
User's Guide for the

ADRES-Pro

Secure Internet Web Access for Monitor, Control and Alarm for the

ADRES *Automated Demand Response
and Energy Savings Solution*

Lighting Controller

Version 7.12.18



Winn Energy Controls, Inc.

2637 Ariane Drive

San Diego, CA 92117

Tel: (800) 770-2828

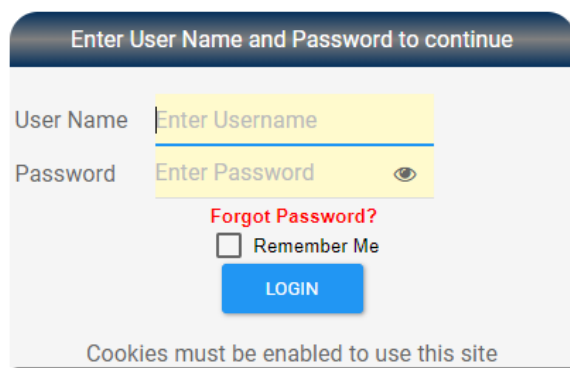
Tel: (858) 274-1330

Fax: (858) 274-1362

The ADRESpro portal to the ADRES controllers can be reached at the secure web site URL:
<http://www.adrespro.com/dashboard>

When navigating the web site, it is recommended to user Google Chrome browser for full Map functionality.

When you have arrived at the [adrespro.com/dashboard](http://www.adrespro.com/dashboard) the following Login web page is presented.



Enter User Name and Password to continue

User Name Enter Username

Password Enter Password

[Forgot Password?](#)

Remember Me

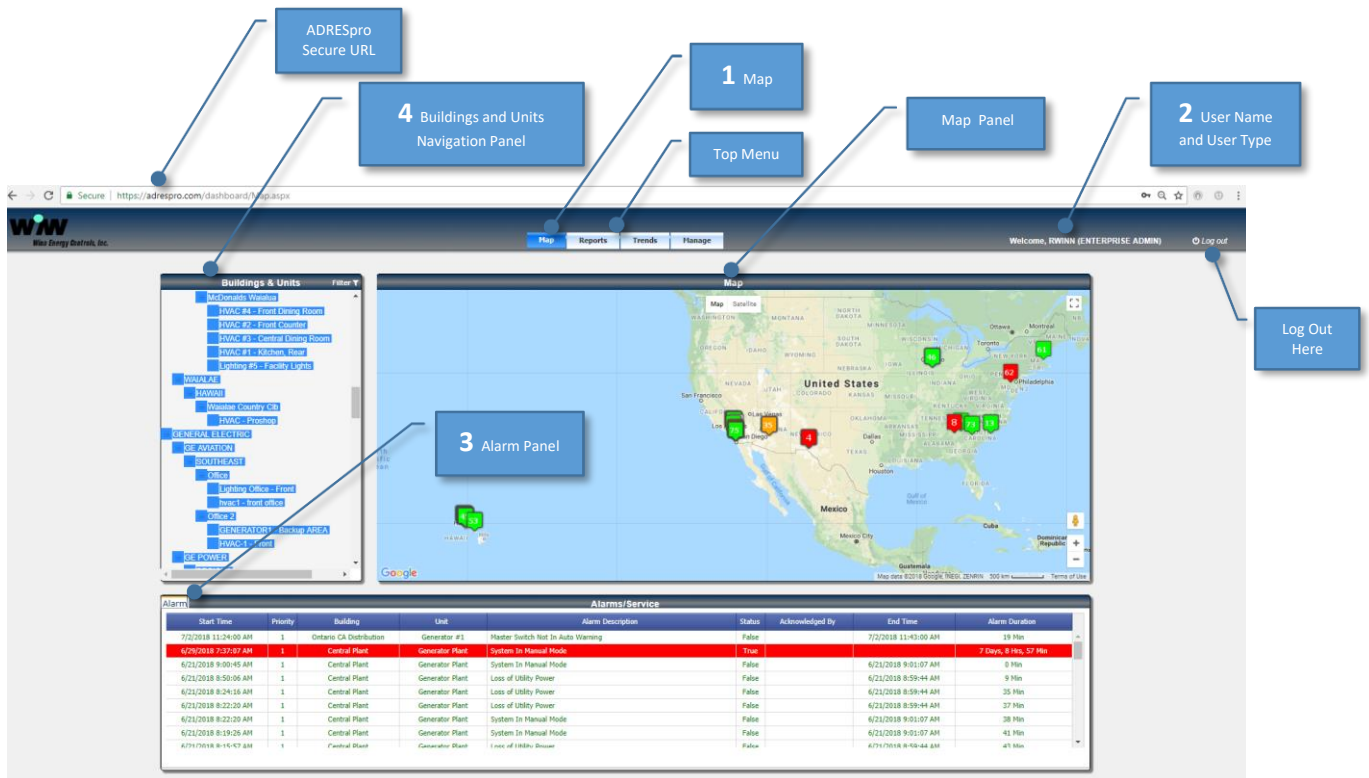
LOGIN

Cookies must be enabled to use this site

The User must provide the User Name and their password to gain access to the site.

If the Password is forgotten, following the Forgot Password link.

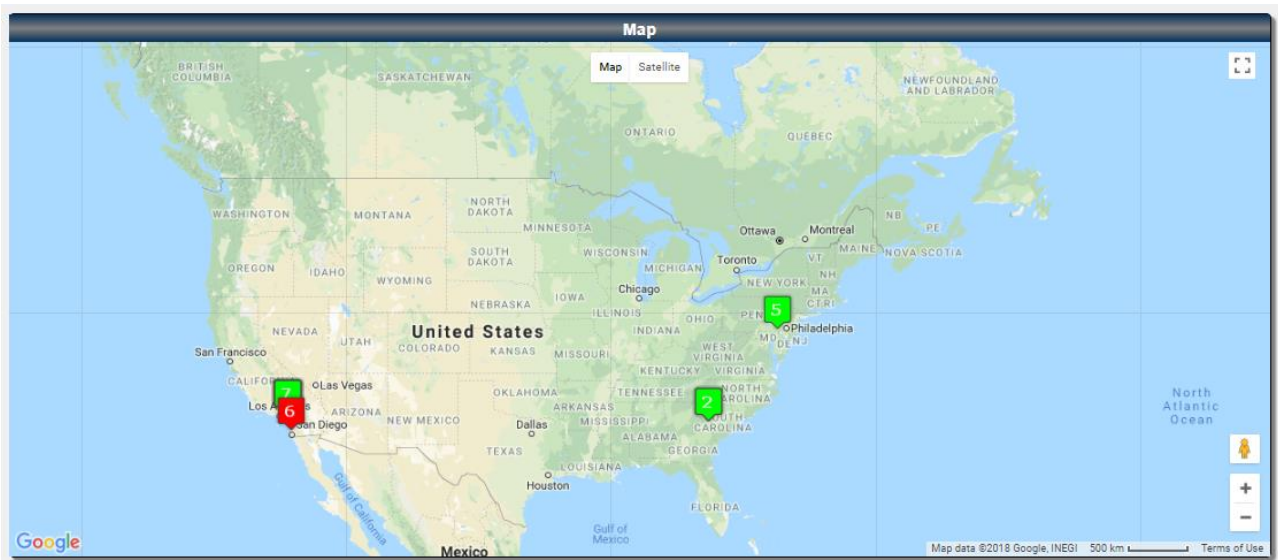
With a successful login, the User will be presented with the default Map page.



The Map panel above displays all buildings for which User is authorized to access and displayed according to GPS location on the map.

- 1 The map panel can also be restored by using the Map selection from the main menu in the top header.
- 2 In the top right of the screen, the User name and User Type is displayed alongside a Log Out option. The user will automatically be logged out after 15 minutes of inactivity.
- 3 The Alarm panel showing all alarms and warning for all the Buildings and Units that the User has access and are all displayed while on the Map Home Page.
- 4 Buildings and Units Navigation Tree panel will remain available in all pages. The tree allows you to select in alphabetical order End Customers, Regions, Buildings and Units for which the User has been authorized access.

Map Panel Details



The Map panel above displays all buildings for which User is authorized to access and displayed according to GPS location on the map.

Each Building (and Units within each building) are displayed on the map with a colored marker according to the building GPS position. The color of the marker indicates the operational status of the Unit (s) within the building.

- Green defines a Unit is Normal On-Line operation.
- Grey defines a Unit that is Off-Line and not reporting (no communication, no power available or out-of-commission).
- Amber defines a Unit that currently has a non-critical alarm or warning condition.
An Example of the Amber warning (priority 2 or 3) condition for an HVAC unit may be a low Supply temperature while the A/C compressors are running or a high delta pressure across the air filters.
- Red defines a Unit that currently has a critical alarm condition.
An Example of the Red alarm (Priority 1) condition for an HVAC unit is typically the room temperature is to high or low compared to the active heating and cooling set-points.

The map panel can be restored by clicking on the Map Tab from the main menu.

Alarm Panel Details

Start Time	Priority	Building	Unit	Alarm Description	Status	Acknowledged By	End Time	Alarm Duration
7/2/2018 11:24:00 AM	1	Ontario CA Distribution	Generator #1	Master Switch Not In Auto Warning	False		7/2/2018 11:43:00 AM	19 Min
6/29/2018 7:37:07 AM	1	Central Plant	Generator Plant	System In Manual Mode	True			7 Days, 8 Hrs, 57 Min
6/21/2018 9:00:45 AM	1	Central Plant	Generator Plant	System In Manual Mode	False		6/21/2018 9:01:07 AM	0 Min
6/21/2018 8:50:06 AM	1	Central Plant	Generator Plant	Loss of Utility Power	False		6/21/2018 8:59:44 AM	9 Min
6/21/2018 8:24:16 AM	1	Central Plant	Generator Plant	Loss of Utility Power	False		6/21/2018 8:59:44 AM	35 Min
6/21/2018 8:22:20 AM	1	Central Plant	Generator Plant	Loss of Utility Power	False		6/21/2018 8:59:44 AM	37 Min
6/21/2018 8:22:20 AM	1	Central Plant	Generator Plant	System In Manual Mode	False		6/21/2018 9:01:07 AM	38 Min
6/21/2018 8:19:26 AM	1	Central Plant	Generator Plant	System In Manual Mode	False		6/21/2018 9:01:07 AM	41 Min
6/21/2018 8:15:47 AM	1	Central Plant	Generator Plant	Loss of Utility Power	False		6/21/2018 8:59:44 AM	43 Min

Alarm panel while on Map page that functions and displays:

- All alarms (alarms and warnings) accumulated from each of the Buildings and Units displayed in the Navigation tree.
- Alarms are displayed with their priority level.

