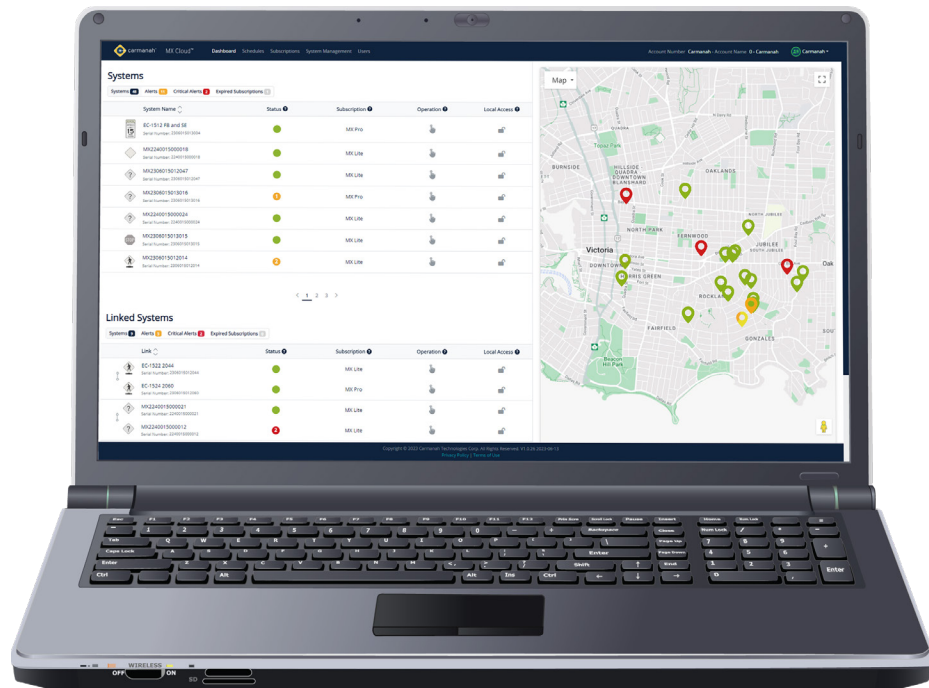
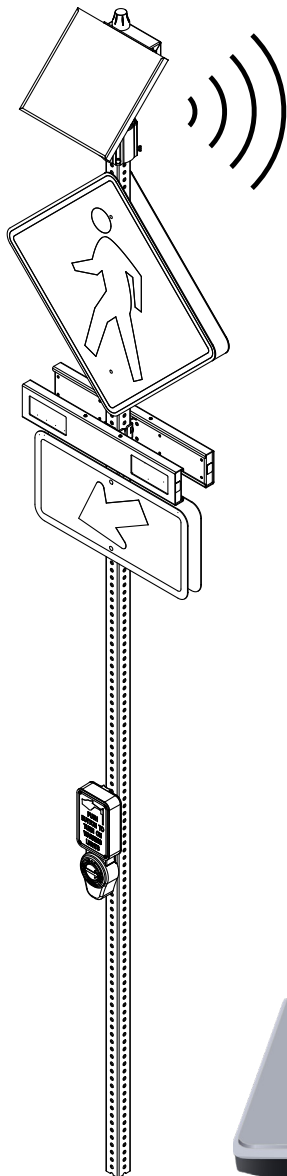




carmanah®  
MX Series

MX Cloud™  
USER GUIDE



91753REVE

## Table of Contents

<b>1.0 Introduction.....</b>	<b>4</b>
1.1 About MX Cloud.....	4
1.2 MX Subscriptions.....	4
<b>2.0 Initial Setup .....</b>	<b>5</b>
2.1 System Commissioning .....	5
2.2 Account Administrator.....	5
2.3 Logging into MX Cloud .....	6
2.4 Forgot Password.....	6
<b>3.0 Dashboard.....</b>	<b>7</b>
3.1 Overview .....	7
3.2 Navigation Bar .....	8
3.3 Account and Profile Information .....	8
3.4 Systems and Linked Systems .....	9
3.5 Map View .....	11
<b>4.0 System Details .....</b>	<b>12</b>
4.1 Overview .....	12
4.2 Additional Information Tabs .....	14
4.3 Status Tab .....	14
4.4 Charts Tab .....	15
4.5 System Information Tab.....	18
4.6 Event Log Tab .....	19
4.7 Settings Tab.....	20
4.8 Power Module Screen .....	25
4.9 Flasher Module Screen.....	26
<b>5.0 Schedules.....</b>	<b>27</b>
5.1 Overview .....	27
5.2 Creating a Schedule .....	30
5.3 Creating Exceptions/Alternate Schedules .....	33
5.4 Assigning Systems to Schedules .....	37
<b>6.0 Subscriptions.....</b>	<b>40</b>
6.1 Overview .....	40
6.2 Subscription Renewal.....	42
6.3 Subscription Upgrade .....	43
6.4 Subscription Transfer.....	44
<b>7.0 System Management.....</b>	<b>45</b>



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7.1	Overview .....	45
7.2	Bulk Operation Mode Change .....	46
7.3	Download Alerts and Events .....	47
7.4	Transfer Ownership .....	47
7.5	Reset Digital Keys .....	48
7.6	Local Access.....	49
7.7	Alert Notifications.....	50
<b>8.0</b>	<b>Users .....</b>	<b>51</b>
8.1	Overview .....	51
8.2	Invite User to Account.....	52
8.3	Change User Role .....	54
8.4	Delete User .....	55
<b>9.0</b>	<b>Account and Profile Management.....</b>	<b>56</b>
9.1	Overview .....	56
9.2	User Profile .....	56
9.3	Change Password .....	59
9.4	Miscellaneous .....	59

## 1.0 Introduction

### 1.1 About MX Cloud

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MX Cloud is Carmanah's browser-based application to remotely program, configure and monitor MX systems. Upon installation, MX systems will automatically report various data into MX Cloud.

MX Cloud allows users to perform several functions, including:

- User management
- Asset management
- System health and usage data
- Over-the-air updates
- System alerts
- Knockdown alerts
- Historical system data
- Remote programming
- Remote scheduling

**NOTE**

Certain features within MX Cloud are tied to your MX Subscription tier.

### 1.2 MX Subscriptions

---

MX subscriptions come in three tiers.

1. **MX Lite** – included with every system for three years. Provides remote visibility of all aspects of your system with actionable alerts.
2. **MX Plus** – includes all the MX Lite features + remote programming, 180 days of historical data and enhanced event-specific alerts (system knockdown).
3. **MX Pro** – includes all the MX Lite and MX Plus features + remote scheduling to create, edit and set schedules remotely.

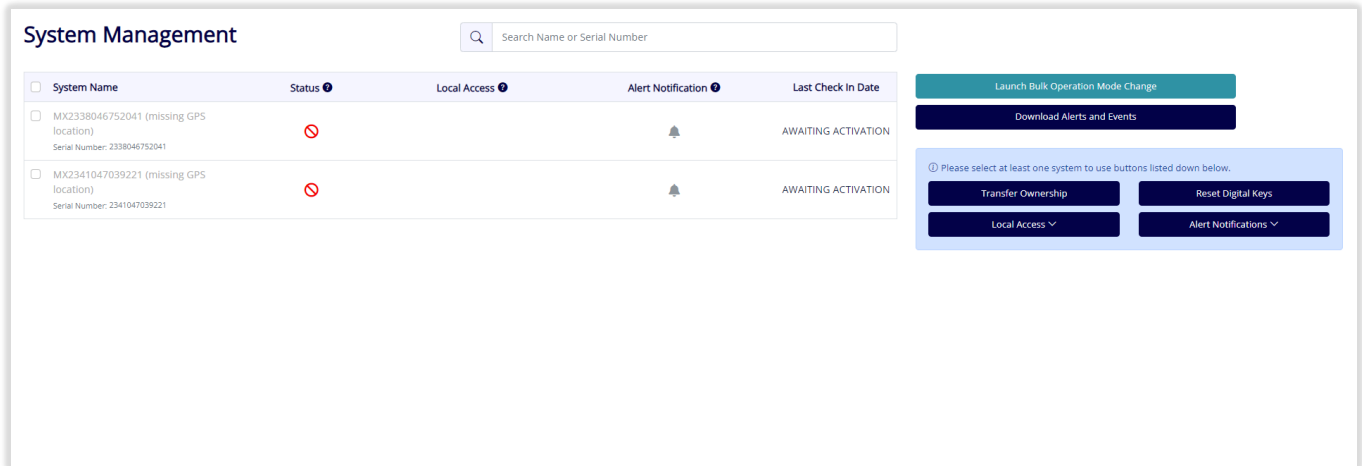
For detailed information on subscriptions, see our website – <https://carmanah.com/mx-series>.

## 2.0 Initial Setup

### 2.1 System Commissioning

Refer to the **LEVEL 1** System Planner and **LEVEL 2** Installation Guides to complete the installation of your MX system.

Systems that have yet to be deployed will not be accessible or show further details. These systems will reside on the System Management screen until they are powered on for the first time.



**System Management**

Search Name or Serial Number

System Name	Status	Local Access	Alert Notification	Last Check In Date
<input type="checkbox"/> MX2338046752041 (missing GPS location) Serial Number: 2338046752041				AWAITING ACTIVATION
<input type="checkbox"/> MX2341047039221 (missing GPS location) Serial Number: 2341047039221				AWAITING ACTIVATION

Launch Bulk Operation Mode Change

Download Alerts and Events

Please select at least one system to use buttons listed down below.

Transfer Ownership

Reset Digital Keys

Local Access

Alert Notifications

Once powered up, it will connect to the local cellular network and establish communication with MX Cloud, requiring no user interaction. Within a short period, the system will begin reporting to MX Cloud with its respective location, status and programmed settings.

#### NOTE

To download the MX Series user manuals, please visit [carmanah.com/mxdocs](https://carmanah.com/mxdocs).

#### NOTE

To download the MX Field App for local programming and diagnostics, please visit [carmanah.com/app](https://carmanah.com/app). The MX Field App is available free of charge on the Apple App Store and Google Play Store for compatible mobile devices.

### 2.2 Account Administrator

Every MX Cloud account will be initiated with at least one administrator, an MX Admin. This administrator can invite other users through the self-serve process, as shown in [Section 8](#). The invited user will receive an emailed invitation to create their user profile.

If you do not have an MX Cloud account, contact Carmanah. Once your account is created, you will receive an email to set up your MX Cloud user profile.



**MX Admin** The highest level of account authority. Manage all account aspects, including adding/removing users and transferring system ownership. One or more MX Admins are required for each account.

## 2.3 Logging into MX Cloud

Once you have been invited to join an MX Cloud account and have completed the profile setup procedure, navigate to the MX Cloud URL here – [mxcloud.live](https://mxcloud.live).

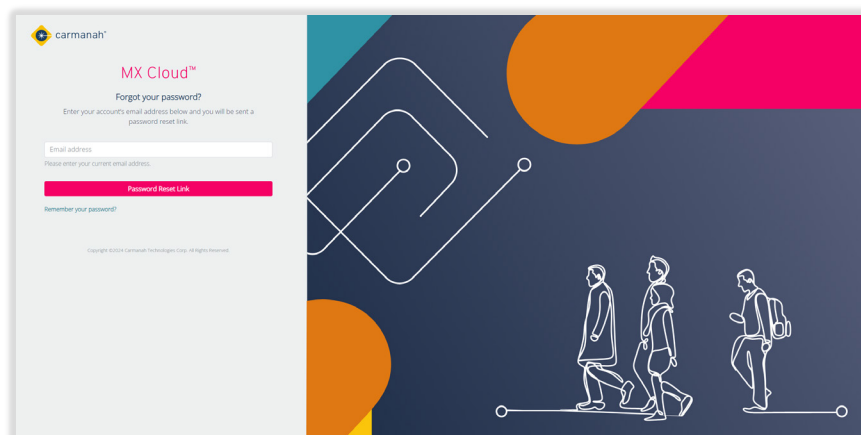
1. Enter your profile email address.
2. Enter your profile password.
3. Click LOG IN to proceed to the dashboard.



## 2.4 Forgot Password

If you have forgotten your password, click the “Forgot your password?” link above the LOG IN button.

1. Enter your email address and then click on RESET PASSWORD.
2. Navigate to your email inbox and look for the password reset email. This could be in your spam or junk folder depending on your email provider’s settings.
3. Click on the link in the email which will open a new browser window or tab.
4. Enter your email address again, choose a new password and click RESET PASSWORD.
5. You will now be taken to the dashboard using your new password.



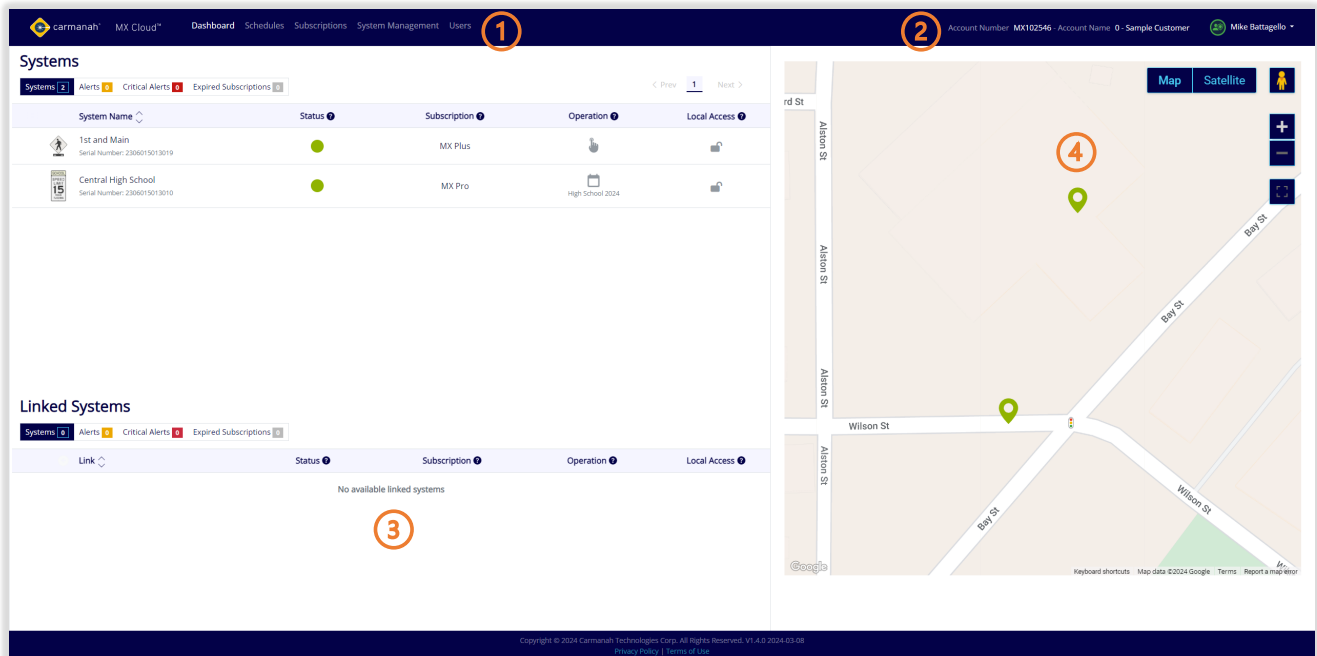
## 3.0 Dashboard

### 3.1 Overview

You will be greeted with the dashboard once logged into your MX Cloud profile. The dashboard is divided into four sections:

1. Navigation bar
2. Account and profile information
3. Systems and linked systems in table view
4. Systems and linked systems in map view

To return to the dashboard, you can click on the Dashboard button in the navigation bar or the Carmanah logo in the upper left corner.



