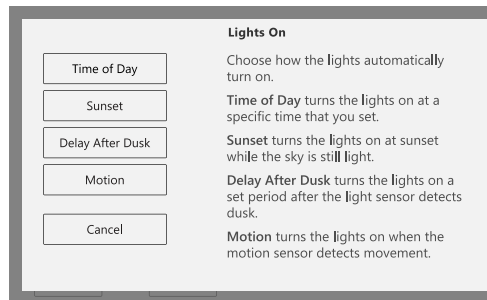
Advanced Program Lights on

Advanced button presents options for turning the lights on automatically

Program screen

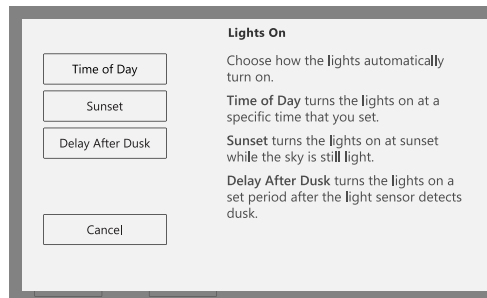


Lights On: Advanced options with motion sensor



Cancel button returns to Light Settings screen without any changes
Other buttons lead to the screens on page 34

Lights On: Advanced options without motion sensor



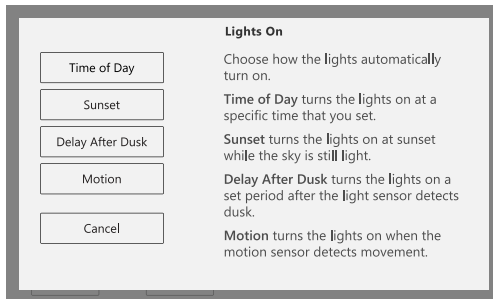
With no motion sensor installed, neither the Motion button nor its description are shown

Advanced Program Lights on options

Option buttons allow the user to switch between any of the screens

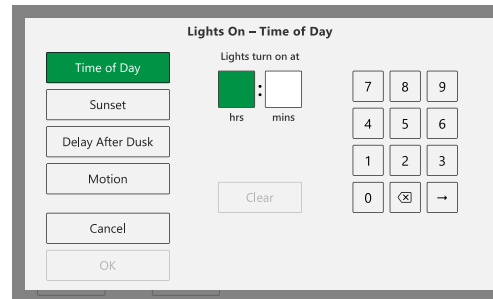
OK button saves the displayed choice (on the active screen only) and returns to Light Settings screen

Lights On: Advanced options



Cancel button returns to Light Settings screen without any changes

Lights On – Time-of-Day screen



By default, the time is blank

OK button is inactive until both hours and minutes are valid

Tap either the hours or minutes box to activate it, then enter a value in military or 24-hour time with the 10-key, from 0:00 to 23:59

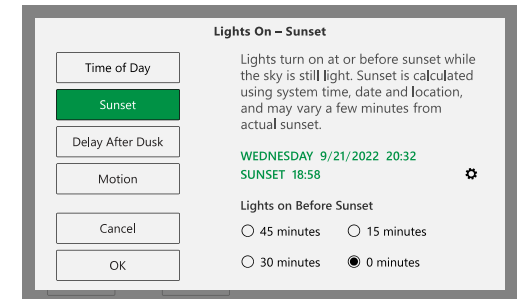
Backspace (⌫) button erases the entry in the active field, and the field remains active

Previous/Next (←/→) button shifts focus between fields

Clear button clears the entire time entry

Cancel button returns to options

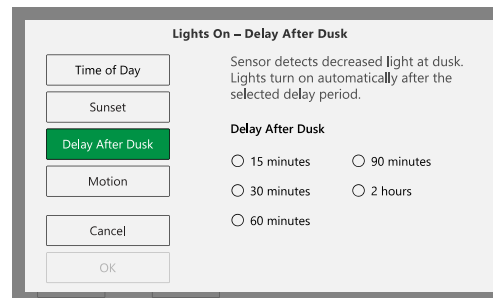
Lights On – Sunset screen



By default, 0 minutes is preselected and the OK button is active

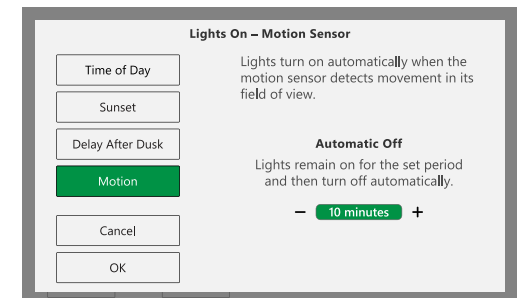
System time and calculated sunset time are displayed for reference; see page 35 for more

Lights On – Delay After Dusk screen



By default, nothing is preselected and the OK button is inactive

Lights On – Motion Sensor screen



By default, 10 minutes is preset and the OK button is active

+/- buttons adjust in 5-minute intervals from 5 to 60

Motion detection turns lights on only if photocell detects low light

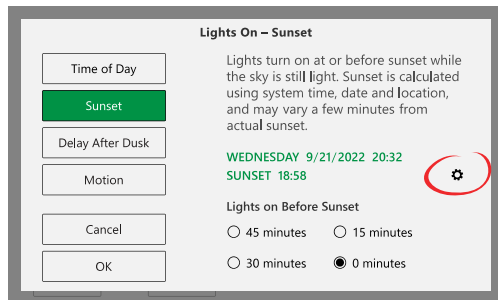
Advanced Program Lights On – Sunset screen

Lights on at Sunset requires the system location to be set (see page 37 for details)

Options allow for automatic location detection (with the optional GPS modem installed), manual entry of a location, or selection of location from a list of cities

The user can override the automatic location (see page 45) or edit a previously set or selected location (see page 47)

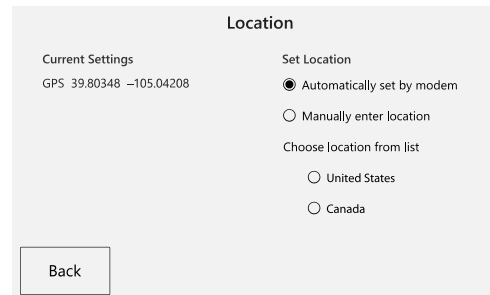
Lights On – Sunset screen



Press the **Settings** (⚙️) button to view, set, or override the location



Location screen: GPS location set by modem



When location is automatically set, Current Settings shows the GPS location

GPS location cannot be edited, but it can be overridden using the other options: press any option to proceed

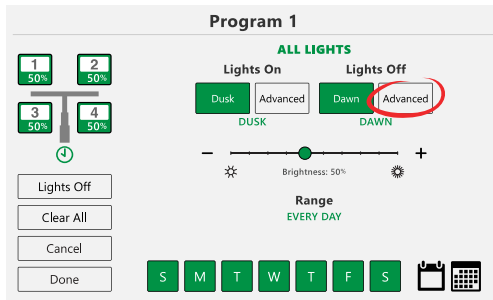
Pressing an option immediately advances to the next screen

Back button returns to Lights On – Sunset screen

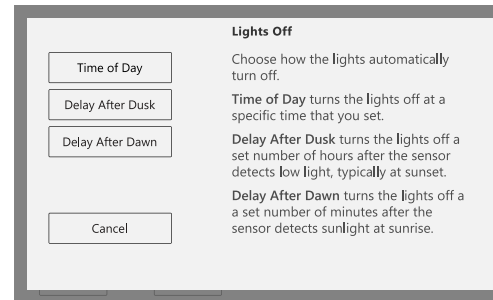
Advanced Program Lights off

Advanced button presents options for turning the lights off automatically

Program screen



Lights Off: Advanced options



Cancel button returns to Light Settings screen without any changes

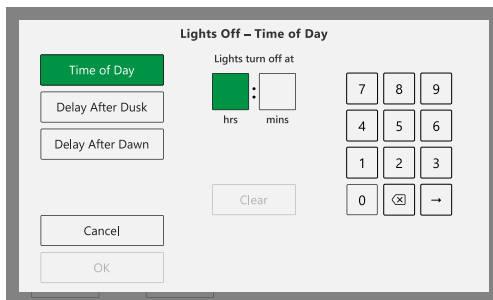
Other buttons lead to the screens below

For motion sensor, see page 34

Option buttons allow the user to switch between any of these screens

OK button saves the displayed choice (on the active screen only) and returns to Light Settings screen