	Priority level 1	Critical Alarm	Alarm requiring immediate attention
	Priority level 2	Warning	Alarm requiring unscheduled maintenance service.
	Priority level 3	Warning	Alarm to be resolved in next scheduled maintenance visit.

- Alarms times are all local times to the Buildings and Units.
- Alarms are displayed as most recent at the top and oldest at the bottom.
- Alarm panel will only display currently active alarms and warnings.
- Alarm Color codes are as follows:

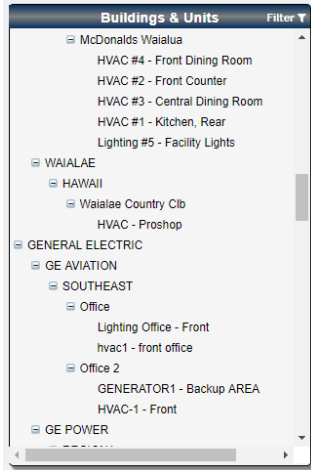
Active alarm unacknowledged Red Background with White Lettering

Active alarm acknowledged White Background with Red Lettering

Inactive alarm White Background with Green Lettering

- Alarms can be acknowledged by the User by double clicking on the alarm.
- The User credentials will automatically be displayed along with the day, date, and time the alarm was acknowledged.
- The alarm duration will continue to accrue time until the alarm is resolved.
- Once the Alarm is resolved, the Alarm will be recorded and the start time, duration and end time will be recorded and available within the Alarm report.

Buildings and Units Navigation Panel Details

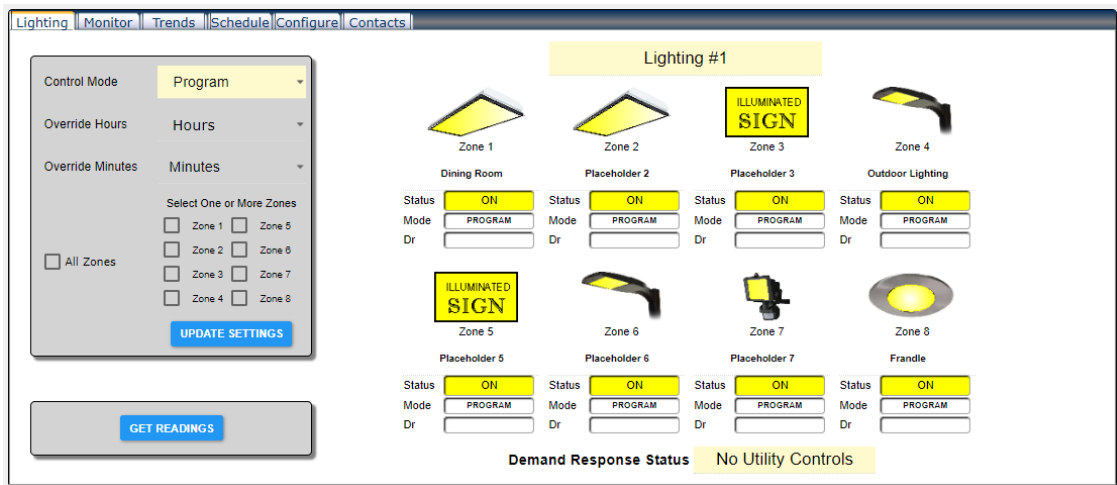


The Buildings and Units Navigation tree panel will remain available on all pages.

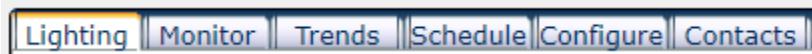
Navigation panel functions and displays:

- Alphabetical listing of all End Customers, Regions, Buildings and Units for which the User has been given access to by the Administrator (s).
- The Navigation Tree panel sorts and displays in the following order:
 - Top Level End Customer
 - Second Level Regions defined for each End Customer
 - Third Level Buildings within the Regions
 - Fourth Level Units within the Buildings
- The Buildings and Units Navigation Tree panel at the top right has a filter selection pop up that provides the User a quick way to sort and filter the Buildings and Units by the following criteria:
 - Alarm Priority
 - Unit Type
 - Region
 - State
 - City
- Directly select a Unit within a Building to monitor, control, program, schedule or trend the unit. The Map panel will switch to the Unit monitor panel after a Unit is selected.

Unit Panel Details



With the selection of any Unit the map panel will switch to the specific Unit panel and display the Unit type along with the last performance and alarm data received from the unit. The above is the Unit Tab panel for a packaged HVAC unit.



The Lighting Unit panel menu shown above contains six selectable Tabs. Each of these panels are detailed later in the manual. The overview below defines each tab selection that provides the User the following Information:

- **Lighting Tab** - This tab shows the last reading from the Unit along with all available readings. This tab provides a GET READINGS button that when pressed, will connect to the Unit and return the real-time readings for the Unit including all alarms. In other Unit types, this panel will provide for the User to change operating modes, override current set points, and if available allow each lighting zone to be turned on or off.
- **Monitor Tab** - This tab shows the last analog and digital configured sensor readings from the Unit. This tab provides a GET READINGS button that when pressed, will connect to the Unit and return the real-time analog, digital and sub-meter readings for the Unit including all alarms.
- **Trends Tab** - This tab will allow the User to display the Unit performance data returned from the unit over a day, week or month as selectable within the tab.
- **Schedules** - This tab will allow the User if authorized to create, edit or delete the weekly or monthly operational schedule. The schedule will be executed when the Unit is placed in the Program mode in the Monitor tab.
- **Configure Tab** - This tab will allow the User if authorized to edit the Unit configuration. Normally a User cannot make any changes to the configuration, only an Administrator is allowed to change any configurations.

- **Contacts Tab** - This tab will allow the User to view the personnel to contact if alarms, questions, or issues arise with the Building or Unit they are shown as a contact. The Contacts include end customer corporate, regional and store personnel as well as prime and subcontractor personnel.

Alarm, Service and Performance Tab Panel

Unit Alarm Tab Panel

The Alarm panel at the bottom of the map panel will change to an Alarm, Service and Performance tab panel when a Unit is selected from the Buildings and Unit Navigation Tree.

The Alarm Tab operates exactly the same as on the Map Page with the exception it only shows alarms and history for the unit selected and displayed in the Unit panel.

Start Time	Priority	Alarm Description	Status	Acknowledged By	End Time	Alarm Duration
6/20/2018 3:25:00 PM	1	No AC Voltage	True			5 Days, 21 Hrs, 21 Min
6/20/2018 3:25:00 PM	1	Intermittent Speed Sensor	True			5 Days, 21 Hrs, 21 Min
6/19/2018 4:42:55 PM	1	Overcrank	False		6/19/2018 4:29:00 PM	-13 Min
6/19/2018 4:29:00 PM	1	Master Switch Error	True			6 Days, 20 Hrs, 17 Min
6/19/2018 4:26:00 PM	1	Overcrank	False		6/19/2018 4:29:00 PM	3 Min

Service Notes Tab Panel

The Service Tab is available to all Users to provide a real-time communication of alarm disposition, preventative and corrective service. The Service Tab can also contain maintenance activities, notifications of actions required or scheduled between End Customer and Contractor personnel specific to the unit. The Service Tab provides the User an ability to view service and maintenance activities by day / date / time / technician, etc. It also provide an ability to enter a Service Note by the User to inform the system of future actions or status of work-in-progress.

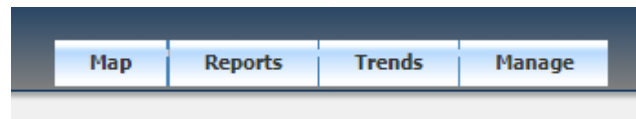
Date & Time	Login Name	Comment
6/8/2018 11:57:51 AM	daryn	ACKNOWLEDGED ALARM AND WILL RESPOND IN 1 HOUR.

Unit Performance Tab Panel

The Performance Tab is a tabular display of the same data in the Unit panel HMI but in a tabular format. If there is more than one of the same type of Unit in the building, the Performance Tab will show all units and their respective values for the building selected at the same time.

Alarm/Service/Performance		Alarms/Service																
		Perform																
Lighting Control	Service Area	Zone 1		Zone 2		Zone 3		Zone 4		Zone 5		Zone 6		Zone 7		Zone 8		Reading Time
		On/Off Status	Control Mode	On/Off Status	Control Mode	On/Off Status	Control Mode	On/Off Status	Control Mode	On/Off Status	Control Mode	On/Off Status	Control Mode	On/Off Status	Control Mode			
<input checked="" type="checkbox"/>	5 Warehouse	ON	P	ON	P	ON	P	ON	P	ON	P	ON	P	ON	P	ON	P	5/21/2018 10:02 AM

Main Menu



The main menu provides three tabs for a User to select from and four tabs if the user is an Administrator. The Menus are defined as:

Map - This main menu selection will navigate the User to the Map page and will clear the User's building and unit selection in the Navigation page if going from a Building and Unit to the Map.