The screenshot shows the MX Cloud Dashboard interface. The navigation bar (1) is at the top, containing the Carmanah logo, 'MX Cloud™', and menu items: Dashboard, Schedules, Subscriptions, System Management, and Users. The account and profile information (2) is in the top right, showing 'Account Number: MX102546', 'Account Name: 0 - Sample Customer', and a user profile for 'Mike Battagello'. The main content area is divided into two sections: 'Systems' and 'Linked Systems'. The 'Systems' section (3) displays a table with columns: System Name, Status, Subscription, Operation, and Local Access. It lists two systems: '1st and Main' (Serial Number: 2306015013019) and 'Central High School' (Serial Number: 2306015013019). The 'Linked Systems' section (4) shows a map view of the same systems, with a green location pin on a map of a street intersection. The bottom of the dashboard features a footer with copyright information and links to Privacy Policy and Terms of Use.

#### NOTE

Hover over any “?” icon (🔍) to bring up additional details.

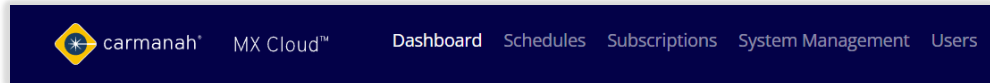
#### NOTE

The navigation bar will have more or fewer buttons depending on your user role. See [Section 8](#) for more information.

## 3.2 Navigation Bar

The navigation bar displays five primary functions for managing MX systems:

1. Dashboard – takes you to the dashboard where you get an overview of your active MX systems.
2. Schedules – creating and managing schedules (e.g., for school zone beacon applications; see [Section 5](#)).
3. Subscriptions – managing MX subscriptions (see [Section 6](#)).
4. System Management (MX Admins only) – administrative and security management features for your MX systems (see [Section 7](#)).
5. Users (MX Admins only) – managing current users and inviting new users into your MX Cloud account (see [Section 8](#)).



## 3.3 Account and Profile Information

The account and profile information area of the dashboard in the upper right corner of the screen will provide the following:

- The unique account number
- The unique account name
- Your user role icon
- Your profile name



Clicking on your profile name will bring up a menu of functions related to your profile:

- Profile
- Change Password
- Your Accounts
- Help & Support
- Sign Out

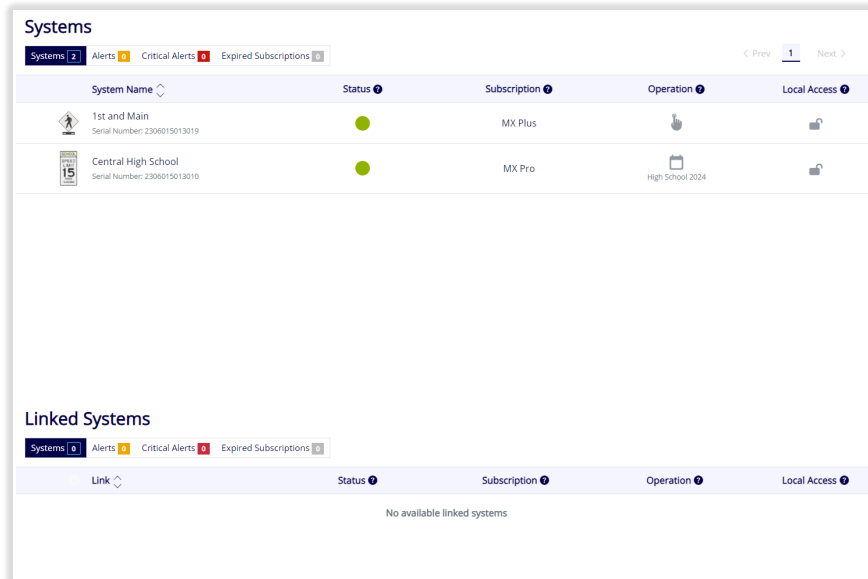
See [Section 9](#) for more information on the items above.



## 3.4 Systems and Linked Systems

The Systems area of the dashboard lists all active systems in a table view broken down by:

- Standalone MX systems
- Linked MX systems (typically used for a crosswalk) – only shows systems that have been manually linked (share the same network parameters) for flash synchronization. Systems that are on the factory default RRFB network will not show under the Linked Systems list. It is recommended to manually link all crosswalk beacons.



The screenshot shows two sections: 'Systems' and 'Linked Systems'. Both sections have a header with filters: 'Systems' (2), 'Alerts' (0), 'Critical Alerts' (0), and 'Expired Subscriptions' (0). The 'Systems' section contains a table with the following data:

System Name	Status	Subscription	Operation	Local Access
1st and Main Serial Number: 2306015013019	●	MX Plus	⚙️	🔒
Central High School Serial Number: 2306015013010	●	MX Pro	📅 High School 2024	🔒

The 'Linked Systems' section shows a header with the same filters and a table with the following data:

Link	Status	Subscription	Operation	Local Access
No available linked systems				

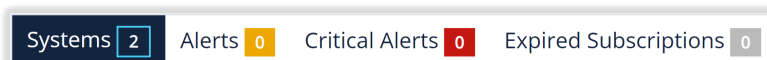
Systems will begin to populate your account on the System Management screen automatically after they have shipped. Once they become active they will move the dashboard. Systems are sorted by their system name. You can change the order from ascending descending at any time by clicking the “up/down chevron” icons (^ v) next to System Name or Link. Below the system name will be the system’s serial number.

To cycle through to the next series of systems, click the “left/right chevron” icons ( < > ) or number at the top of the list.



You can filter the systems by clicking on any of the following buttons. The numbers shown correspond to the system quantity in each filter.

- Systems – shows all systems.
- Alerts – shows only systems with one or more alerts.
- Critical Alerts – shows only systems with one or more critical alerts.
- Expired Subscriptions – shows only systems with expired subscriptions.



Each system will display its current:

- Status
- Subscription tier
- Operation mode
- Local Access status

**NOTE**

Systems that have expired subscriptions will be grayed out and are not accessible. A new subscription must be applied to the system to access it in MX Cloud. See [Section 6](#) for more information.

Clicking on a system name or serial number will take you to the system's details screen. See [Section 4](#) for more information.

## Status

Indicates whether the system is operating as intended or not. Depending on the system status, the icon will turn green, yellow, red or gray. The number inside the yellow or red circle indicates how many alerts that system has.





If all fault conditions are removed, the system will automatically turn green, indicating the system is operating normally.






## Subscription

Indicates the type of subscription that is applied to the system. See [Section 1.2](#) for more information.

## Operation

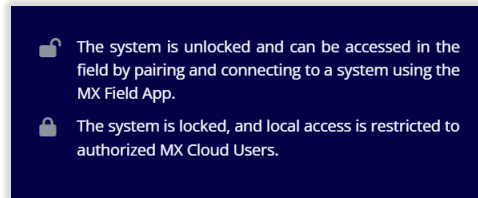
Indicates which operation mode the system is currently running. See [Section 4.7](#) for more information.

<ul style="list-style-type: none"> <li> The system is operating as intended.</li> <li> The system is alerting you to an abnormal condition. Failure to address the issue could result in the system failing to operate as intended.</li> <li> The system is not operating as intended, or its operational status is unknown. Immediate action is required to resolve the issue.</li> <li> The system's MX Subscription has expired, and the system is offline.</li> <li> The system is not yet commissioned.</li> </ul>	<p><b>MX Lite</b> Get actionable alerts and a network-wide view of your systems.</p> <p><b>MX Plus</b> Make changes to your system settings and access data from anywhere.</p> <p><b>MX Pro</b> Create, edit, and set schedules in bulk and on-the-fly.</p> <p><b>EXPIRED</b> Subscription is expired.</p>
--	--

	<b>Always On</b> The system has been set to always on, and the beacons will flash 24 hours a day.
	<b>Dusk-to-Dawn</b> The system is set to operate between dusk and dawn only.
	<b>Trigger/Standby</b> The system is set to operate by a push button or trigger.
	<b>Trigger with Notification</b> The system is set to operate by an external trigger or sensor. Each activation will generate a system notification.
	<b>Schedule</b> The system is set to schedule mode, and a schedule has been applied. The name of the assigned schedule will appear.

## Local Access

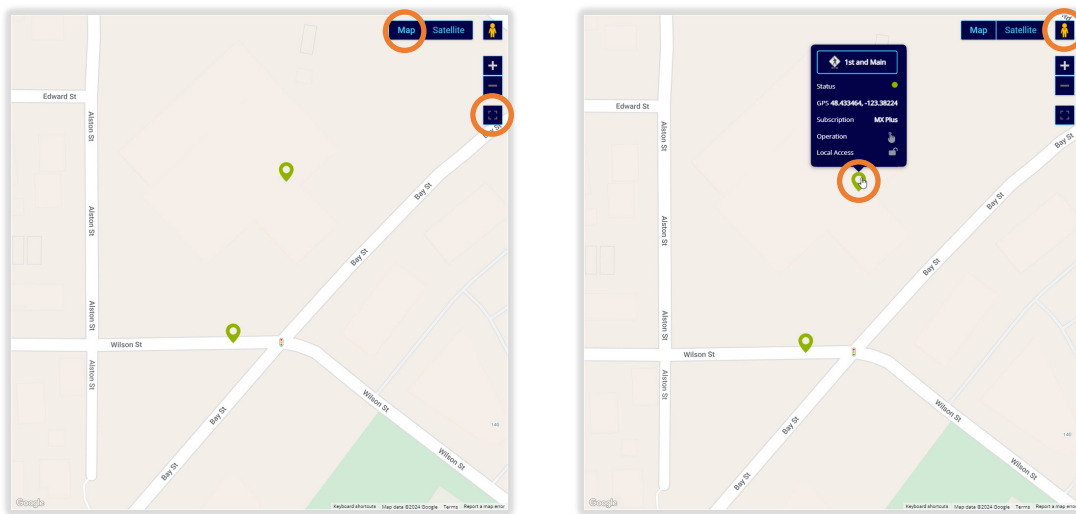
Indicates whether local pairing is enabled or disabled. See [Section 7.6](#) for more information.



## 3.5 Map View

The map view area of the dashboard will automatically adjust and create a “geofence” around the perimeter of all active systems within the account. Each time a new system is commissioned, the map will automatically change the default map view to show all active systems.

Each system is represented on the map by a “pin.” These pins signify the system’s location and will be color-coded with their current system status. Hovering over each pin will provide quick information regarding the system. Clicking on a pin will bring you to the system’s details screen.



- The drop-down in the upper right corner provides an option to use the satellite view versus the default map view.
- The icon in the upper right corner (four arrows pointing outwards) provides a full-screen option for the map. Once in full screen, you can use the “plus” (+) or “minus” (–) buttons to zoom in or out on the map. This is useful when viewing a cluster of systems on one site. Alternatively, you can zoom in or out at any time using your mouse’s middle scroll wheel.
- To bring up Google Street View for each location, drag the “Pegman” onto the desired location.



## 4.0 System Details

### 4.1 Overview

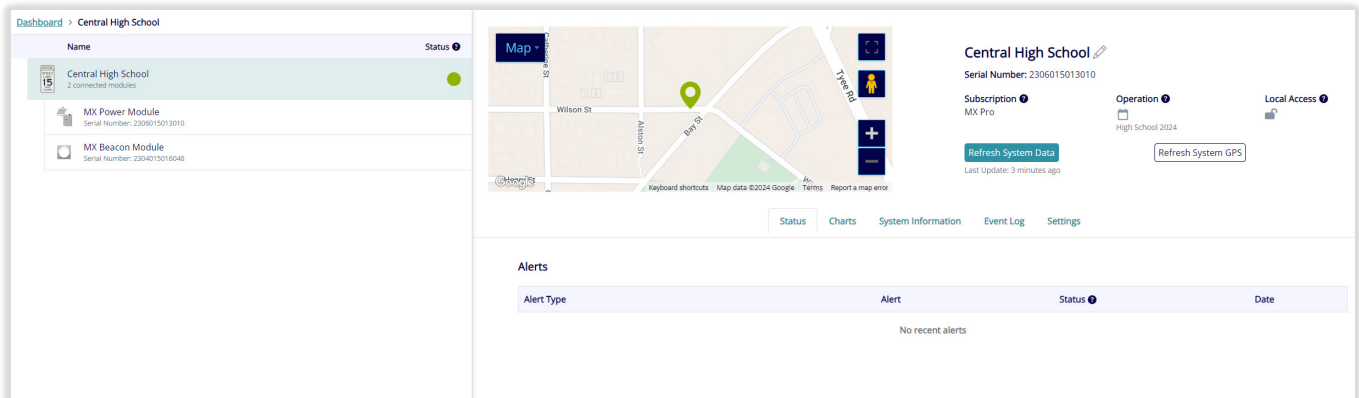
The system's detail screen provides greater detail and remote programming options if applicable.

A hierarchy will be displayed on the left panel of the screen with the following:

- System name
- Power module and serial number
- All flasher modules and their respective serial numbers

If your system is manually linked with one or more additional systems, they will also show in this panel. Clicking on any system in this panel will allow you to view each individual system without having to backtrack to the dashboard.

The map will focus on the location of this individual system and can be manipulated in the same manner as on the dashboard.



Dashboard > Central High School

Name Status

Central High School 2 connected modules

MX Power Module  
Serial Number: 2306015013010

MX Beacon Module  
Serial Number: 2304015016048

Map

Wilson St  
Aston St  
Bay St  
Dyer Rd

Central High School  
Serial Number: 2306015013010

Subscription  
MX Pro

Operation  
High School 2024

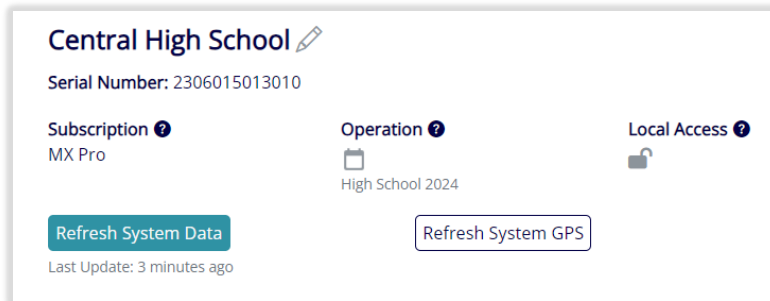
Local Access

Refresh System Data  
Last Update: 3 minutes ago

Refresh System GPS

Alerts

Alert Type	Alert	Status	Date
No recent alerts			



Central High School

Serial Number: 2306015013010

Subscription  
MX Pro

Operation  
High School 2024

Local Access

Refresh System Data  
Last Update: 3 minutes ago

Refresh System GPS

#### NOTE

GPS accuracy will vary. Pinned location is not an exact representation of actual system location. Use Refresh System GPS as required for an updated location.