Lights Off – Time of Day screen

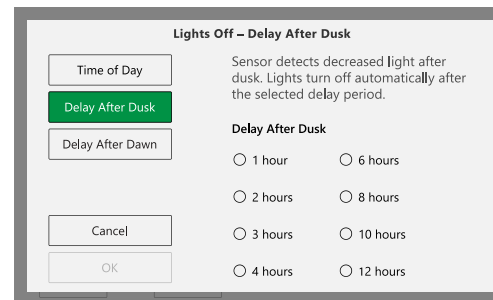


Enter a value in 24-hour time, from 0:00 to 23:59

Previous/Next (←/→) button shifts focus between fields

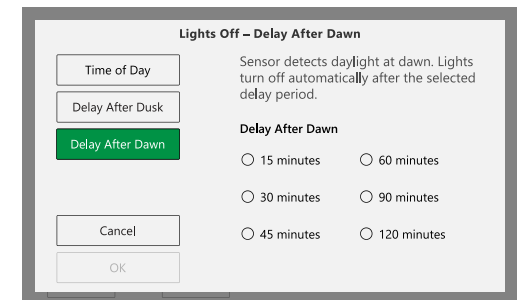
OK button is inactive until both hours and minutes are valid

Lights Off – Delay After Dusk screen



By default, nothing is preselected and the OK button is inactive

Lights Off – Delay After Dawn screen



By default, nothing is preselected and the OK button is inactive

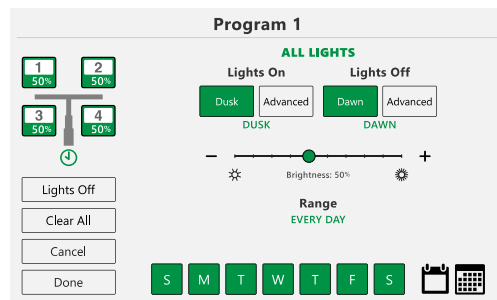
Advanced Program Dusk, dawn, and sunset

Dusk-to-dawn operation uses a photocell sensor to detect ambient light

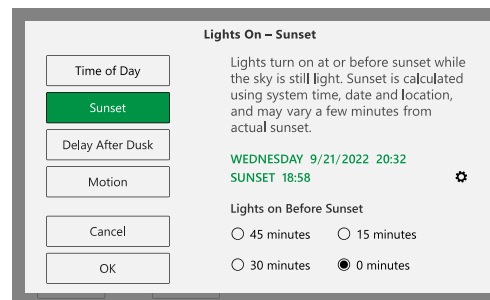
Advanced settings (page 33) include an option for turning lights on at sunset; this option does not use the photocell, but is calculated using system settings

For important considerations when using dusk, dawn, or sunset, see below

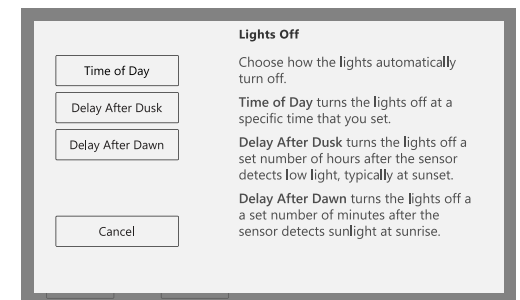
Program screen: Dusk-to-dawn operation



Advanced settings: Lights on at sunset



Advanced settings: Lights off



Dusk and dawn options

Dusk-to-dawn operation is actually, and more accurately, “low light” operation, based on ambient light detected by the system’s photocell sensor

The control system uses a photocell to respond to changes in ambient light, turning the lights on when light decreases (such as at dusk) and turning them off when light increases (such as at dawn)

Although the buttons on the Program screen are labeled “Dusk” and “Dawn,” when operating with these settings, the lights will turn on whenever low light is detected, such with heavy cloud cover, and will turn off when brighter light is detected—this could occur multiple times over the course of a single day

(The system recognizes and does not respond to temporary sources of light, such as vehicle headlights)

Setting the lights to turn on at dusk ensures the lights will come on when ambient light is low, regardless of whether this happens during daylight hours or when it starts to get dark at the end of the day, at twilight

If you choose this setting, be sure to consider this behavior when deciding how to turn the lights off, either at dawn or using the advanced settings shown on page 36; for example:

If you set the lights to turn off at 8:00 a.m., they could turn on again early in the day and stay on up to 24 hours, which would deplete battery power faster than expected

If you set the lights to turn off 6 hours after dusk, they could turn on early in the day and stay on hours after cloud cover breaks and daylight returns

Sunset

The control system requires three variables for turning the lights on at sunset: time, date, and location; the system calculates the time of sunset each day

The system location is automatically set if an (optional) GPS modem is installed; alternatively, the user can manually set a location, and can also override the set location

When the lights are programmed to turn on at sunset, they turn on once per day based on the calculated time of sunset, which changes daily

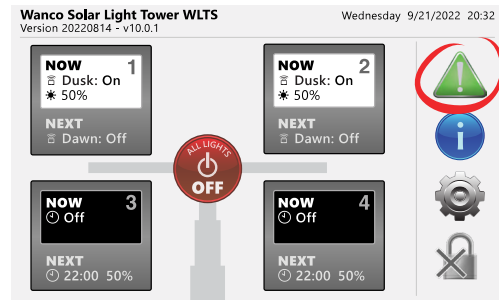
Setting the lights to turn on at sunset ensures the lights come on each day at twilight, when it starts to get dark at the end of the day

If you choose this setting, be sure to consider this time of day when deciding how to turn the lights off, either at dawn or using the advanced settings on page 36

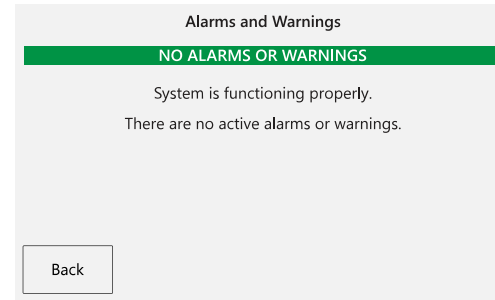
Alarms

After resolving the issue that caused an alarm, the control system may take up to two minutes to clear the alarm; lights may continue “pulse” during this time

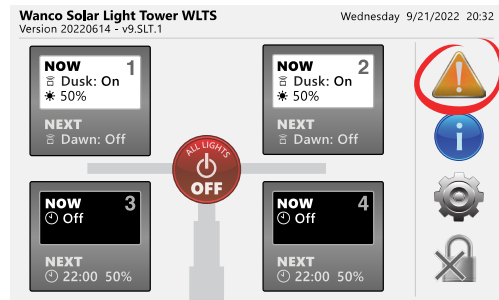
Main screen: No alarms



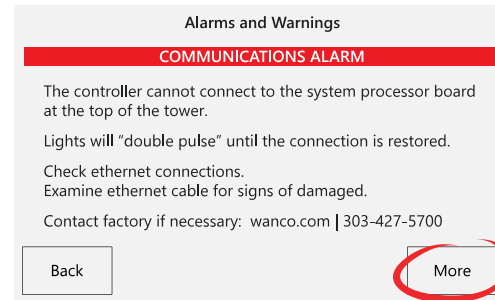
Alarms and Warnings screen: No alarms



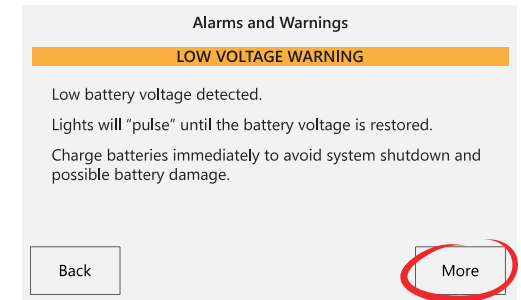
Main screen: Active alarm



Two alarms – Communications failure

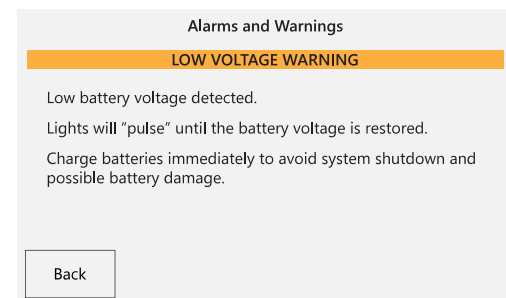
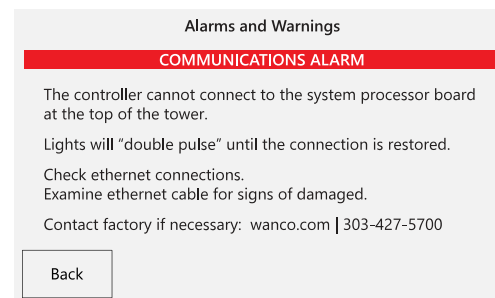


Two alarms – Low voltage



If multiple alarms are active, More button cycles between them
Back button returns to previous screen

One alarm



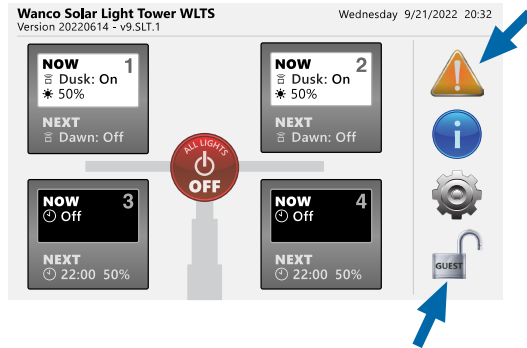
With only one active alarm, the More button does not appear