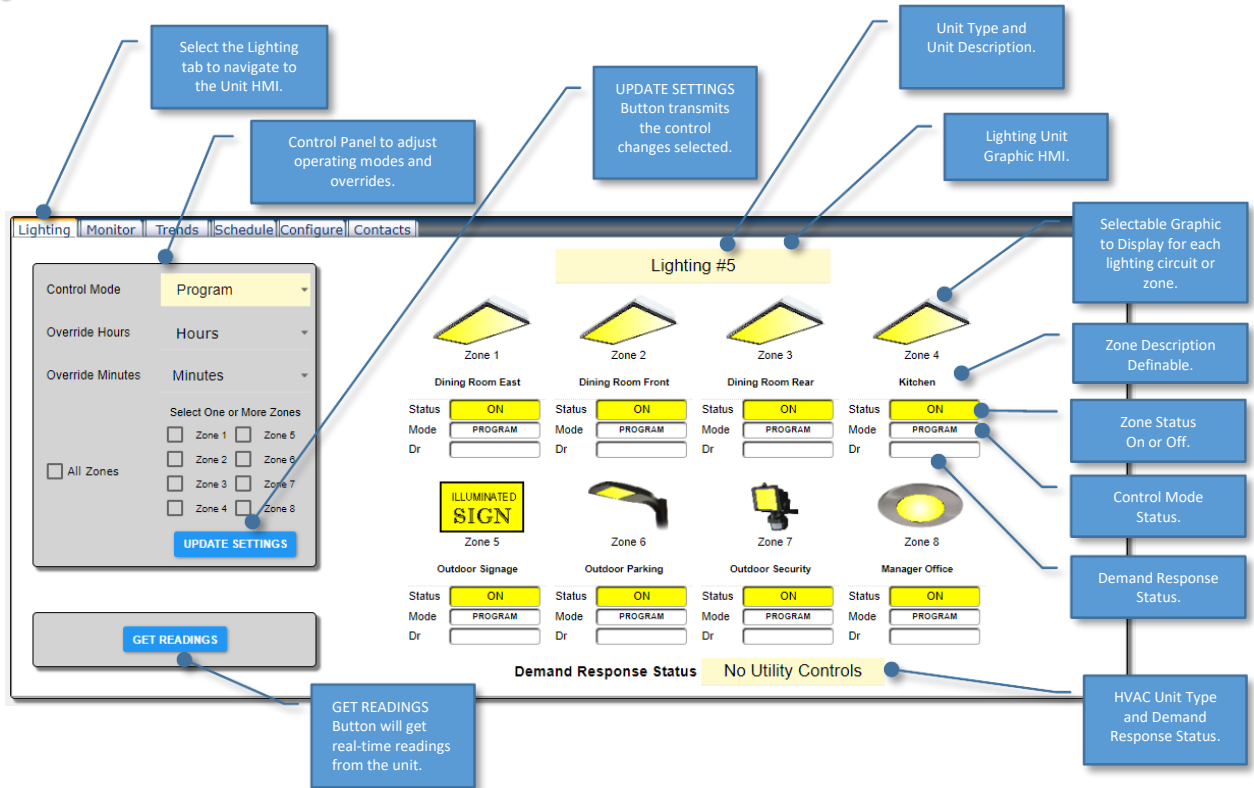
Reports - This menu provides access to preformatted reports that can be created at any time within the interface. The User will need to select a Building and or Unit for which to run the selected report. The current preformatted reports are as follows:

- **M&V Report** - This is the Measurement and Verification report that created and saved from measured and reported baseline and post retrofitted data to determine performance and savings from the Building or Unit selected.
- **Alarm Log** - This is a report that can be created and saved. The Alarm log is a tabular report with newest Alarm starting at the top and descending to the oldest Alarms. The priority, description, start and end time along with duration is presented in the report.
- **Service Log** - This is a report that can be created and saved from the Service log in the alarm, service, performance panel. The Service log is a tabular report with newest service note starting at the top and descending to the oldest Service note. The service day/date/time, User, and description is presented in the report.
- **Building Report** - The Building report captures the information on the building that individual ADRES units are installed on. The Building report includes End Customer name, building number, address, number and types of ADRES units, IP Address of Controllers.
- **Unit Report** - The Unit report captures the information on each individual ADRES Unit installed in the building. The Unit report includes Unit Type, General

Information, Location, IP Address, ID, Generator Make, Model, Serial Number, Control Type, Size and Specific Information such as air, oil, fuel filters, oil type and quantity, filter part number and quantities and other replacement and spare parts typically used.

Trends - This main menu selection will navigate the User to create graphing of individual Units trend performance. The User has the ability to select an individual day, week or month for which to trend the data. Once the duration is selected, the User can navigate with the trend report forward or reverse in days, weeks or months.

Lighting Tab in Unit Tab Panel



The Monitor tab panel provide a real-time accessible Human Machine Interface (HMI) to the Lighting unit. In this case is the Lighting control unit with monitoring capability.

Note: The ADRES controller will automatically push data to the ADRESpro server every 15 minutes. The day, date, and time stamp of the data will be shown in the Performance panel at the bottom of the page in local time.

The Lighting unit panel provide a graphic depiction of up to eight zone or circuits of lighting along with up to eight analog, eight digital and three sub-meter inputs. Each sensor may be uniquely setup and configured and will be described in the Configure tab.

In the top left of the Lighting panel is the Control Mode selections. When the operating data is displayed in the page as it is above, the Control selection is populated with the Unit's current operating modes and set-points for each lighting zone.

Control Mode: Program

Override Hours: Hours

Override Minutes: Minutes

Select One or More Zones

All Zones

Zone 1 Zone 5

Zone 2 Zone 6

Zone 3 Zone 7

Zone 4 Zone 8

UPDATE SETTINGS

As displayed in the Control panel above, the following selections are defined as:

Control Mode - This is the Lighting Control modes configurable for each zone and the selections are:

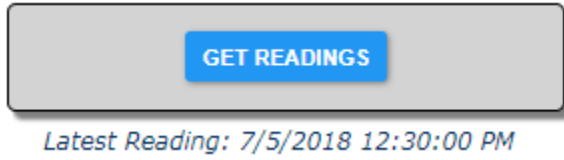
- Program The lighting zone or zones selected will run their time light weekly and vacation schedules.
- Override The Unit will not service either Heating or Cooling set-points.
- Dimming Select the zones to adjust the dimming level.
- Manual On The zone will be turned on and left on.
- Manual Off The zone will be turned off and left off.

Override Hours - This is used to select the number of hours to override the lighting zone or zones selected.

Override Minutes - This is used to select the number of hours to override the lighting zone or zones selected.



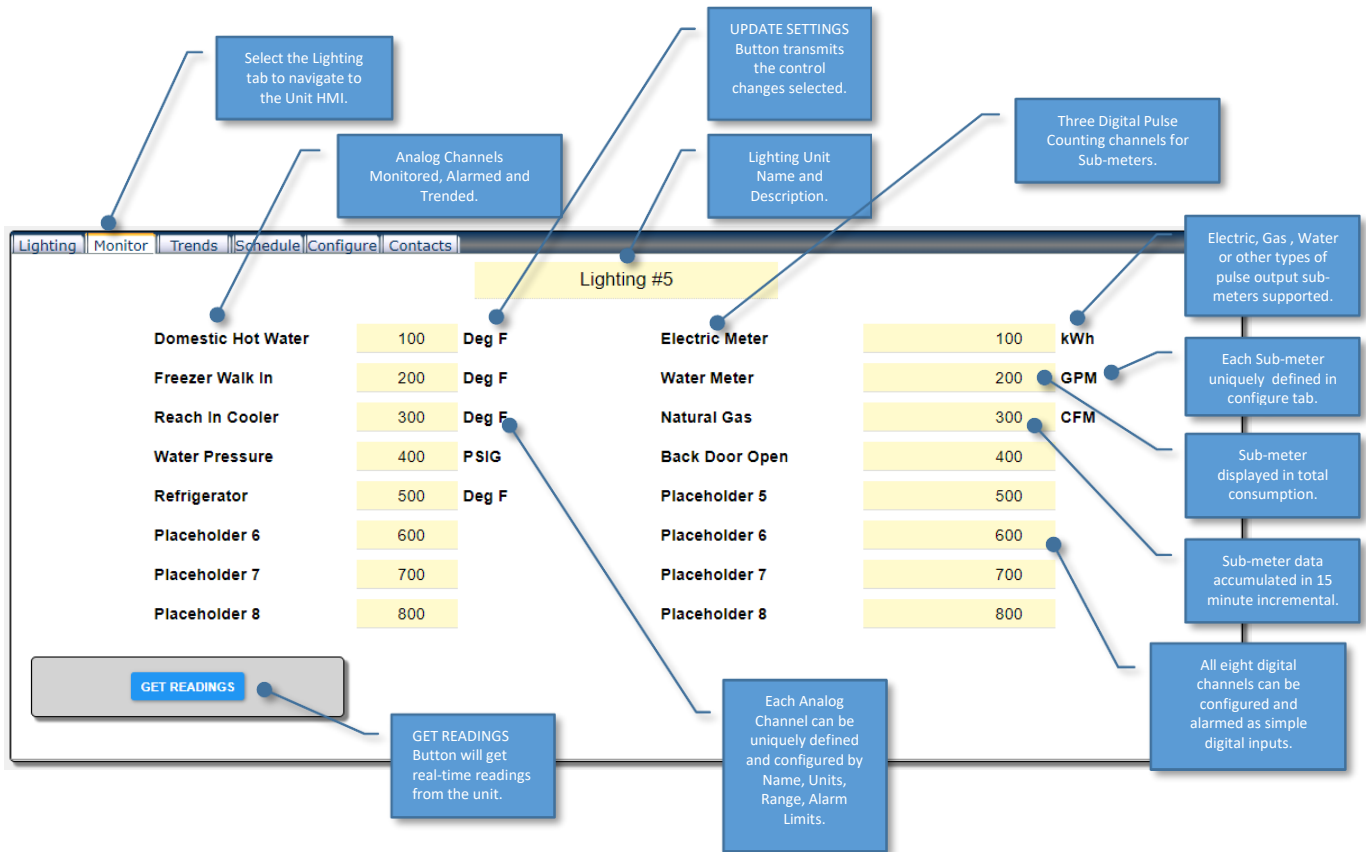
After the Control modes are selected and entered, Press the UPDATE SETTINGS button to transmit the settings to the HVAC Unit.