## System Name

Click on the pencil icon (✎) next to the system name to change its name and application icon:

1. Choose the new system name (limited to twenty characters).
2. Choose the application icon:
  - a. Crosswalk
  - b. School zone
  - c. LED stop sign
  - d. LED warning sign



The application icon will show for each system on the system's detail screen and on the dashboard for quick reference on the type of system deployed. If an application is not assigned, you will see an icon with a question mark.

## Subscription

Shows the current subscription. Systems with MX Lite or MX Plus will have a hyperlink to upgrade to a higher-level subscription. Clicking on this will take you to the Subscriptions tab. See [Section 6](#) for more information.

## Operation

Shows the current operation mode. See [Section 4.7](#) to change this mode as required.

## Local Access

Shows whether local access is locked or unlocked. See [Section 7.6](#) for more information.

## Refresh System Data

When required, manually refresh the system data by clicking the Refresh System Data button. This is particularly helpful when troubleshooting. This will request new data from the system which will be shown on the Charts tab. See [Section 4.4](#) for more information.

- MX Lite – 30 refresh per month/system
- MX Plus/Pro – unlimited refreshes

### NOTE

Systems with MX Lite/MX Plus subscriptions have one scheduled update per day while systems with an MX Pro subscription have scheduled updates every 15 minutes.

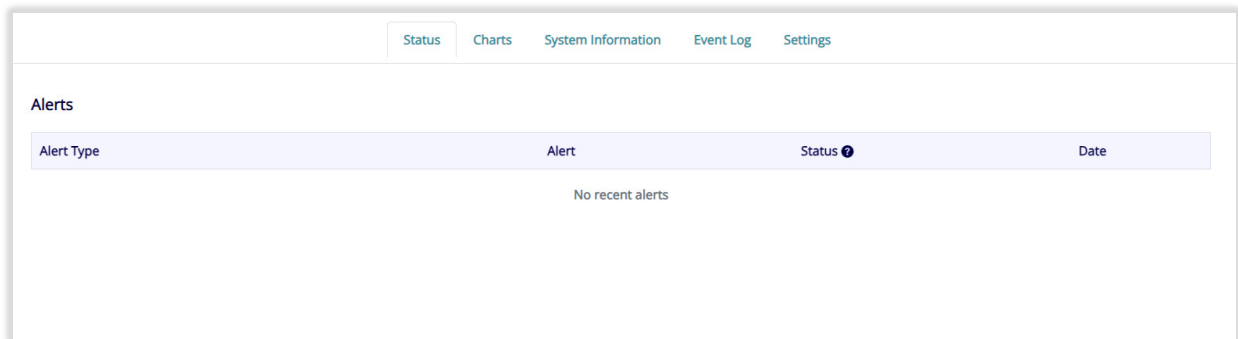
## Refresh System GPS

When required, manually refresh the GPS location using the Refresh System GPS button. This is useful if the system has been moved or the GPS location is incorrect. This will request new a new GPS fix from the system.

## 4.2 Additional Information Tabs

Along the middle of the system's details screen will be additional functions:

- Status
- Charts
- System Information
- Event Log
- Settings

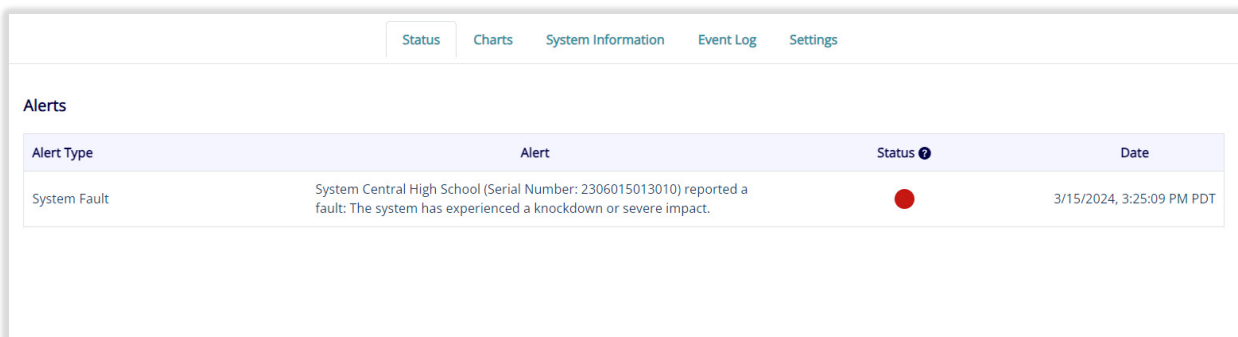


## 4.3 Status Tab

The Status tab will be selected by default each time you click on a system. This will show if there are any active alerts for this system. If there are multiple alerts, they will be listed chronologically with the newest at the top. The status of the system will change to yellow or red depending on the severity of the alert(s) detected.

- Yellow = alert (abnormal condition)
- Red = critical alert (system not operating as intended)

If the alert is cleared or rectified, it will be removed from the Status tab, and a record of this will be reflected in the Event Log.



### NOTE

Alerts will not show in MX Cloud or via email/SMS notifications until the system has greater than 24-hours of runtime.

## 4.4 Charts Tab

The Charts tab provides current performance and historical system data. Information on this screen varies depending on the:

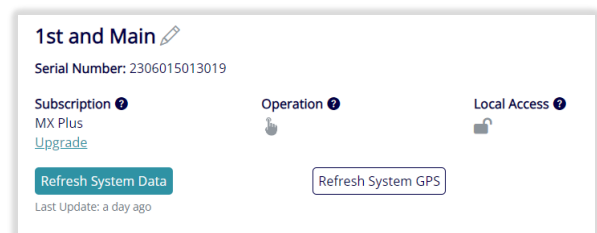
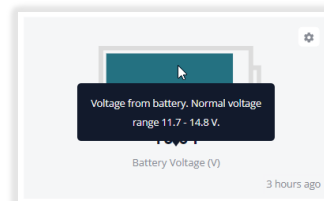
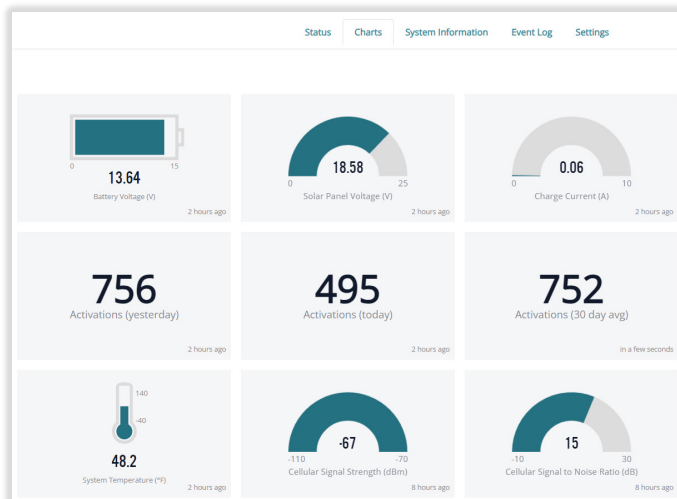
- Subscription level
- Solar or AC power source
- Operation mode

The following information may be displayed for the system. This information reflects the last reported value as shown in each performance card or under the Refresh System Data button. Click on Refresh System Data to receive new data as required.

- System or battery voltage
- Solar panel voltage
- Charge current
- Yesterday's activations (Trigger/Standby mode only)
- Today's activations (Trigger/Standby mode only)
- 30-day activation average (Trigger/Standby mode only)
- System temperature
- Cellular signal strength
- Cellular signal-to-noise ratio

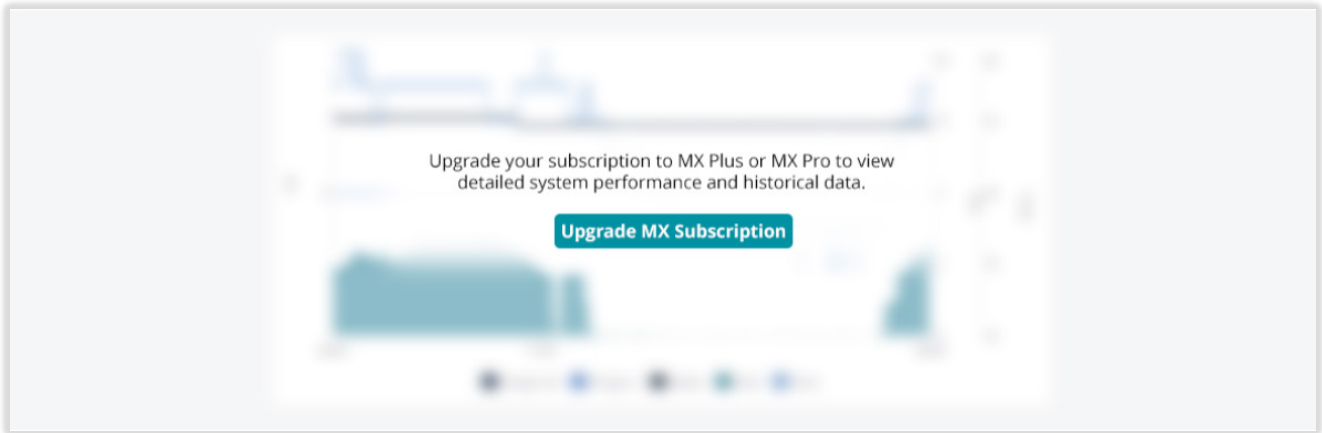
**NOTE**

Hover over each performance metric for a detailed description.

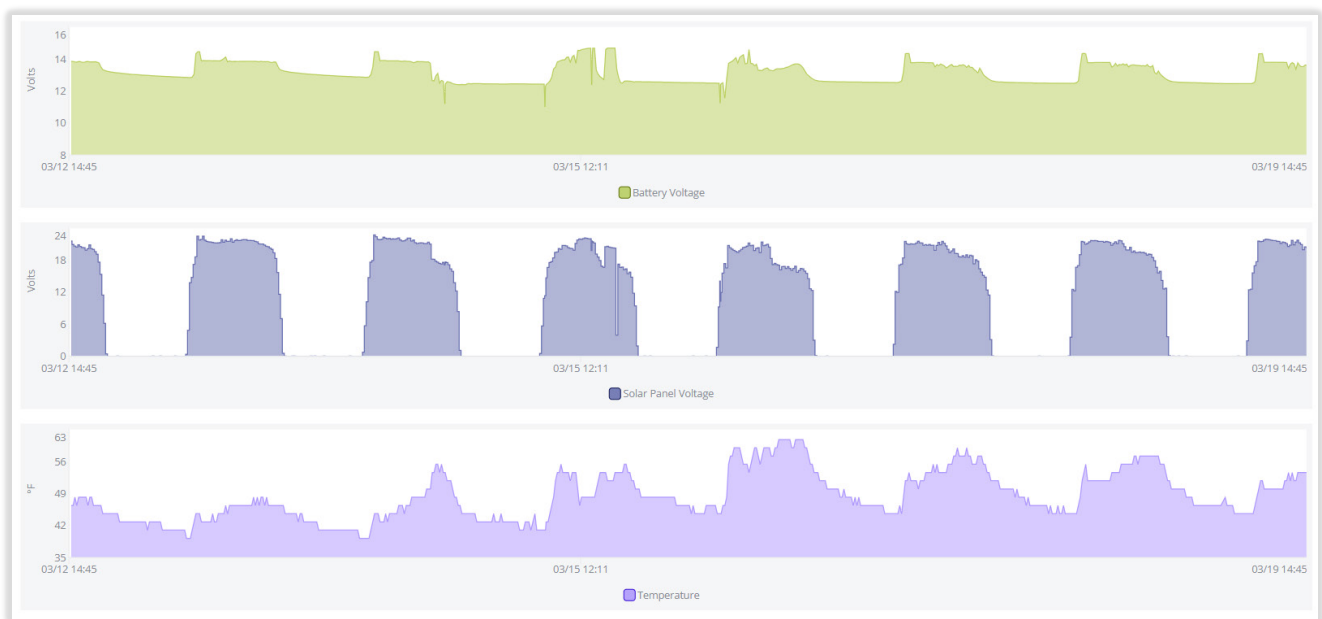

**NOTE**

Activation count is calculated by the total activation time divided by the flash duration set. Systems that are linked together will yield a result of all combined activations.

MX Plus and MX Pro subscriptions will have access to 180 days of historical information. MX Lite systems will only show the last reported data points.

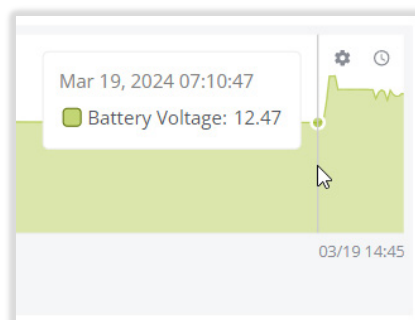


*MX Lite chart section*



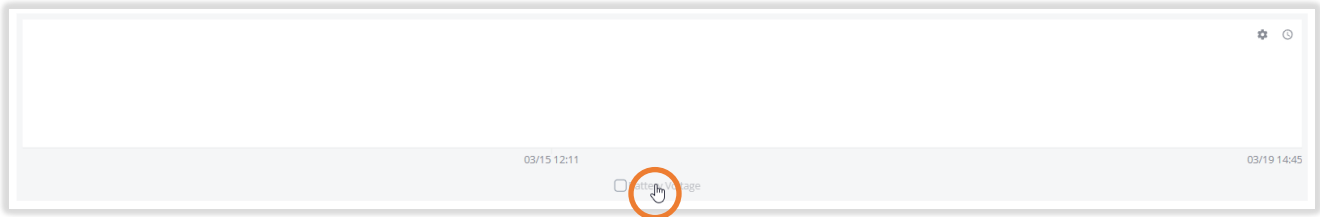
*MX Plus/Pro chart section*

Hover over any data point on the graph to see a timestamp of when it occurred and the value.