Alarms Alarms button

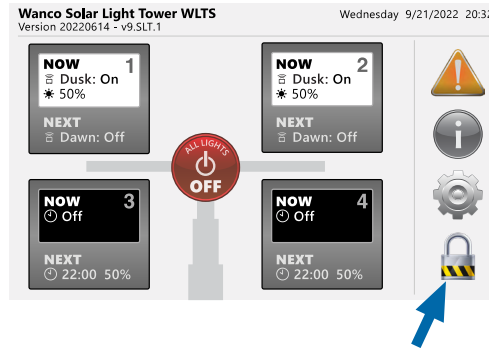
Alarms button is orange with active alarms, otherwise it is green

Alarms button is always enabled regardless of alarm condition, password protection, and login status

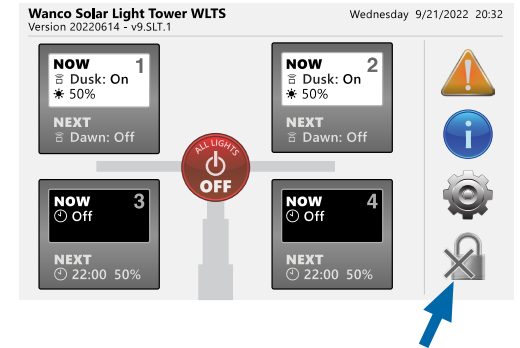
Active alarm, logged in



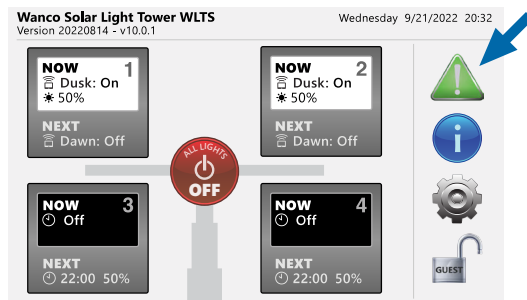
Active alarm, logged out



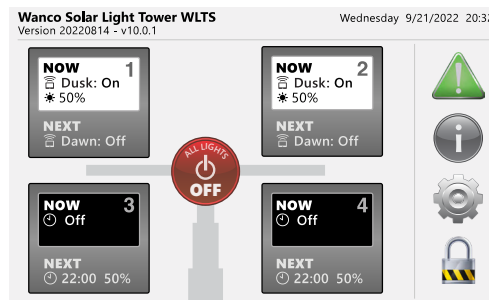
Active alarm, password protection disabled



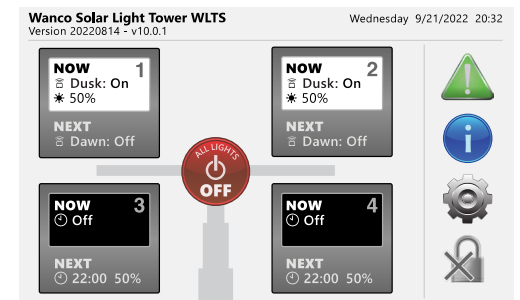
No alarms, logged in



No alarms, logged out



No alarms, password protection disabled

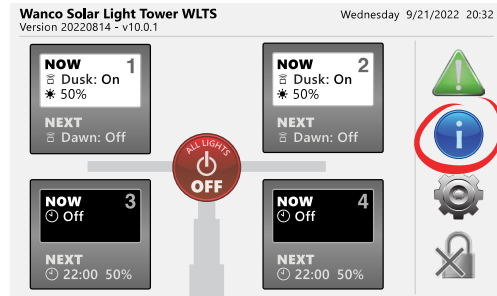


Information Screen

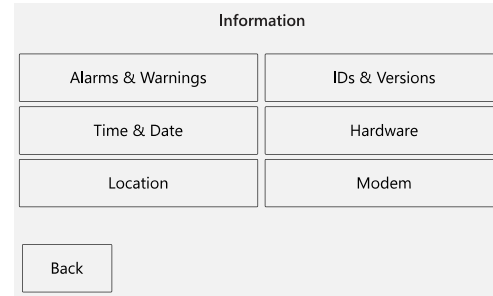
Provides access to various information about the system
No changes to any settings can be made from these screens

Back button returns to previous screen

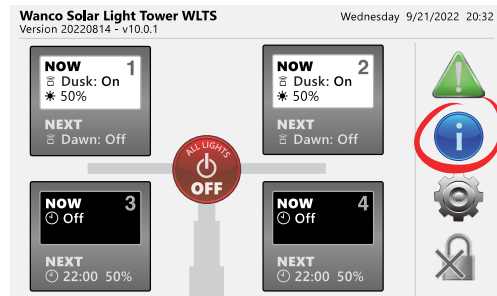
System Information button



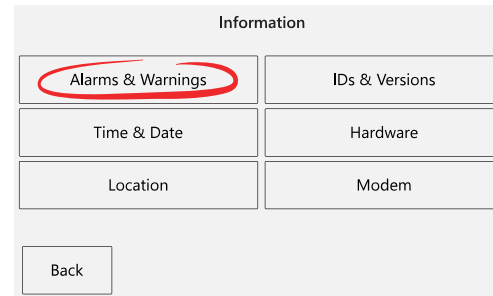
Information screen



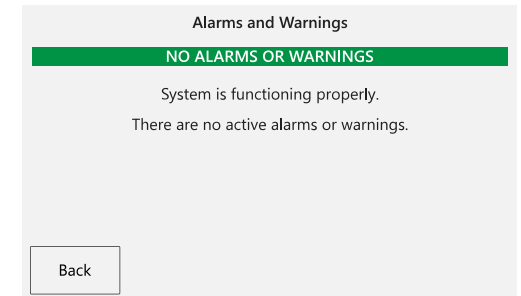
System Information button



Alarms & Warnings button



No alarms

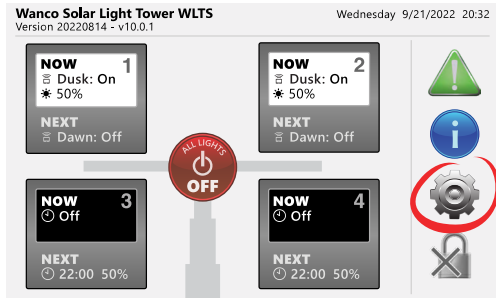


Information screen provides access to Alarms & Warnings screen, same as the Alarms button on the Main screen (previous page)

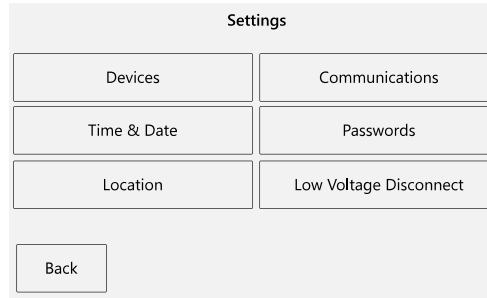
System Settings

To view or change system settings, press **Settings** (⚙️) button on the Main screen

System Settings button

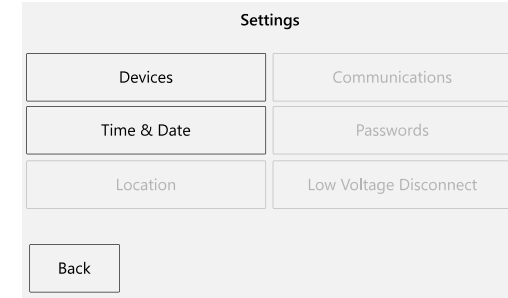


Settings screen



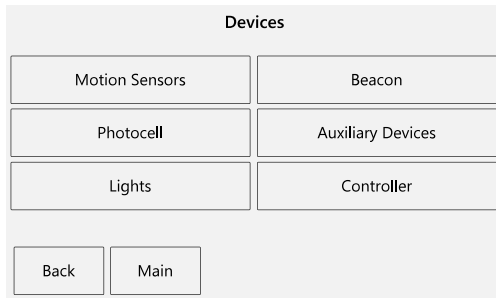
All buttons are active when password protection is disabled
With password protection enabled, all buttons are active when logged in with service-level access

Settings screen, guest login

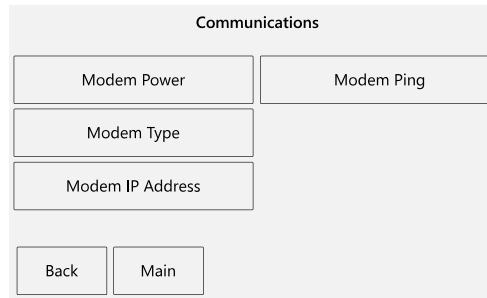


When logged in with guest-level access, only device settings and time & date can be managed; buttons for other settings are inactive