To get real-time data and performance readings from the Unit, Press the GET READINGS button. The last reading time will be displayed below the box.

NOTE: The ADRES control always keeps its local time. The User that is logged into ADRESpro will be shown the User's time zone. If a User is in a different time zone from the ADRES control, the time zone offset will be adjusted automatically by the ADRESpro application when receiving new performance data or warning / alarm conditions.

Monitor Tab in Unit Tab Panel



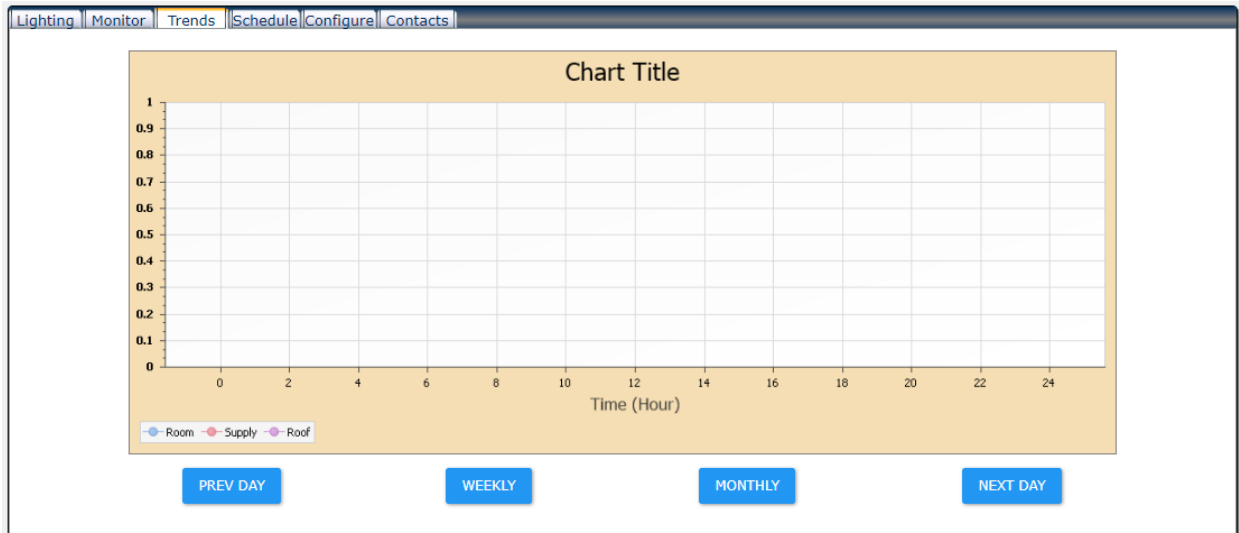
The Monitor tab panel provide a real-time accessible Human Machine Interface (HMI) to the Lighting Unit and its eight analog, eight digital and three pulse counting inputs.

Note: The ADRES controller will automatically push data to the ADRESpro server every 15 minutes. The day, date, and time stamp of the data will be shown in the Performance panel at the bottom of the page in local time.

The Monitoring Unit panel provide a graphic tabular display up all analog, digital and sub-meter inputs. The display is color coded to display those parameter that are in a Warning (Amber color) or Alarm (Red color) condition. Each sensor may be uniquely setup and configured and will be described in the Configure tab.

Trend Tab in Unit Tab Panel

Select the Trends tab in the Unit tap panel to bring up the daily, weekly or monthly trend graphs for the Lighting Unit and the On or Off status for each zone during the day selected. Trends for the analog, digital and sub-meter monitoring are also available.



PREV DAY

NEXT DAY

To view the trend data for the Unit for a different day the current, select from either the PREV DAY or NEXT DAY blue navigation buttons at the bottom of the page. Whether it is a daily, weekly or monthly trend, each can be view to move forward or backward by day, week of month.

WEEKLY

To view the trend data for the Unit for a week, select the WEEKLY blue navigation button. When the Weekly trend is presented, you can navigate forward or backward one week at a time.

MONTHLY

To view the trend data for the Unit for a month, select the MONTHLY blue navigation button. When the Monthly trend is presented, you can navigate forward or backward one month at a time.

Schedule Tab in Unit Tab Panel

To view or set the program weekly or vacation time / light schedule for the Unit select from one of the blue navigation buttons at the bottom of the page. Whether it is to set or view the weekly time / temperature schedule or the yearly vacation schedules.

The screenshot shows a software interface for scheduling. At the top, there are navigation tabs: Lighting, Monitor, Trends, Schedule, Configure, and Contacts. Below this, the 'Unit Selected' is 'Lighting #5 - Indoor and Outdoor Lighting', 'Zone Number' is '1', and 'Zone Name' is '1'. The main area is a table with columns for 'Day', 'Program 1', 'Program 2', 'Program 3', and 'Program 4'. Each program column has sub-columns for 'Time' and 'Status'. The table shows a weekly schedule with various colored cells representing different programs and their statuses. At the bottom, there are buttons for 'WEEKLY CONFIGURE', 'Export Options' (with icons for Excel, PDF, and Word), and 'VACATION CONFIGURE'. Callouts provide instructions: 'The current Time / Light schedule is displayed from the Unit Navigation Panel.', 'There are four time light schedules per day available and each day can be', 'If the Time / Light schedule needs adjustment, select the WEEKLY CONFIGURE button to bring up the configure pop up menu.', 'Use the Export Options of MS Excel, PDF or MS Word to create hard copies or analysis documents.', and 'If the Vacation schedules needs adjustment, select the VACATION CONFIGURE button to bring up the configure pop up menu.'

The ADRES control provide four time / light program changes per day in the schedule and each day of the week can be unique. The ADRES control will run the Lighting unit to the above program schedule including any vacation schedule set while the unit is set to PROGRAM mode.

The ADRES control provides twelve vacation selections for the year. The Vacation Schedule page can be prefilled with current Federal holidays for the current year. Alternatively, each of the twelve vacation schedules can be individually adjusted or not used as desired. The ADRES control when its day/date/time reaches a Vacation Schedule start day, at midnight on the start day, the control will bypass the Program weekly set-points, load and maintain the vacation heat and cool set-points for the duration of the vacation. The vacation will terminate at midnight on the Vacation End Day.

The Vacation start and end dates can cover multiple days, (e.g. if a vacation start day is set for Dec 24, at midnight on December 24 the unit will load and maintain the vacation set-points and maintain the set-points until the end date. If the End Date in the example is set for Dec. 26 then at midnight on Dec 26, the vacation schedule will terminate and the Program Weekly schedule set-points will be loaded.

WEEKLY CONFIGURE

The WEEKLY CONFIGURE menu will be present as shown and described below:

1 Select the Transmit Option to either Set New Program, used with the SEND PROGRAM button when communicating new program settings to the Unit. Select the Show Current Program and GET PROGRAM button to retrieve the current schedule data from the Unit.

2 Select one or more lighting zones to program at the same time the schedule.

3 Select one of four available Programs to set new time, days and heating and cooling set points.

4 After selection of the Program to adjust, select the hour, minute and AM or PM from the Program Time pull down boxes.

5 Select either On or Off condition for the program.

6 Select Days for the new program using either the All Days, Weekdays, Weekends or one or more individual days with check boxes.

7 After all new program settings are entered or selected, Press the SEND PROGRAM button to transmit the program adjustments to the Unit.

The following steps should be followed to adjust one, more or all the Program schedules in the ADRES Lighting controller.

- Step 1 - Select the SET NEW PROGRAM transmit option radio button.
- Step 2 - Select the SET NEW PROGRAM transmit option radio button.
- Step 3 - Select the Program Number (1 – 4) to adjust with the corresponding radio button.
- Step 4 - Select the new Hour, Minute and AM or PM from the Program Time pull down boxes.
- Step 5 - Select either On or Off from the Time On or Off pull down box.
- Step 6 - Select one or more days of the week for which the new program will be applied to.
- Step 7 - Press the SEND PROGRAM to communicate the program adjustments to the ADRES Lighting unit in the field.

The current schedule can also be previewed in this popup form using the view selection radio button defined in Note 4.

VACATION CONFIGURE

The VACATION CONFIGURE menu will be present as shown and described below:

1 Select the Transmit Option to either Set New Schedule, used with the SEND SCHEDULE button when communicating new vacation schedule to the Unit. Select the Show Current Schedule and GET SCHEDULE button to retrieve the current vacation schedule from the Unit.

7 After all new Vacation schedules setting are entered, Press the SEND SCHEDULE button to transmit the schedule adjustments to the Unit.

Transmit Options

- Set New Schedule
- Show Current Schedule

SEND SCHEDULE

All Units

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Vacation 1	Start	Jan	1	End	Jan	2	New Year's Day
Vacation 2	Start	--	--	End	--	--	MLK's Birthday 3rd Monday in Jan
Vacation 3	Start	--	--	End	--	--	Washington's Birthday 3rd Monday Feb
Vacation 4	Start	--	--	End	--	--	Memorial Day 4th Monday May
Vacation 5	Start	--	--	End	--	--	Independence Day July 4th Friday or Monday
Vacation 6	Start	--	--	End	--	--	Labor Day
Vacation 7	Start	--	--	End	--	--	Columbus Day 2nd Monday in Oct
Vacation 8	Start	--	--	End	--	--	Veteran's Day Nov 11th
Vacation 9	Start	--	--	End	--	--	Thanksgiving Day 4th Thursday Nov
Vacation 10	Start	--	--	End	--	--	Christmas Day Dec 25th
Vacation 11	Start	--	--	End	--	--	Misc Holiday 1
Vacation 12	Start	--	--	End	--	--	Misc Holiday 2

The following steps should be followed to adjust one, more or all the Vacation schedules in the ADRES HVAC controller.