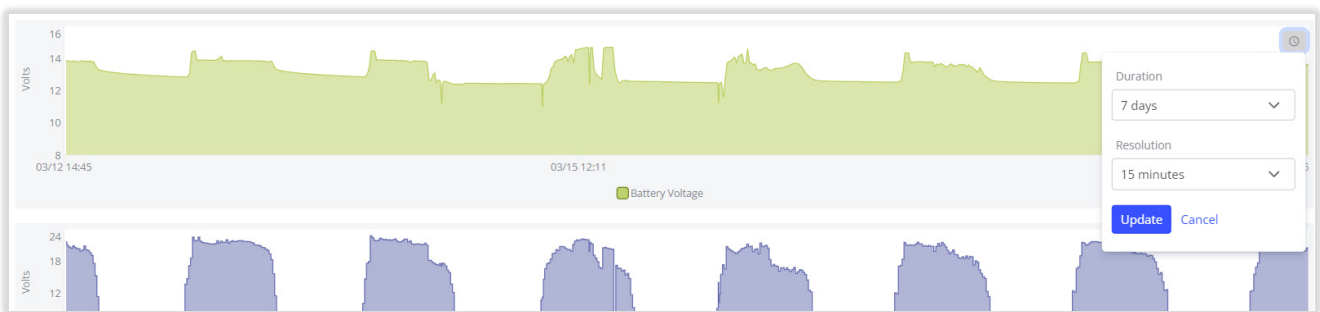




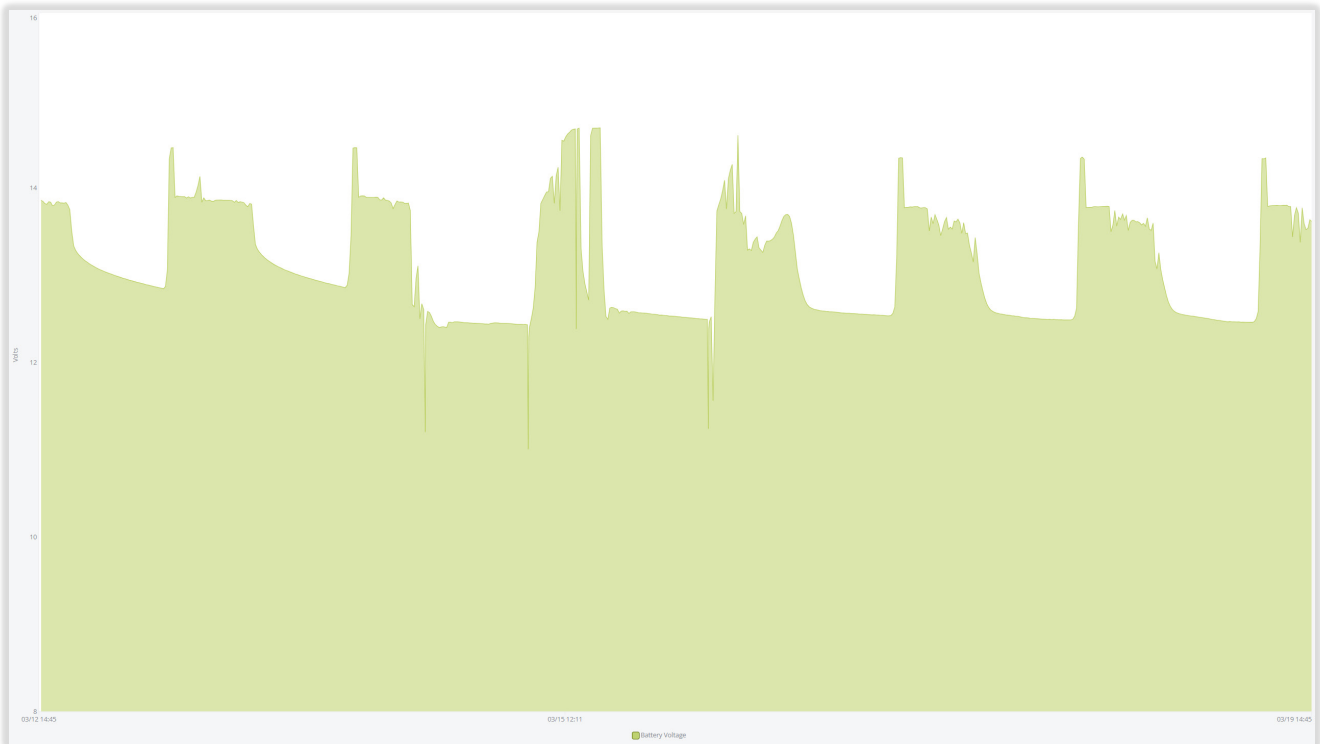
Click on the legend at the bottom of the graph to turn off the data for that parameter.



In the upper right corner of each graph, you can change the duration and resolution of the data. Duration can be set up to 180 days. Clicking on the “clock” icon (🕒) will allow you to adjust these settings.



Clicking on the “gear” icon (⚙️) will allow you to view each graph in full screen.



## 4.5 System Information Tab

The System Information tab provides general information about each system. Between this tab and the power module/flasher module(s) screens, you will come across the following parameters:

Status	Charts	System Information	Event Log	Settings
System Information				
Account Name	Mx102546			
System Name	Central High School			
Local Access	Unlocked			
Intensity Mode	Auto			
Subscription Level	Mx Pro			
Subscription Start Date	2024-01-26			
Subscription End Date	2024-08-26			
GPS Location	48.433276, -123.383352			
GPS Fix Time	2024-03-19			
First Activation Date	2023-08-11			
Channel	14			
PAN ID	3538			
Network Key	83ced470dcdc11ee9f3bd1d388cefd9d			
Cellular Signal Strength	Good			
Cellular Signal to Noise Ratio	Fair			
IMEI	359986127427273			
ICCID	8935711002077160419			

Parameter	Description
Account Name	Unique name for your account
Channel	Radio channel assigned to the power module
Firmware Part Number	Module circuit board firmware part number
Firmware Version	Module circuit board firmware version
First Activation Date	Date of first power up for system or module
GPS Location	Coordinates of system
GPS Fix Time	Date of last GPS fix
Hardware Part Number	Module circuit board part number
Hardware Version	Module circuit board revision
ICCID	Unique SIM card identifier
IMEI	Unique modem identifier
Intensity Mode	Denotes whether beacon intensity is in Auto or Manual mode
Local Access	Denotes whether local pairing button is enabled (unlocked) or disabled (locked)

LTE Signal Strength	Cellular signal strength
LTE Signal to Noise Ratio	Cellular bandwidth based on signal strength
7MAC Address	Unique hardware identifier
Module Name	Denotes power or flasher module
Module Part Number	Module part number
Network Key	Network parameter for linking
PAN ID	Network parameter for linking
Power Source	Denotes whether system is solar or AC powered
Serial Number	Module serial number
Subscription End Date	End date of subscription
Subscription Level	Subscription level applied to system
Subscription Start Date	Start date of subscription
System Name	Unique system name
Warranty End Date	End date of warranty of module
Warranty Start Date	Start date of warranty of module

## 4.6 Event Log Tab

The Event Log tab provides a recent list of system events. Alerts that have self-cleared will also show here when they are resolved. MX Plus and MX Pro subscriptions will have access to 45 days of historical information. MX Lite systems will show system events from the past seven days.

Status

Charts

System Information

Event Log

Settings

Event Log

Event Type	Event	Event Source	Date
Refresh Request	Refresh data requested.	mbattagello@synapse-its.com	3/15/2024, 2:38:14 PM PDT
Refresh Request	GPS Reset Requested.	mbattagello@synapse-its.com	3/15/2024, 2:38:11 PM PDT
Fault Resolved	System 1st and Main (Serial Number: 2306015013019) fault (Cellular Communication) was cleared.	-	3/8/2024, 1:42:42 PM PST
Refresh Request	Refresh data requested.	mbattagello@synapse-its.com	3/5/2024, 11:43:06 AM PST
Setting Change	Local Access Lock update requested - change from Locked to Unlocked	mbattagello@synapse-its.com	3/4/2024, 11:29:10 AM PST
Setting Change	Local Access Lock update requested - change from Unlocked to Locked	mbattagello@synapse-its.com	3/4/2024, 9:22:31 AM PST

**NOTE**

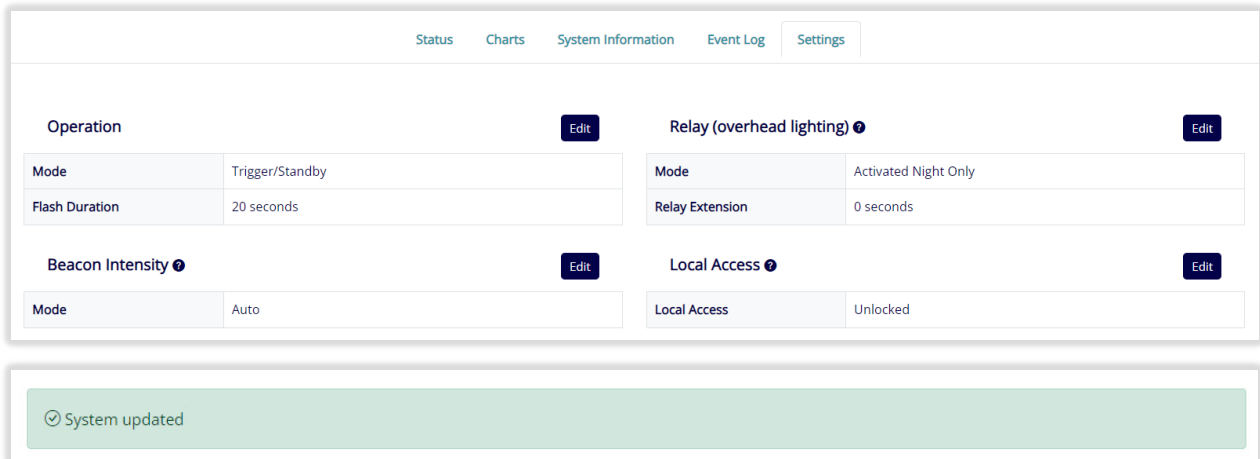
Systems with MX Plus/Pro can have the last 180 days of their Event Log downloaded via the System Management screen. See [Section 7](#) for more information.

## 4.7 Settings Tab

The Settings tab allows remote programming of various system settings. Full use of this tab requires an MX Plus or MX Pro subscription and will be mainly read-only for MX Lite subscriptions.

- Operation – sets the system operation mode.
- Beacon Intensity – sets the beacon intensity.
- Relay (overhead lighting) – sets overhead lighting related parameters.
- Local Access – enables or disables local pairing via the MX Field App.

Click on the Edit button for any parameter to bring up the adjustments that can be made. When editing a parameter, the current setting and the desired new setting will be displayed. Once complete, click Send and wait for the system to confirm that the update has been made.



The screenshot shows the 'Settings' tab in the MX Cloud interface. At the top, there are navigation tabs: Status, Charts, System Information, Event Log, and Settings. The 'Settings' tab is active. Below the navigation tabs, there are four settings sections, each with an 'Edit' button:

- Operation**: Mode is set to 'Trigger/Standby', Flash Duration is '20 seconds'.
- Relay (overhead lighting)**: Mode is 'Activated Night Only', Relay Extension is '0 seconds'.
- Beacon Intensity**: Mode is 'Auto'.
- Local Access**: Local Access is 'Unlocked'.

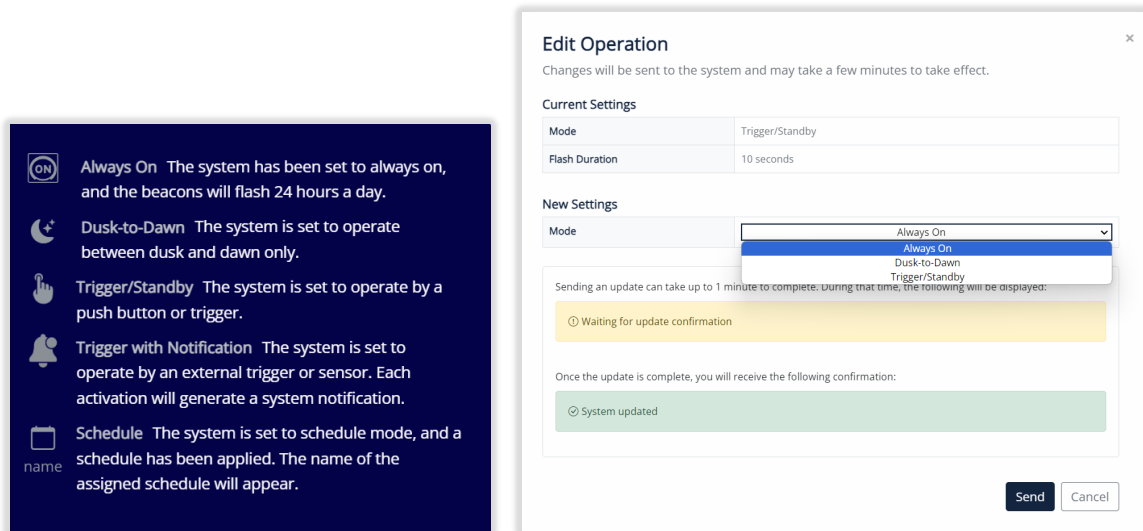
Below the settings sections, there is a green confirmation bar that says 'System updated'.

**NOTE** Local Access is editable with all MX subscription levels, including MX Lite.

## Operation

There are five different operation modes to select from. Choosing one of these will expose additional parameters depending on the application.

- Always On – beacon(s) will flash 24 hours a day.
- Dusk-to-Dawn – beacon(s) will flash between dusk and dawn only.
- Trigger/Standby – beacon(s) is activated by a push button, or external trigger such as a passive detection sensor. When selected you will be prompted to enter an additional Flash Duration value.
- Trigger with Notification – beacon(s) are activated by an external trigger or sensor. An SMS and/or email alert is sent each time the system is triggered. Requires an MX Cloud profile with notifications enabled and an active MX Cloud subscription for the system.
- Schedule – beacon(s) will flash based on a user generated schedule.



### NOTE

The flasher module(s) connected to this system will determine what operation modes are available. For example, for compliance reasons, RRFBs will only operate in Trigger/Standby mode.

### NOTE

Systems cannot change to Schedule mode from the Settings tab. You must assign a system to a schedule, which automatically changes the system to Schedule mode.

## Beacon Intensity

The Beacon Intensity drop-down menu provides settings to adjust daytime and nighttime intensity values. By default, the system will be in Auto mode.

There are two different intensity modes:

- Auto
- Manual

Most users will benefit from leaving the system in Auto mode. In Auto mode, the system will dynamically adjust brightness to retain system sustainability, while attempting to achieve factory default brightness.

The main function of Manual mode is to override the Auto settings to force a specific intensity (a percentage of the factory default value). This is typically to reduce the intensity if it is too bright. Using Manual mode may compromise sustainability for solar-powered systems.

**NOTE**

In Manual mode, parameters visible to the user for adjustment are specific to the flasher module(s) connected to the system.

**Auto** The beacon output intensity will automatically adjust to maximize the beacon's brightness while ensuring sustainability in varying weather conditions.

**Manual** The beacon output intensity will be fixed at the intensity set by the user.

### Edit Beacon Intensity

Changes will be sent to the system and may take a few minutes to take effect.

**Current Settings**

Mode: Auto

**New Settings**

Mode: - Select Mode -

- Select Mode -

Auto

Manual

Sending an update can take up to 1 minute to complete. During that time, the following will be displayed:

⌚ Waiting for update confirmation

Once the update is complete, you will receive the following confirmation:

✅ System updated

**Send** **Cancel**

### Edit Beacon Intensity

Changes will be sent to the system and may take a few minutes to take effect.