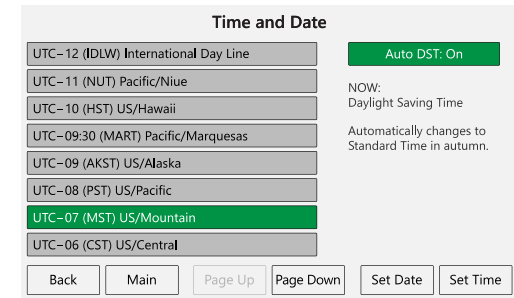
Devices screen



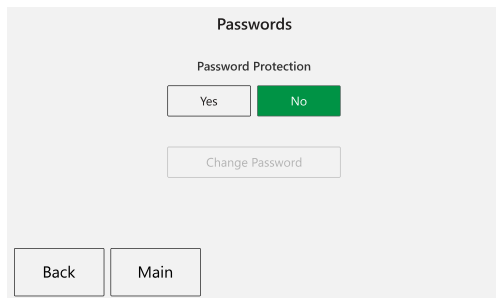
Communications screen



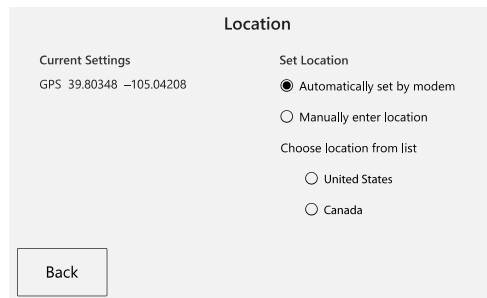
Time and Date screen



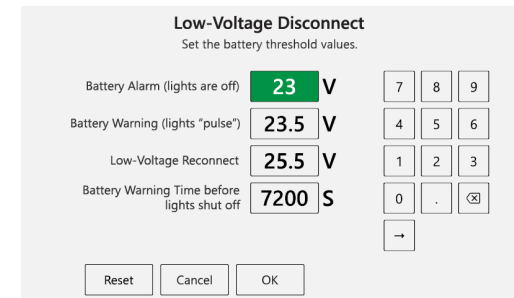
Passwords screen



Location screen



Low-Voltage Disconnect screen



Settings Time and date

Press **Settings** (⚙️) button on the Main screen, then **Time & Date** (see page 41)

Time and Date screen

Time and Date

UTC-12 (IDLW) International Day Line Auto DST: On

UTC-11 (NUT) Pacific/Niue

UTC-10 (HST) US/Hawaii

UTC-09:30 (MART) Pacific/Marquesas

UTC-09 (AKST) US/Alaska

UTC-08 (PST) US/Pacific

UTC-07 (MST) US/Mountain

UTC-06 (CST) US/Central

NOW: Daylight Saving Time

Automatically changes to Standard Time in autumn.

Back Main Page Up Page Down **Set Date** Set Time

Selected time zone highlighted in green

Change the time zone by pressing a different time zone button

Page Up and **Page Down** buttons scroll through the time zones one page at a time; the respective button becomes inactive when the start or end of the list is reached

Set Date and **Set Time** buttons let the user view and edit the system time and date

Back button saves changes and returns to previous screen

Main button saves changes and returns to Main screen

Set Date screen

Set Date

Month Day Year

09 21 22

7 8 9

4 5 6

1 2 3

0 (X) -

Reset Cancel OK

Use number buttons to enter the correct date

Active field is highlighted in blue

Backspace (X) button erases the right-most character in the active field

Previous/Next (←/→) button shifts focus between fields

Reset button reverts entry back to current system date

Cancel button returns to Time and Date screen without saving changes

OK button saves changes and returns to Time and Date screen

Time and Date screen

Time and Date

UTC-12 (IDLW) International Day Line Auto DST: On

UTC-11 (NUT) Pacific/Niue

UTC-10 (HST) US/Hawaii

UTC-09:30 (MART) Pacific/Marquesas

UTC-09 (AKST) US/Alaska

UTC-08 (PST) US/Pacific

UTC-07 (MST) US/Mountain

UTC-06 (CST) US/Central

NOW: Daylight Saving Time

Automatically changes to Standard Time in autumn.

Back Main Page Up Page Down Set Date **Set Time**

Set Time screen: Auto DST on (summer)

Set Time

Hour Minute Second

20 32 01

Daylight Saving Time

7 8 9

4 5 6

1 2 3

0 (X) -

Reset Cancel OK

Use number buttons to enter the correct time

With a time zone selected, the current time (Standard or Daylight Saving) is indicated below the time

Reset button reverts entry back to current system time

Auto DST on (winter)

Set Time

Hour Minute Second

14 25 00

Standard Time

7 8 9

4 5 6

1 2 3

0 (X) -

Reset Cancel OK

Settings Time and date: Auto DST

Automatic Daylight Saving Time (Auto DST) is enabled by default

Auto DST automatically changes the system time from standard time to Daylight Saving Time on the appropriate date in springtime, and back again in autumn, ensuring that time-based automatic operation of the light tower continues as expected despite the time shift

For locations that do not observe Daylight Saving Time, and for users who prefer to turn this feature off, Auto DST can be disabled

Auto DST on

The 'Time and Date' settings screen shows a list of time zones. The 'Auto DST: On' button is highlighted in green. Below the list, it says 'NOW: Daylight Saving Time' and 'Automatically changes to Standard Time in autumn.' At the bottom are buttons for 'Back', 'Main', 'Page Up', 'Page Down', 'Set Date', and 'Set Time'.

Auto DST button acts as a toggle: pressing it disables or re-enables the automatic system time change

When enabled, the Auto DST button is highlighted in green, and the system automatically changes between Standard Time and Daylight Saving Time on the appropriate days of the year

Auto DST off

The 'Time and Date' settings screen shows 'Auto DST: Off' at the top right. The 'Set Time' button at the bottom right is highlighted in red. The time zone list is present but appears inactive. At the bottom are buttons for 'Back', 'Main', 'Page Up', 'Page Down', 'Set Date', and 'Set Time'.

When Auto DST is disabled, the time zone buttons are inactive
The date and time can be changed

Auto DST off

The 'Set Time' screen shows the current time as 20:32:01. Below the time are buttons for 'Reset', 'Cancel', and 'OK'. To the right is a numeric keypad.

With Auto DST disabled, the system does not know whether the current time is Standard Time or DST, and therefore no note is shown below the time (compare with screens below)

Daylight Saving Time

The 'Time and Date' settings screen shows 'Auto DST: On' in green. Below the list, it says 'NOW: Daylight Saving Time'. A blue arrow points to this text. Another blue arrow points to the 'Auto DST: On' button. At the bottom are buttons for 'Back', 'Main', 'Page Up', 'Page Down', 'Set Date', and 'Set Time'.

With Auto DST enabled, the current time—Standard Time or DST—is indicated below the Auto DST button on the Time and Date screen, and below the time on the Set Time screen

The 'Set Time' screen shows the current time as 20:32:01. Below the time, it says 'Daylight Saving Time'. A blue arrow points to this text. At the bottom are buttons for 'Reset', 'Cancel', and 'OK'.

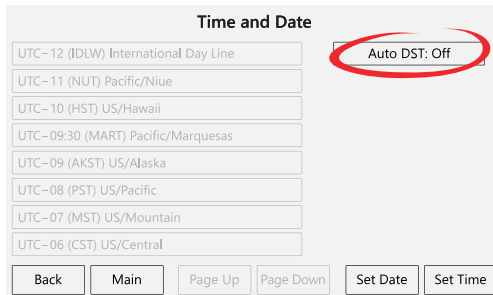
Standard Time

The 'Time and Date' settings screen shows 'Auto DST: On' in green. Below the list, it says 'NOW: Standard Time'. A blue arrow points to this text. At the bottom are buttons for 'Back', 'Main', 'Page Up', 'Page Down', 'Set Date', and 'Set Time'.

The 'Set Time' screen shows the current time as 14:25:00. Below the time, it says 'Standard Time'. At the bottom are buttons for 'Reset', 'Cancel', and 'OK'.