- Step 1 - Select the SET NEW SCHEDULE transmit option radio button.
- Step 2 - Select the Federal Holiday check box to fill the vacation schedules with current federal holidays for the current year.
- Step 3 - Manually adjust each holiday if desired.
- Step 4 - Press the SEND SCHEDULE blue navigation button to communicate the schedule adjustment to the ADRES HVAC unit in the field.

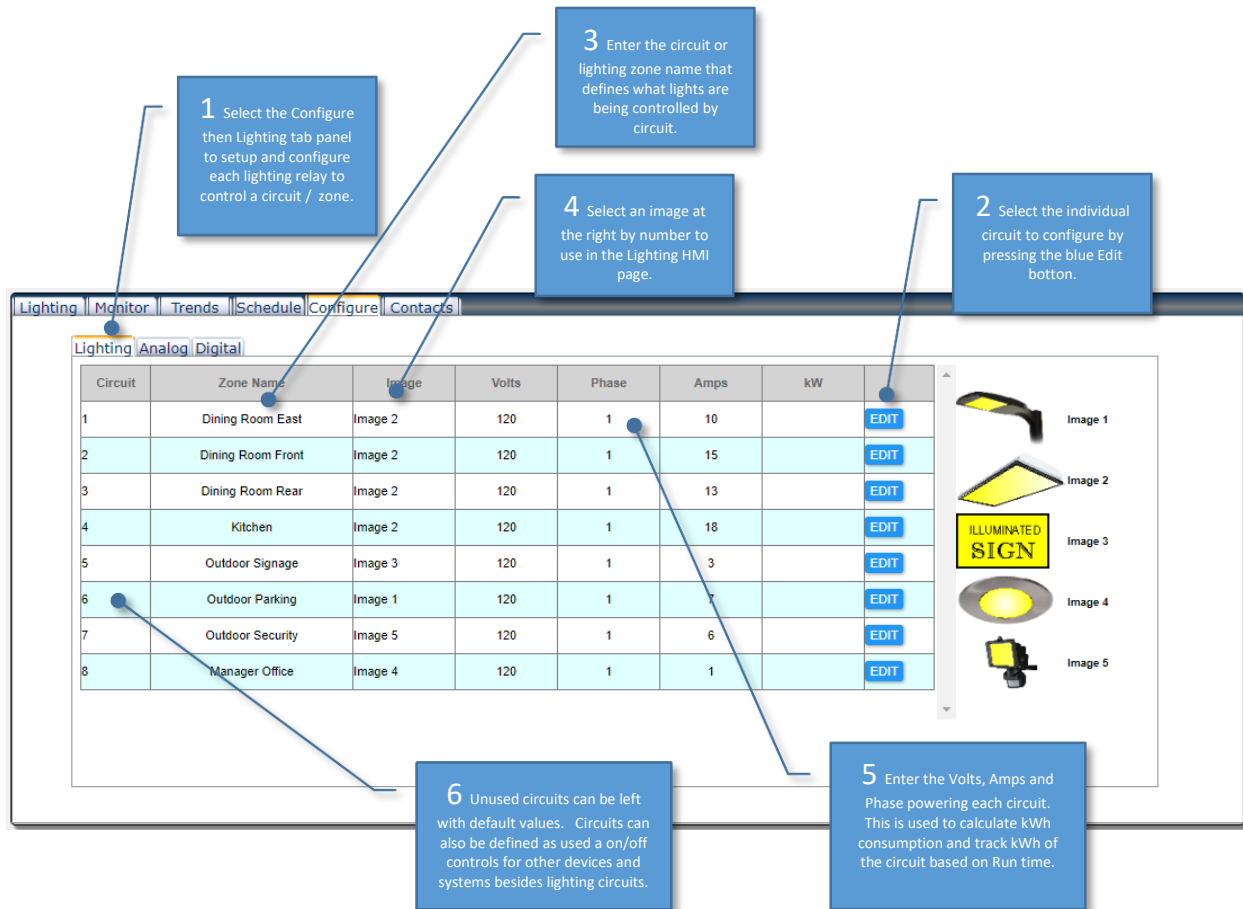
To download the current Vacation Schedules in the ADRES Controller, select the Show Current Schedule radio button and Press the Blue GET CURRENT SCHEDULE blue navigation button.

Configure Tab in Unit Tab Panel

The Configure panel in the Unit Tab panel is available to setup and configure the Lighting unit and define each lighting relay, analog input, digital input or pulse counting sub-meter input.

Lighting Tab in Configure Tab Panel

The Lighting Relay configure Tab panel is available to setup and configure each of the eight available lighting zone being controlled by the ADRES Lighting unit. A screen shot of the Lighting configure page is described and shown below:



The screenshot shows the 'Configure' tab in the 'Lighting' section. It features a table with columns for Circuit, Zone Name, Image, Volts, Phase, Amps, kW, and an EDIT button. To the right of the table is a vertical list of image options labeled Image 1 through Image 5. Callouts 1-6 provide instructions on how to use the interface.

Circuit	Zone Name	Image	Volts	Phase	Amps	kW	EDIT
1	Dining Room East	Image 2	120	1	10		EDIT
2	Dining Room Front	Image 2	120	1	15		EDIT
3	Dining Room Rear	Image 2	120	1	13		EDIT
4	Kitchen	Image 2	120	1	18		EDIT
5	Outdoor Signage	Image 3	120	1	3		EDIT
6	Outdoor Parking	Image 1	120	1			EDIT
7	Outdoor Security	Image 5	120	1	6		EDIT
8	Manager Office	Image 4	120	1	1		EDIT

Image 1: Track lighting fixture
 Image 2: Square recessed lighting fixture
 Image 3: Yellow illuminated sign
 Image 4: Round ceiling light fixture
 Image 5: Security camera

The following steps should be followed to configure each lighting circuit being used

- Step 1 - Select the Lighting configure tab panel.
- Step 2 - Select the EDIT blue button adjacent to the circuit to be defined and configured.
- Step 3 - The circuit will be highlighted in yellow and each parameter or value can be entered directly starting with a Name for the lighting circuit or zone.
- Step 4 - Select from the pull down box the image number for the Lighting fixture type to be displayed in the Lighting HMI page.
- Step 5 - Enter the measure or calculated values for Voltage, Amperage and Phase powering the lighting circuit. This will calculate kWh and be used to estimate hourly kWh per circuit.
- Step 6 - Press the Update to save or Cancel to cancel the configuration of the circuit.

Analog Tab in Configure Tab Panel

The Analog configure Tab panel is available to setup and configure uniquely each of the eight available analog inputs on the Lighting Unit. A screen shot of the Analog configure page is described and shown below:

The screenshot shows the 'Configure' tab panel for the 'Lighting' unit, specifically the 'Analog' sub-tab. The interface includes a table for configuring eight analog channels, with the first channel 'Domestic Hot Water' highlighted in yellow. Below the table are 'SET ANALOG' and 'GET ANALOG' buttons. The table columns are: Channel, Parameter, Units, Alarm Low Condition, Low Alert Condition, High Alert Condition, Alarm High Condition, Alarm Delay, Alarm Condition, Instrument Type, Conversion Low, and Conversion High. Each row has an 'EDIT' button on the right.

Channel	Parameter	Units	Alarm Low Condition	Low Alert Condition	High Alert Condition	Alarm High Condition	Alarm Delay	Alarm Condition	Instrument Type	Conversion Low	Conversion High	
1	Domestic Hot Water	Deg F	180.00	185.00	200.00	203.00	1	HIGH ONLY	Thermistor			EDIT
2	Freezer Walk In	Deg F	-8.00	-2.00	18.00	22.00	1	BOTH	Thermistor			EDIT
3	Reach In Cooler	Deg F	38.00	40.00	48.00	52.00	1	HIGH ONLY	Thermistor			EDIT
4	Water Pressure	PSIG							Linear	0	200	EDIT
5	Refrigerator	Deg F					1	BOTH	Thermistor			EDIT
6	Placeholder 6								0			EDIT
7	Placeholder 7								0			EDIT
8	Placeholder 8								0			EDIT

Numbered callouts (1-11) provide detailed instructions for each step of the configuration process, from selecting the tab to using the SET and GET buttons.

The following steps should be followed to configure each Analog input channel being used:

- Step 1 - Select the Analog configure tab panel.
- Step 2 - Select the EDIT blue button adjacent to the Analog input to be defined and configured.
- Step 3 - The Analog channel will be highlighted in yellow and each parameter or value can be entered directly starting the a Name for the parameter being monitored.
- Step 4 - Select from the pull down box the Engineering Units to be displayed with the value.
- Step 5 - Enter low and high alert and alarm values for the monitored point.
- Step 6 - Enter the delay in minutes the Alarm persists before the Alarm is reported.
- Step 7 - Select from the pull down box the Alarm Condition (s) to report.

- Step 8 - Select from the pull down box the Sensor type. If not listed, select Linear.
- Step 9 - If a Linear sensor is selected in Step 8, Enter the zero and max value for the sensor.
- Step 10 - Once all Analog channels have been successfully configured, press the blue SET ANALOG button to transmit the configuration to the ADRES control in the field.
- Step 11 - To check or determine what Analog channel configure the ADRES Control in the field use the READ ANALOG button to download the configuration to view and change.