**Current Settings**

Mode: Auto

**New Settings**

Mode: Manual

Daytime Intensity: 100%

Nighttime Intensity: 30%

Sending an update can take up to 1 minute to complete. During that time, the following will be displayed:

⌚ Waiting for update confirmation

Once the update is complete, you will receive the following confirmation:

✅ System updated

**Send** **Cancel**

## Auto Mode

The beacon output intensity will automatically adjust to maximize the beacon's brightness while maximizing sustainability in varying weather conditions.

- Meets MUTCD Standards.
- Automatic Light Control (ALC) enabled – allows the system to reduce the beacon brightness in response to low battery states of charge. RRFBs will not use ALC to ensure that SAE J595 standards are adhered to.
- Applies sustainable daytime intensity based on the flasher module connected.
- Applies sustainable nighttime intensity based on the flasher module connected.

## Manual Mode

The beacon output intensity will be fixed at the percentage set by the user. This is a percentage of the factory default value.

- Automatic Light Control (ALC) disabled – the system runs at a fixed intensity.
- User adjustable daytime intensity (percentage of factory default value).
- User adjustable nighttime intensity (percentage of factory default value).

**NOTE**

Refer to the **LEVEL 1** SYSTEM PLANNER for more information on MX Series default settings, such as flash patterns, intensity settings and out-of-the-box functionality at [support.carmanah.com](https://support.carmanah.com).

## Relay (overhead lighting)

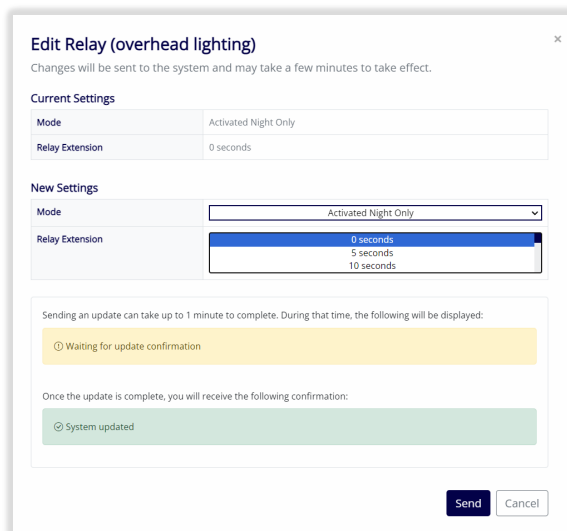
There are two relay modes:

- Activated Night Only – the overhead light is activated at night only when the beacon(s) is flashing.
- Activated Day and Night – the overhead light is activated at all times when the beacon(s) is flashing.

Overhead lighting utilizes the integrated DC relay in all power modules. When the beacon is flashing, the relay output becomes active depending on which mode is selected.

Use the relay extension function to keep the overhead light active after the beacon(s) stops flashing. The relay extension duration can be set between 0 – 60 seconds.

- The DC relay is available for overhead lighting use only.
- Night Only – the overhead light is active at night only, when the beacons are flashing.
- Day and night – the overhead light is active both day and night when beacons are flashing.
- Relay extension – the amount of time the overhead light is on after the beacons stop flashing (0-60 seconds).



### NOTE

It is recommended to leave the relay mode in Activated Night Only. This ensures the lighting fixture only comes on at night when the beacon(s) is flashing. For solar systems, this reduces the power requirements.

### NOTE

The integrated DC relay uses the 12V OUT (5A MAX) terminals on the power module board. Refer to the appropriate **LEVEL 2** install guide for more information.



## 4.8 Power Module Screen

The Power Module screen provides additional information about the system's power module. See [Section 4.5](#) for more information.

<b>Power Module</b>	
Serial Number: 2306015013010	
<b>Module Information</b>	
Account Name	MX102546
System Name	Central High School
Module Name	MX Power Module
Power Source	AC
Serial Number	2306015013010
MAC Address	E1:8C:08:99:7E:2F
Module Part Number	90472
Hardware Part Number	90585
Hardware Version	D
Firmware Part Number	91517
Firmware Version	2.5.0
First Activation Date	2023-08-11
Warranty Start Date	2023-08-11
Warranty End Date	2026-08-11
Channel	14
PAN ID	3538
Network Key	83ced470dc11ee9f3bd1d388cefd9d
GPS Location	48.433276, -123.383352



## 4.9 Flasher Module Screen

The Flasher Module screen provides additional information about the system's flasher module(s). See [Section 4.5](#) for more information.

### MX Beacon Module

Serial Number: 2304015016046

#### Module Information

Account Name	MX102546
System Name	Central High School
Module Name	MX Beacon Module
Serial Number	2304015016046
MAC Address	1A:EE:01:8D:F7:F4
Module Part Number	90494
Hardware Part Number	90073
Hardware Version	E
Firmware Part Number	90753
Firmware Version	2.5.0
First Activation Date	2023-08-11
Warranty Start Date	2023-08-11
Warranty End Date	2026-08-11
Channel	14
PAN ID	3538
Network Key	83ced470dc11ee9f3bd1d388cefd9d

## 5.0 Schedules

### 5.1 Overview

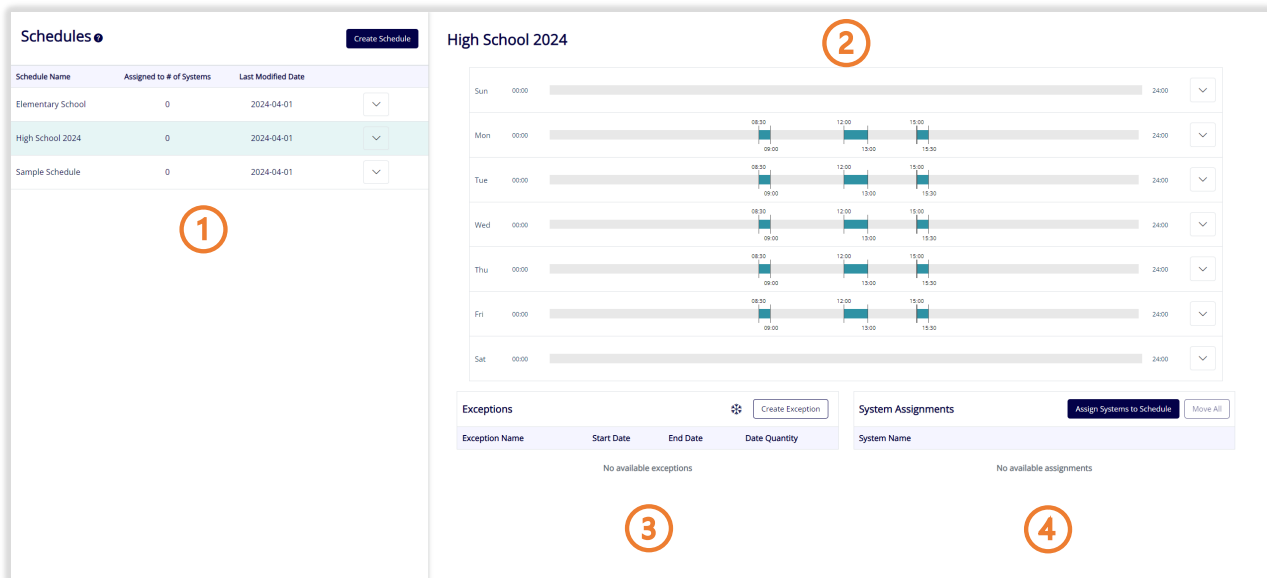
The Schedules screen is where you will manage schedule-based programming, primarily used for school zone systems.

Schedules are based on a seven-day period from Sunday to Saturday. The schedule is not date-based and will run in perpetuity when assigned to a system.

Each account will start with a Sample Schedule as an example. It is recommended to start by cloning the Sample Schedule and use it as a template.

**NOTE**

Schedules are created and can exist independently of MX systems.



The screenshot shows the 'Schedules' screen with the following sections:

- Section 1: Schedules** (Left sidebar): A table listing schedules. The 'High School 2024' schedule is highlighted.

Schedule Name	Assigned to # of Systems	Last Modified Date
Elementary School	0	2024-04-01
High School 2024	0	2024-04-01
Sample Schedule	0	2024-04-01
- Section 2: Schedule details** (Top right): A detailed view of the 'High School 2024' schedule. It shows a weekly timeline from Sunday to Saturday. The timeline for Monday is expanded, showing a schedule from 08:00 to 15:30 with a break from 12:00 to 13:00. The total duration is 24:00.
- Section 3: Exceptions and alternate schedule** (Bottom left): A section for managing exceptions. It includes a 'Create Exception' button and a table with columns: Exception Name, Start Date, End Date, and Date Quantity. The table currently shows 'No available exceptions'.
- Section 4: System Assignments** (Bottom right): A section for managing system assignments. It includes an 'Assign Systems to Schedule' button and a table with columns: System Name. The table currently shows 'No available assignments'.

This screen is segmented into four sections:

1. Schedules
2. Schedule details
3. Exceptions and alternate schedule
4. System Assignments

The left side of the screen will show the following:

- List of previously created schedules
- Number of systems assigned to each schedule
- Last date each schedule was modified

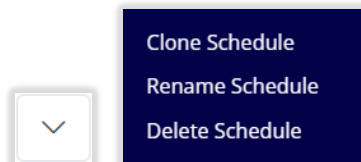
Schedules ?

Create Schedule

Schedule Name	Assigned to # of Systems	Last Modified Date	
Elementary School	0	2024-04-01	▼
High School 2024	0	2024-04-01	▼
Sample Schedule	0	2024-04-01	▼

How to create a schedule is outlined in [Section 5.2](#).

Click on the down chevron icon to bring up additional functions for each schedule.



## Clone Schedule

This will allow you to clone an existing schedule. The newly cloned schedule will have identical schedule details as the original. The cloned schedule will be given a new name which can be renamed.

Clone Schedule

×

Schedule Name : High School 2024

Name

High School 2024 - 1

Clone

Cancel

## Rename Schedule

This will allow you to rename an existing schedule.

Rename Schedule

Schedule Name : High School 2024 - 1

New Name

Rename Cancel

## Delete Schedule

This will allow you to delete an existing schedule.

Delete Schedule

Schedule Name : Middle School

This action will permanently delete this schedule.

Delete Cancel

### NOTE

Only schedules with no assigned systems may be modified or deleted. To modify a schedule with systems assigned to it, you will need to clone the schedule and then begin to make modifications. Once you have completed the necessary changes, you can assign each applicable system to the new schedule. See [Section 5.4](#) for more information.

### NOTE

The Sample Schedule will automatically populate if all schedules are deleted.

### NOTE

Schedules with “APP” next to the name signifies a locally programmed schedule via the MX Field App. These schedules cannot be edited but can be cloned. If the system(s) assigned to this schedule are moved to one created in MX Cloud, the APP schedule will automatically be purged from the account within 24 hours.

Schedules <span></span>			
Create Schedule			
Schedule Name	Assigned to # of Systems	Last Modified Date	
Central School District APP	1	2024-04-01	▼
Elementary School	0	2024-04-01	▼
High School 2024	0	2024-04-01	▼
Sample Schedule	0	2024-04-01	▼

APP

Indicates this schedule was created using the MX Field App, and cannot be edited from MX Cloud. To make changes, clone this schedule and assign systems to the cloned version.

## 5.2 Creating a Schedule

Click on Create Schedule to create a new blank schedule. Optionally, click the checkbox in the New Schedule pop-up to include the Sample Schedule. The Sample Schedule uses the following events from Monday to Friday:

- 08:30 – 09:00 (beacons on)
- 12:00 – 13:00 (beacons on)
- 15:00 – 15:30 (beacons on)

Events are periods when the system's beacons are on. During all other periods in the schedule the beacons will remain off unless pedestrian triggered.

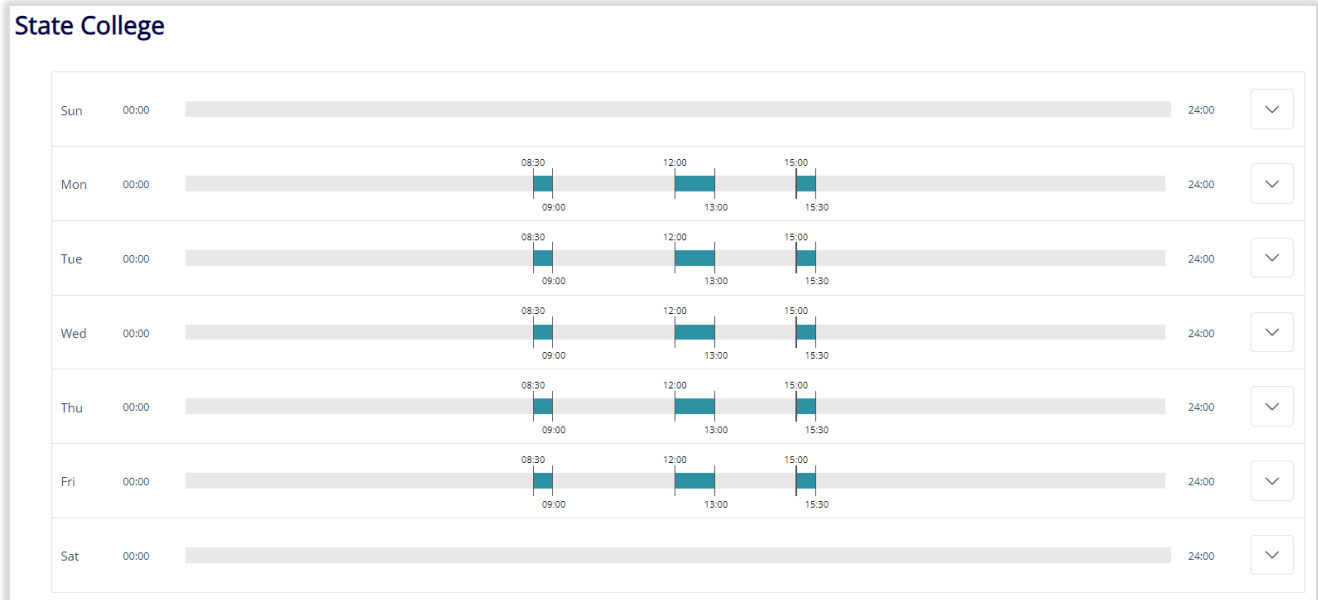
New Schedule

Schedule Name

☒ Include Sample Schedule

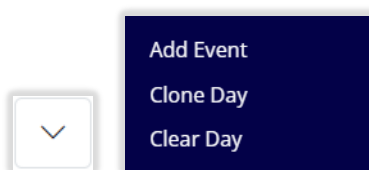
Create

Cancel



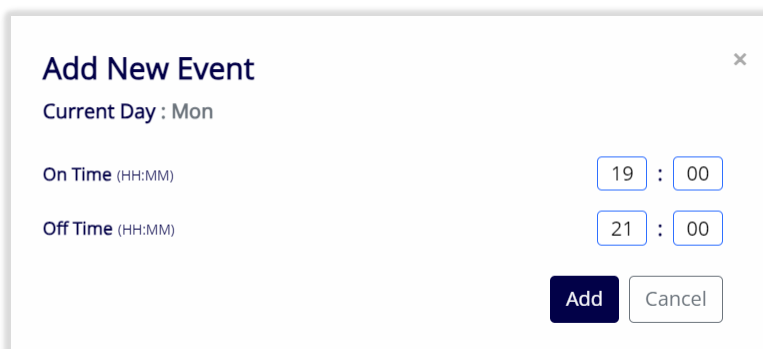
Build the schedule for the typical weekly events throughout the year. For any days that fall outside of this schedule, such as an early release day, create an alternate schedule to supersede this schedule for that day. See [Section 5.3](#) for more information.