Settings Time and date: Auto DST – choose time zone

Auto DST disabled



Time and Date

UTC-12 (IDLW) International Day Line

UTC-11 (NUT) Pacific/Niue

UTC-10 (HST) US/Hawaii

UTC-09:30 (MART) Pacific/Marquesas

UTC-09 (AKST) US/Alaska

UTC-08 (PST) US/Pacific

UTC-07 (MST) US/Mountain

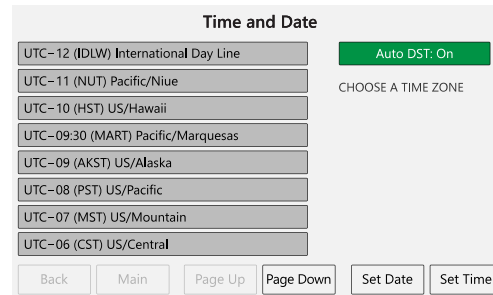
UTC-06 (CST) US/Central

Auto DST: Off

Back Main Page Up Page Down Set Date Set Time

When Auto DST is disabled, the time zone buttons are inactive

Auto DST re-enabled



Time and Date

UTC-12 (IDLW) International Day Line

UTC-11 (NUT) Pacific/Niue

UTC-10 (HST) US/Hawaii

UTC-09:30 (MART) Pacific/Marquesas

UTC-09 (AKST) US/Alaska

UTC-08 (PST) US/Pacific

UTC-07 (MST) US/Mountain

UTC-06 (CST) US/Central

Auto DST: On

CHOOSE A TIME ZONE

Back Main Page Up Page Down Set Date Set Time

When Auto DST is re-enabled, a time zone must be selected before exiting the Time and Date settings screen

Back and Main buttons are both inactive

"Choose a time zone" note appears under the Auto DST button

The date and time can be changed

Settings Location

Press **Settings** (⚙️) button on the Main screen, then **Location** (see page 41)

Location is required for programming lights to turn on at sunset (see page 35)

When equipped with the (optional) GPS modem, location is automatically detected

User can set a location or override the set location

To change settings, press any option (see page 47)

Location screen: Location automatically set

The screenshot shows the 'Location' settings screen. On the left, under 'Current Settings', it displays 'GPS 39.80348 -105.04208'. On the right, under 'Set Location', the 'Automatically set by modem' option is selected with a radio button. Below it are 'Manually enter location' and 'Choose location from list' (with 'United States' and 'Canada' as options). A 'Back' button is at the bottom left.

With a modem, Current Settings shows the GPS modem location

Location screen: Location manually entered

The screenshot shows the 'Location' settings screen. On the left, under 'Current Settings', it displays 'Latitude 39.80348' and 'Longitude -105.04208'. On the right, under 'Set Location', the 'Manually enter location' option is selected with a radio button. Below it are 'Automatically set by modem' and 'Choose location from list' (with 'United States' and 'Canada' as options). A 'Back' button is at the bottom left.

When location is manually entered, Current Settings shows latitude and longitude

Location screen: Location chosen from list

The screenshot shows the 'Location' settings screen. On the left, under 'Current Settings', it displays 'Arvada, CO USA'. On the right, under 'Set Location', the 'United States' option is selected under the 'Choose location from list' section. Other options include 'Automatically set by modem', 'Manually enter location', and 'Canada'. A 'Back' button is at the bottom left.

When location is chosen from a list, Current Settings shows city name

Location screen: Location not set

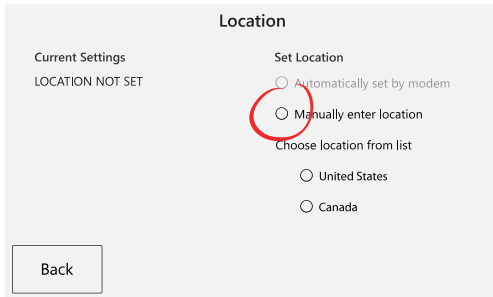
The screenshot shows the 'Location' settings screen. On the left, under 'Current Settings', it displays 'LOCATION NOT SET'. On the right, under 'Set Location', the 'Automatically set by modem' option is selected with a radio button. Below it are 'Manually enter location' and 'Choose location from list' (with 'United States' and 'Canada' as options). A 'Back' button is at the bottom left.

Without a modem, Current Settings shows the location is not set unless the user has previously set the location

Pressing an option immediately advances to the next screen (see page 46)

Settings Location: Not set

Location not set

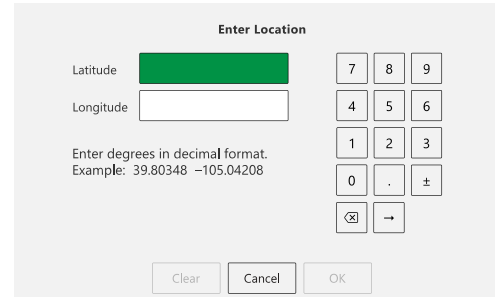


Without a modem, the screen defaults to require a location if one has not been previously set

Automatic option is disabled when a modem is not present

Pressing an option immediately advances to the next screen

Enter location



Use number buttons to enter the location's latitude & longitude in decimal degrees

Active field is highlighted in green

Backspace (⌫) button erases the right-most character in the active field

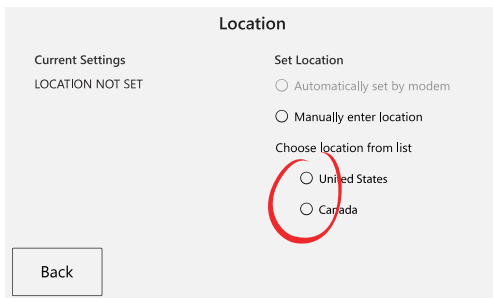
Previous/Next (←/→) button shifts focus between fields

Clear button is inactive until a value is entered, then clears the active entry

Cancel button returns to Location screen without saving changes

OK button is inactive until values are present for both latitude and longitude, then saves changes and opens time/date prompt (see page 48)

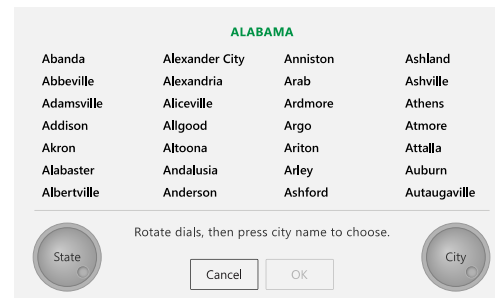
Location not set



Only U.S. and Canadian cities are stored in the control system

For other countries, the user must manually enter the location (see above)

Choose U.S. state and city



Screen defaults to the first state and city, listed alphabetically

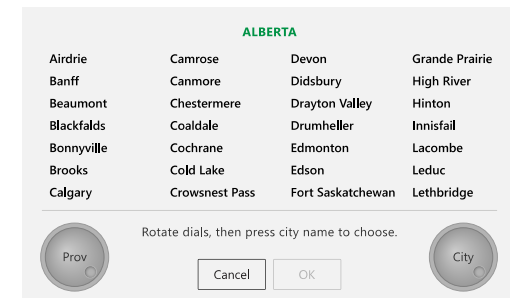
Active state name is displayed at the top of the screen

Brief instructions tell the user to rotate dials (for state and city)

Cancel button returns to Location screen without saving changes

OK button is inactive until a city is selected, then saves the selection and opens time/date prompt (see page 48)

Choose Canadian province and city



Screen defaults to the first province and city, listed alphabetically

Active province name is displayed at the top of the screen

Brief instructions tell the user to rotate dials (for province and city)

Settings Location: Edit

Location previously manually entered

Location

Current Settings
Latitude 39.80348
Longitude -105.04208

Set Location

Automatically set by modem

Manually enter location

Choose location from list

United States

Canada

Back



Enter latitude and longitude

Enter Location

Latitude

Longitude

Enter degrees in decimal format.
Example: 39.80348 -105.04208

7 8 9
4 5 6
1 2 3
0 . ±
⊗ →

Clear Cancel OK

Allows the user to edit the previously entered latitude and longitude

Active field is highlighted in green

Backspace (⊗) button erases the right-most character in the active field

Previous/Next (←/→) button shifts focus between fields

Clear button clears the active entry

Cancel button returns to Location screen without saving changes

OK button saves changes and opens time/date prompt (see page 48)

Location previously selected from list

Location

Current Settings
Arvada, CO USA

Set Location

Automatically set by modem

Manually enter location

Choose location from list

United States

Canada

Back



Choose state and city

COLORADO

Arboles	Ault	Bayfield	Blanca
Aristocrat Ranch	Aurora	Bennett	Boone
Arriba	Avon	Berkley	Boulder
Arvada	Avondale	Berthoud	Breckenridge
Aspen	Bark Ranch	Bethune	Brighton
Aspen Park	Basalt	Beulah Valley	Broomfield
Atwood	Battlement Mesa	Black Forest	Brush

Rotate dials, then press city name to choose.

State City

Cancel OK

Allows the user to change the previously selected state/province and city

Previously selected city listed in the first column, highlighted in green

Cancel button returns to Location screen without saving changes

OK button saves the selection and opens time/date prompt (see page 48)

Settings Location: Time & date – change

After changing the system location, the user is prompted to change the system time and date

If the displayed time and date are correct, the user can choose not to change them (see page 49)

Yes button advances to Time and Date screen

Enter Location screen

Enter Location

Latitude **39.80348**

Longitude **-105.04208**

Enter degrees in decimal format.
Example: 39.80348 -105.04208

Clear Cancel **OK**



Location

Current Settings Set Location

Latitude 39.80348

Longitude -105.04208

Time & Date
Wednesday 9-21-2022 20:32
Change?