Digital Tab in Configure Tab Panel

The Digital configure Tab panel is available to setup and configure uniquely the first three digital inputs as either pulse counting sub-meter inputs or standard digital inputs. Digital channels 4 through 8 can only be standard digital inputs. A screen shot of the Digital configure page is described and shown below:

1 Select the Configure then Analog tab panel to setup and configure each Analog input to monitor and alarm.

2 Select the individual Digital channel to configure by pressing the blue Edit button.

3 If the channel is to be configured for pulse counting, select the Pulse Check box.

4 Enter the Digital or Pulse name for the parameter to be used in the Monitor display.

5 Enter the Description On or Off if not a pulse channel.

6 Enter the On or Off Condition of the channel that will result in an alarm.

7 If configured as a pulse channel, Select the Units to be displayed.

8 If configured as a pulse channel select the Pulse conversion factor that will result in the Engineering Units.

9 Use the SET DIGITAL button after the DIGITAL channels are all configured. This will transmit the setup to the ADRES control.

10 Use the GET DIGITAL button to retrieve the DIGITAL channel setup directly from the ADRES control.

Channel	Parameter	Pulse	Description On	Description Off	Alarm Delay	Alarm Condition	Units	Pulses Per Unit	Pulse Conversion	
1	Electric Meter	<input checked="" type="checkbox"/>					kWh	400		EDIT
2	Water Meter	<input checked="" type="checkbox"/>					GPM	1		EDIT
3	Natural Gas	<input checked="" type="checkbox"/>					CFM	20		EDIT
4	Back Door Open		Open	Closed	1	ON				EDIT
5	Placeholder 5									EDIT
6	Placeholder 6									EDIT
7	Placeholder 7									EDIT
8	Placeholder 8									EDIT

The following steps should be followed to configure each Digital input channel being used:

- Step 1 - Select the Digital configure tab panel.
- Step 2 - Select the EDIT blue button adjacent to the Digital input to be defined and configured.
- Step 3 - Select the Pulse check box if the channel is to be configured as a pulse or sub-meter channel.
- Step 4 - The Digital or pulse channel will be highlighted in yellow and each parameter or value can be entered directly starting the a Name for the parameter being monitored.
- Step 5 - Enter the On and Off descriptions to be displayed for the channel.

- Step 6 - Select either the On or Off condition that will trigger an Alarm or None if the point is not be alarmed.
- Step 7 - If configured as a pulse channel select the Engineering Units to be displayed with the channel.
- Step 8 - Enter the pulse conversion factor for the channel. This value will be multiplied by the number or pulses to display total sub-metered consumption in the Engineering Units.
- Step 9 - Once all Digital channels have been successfully configured, press the blue SET DIGITAL button to transmit the configuration to the ADRES control in the field.
- Step 10 - To check or determine the current Digital channel configure of the ADRES Control in the field use the READ ANALOG button to download the configuration to view and change.

Contact Tab in Unit Tab Panel

The Contact panel in the Unit Tab panel is available to display Building or Store contact information as well as End Customer contacts and Contractor / Sub Contractor contacts for the building and unit selected. This information is populated from the User Setup and Configuration page under the Manage main menu Tab.

The End Customer tab is shown below:

The screenshot shows the 'Unit Details' contact tab interface. At the top, there are navigation tabs: Monitor, Trends, Schedule, Configure, and Contact. The 'Contact' tab is active, and within it, 'End Customer' and 'Contractors' are sub-tabs. The main content area displays building information and two contact entries for 'Waialae User'. Callouts provide the following information:

- Toggle between the End Customer and Contractors and Sub Contractors.** (Points to the sub-tab area)
- Buildings Name, Number, Location and Contact information** (Points to the building details)
- Contacts can include one or more End Customer Contacts: Corporate, Regional or Store End Customer Users.** (Points to the contact list)
- Use the scroll bar to view all contacts.** (Points to the right-side scrollbar)

Building Information	
NAME:	WAIALAE
BUILDING:	
NUMBER:	1
LOCATION:	4997 Kahala Ave. HONOLULU, HI 96816

Contact 1		Contact 2	
NAME:	Waialae User	NAME:	Waialae User
TITLE:	Facility Engineer	TITLE:	Facility Engineer
ADDRESS:	4997 Kahala Ave. Honolulu, HI 96817	ADDRESS:	4997 Kahala Ave Honolulu, HI 96817
EMAIL:	facilities@waialae.com	EMAIL:	facilities@waialae.com
PHONE:	(808) 555-6543	PHONE:	(808) 555-6543
MOBILE:	(808) 765-3456	MOBILE:	(808) 765-3456

The Contacts panel is formatted to include the Building information at the top left.

The End Customer contacts are typically arranged as one or more Corporate, Regional, Building / Store as shown above. Changes to any of the contacts or individual contacts data must be made by a Project or End Customer Administrator.

The Contractor / Sub Contractor tab is shown below:

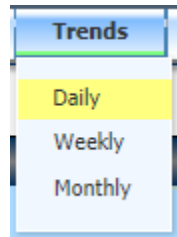
The screenshot shows the 'Unit Details' window with the 'Contact' tab selected. The interface has a menu bar with 'Monitor', 'Trends', 'Schedule', 'Configure', and 'Contact'. Below the menu, there are two tabs: 'End Customer' and 'Contractors'. The 'Contractors' tab is active, displaying two contact profiles side-by-side. A blue callout box points to the 'Contractors' tab with the text: 'Toggle between the End Customer and Contractors and Sub Contractors.' Another blue callout box points to the contact list with the text: 'Contacts can include one or more Contractor or Sub Contractor Contacts: Corporate, Regional, or Store Contractor Users.'

Contractor	Sub Contractor
NAME: Scott Sitzer COMPANY: SCOTTS AUTOMATION CONCEPTS TITLE: General Manager ADDRESS: Honolulu, HI 96812 EMAIL: scotssautomationconcepts@gmail.com PHONE: (808) 832-0740 MOBILE: (800) 372-4805 TYPE: Contractor Admin	NAME: Tom Pugh COMPANY: PRISTINE AIR HAWAII TITLE: President ADDRESS: Honolulu, HI 96814 EMAIL: thomasgpugh@yahoo.com PHONE: (808) 364-5361 MOBILE: (808) 364-5361 TYPE: Contractor Admin

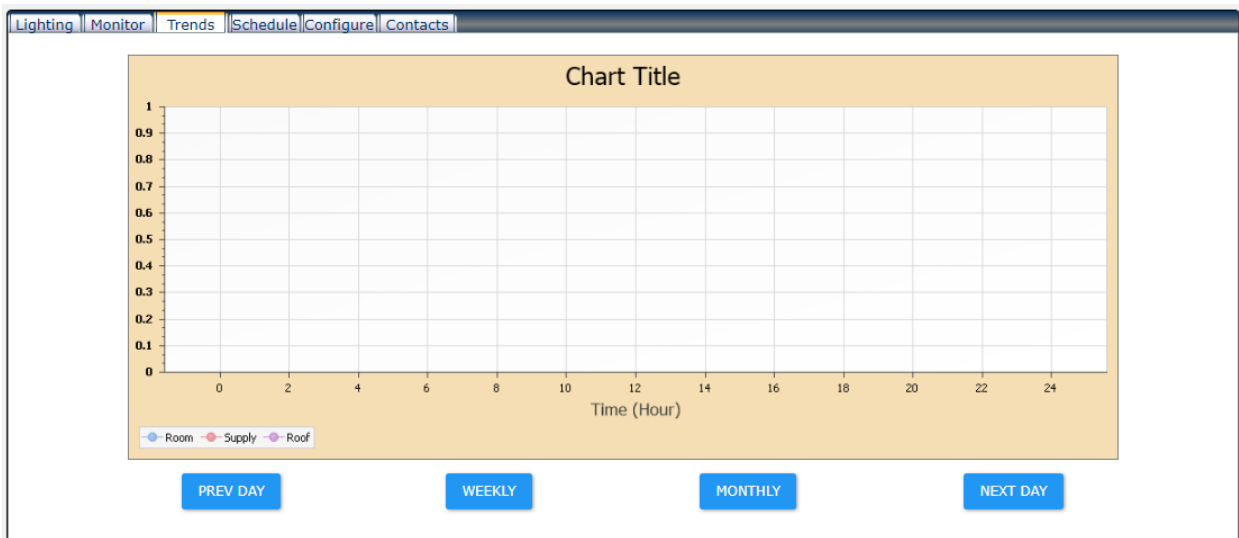
The Contractor or Sub Contractor contacts are typically arranged as one or more Corporate, Regional, Building / Store support Contractor and any Subcontractors as shown above. Changes to any of the contacts or individual contacts data must be made by a Project or Contractor Administrator.

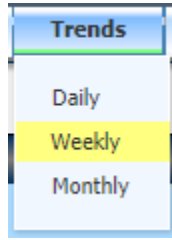
Trend Menu Selection from Main Menu

A selection of daily, weekly or monthly trend reports can be made from the Main Menu. For the Lighting zones are charted as On or Off through each day.