Click on the down chevron icon to bring up additional functions for each day.



## Add Event

This will allow you to add a new event. Choose the event on time and off time and click Add to complete. Events use a 24-hour clock format in HH:MM.



**Add New Event** ×

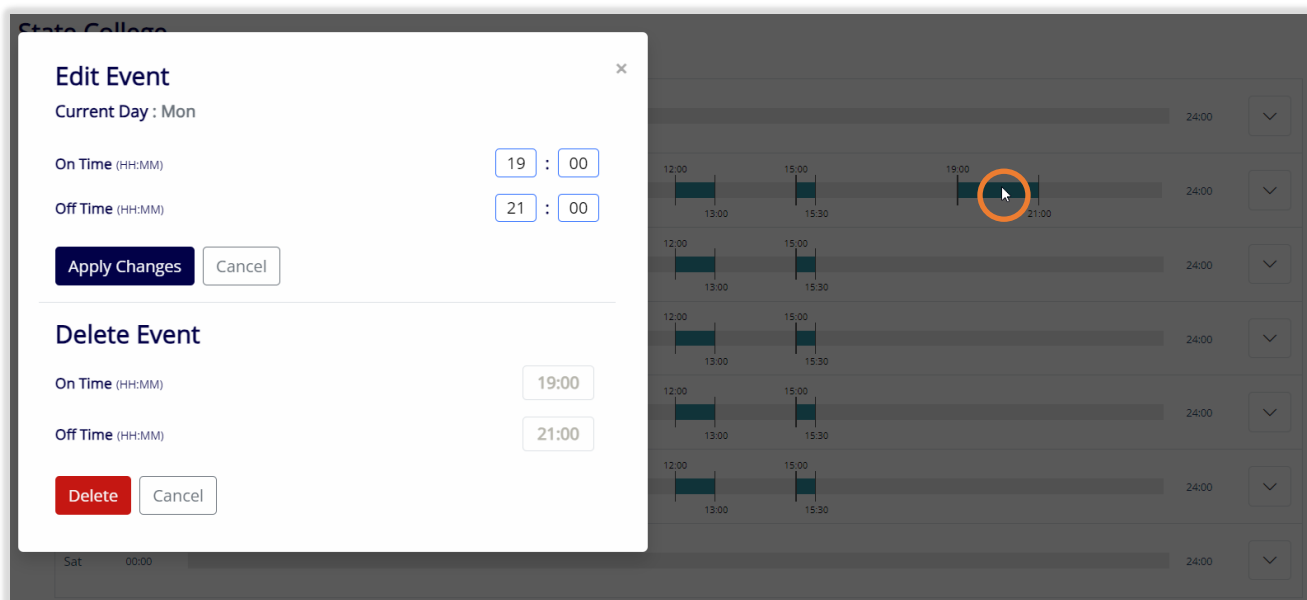
Current Day : Mon

On Time (HH:MM) 19 : 00

Off Time (HH:MM) 21 : 00

**Add** **Cancel**

If you need to make a change to an event, click on the blue portion of the event in the timeline. You can edit the times or delete the event.



**Edit Event** ×

Current Day : Mon

On Time (HH:MM) 19 : 00

Off Time (HH:MM) 21 : 00

**Apply Changes** **Cancel**

---

**Delete Event**

On Time (HH:MM) 19:00

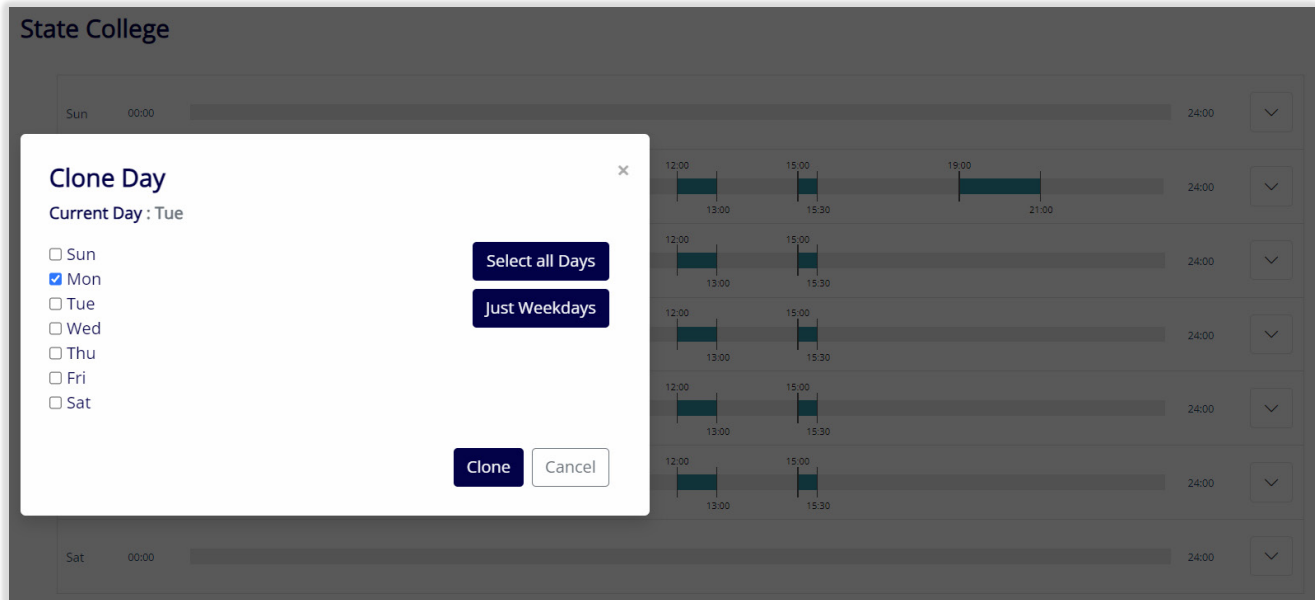
Off Time (HH:MM) 21:00

**Delete** **Cancel**

The background shows a timeline interface with multiple rows of events. A blue bar representing an event from 19:00 to 21:00 is highlighted with an orange circle, indicating it is the selected event for editing or deletion.

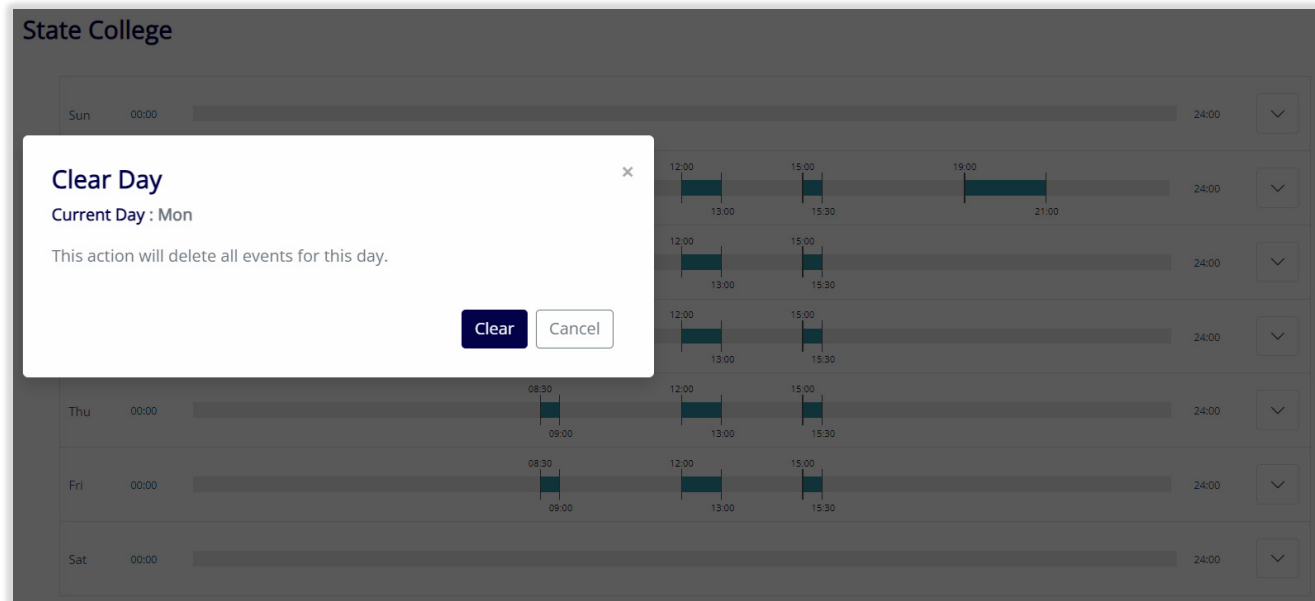
## Clone Day

This will allow you to copy the event timeline from one day to another. You can select individual days, all days, or just weekdays. Click Clone to complete.



## Clear Day

This will allow you to clear the event timeline for a given day.



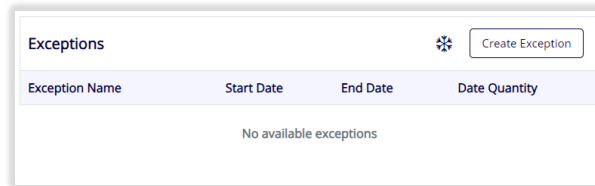


## 5.3 Creating Exceptions/Alternate Schedules

The Exceptions section allows for the following:

- Create an exception/alternate schedule
- Create a “snow day” exception
- Edit existing exceptions
- Delete existing exceptions

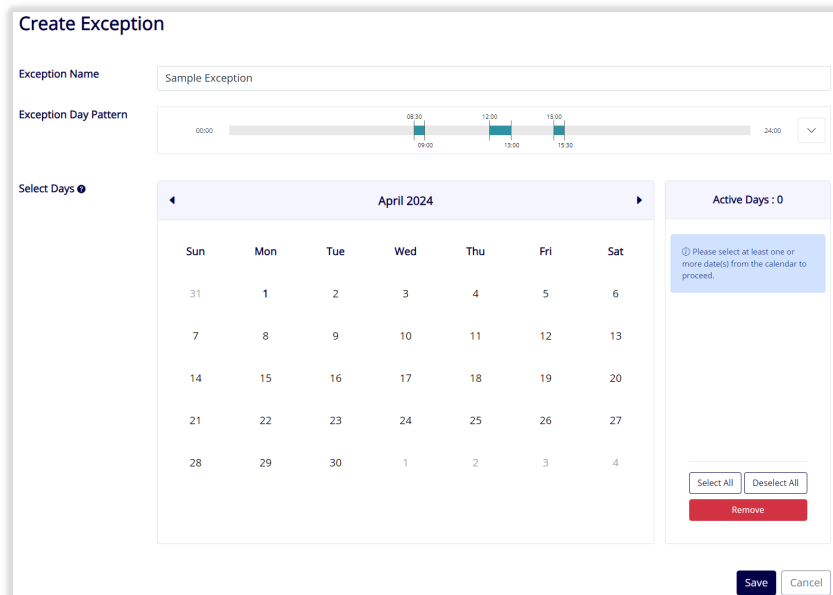
All created exceptions will be listed, showing the exception name, start date and end date.



### Create Exception/Alternate Schedule

Exceptions/alternate schedules override the existing day’s event timeline on the date(s) chosen for the exception. They differ from schedules as they are date-based instead of day-of-the-week based. While an exception is active, the beacon(s) follow the new exception day pattern events. This is useful for altering your weekly schedule with reoccurring (such as early release days), one-off occasions, or holidays.

1. Click on Create Exception.
2. Choose a name for the exception.
3. Edit/add/delete events for the day pattern to suit your exception requirements. Clearing the day will result in no events, which turns the beacon(s) off for the dates selected.
4. Choose the applicable dates.
5. Click on Save to complete.





In the example below, the Summer Break 2024 exception operates between June 17, 2024 and August 30, 2024. No scheduled events will occur during this exception period, and the beacon(s) will remain off. On August 31st, 2024, the schedule will resume its normal weekly programmed events.

### Create Exception

Exception Name: Summer Break 2024

Exception Day Pattern: 00:00 to 24:00

Select Days

August 2024						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Active Days : 55

- ☐ 2024-08-21
- ☐ 2024-08-22
- ☐ 2024-08-23
- ☐ 2024-08-26
- ☐ 2024-08-27
- ☐ 2024-08-28
- ☐ 2024-08-29
- ☐ 2024-08-30

Select All Deselect All Remove

Save Cancel

Exceptions				Create Exception
Exception Name	Start Date	End Date	Date Quantity	
Summer Break 2024	2024-06-17	2024-08-30	55	▼

## Create a “Snow Day” Exception

The “snowflake” icon (❄️) next to Create Exception is a quick method to turn the beacon(s) off, on the dates selected, for all systems assigned to the schedule.

1. Click on the snowflake icon.
2. Choose a name for the exception.
3. Choose the applicable date(s).
4. Click on Save to complete.

In the example below, “Holidays 2024” turns the beacon(s) for May 27, 2024. On May 28, 2024, the schedule will resume its weekly programmed events.

Any additional exceptions will be shown in chronological order under the Exceptions list.

### Create Exception

Exception Name

Exception Day Pattern

00:00
24:00

Select Days

May 2024

Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1

Active Days : 1

☐ 2024-05-27

Select All

Deselect All

Remove

Save


Cancel

Exceptions				❄️ Create Exception
Exception Name	Start Date	End Date	Date Quantity	
Holidays 2024	2024-05-27	2024-05-27	1	▼
Summer Break 2024	2024-06-17	2024-08-30	55	▼

## Edit and Delete Exceptions

Click on the down chevron icon to edit or delete an exception.

- Edit Exception – allows renaming the exception and changing exception parameters. Click Save to complete.
- Delete Exception – deletes the exception. Click Delete to complete.

Exceptions 				Create Exception
Exception Name	Start Date	End Date	Date Quantity	
Holidays 2024	2024-05-27	2024-05-27	1	▼
Summer Break 2024	2024-06-17	2024-08-30	55	

Edit Exception  
Delete Exception

### Edit Exception: Holidays 2024

Exception Name:

Exception Day Pattern:   ▼

Select Days ●

May 2024

Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1

Active Days : 1

☐ 2024-05-27

Select All Deselect All

Remove

Save Cancel

**NOTE**

Only dates that are not taken by another exception may be chosen.

12

Date is assigned to the current exception.