No **Yes**

Back



Time and Date screen

Time and Date

UTC-12 (IDLW) International Day Line **Auto DST: On**

UTC-11 (NUT) Pacific/Niue

UTC-10 (HST) US/Hawaii

UTC-09:30 (MART) Pacific/Marquesas

UTC-09 (AKST) US/Alaska

UTC-08 (PST) US/Pacific

UTC-07 (MST) US/Mountain

UTC-06 (CST) US/Central

CHOOSE A TIME ZONE

Back Main Page Up Page Down Set Date Set Time

Select the correct time zone by pressing a time zone button

Set Date and Set Time buttons let the user view and edit the system time and date

For more, see pages 42 through 44

U.S. City screen

COLORADO

Arboles	Ault	Bayfield	Blanca
Aristocrat Ranch	Aurora	Bennett	Boone
Arriba	Avon	Berkley	Boulder
Arvada	Avondale	Berthoud	Breckenridge
Aspen	Bark Ranch	Bethune	Brighton
Aspen Park	Basalt	Beulah Valley	Broomfield
Atwood	Battlement Mesa	Black Forest	Brush

Rotate dials, then press city name to choose.

State City

Cancel **OK**



Location

Current Settings Set Location

Arvada, CO USA

Time & Date
Wednesday 9-21-2022 20:32
Change?

No **Yes**

Back



Time and Date screen

Time and Date

UTC-12 (IDLW) International Day Line **Auto DST: On**

UTC-11 (NUT) Pacific/Niue

UTC-10 (HST) US/Hawaii

UTC-09:30 (MART) Pacific/Marquesas

UTC-09 (AKST) US/Alaska

UTC-08 (PST) US/Pacific

UTC-07 (MST) US/Mountain

UTC-06 (CST) US/Central

NOW:
Daylight Saving Time

Automatically changes to Standard Time in autumn.

Back Main Page Up Page Down Set Date Set Time

After selecting a city, the time zone is automatically selected

Change the time zone, if needed, by pressing a different time zone button

Settings Location: Time & date – no change

After changing the system location, the user is prompted to change the system time and date

If the displayed time and date are correct, the user can choose not to change them

No button returns to Location screen

Enter Location screen

Enter Location

Latitude **39.80348**

Longitude **-105.04208**

Enter degrees in decimal format.
Example: 39.80348 -105.04208

Clear Cancel **OK**



Location

Current Settings Set Location

Latitude 39.80348

Longitude -105.04208

Time & Date
Wednesday 9-21-2022 20:32
Change?
No Yes

Back



Location screen: Location manually entered

Location

Current Settings
Latitude 39.80348
Longitude -105.04208

Set Location

Automatically set by modem

Manually enter location

Choose location from list

United States

Canada

Back

U.S. City screen

COLORADO

Arboles	Ault	Bayfield	Blanca
Aristocrat Ranch	Aurora	Bennett	Boone
Arriba	Avon	Berkley	Boulder
Arvada	Avondale	Berthoud	Breckenridge
Aspen	Bark Ranch	Bethune	Brighton
Aspen Park	Basalt	Beulah Valley	Broomfield
Atwood	Battlement Mesa	Black Forest	Brush

Rotate dials, then press city name to choose.

State City

Cancel **OK**



Location

Current Settings Set Location

Arvada, CO USA

Time & Date
Wednesday 9-21-2022 20:32
Change?
No Yes

Back



Location screen: Location chosen from list

Location

Current Settings
Arvada, CO USA

Set Location

Automatically set by modem

Manually enter location

Choose location from list

United States

Canada

Back

Settings Devices: Photocell

Press **Settings** (⚙️) button on the Main screen, then **Devices**, then **Photocell** (see page 41)

Photocell brightness determines how the control system responds to changes in ambient light levels, turning on the lights when ambient light decreases (such as at dusk) and turning them off when light increases (such as at dawn)

The photocell trim changes on/off times up to approximately ± 30 minutes from default when the photocell is controlling the lights

The user can make independent adjustments for turning the lights on (dusk) and off (dawn)

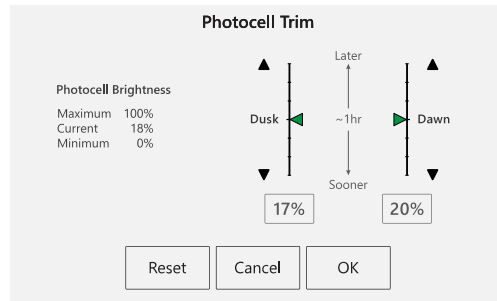
Increasing the photocell trim makes the lights turn on sooner and off later; decreasing the trim turns the lights on later and off sooner

Reset button resets to default of no offset (0 trim) for both dusk and dawn

Cancel button returns to Devices screen without saving changes

OK button saves the trim settings and returns to the Devices screen

Default trim



Independent trim for lights on (dusk) and lights off (dawn)

Up/Down (▲ / ▼) buttons adjust trim with each press

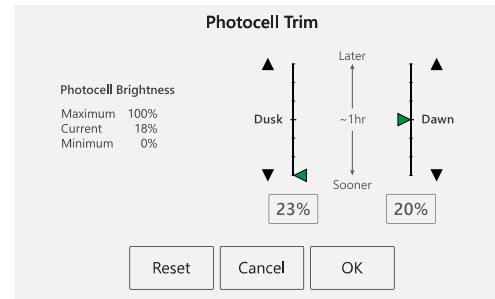
Green arrows on sliders indicate current trim

Adjust trim in approximately 10-minute increments to a maximum of about 30 minutes later or 30 minutes earlier than the default

Default (zero trim) position is green arrows in the center position, as shown above

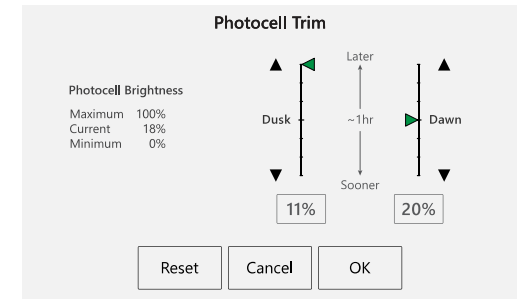
Percentage displayed below each slider shows trim relative to current brightness, which is shown below "Photocell Brightness" heading

Dusk: trim sooner



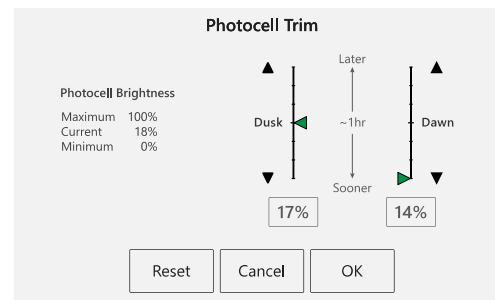
To make the lights turn on sooner, adjust Dusk to increase the photocell trim

Dusk: trim later



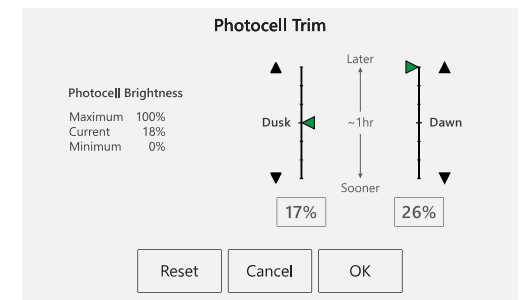
To make the lights turn on later, adjust Dusk to reduce the photocell trim

Dawn: trim sooner



To make the lights turn off sooner, adjust Dawn to reduce the photocell trim

Dawn: trim later

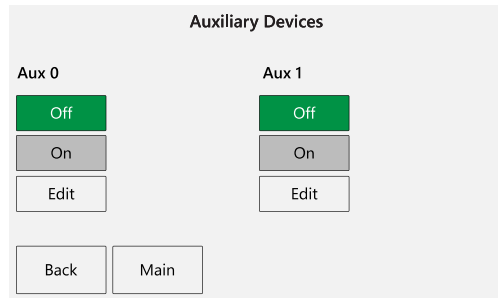


To make the lights turn off later, adjust Dawn to increase the photocell trim

Settings Devices: Auxiliary devices

Press **Settings** (⚙️) button on the Main screen, then **Devices**, then **Auxiliary Devices** (see page 41)

Auxiliary Devices settings



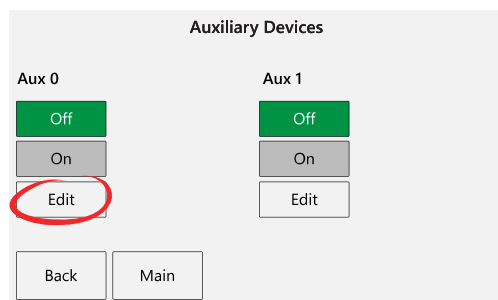
On and **Off** buttons control power to the circuits for connected auxiliary devices