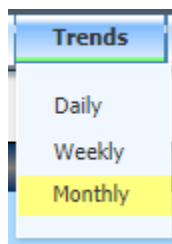
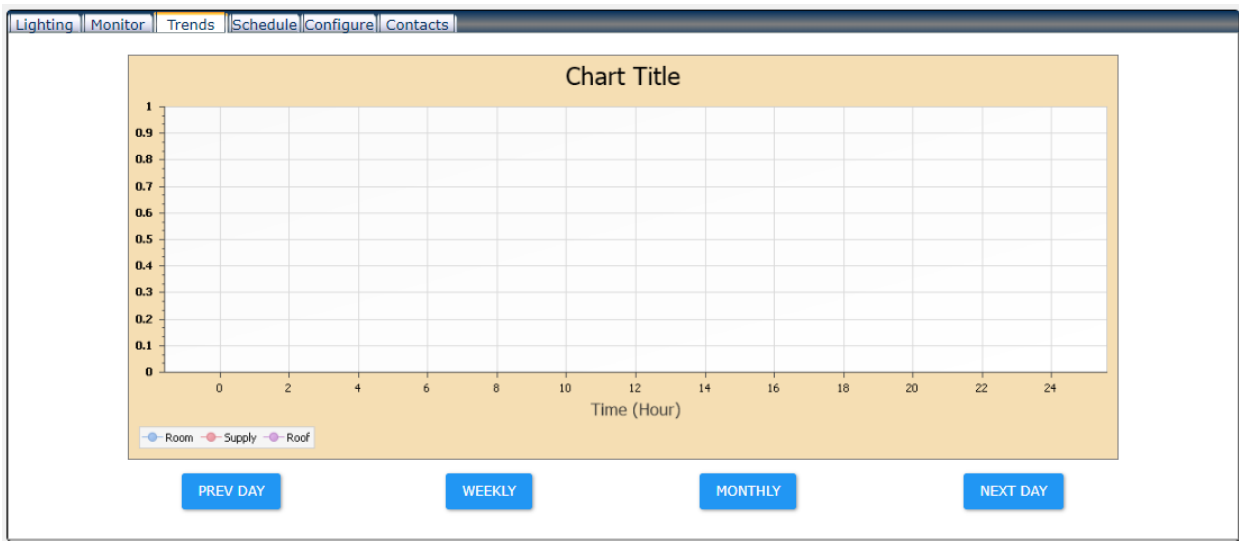


For a daily trend of a Unit, select from Daily as shown above. The following trend will be generated from historical data. For the HVAC Unit, Roof, Supply and Room temperature are charted as default. All other points associated with the unit can be made available in the trend. Use the PREV DAY and NEXT DAY blue navigation buttons at bottom to select different days.

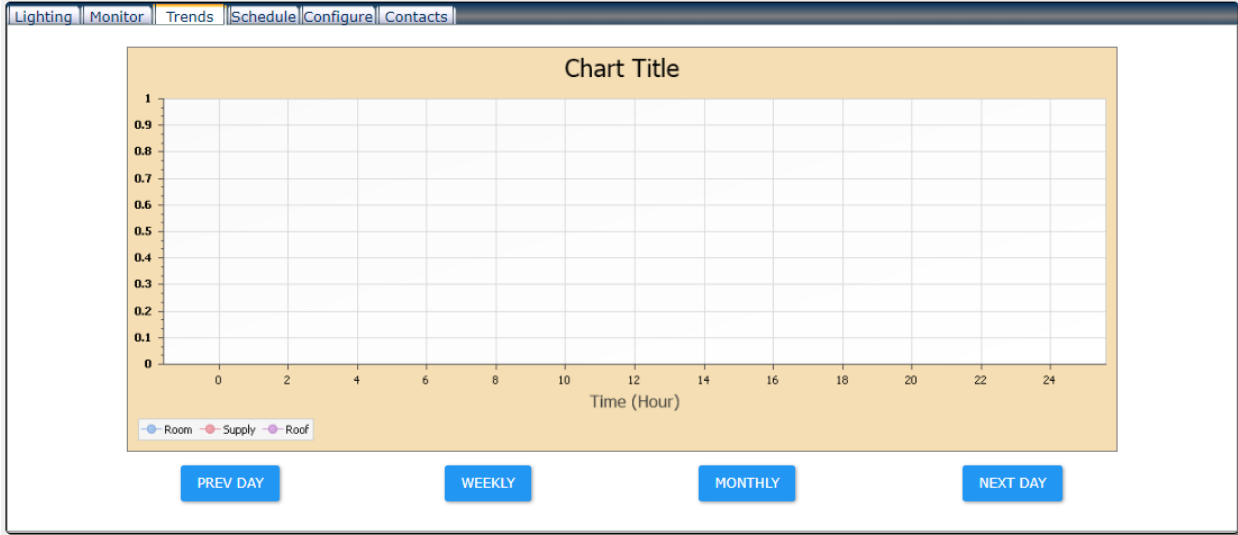




For a weekly trend of a Unit, select from Weekly as shown above. The following trend will be generated from historical data. For the HVAC Unit, Roof, Supply and Room temperature are charted as default. All other points associated with the unit can be made available in the trend. Use the PREV WEEK and NEXT WEEK blue navigation buttons at bottom to select different weeks.

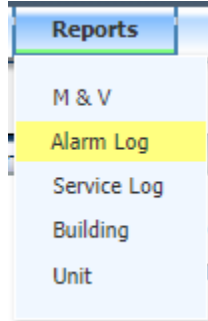


For a monthly trend of a Unit, select from Monthly as shown above. The following trend will be generated from historical data. For the HVAC Unit, Roof, Supply and Room temperature are charted as default. All other points associated with the unit can be made available in the trend. Use the PREV MONTH and NEXT MONTH blue navigation buttons at bottom to select different months.



Alarm Log Report Selection from Main Menu

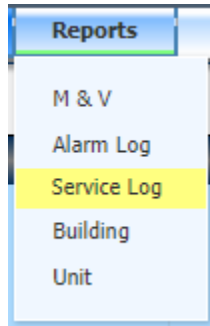
To select the Alarm Log report



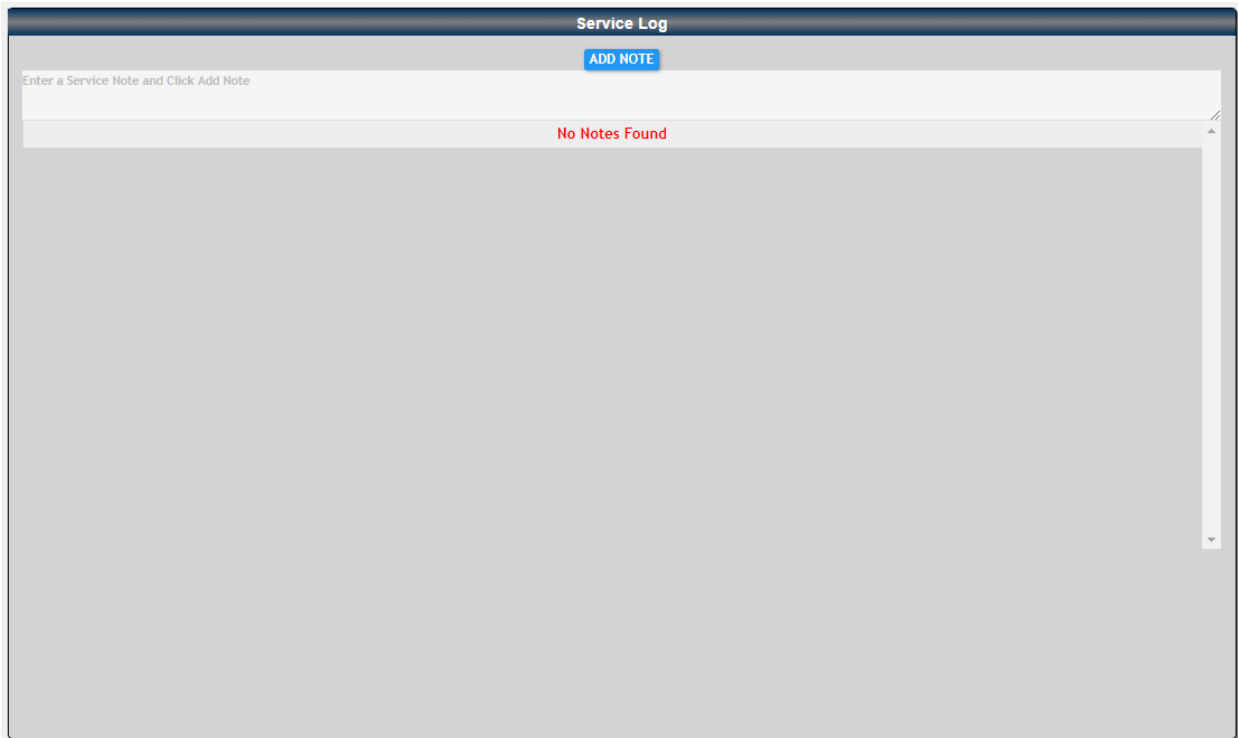
An alarm and warning report can be viewed for all buildings and units for which the User has access. A sample alarm report is shown below:

Alarms									Export Options: X PDF W
Start Time	Priority	Building	Unit	Alarm Description	Status	Acknowledged By	End Time	Alarm Duration	
7/2/2018 11:24:00 AM	1	Ontario CA Distribution	Generator #1	Common Fault	False	rwinn	7/2/2018 11:43:00 AM	19 Min	
7/2/2018 11:24:00 AM	1	Ontario CA Distribution	Generator #1	Master Switch Not In Auto Warning	False		7/2/2018 11:43:00 AM	19 Min	
6/29/2018 7:37:07 AM	1	Central Plant	Generator Plant	System In Manual Mode	True			7 Days, 10 Hrs, 2 Min	
6/26/2018 10:43:25 AM	1	Ontario CA Distribution	Generator #1	Master Switch Not In Auto Warning	False	bce	7/2/2018 11:43:00 AM	6 Days, 0 Hrs, 59 Min	
6/26/2018 10:43:25 AM	1	Ontario CA Distribution	Generator #1	Common Fault	False	rwinn	7/2/2018 11:43:00 AM	6 Days, 0 Hrs, 59 Min	
6/26/2018 10:32:00 AM	1	Ontario CA Distribution	Generator #1	Common Fault	False	rwinn	7/2/2018 11:43:00 AM	6 Days, 1 Hrs, 11 Min	
6/26/2018 10:32:00 AM	1	Ontario CA Distribution	Generator #1	Master Switch Not In Auto Warning	False	bce	7/2/2018 11:43:00 AM	6 Days, 1 Hrs, 11 Min	
6/26/2018 10:32:00 AM	1	Ontario CA Distribution	Generator #1	Common Fault	False	rwinn	7/2/2018 11:43:00 AM	6 Days, 1 Hrs, 11 Min	
6/26/2018 10:32:00 AM	1	Ontario CA Distribution	Generator #1	Master Switch Not In Auto Warning	False	bce	7/2/2018 11:43:00 AM	6 Days, 1 Hrs, 11 Min	
6/21/2018 10:19:58 AM	3	Central Plant	Generator Plant	Demand Response Generator Start	False	rwinn	6/21/2018 10:25:09 AM	5 Min	
6/21/2018 9:00:45 AM	1	Central Plant	Generator Plant	System In Manual Mode	False		6/21/2018 9:01:07 AM	0 Min	
6/21/2018 8:50:06 AM	1	Central Plant	Generator Plant	Loss of Utility Power	False		6/21/2018 8:59:44 AM	9 Min	
6/21/2018 8:31:33 AM	3	Central Plant	Generator Plant	Demand Response Generator Start	False	rwinn	6/21/2018 10:25:09 AM	1 Hrs, 53 Min	
6/21/2018 8:24:16 AM	1	Central Plant	Generator Plant	Loss of Utility Power	False		6/21/2018 8:59:44 AM	35 Min	
6/21/2018 8:22:20 AM	1	Central Plant	Generator Plant	Loss of Utility Power	False		6/21/2018 8:59:44 AM	37 Min	
6/21/2018 8:22:20 AM	1	Central Plant	Generator Plant	System In Manual Mode	False		6/21/2018 9:01:07 AM	38 Min	
6/21/2018 8:19:26 AM	1	Central Plant	Generator Plant	System In Manual Mode	False		6/21/2018 9:01:07 AM	41 Min	
6/21/2018 8:15:57 AM	1	Central Plant	Generator Plant	Loss of Utility Power	False		6/21/2018 8:59:44 AM	43 Min	
6/20/2018 3:25:08 PM	1	Dialysis Center 1	Generator 1	Master Switch Error	False	daryn	6/19/2018 4:26:00 PM	-59 Min	
6/20/2018 3:25:08 PM	1	Dialysis Center 1	Generator 1	No AC Voltage	True	daryn		16 Days, 2 Hrs, 14 Min	
6/20/2018 3:25:08 PM	1	Dialysis Center 1	Generator 1	Intermittent Speed Sensor	True	daryn		16 Days, 2 Hrs, 14 Min	
6/19/2018 4:43:41 PM	1	Dialysis Center 1	Generator 1	Master Switch Error	False	daryn	6/19/2018 4:26:00 PM	-17 Min	
6/19/2018 4:42:55 PM	1	Dialysis Center 1	Generator 1	Overcrank	False	daryn	6/19/2018 4:29:00 PM	-13 Min	
6/19/2018 4:29:00 PM	1	Dialysis Center 1	Generator 1	Master Switch Error	True	daryn		17 Days, 1 Hrs, 10 Min	
6/19/2018 4:26:00 PM	1	Dialysis Center 1	Generator 1	Overcrank	False	daryn	6/19/2018 4:29:00 PM	3 Min	
6/18/2018 3:18:01 PM	3	Central Plant	Generator Plant	Demand Response Generator Start	False	rwinn	6/21/2018 10:25:09 AM	2 Days, 19 Hrs, 7 Min	
6/18/2018 3:03:47 PM	3	Central Plant	Generator Plant	Demand Response Generator Start	False	rwinn	6/21/2018 10:25:09 AM	2 Days, 19 Hrs, 21 Min	

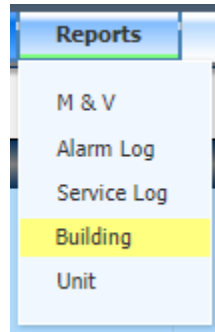
To select the Service Log report:



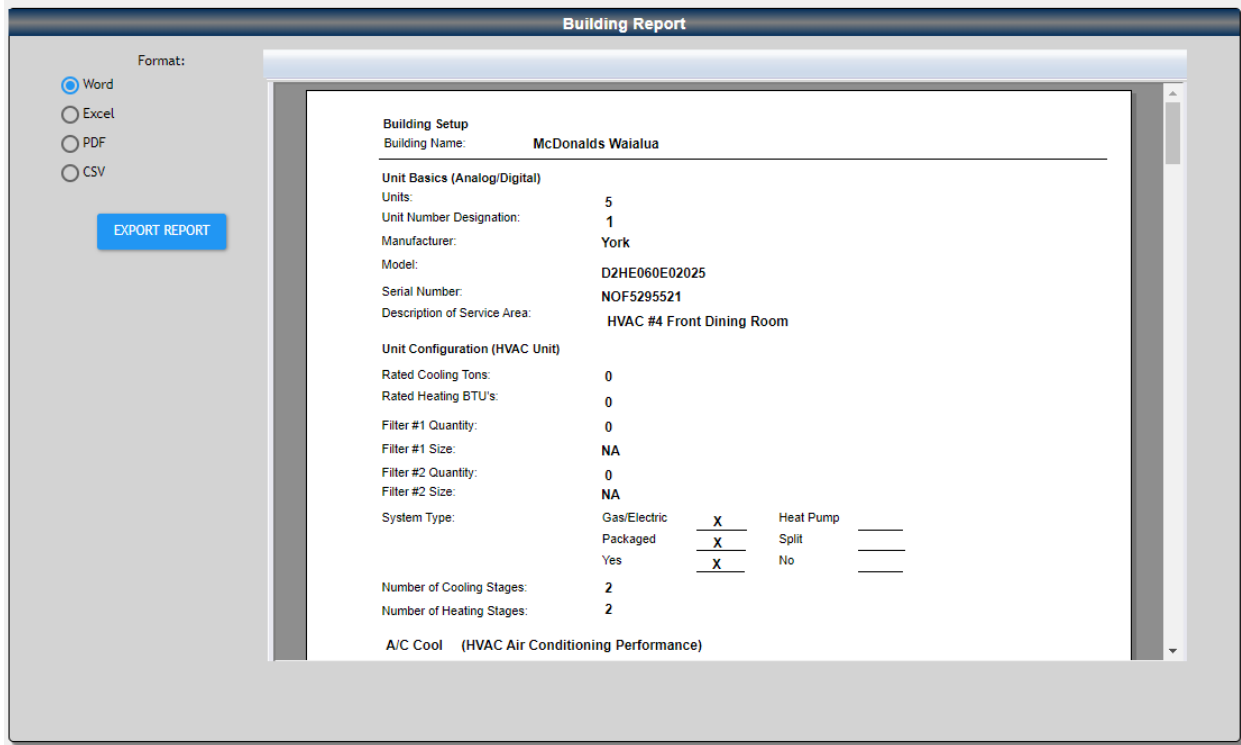
An service log report can be viewed for the individual building and unit for which the User has selected. A service log report is shown below:



To select the Building report:



The building report can be viewed for the individual building the User has selected. A building report is shown below:



The screenshot shows a 'Building Report' window. On the left, there is a 'Format:' section with radio buttons for Word (selected), Excel, PDF, and CSV, and an 'EXPORT REPORT' button. The main content area displays the following information:

Building Setup
 Building Name: McDonalds Waialua

Unit Basics (Analog/Digital)
 Units: 5
 Unit Number Designation: 1
 Manufacturer: York
 Model: D2HE060E02025
 Serial Number: NOF5295521
 Description of Service Area: HVAC #4 Front Dining Room

Unit Configuration (HVAC Unit)
 Rated Cooling Tons: 0
 Rated Heating BTU's: 0
 Filter #1 Quantity: 0
 Filter #1 Size: NA
 Filter #2 Quantity: 0
 Filter #2 Size: NA

System Type:

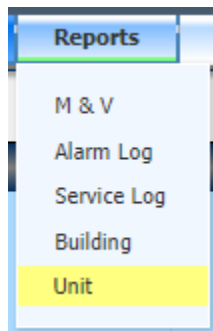
Gas/Electric	<input checked="" type="checkbox"/>	Heat Pump	<input type="checkbox"/>
Packaged	<input checked="" type="checkbox"/>	Split	<input type="checkbox"/>
Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>

Number of Cooling Stages: 2
 Number of Heating Stages: 2

A/C Cool (HVAC Air Conditioning Performance)

The building report can be exported as either a MS Word document, MS Excel spreadsheet, Portable Document File (PDF), or Comma Separated Variable file (CSV).

To select the Unit report:



The unit report can be viewed for the individual Building and Units the User has selected. A unit report is shown below:

Format:

Word
 Excel
 PDF
 CSV

Unit Report

Unit Basics (Analog/Digital)						
Units:	5					
Unit Number Designation:	1					
Manufacturer:	York					
Model:	D2HE060E02025					
Serial Number:	NOF5295521					
Description of Service Area:	Front Dining Room					
Unit Configuration (HVAC Unit)						
Rated Cooling Tons:	0					
Rated Heating BTU's:	0					
Filter #1 Quantity:	0					
Filter #1 Size:	NA					
Filter #2 Quantity:	0					
Filter #2 Size:	NA					
System Type:	Gas/Electric	<input checked="" type="checkbox"/>	Heat Pump			
	Packaged	<input checked="" type="checkbox"/>	Split			
	Yes	<input checked="" type="checkbox"/>	No			
Number of Cooling Stages:	2					
Number of Heating Stages:	2					
A/C Cool (HVAC Air Conditioning Performance)						
Compressor 1st Stage	Volts	0 Amps	0.00 Phase	0 KW	0.00 BTU	0
Compressor 1st Stage	Volts	208 Amps	10.00 Phase	3 KW	4.00 BTU	0
Compressor 2nd Stage	Volts	0 Amps	0.00 Phase	0 KW	0.00 BTU	0

The building report can be exported as either a MS Word document, MS Excel spreadsheet, Portable Document File (PDF), or Comma Separated Variable file (CSV).