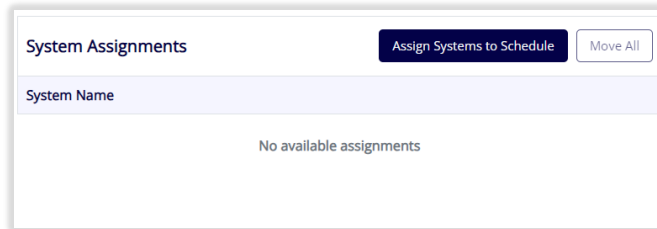
12  
Exception Name

## 5.4 Assigning Systems to Schedules

The System Assignment section allows for the following:

- Assign system(s) to a schedule
- Move all system(s) assigned to this schedule to another schedule

Once you have completed building the schedule's events and exceptions, you can assign a system to this schedule. Assigning a system to a schedule will automatically change that system's operation mode to Schedule.



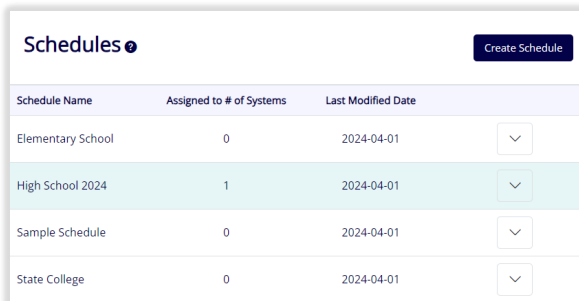
System Assignments

Assign Systems to Schedule Move All

System Name

No available assignments

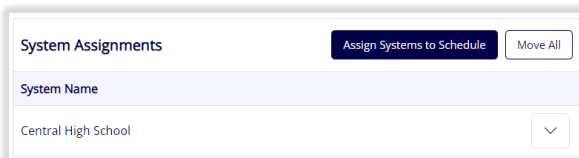
1. On the left side of the Schedules screen, click on the schedule you want to assign systems to. The schedule will turn teal.
2. Click on Assign Systems to Schedule.
3. Click the checkbox for each system you want to assign to the schedule.
  - a. Only systems with MX Pro subscriptions will be listed. If the system already has a schedule assigned, it will be listed under Current Schedule.
  - b. Click on the checkbox next to System Name to select all systems.
4. Click on Save to complete.



Schedules

Create Schedule

Schedule Name	Assigned to # of Systems	Last Modified Date	
Elementary School	0	2024-04-01	▼
High School 2024	1	2024-04-01	▼
Sample Schedule	0	2024-04-01	▼
State College	0	2024-04-01	▼

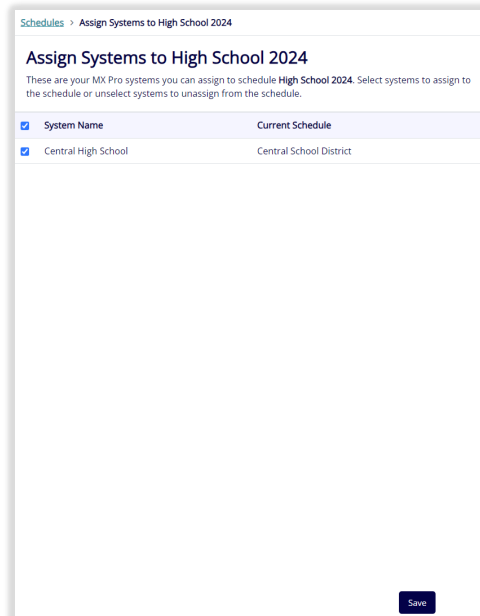


System Assignments

Assign Systems to Schedule Move All

System Name

Central High School ▼



Schedules > Assign Systems to High School 2024

Assign Systems to High School 2024

These are your MX Pro systems you can assign to schedule High School 2024. Select systems to assign to the schedule or unselect systems to unassign from the schedule.

<input checked="" type="checkbox"/> System Name	Current Schedule
<input checked="" type="checkbox"/> Central High School	Central School District

Save

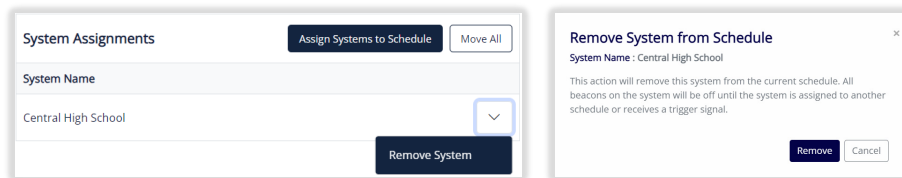
Once you have a system assigned to a schedule, you can do the following:

- Remove a system from a schedule.
- Move all systems from one schedule to another schedule.

## Remove System

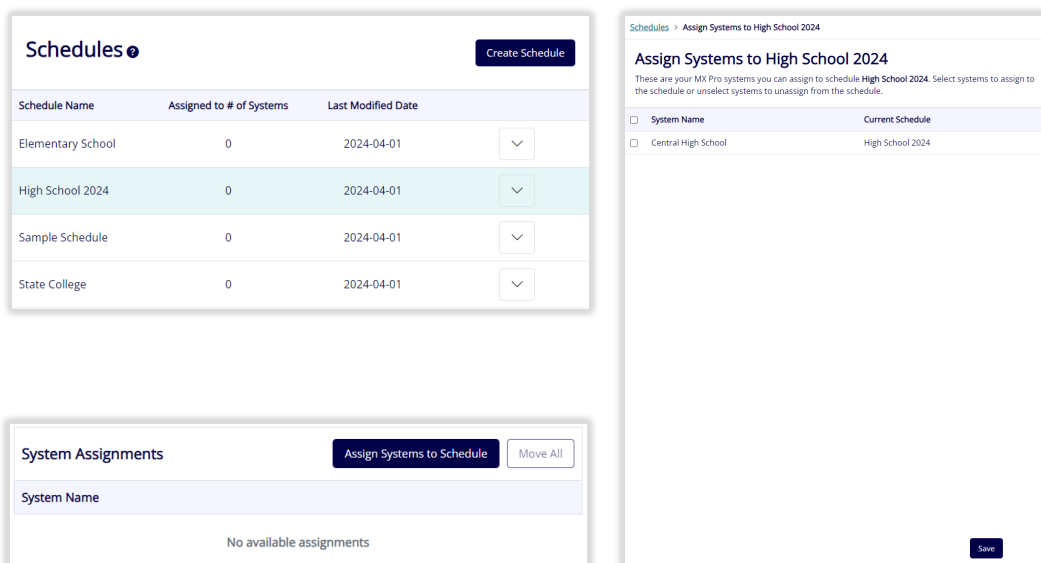
Click on the down chevron icon to remove a system assigned to a schedule.

1. Click on the down chevron icon and click on Remove System.
2. Confirm that this is the system you wish to remove from the schedule. Click on Remove to complete.



You can also remove the schedule for a group of systems assigned the same schedule.

1. On the left side of the Schedules screen, click on the schedule you want to unassign systems from. The schedule will turn teal.
2. Click on Assign Systems to Schedule.
3. Choose the system(s) you wish to unassign from the schedule.
  - a. All systems with MX Pro subscriptions assigned to this specific schedule will be listed.
4. Uncheck the box on the system(s) you wish to unassign.
  - a. Click on the checkbox next to System Name to select all systems.
5. Click on Save to complete. These system(s) will now revert to the Trigger/Standby operating mode.



### NOTE

Removing a system from a schedule automatically changes the operating mode from Schedule to Trigger/Standby.

Click the Move All button to move all systems from the selected schedule to another.

- ### Schedules

Create Schedule

Schedule Name	Assigned to # of Systems	Last Modified Date	
Elementary School	0	2024-04-01	▼
High School 2024	1	2024-04-01	▼
Sample Schedule	0	2024-04-01	▼
State College	0	2024-04-01	▼

### System Assignments

System Name

Central High School

System Assignments

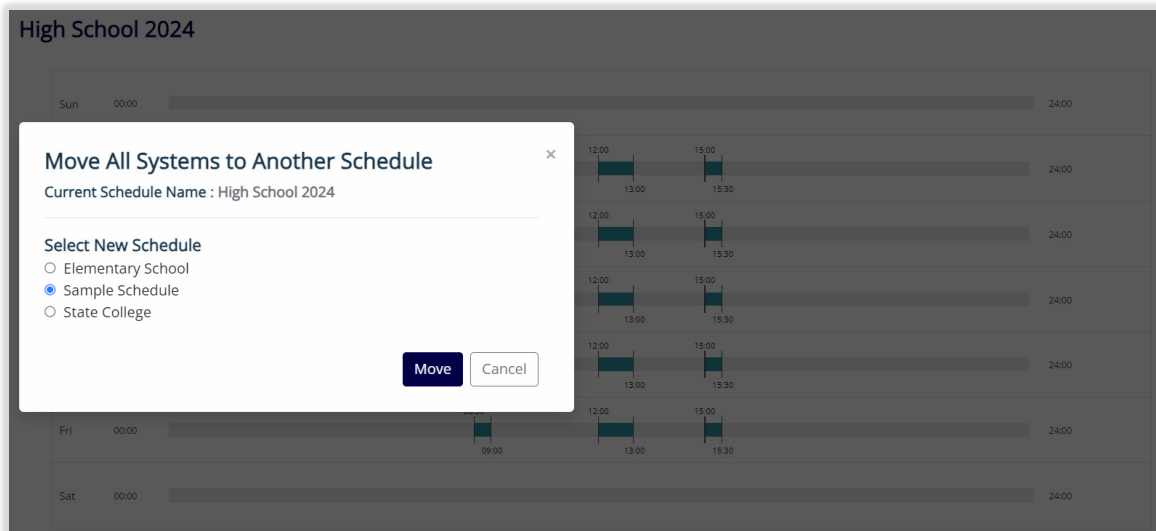
Assign Systems to Schedule

Move All

System Name

Central High School

▼



## Schedules ?

Create Schedule

Schedule Name	Assigned to # of Systems	Last Modified Date	
Elementary School	0	2024-04-01	▼
High School 2024	0	2024-04-01	▼
Sample Schedule	1	2024-04-01	▼
State College	0	2024-04-01	▼

## 6.0 Subscriptions

### 6.1 Overview

The Subscriptions screen provides access to manage assigned and unassigned subscriptions. Assigned subscriptions are sorted by expiry date but may also be manually sorted by system name.

Systems that have yet to be deployed will not be accessible for subscription management. Their details will be updated once commissioned.

### Manage MX Subscriptions

View all systems registered on your account and their current subscription status. If you have purchased MX Subscriptions which have not previously been assigned to a system, they will be listed under "Available subscriptions to assign."

Visit our website to learn about [MX Subscriptions](#).

Available subscriptions to assign: 0

Subscription	Length (years)	Quantity
No available plans		

[Transfer Subscription](#)

System	Subscription	Today	Expiry Date
MX2319015073119 Serial Number: 2319015073119	AWAITING ACTIVATION	<div></div>	System has not yet been commissioned <a href="#">Add Subscription</a>
MX2319015073139 Serial Number: 2319015073139	AWAITING ACTIVATION	<div></div>	System has not yet been commissioned <a href="#">Add Subscription</a>

### Manage MX Subscriptions

View all systems registered on your account and their current subscription status. If you have purchased MX Subscriptions which have not previously been assigned to a system, they will be listed under "Available subscriptions to assign."

Visit our website to learn about [MX Subscriptions](#).

Available subscriptions to assign: 17

Subscription	Length (years)	Quantity
MX Lite	1	1
MX Lite	3	3
MX Plus	1	2
MX Plus	3	8
MX Pro	1	1
MX Pro	5	2

[Transfer Subscription](#)

System	Subscription	Today	Expiry Date
1st and Main Serial Number: 2306015013019	MX Plus	<div>29 days remaining</div>	2024-04-30 <a href="#">Add Subscription</a>
Central High School Serial Number: 2306015013010	MX Pro	<div></div>	2024-09-30 <a href="#">Add Subscription</a>

### System List

Each system in the account will be listed and show the following:

- System name
- Current subscription
- Time remaining on the subscription
- Expiry date of the subscription

If a system is eligible to accept a new subscription, the Add Subscription button will become active. Systems with two subscriptions already applied to it cannot accept any more subscriptions until one has expired. An example of two subscriptions on one system would be:

- Subscription 1 – MX Lite (3-years included)
- Subscription 2 – MX Plus (3-year length purchased)



## Subscription Inventory

In the upper right corner is a list of all unassigned subscriptions available to be assigned to systems. The table of unassigned subscriptions indicates the:

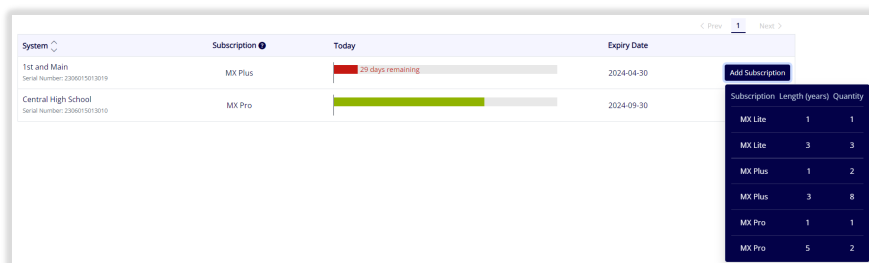
- Subscription level
- Subscription length (in years)
- Quantity of subscriptions in inventory

Available subscriptions to assign: 17		Transfer Subscription
Subscription ?	Length (years)	Quantity
MX Lite	1	1
MX Lite	3	3
MX Plus	1	2
MX Plus	3	8
MX Pro	1	1
MX Pro	5	2

## 6.2 Subscription Renewal

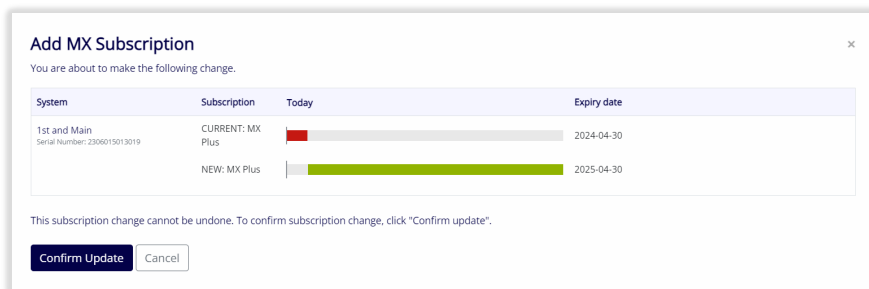
To renew a subscription, follow the steps below:

1. Find the system you wish to add an unassigned subscription to.
2. Click on Add Subscription.
3. Choose the appropriate subscription and length from the list.
4. A pop-up will display the current subscription information and the proposed change.
5. Click Confirm Update to add the subscription. The system will now reflect the new information.
6. The available subscription inventory will adjust accordingly.