Active power state is highlighted in green

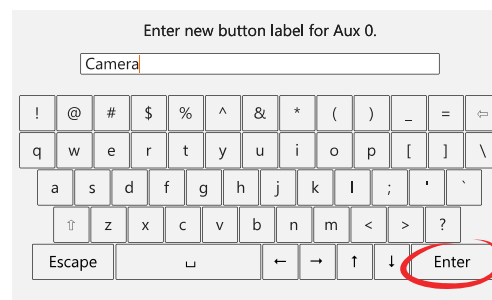
Edit buttons launch the alphanumeric keyboard, enabling the user to change the button label for the installed auxiliary device

If the user deletes a label with the keyboard **Backspace** (←) key, or enters only spaces, the button label is automatically set to the default, "Aux 0" or "Aux 1"

Customize button label



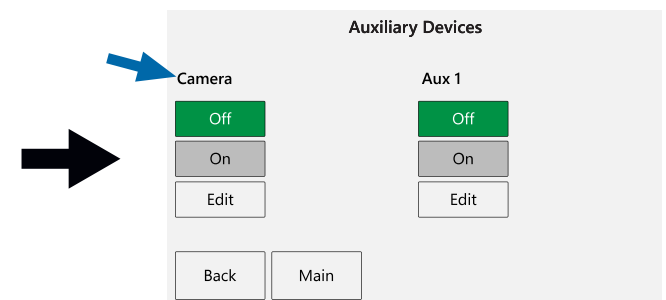
Example: "Camera"



User can enter any label using upper and lower case characters on the virtual keyboard

Labels too long to fit are automatically cut off

Custom button label



After editing, the new label replaces the previous label

Settings Devices: Remote Control Lights

Press **Settings** (⚙️) button on the Main screen, then **Devices**, then **Lights** (see page 41)

External software can switch lights on and off by remote control only when allowed in settings (optional Deluxe Power Management required)

When lights are switched off by remote control, an alarm is triggered; when lights are switched on remotely, no alarm is triggered

With remote control not allowed, a remote control attempt triggers a warning

Remote Control Lights allowed



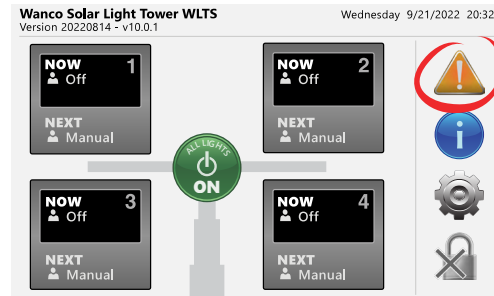
Yes and No buttons set whether remote control of lights is allowed

Pressing either button changes the allowed condition

Active state is highlighted in green

Default state is allowed (Yes)

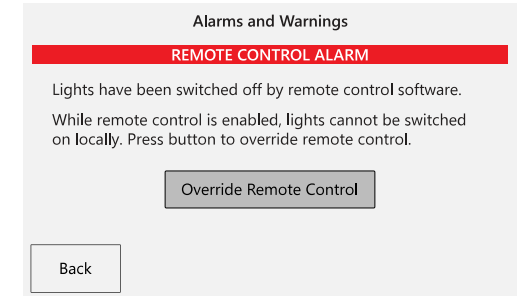
Remote control enabled: Lights switched off remotely, alarm activated



With remote control allowed, when lights are switched off remotely, the Remote Control Alarm is activated

The alarm indicates remote control was requested and allowed

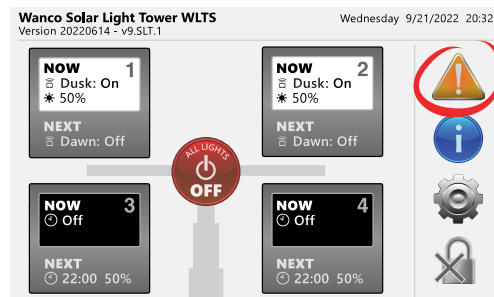
Lights can be controlled locally



Remote Control Lights not allowed

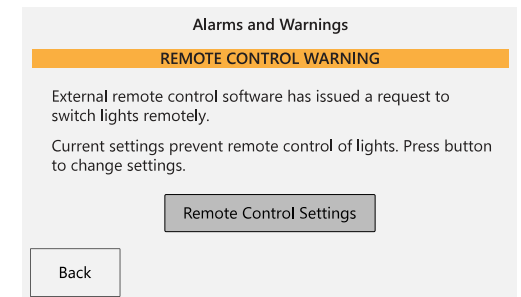


Remote control disabled: Remote control attempted, warning activated



With remote control not allowed, when an attempt is made to switch lights on or off remotely, the Remote Control Warning is activated

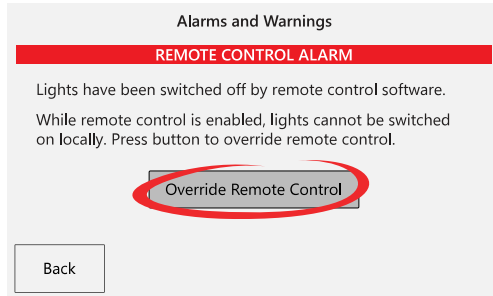
The warning indicates remote control was requested but denied



Settings Devices: Remote Control Alarm & Warning

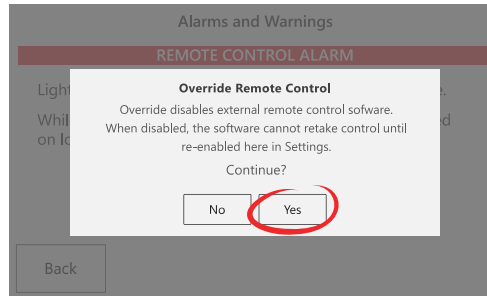
After resolving the issue that caused an alarm, the control system make take up to two minutes to clear the alarm

Remote Control Alarm



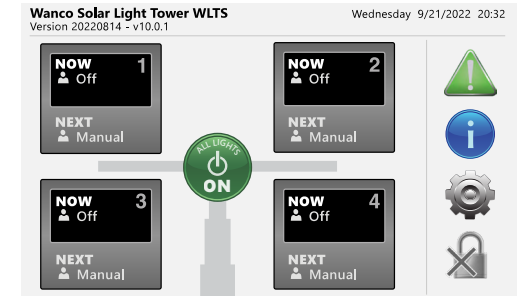
Remote control alarm provides override option on alarm screen

Override confirmation



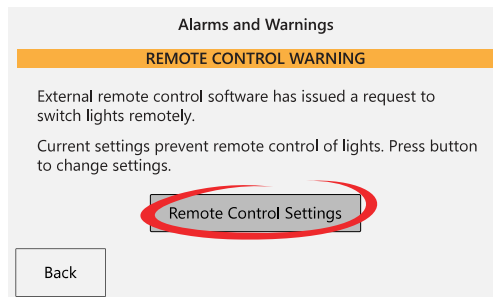
Yes button cancels alarm, disables remote control, and returns to Main screen
No button closes confirmation

Remote Control Lights setting: Disabled



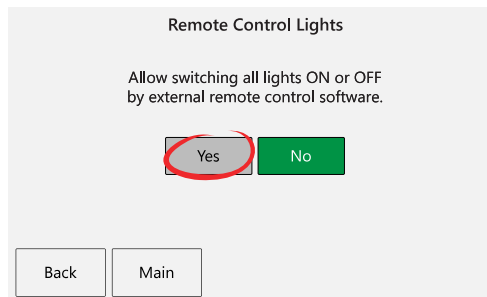
Alarm canceled, override applied
Lights can be controlled locally

Remote Control Warning



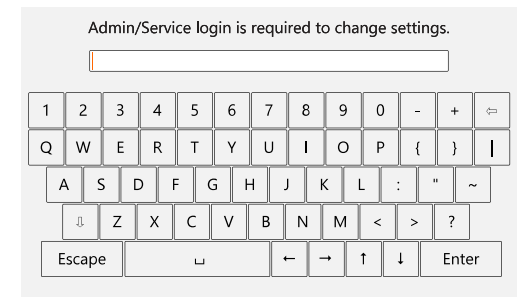
Remote control warning provides redirect to setting screen

Remote Control Lights setting: Disabled



With password protection enabled, Yes button advances to password entry
Back button returns to Warning screen
Main button returns to Main screen and cancels warning

Password entry screen



Enter service-level password
With correct password, Enter button enables remote control, cancels warning, and returns to Main screen

Settings Devices: Controller

Press **Settings** (⚙️) button on the Main screen, then **Devices**, then **Controller** (see page 41)

Controller settings

Controller

Screen Brightness : 80	Reset System
Screen Off Time	Enter VIN
Temperature Mode : °F	Clear Run Timer
Quick Select Buttons	

Back Main

Screen Brightness

Screen Brightness

Brightness

80

7	8	9
4	5	6
1	2	3
0	ⓧ	→

Clear Cancel OK

Set the touchscreen display brightness level: a higher number makes the screen brighter, while a lower number makes it dimmer. The screen draws more power from the batteries when it is bright, and less power when dim.

Screen Off Time

Screen Timeout Delay

Set screen timeout delay or set to 0 for continuous display.

Hour	Minute	Second
00	20	00

7	8	9
4	5	6
1	2	3
0	ⓧ	→

Clear Cancel OK

Set the screen timeout delay. The screen draws more power from the batteries when it is on, and less power when off.

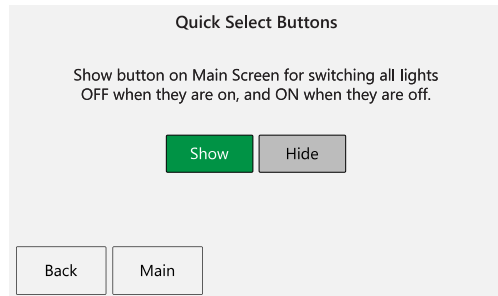
Settings Devices: Controller – Quick Select buttons

Press **Settings** (⚙️) button on the Main screen, then **Devices, Controller, and Quick Select Buttons** (see pages 41 and 54)

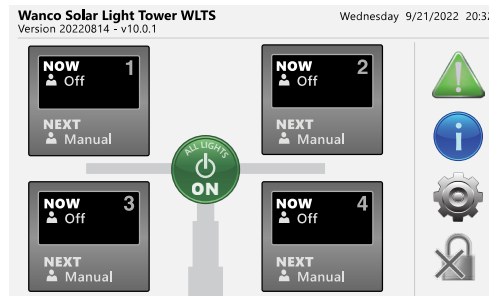
Quick Select buttons are enabled by default; see pages 2 and 3 for details

Active state is highlighted in green

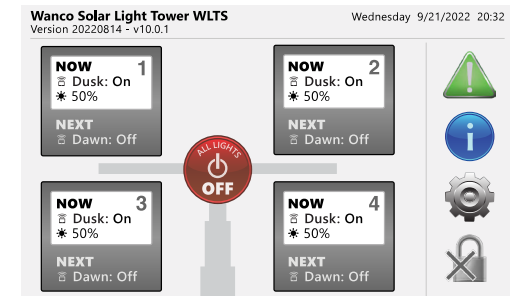
Quick Select Buttons screen: Show



Show button shows the Quick Select button on the Main screen

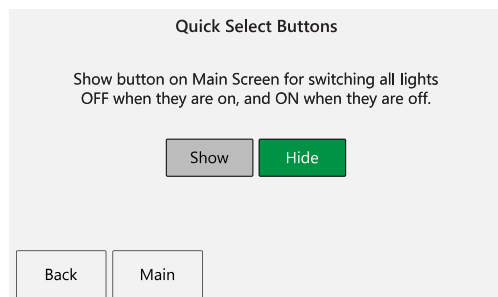


Quick Select button is green when all lights are off

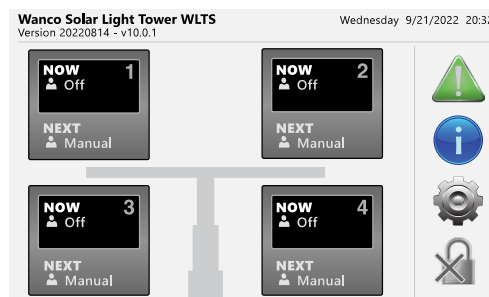


Quick Select button is red when any light is on

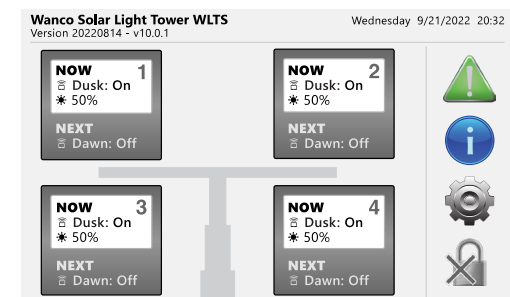
Quick Select Buttons screen: Hide



Hide button hides the Quick Select button on the Main screen



Quick Select button hidden



Settings Passwords: enable/disable

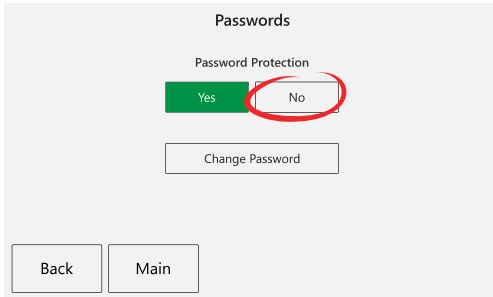
Press **Settings** (⚙️) button on the Main screen, then **Passwords** (see page 41)

With password protection disabled, any user can view and change all system settings except passwords

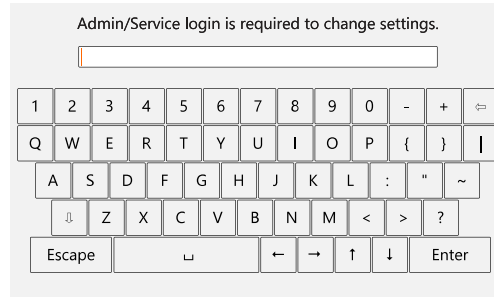
With password protection enabled, a user may change system settings only after logging in; see page 5 for details

The user must enter the service-level password before password protection can be changed, whether enabling or disabling it

Passwords screen: Protection on



Password entry screen

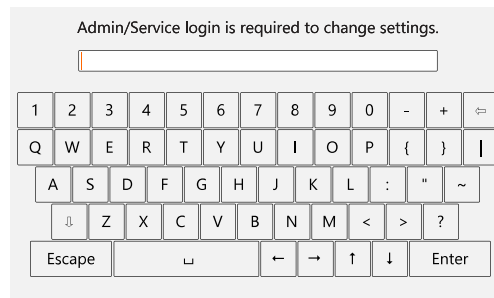


Enter service-level password for changing password protection, either on or off
After correctly entering the service password, **Enter** button accepts the entry and returns to the Passwords screen with protection changed as selected
Escape button exits the login process and returns to the Passwords screen without any changes

Passwords screen: Protection off



Password entry screen

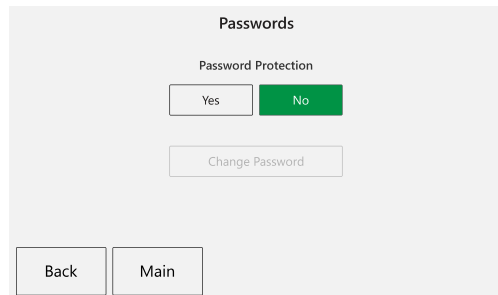


Settings Passwords: change

Press **Settings** (⚙️) button on the Main screen, then **Passwords** (see page 41)

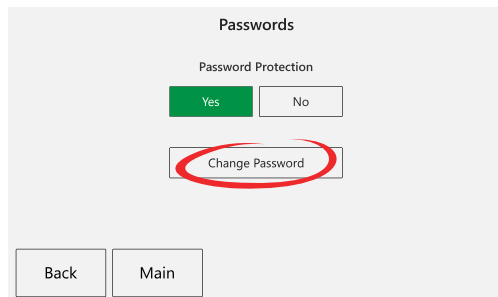
Passwords can be changed only when password protection is enabled and when logged in with service-level access

Passwords screen: Protection off



Passwords cannot be changed when password protection is disabled

Change password



Enter old password



Enter new password



Enter a password to change it: either the guest password or the service password

After entering a password, pressing **Enter** advances to the next step

If no password is entered, or if a password is entered incorrectly, pressing **Enter** exits the change process and returns to the Passwords screen without any changes

Escape exits the change process and returns to the Passwords screen without any changes

Enter a new password

Passwords are case-sensitive and can use a combination of capital and lowercase letters, numbers, and symbols as desired

After entering a new password and pressing **Enter**, the user is prompted to re-type the new password; if the second entry does not match the first, the password is not changed

Enter advances to the next step, and then back to Passwords screen

Escape exits the change process and returns to Passwords screen without any changes

Settings Low-voltage disconnect

Press **Settings** (⚙️) button on the Main screen, then **Low Voltage Disconnect** (see page 41)

The low-voltage disconnect function automatically shuts down power to the system when the battery voltage drops below a setpoint, protecting the batteries and control system from damage

Four threshold values determine system behavior, and these values can be changed under the direction of a trained service technician; they should not be changed by the user unless instructed to do so

Low-Voltage Disconnect screen

Low-Voltage Disconnect
Set the battery threshold values.

Battery Alarm (lights are off)	23 V	7	8	9
Battery Warning (lights "pulse")	23.5 V	4	5	6
Low-Voltage Reconnect	25.5 V	1	2	3
Battery Warning Time before lights shut off	7200 S	0	.	X
		→		

Reset Cancel OK

Active field is highlighted in green

Backspace (X) button erases the right-most character in the active field

Previous/Next (←/→) button shifts focus between fields

Reset button changes all four values back to their factory default settings

Cancel button returns to Settings screen without saving changes

OK button saves changes and returns to Settings screen



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