System	Subscription	Today	Expiry Date
1st and Main Serial Number: 2306015013019	MX Plus	19 days remaining	2024-04-30
Central High School Serial Number: 2306015013010	MX Pro		2024-09-30

Subscription	Length (years)	Quantity
MX Lite	1	1
MX Lite	3	3
MX Plus	1	2
MX Plus	3	8
MX Pro	1	1
MX Pro	5	2



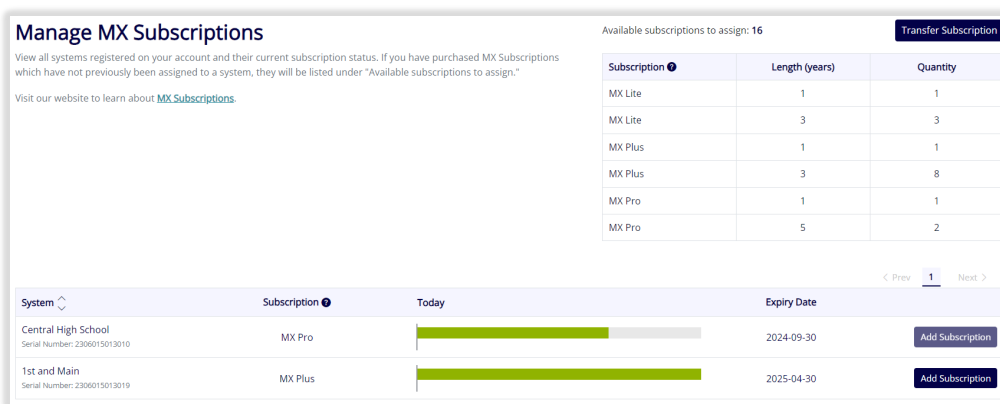
**Add MX Subscription**

You are about to make the following change.

System	Subscription	Today	Expiry date
1st and Main Serial Number: 2306015013019	CURRENT: MX Plus		2024-04-30
	NEW: MX Pro		2025-04-30

This subscription change cannot be undone. To confirm subscription change, click "Confirm update".

**Confirm Update** **Cancel**



**Manage MX Subscriptions**

View all systems registered on your account and their current subscription status. If you have purchased MX Subscriptions which have not previously been assigned to a system, they will be listed under "Available subscriptions to assign."

Visit our website to learn about [MX Subscriptions](#).

Available subscriptions to assign: 16

Subscription	Length (years)	Quantity
MX Lite	1	1
MX Lite	3	3
MX Plus	1	1
MX Plus	3	8
MX Pro	1	1
MX Pro	5	2

System	Subscription	Today	Expiry Date
Central High School Serial Number: 2306015013010	MX Pro		2024-09-30
1st and Main Serial Number: 2306015013019	MX Plus		2025-04-30

### NOTE

Systems with two subscriptions applied will have the Add Subscription button grayed out. A system with less than 60 days remaining will reactivate the Add Subscription button to proceed with a renewal.

### NOTE

Renewals of the same subscription level will be appended to the expiry date of the existing subscription. Renewing with a higher-level subscription will supersede the current subscription and take effect immediately. Once the higher-level subscription expires, this system will revert to any remaining subscription, if applicable.

## 6.3 Subscription Upgrade

Upgrading a subscription is similar to the renewal procedure in [Section 6.2](#). Upgrading a subscription requires the following:

- A system that has only one subscription applied to it.
- An upgraded subscription that is a higher level than the existing subscription.

To update a subscription, follow the steps below:

1. Find the system you wish to add a higher-level subscription to.
2. Click on Add Subscription.
3. Choose the appropriate subscription and length from the available list.
4. A pop-up will display the current subscription information and the proposed change.
5. Click Confirm Update to add the subscription. The system will now reflect the new information.
6. The available subscription inventory will adjust accordingly.

### Add MX Subscription

You are about to make the following change.

System	Subscription	Today	Expiry date
1st and Main Serial Number: 2306015013019	CURRENT: MX Lite	<div></div>	2027-03-31
	NEW: MX Plus	<div></div>	2025-03-31

This subscription change cannot be undone. To confirm subscription change, click "Confirm update".

Confirm Update
Cancel

### NOTE

In the example above, this system has an active 3-year MX Lite subscription and added a 1-year MX Plus subscription. The MX Plus subscription is effective immediately. Once the MX Plus subscription expires, this system will revert to any remaining MX Lite subscription.

## 6.4 Subscription Transfer

Unassigned subscriptions may be transferred from one MX Cloud account to another MX Cloud account. Most users will not have to utilize this feature. MX Authorized Distributors most often use the Transfer Subscription function to provide MX Cloud subscriptions directly to their customers.

To transfer a subscription, follow the steps below:

1. Click on Transfer Subscription. A pop-up will display the subscriptions available for transfer.
2. Select the subscription, length and quantity you wish to transfer.
3. Enter the email address of the MX Admin on the other account that will receive this transfer.
4. The subscription will leave your inventory immediately. The MX Admin of the receiving MX Cloud account will receive an email to accept this transfer. If they do not accept the transfer within five days, the subscription will revert to the original account.

### Manage MX Subscriptions

View all systems registered on your account and their current subscription status. If you have purchased MX Subscriptions which have not previously been assigned to a system, they will be listed under "Available subscriptions to assign."

Visit our website to learn about [MX Subscriptions](#).

Available subscriptions to assign: 16

Subscription	Length (years)	Quantity
MX Lite	1	1
MX Lite	3	3
MX Plus	1	1
MX Plus	3	8
MX Pro	1	1
MX Pro	5	2

Transfer Subscription

System	Subscription	Today	Expiry Date	
Central High School Serial Number: 2306015013010	MX Pro	<div></div>	2024-09-30	<a href="#">Add Subscription</a>
1st and Main Serial Number: 2306015013019	MX Plus	<div></div>	2025-03-31	<a href="#">Add Subscription</a>

### Transfer Subscription

Subscription	Length (years)	Quantity	
MX Lite	1	1	0
MX Lite	3	3	0
MX Plus	1	1	0
MX Plus	3	8	1
MX Pro	1	1	0
MX Pro	5	2	0

Please enter the email address of the MX Admin of the target account.

[Send](#) [Cancel](#)

### Manage MX Subscriptions

View all systems registered on your account and their current subscription status. If you have purchased MX Subscriptions which have not previously been assigned to a system, they will be listed under "Available subscriptions to assign."

Visit our website to learn about [MX Subscriptions](#).

Available subscriptions to assign: 14

Subscription	Length (years)	Quantity
MX Lite	1	1
MX Lite	3	2
MX Plus	1	1
MX Plus	3	8
MX Pro	5	2

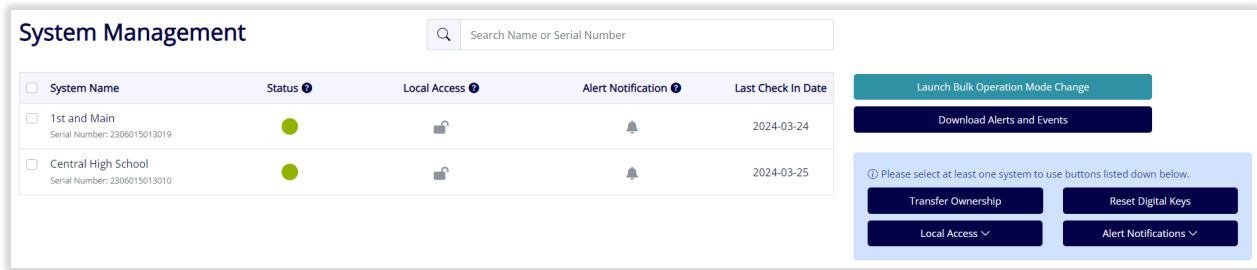
Transfer Subscription

System	Subscription	Today	Expiry Date	
Central High School Serial Number: 2306015013010	MX Pro	<div></div>	2024-08-10	<a href="#">Add Subscription</a>
1st and Main Serial Number: 2306015013019	MX Plus	<div></div>	2024-10-09	<a href="#">Add Subscription</a>

## 7.0 System Management

### 7.1 Overview

The System Management screen provides a convenient way to manage certain system functions. This screen is only available to MX Admins.



<input type="checkbox"/> System Name	Status	Local Access	Alert Notification	Last Check In Date
<input type="checkbox"/> 1st and Main Serial Number: 2306015013019	●	🔒	🔔	2024-03-24
<input type="checkbox"/> Central High School Serial Number: 2306015013010	●	🔒	🔔	2024-03-25

Launch Bulk Operation Mode Change

Download Alerts and Events

① Please select at least one system to use buttons listed down below.

Transfer Ownership    Reset Digital Keys

Local Access    Alert Notifications

### System List

Each system in the account will be listed and show the following:

- System name with serial number
- System status
- Local access status
- Alert Notification status
- Last check-in date

A search bar is provided in the upper right to search for a specific system.

Individual systems can be selected with the checkbox to the left of each system, or the entire list of systems may be selected using the checkbox in the header next to System Name.

Six functions are available on the System Management screen:

1. Launch Bulk Operation Mode Change
2. Download Alerts and Events
3. Transfer Ownership
4. Reset Digital Keys
5. Local Access
6. Alert Notifications

#### NOTE

It will take a short period of time to reflect changes made. Refresh the screen to pull in the latest data.

## 7.2 Bulk Operation Mode Change

Bulk Operation Mode Change allows changing the operation mode to or from Always On and Trigger/Standby on one or more systems.

This function is restricted by the following parameters:

- Only available to systems with MX Plus or MX Pro subscriptions.
- Only available to systems set to Always On or Trigger/Standby.
- Not applicable to systems equipped with RRFBs.

This feature is effective when required to turn on/off the beacon(s) for a large number of systems during special events or inclement weather conditions.

To bulk change operation mode follow the steps below:

1. Click on Launch Bulk Operation Mode Change.
2. Select all systems that are to have their operation mode changed. For easy identification of certain groups of systems, it is recommended to rename them accordingly (see [Section 4.1](#)).
3. Click on Set to Always On Mode or Set to Trigger/Standby Mode to change the operation mode as required. The change may take a few minutes to come into effect.

### Bulk Operation Mode Change

Always On Mode
Trigger/Standby Mode

Search

<input checked="" type="checkbox"/>	System Name	Status	Current Operation	Last Check In Date
<input checked="" type="checkbox"/>	1st and Main Serial Number: 2306015013019	<span style="color: green;">●</span>		2024-03-25
<input checked="" type="checkbox"/>	Central High School Serial Number: 2306015013010	<span style="color: green;">●</span>		2024-03-25

### Set to Always On Mode?

You're about to set the Operation Mode to **Always On** for the following system(s):

**1st and Main**  
**Central High School**

ⓘ Beacons will flash continuously when system is set to **Always On**.

Are you sure you want to change to **Always On** mode for the selected system(s)?

Set to Always On
Cancel

### Bulk Operation Mode Change

Always On Mode
Trigger/Standby Mode

Search

<input type="checkbox"/>	System Name	Status	Current Operation	Last Check In Date
<input type="checkbox"/>	1st and Main Serial Number: 2306015013019	<span style="color: green;">●</span>		2024-03-25
<input type="checkbox"/>	Central High School Serial Number: 2306015013010	<span style="color: green;">●</span>		2024-03-25

## 7.3 Download Alerts and Events

Download Alerts and Events compiles all events and alerts over the last 180 days for all systems with an active MX Plus/Pro subscription on the account. A link is emailed to the user to download the data as a CSV.

Download Alerts and Events

An email will be sent to "mbattagello@synapse-its.com" with a link to download a CSV file of Alerts and Events. This download is limited to 180 days of history and a maximum of 10,000 records. Only systems with active MX Plus or MX Pro subscriptions will be included in the download.

Do you want to download Alerts and Events?

Download
Cancel

## 7.4 Transfer Ownership

Systems may be transferred from one MX Cloud account to another MX Cloud account. Most users will not have to utilize this feature. MX Authorized Distributors most often use the Transfer Ownership function to transfer MX Cloud systems directly to their customers.

To transfer a system, follow the steps below:

1. Select all systems that are to be transferred by using the checkboxes to the left.
2. Click on Transfer Ownership.
3. Enter the email address of the MX Admin on the MX Cloud account that should receive this system.
4. Click on Initiate Ownership Transfer to complete. The system will remain in your inventory until the transfer is accepted. The MX Admin will receive an email to accept this transfer.

System Management

Search Name or Serial Number

<input type="checkbox"/> System Name	Status	Local Access	Alert Notification	Last Check In Date
<input checked="" type="checkbox"/> 1st and Main Serial Number: 2306015013019	1			2024-03-24
<input type="checkbox"/> Central High School Serial Number: 2306015013010				2024-03-25

Launch Bulk Operation Mode Change

Download Alerts and Events

Please select at least one system to use buttons listed down below.

Transfer Ownership

Reset Digital Keys

Local Access

Alert Notifications

Initiate ownership transfer of the selected systems

You're about to initiate the transfer of ownership for the following system(s):

**1st and Main**

Please enter the email address of the MX Admin of the target account.

 johnsmith@victoria.ca

Initiate Ownership Transfer
Cancel

## 7.5 Reset Digital Keys

A digital key is the authorization code to pair with an MX system locally via the MX Field App. Authorized MX Cloud users automatically receive all digital keys for systems associated with the MX Cloud account, eliminating the need to access the pairing button in the power module when on site.

Resetting the digital keys for any or all systems is a way to ensure the systems are secure. Use this function if you wish to lock local access to any unauthorized users. For example, a contractor that is not a user on your MX Cloud account but locally paired while on site with the MX Field App.

To reset the digital key(s) follow the steps below:

1. Select all systems that are to have their digital key reset by using the checkboxes to the left.
2. Click on Reset Digital Keys.
3. Click Reset Digital Keys to complete.

### System Management

<input type="checkbox"/> System Name	Status	Local Access	Alert Notification	Last Check In Date
<input checked="" type="checkbox"/> 1st and Main Serial Number: 2306015013019	<span style="color: green;">1</span>			2024-03-24
<input type="checkbox"/> Central High School Serial Number: 2306015013010	<span style="color: green;">2</span>			2024-03-25

Launch Bulk Operation Mode Change

Download Alerts and Events

Please select at least one system to use buttons listed down below.

Transfer Ownership

Reset Digital Keys

Local Access ▾

Alert Notifications ▾

### Reset Digital Keys

You're about to reset the digital keys for the following systems:

**1st and Main**

Use of the MX Field App for local access to systems requires a digital key. Resetting the digital key will remove local access to any user who is not an authorized user on your account. This process helps keep your systems secure.

Are you sure you want to reset the digital keys for the selected systems?

Reset Digital Keys

Cancel

### NOTE

All users on this MX Cloud account will now receive the updated keys automatically.

### NOTE

The Event Log will show all users who have locally paired with the system. This is a running log over the past 45 days (MX Plus/Pro) or seven days (MX Lite) of system activity. See [Section 4.6](#) for more information.



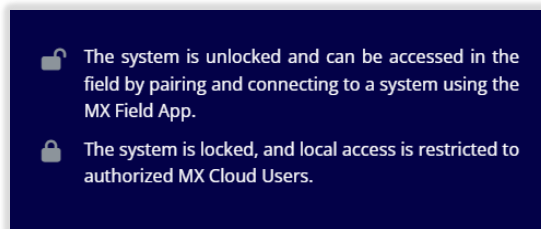
## 7.6 Local Access

Local access relates to Bluetooth connectivity using the MX Field App while on-site. MX Cloud can disable local on-site pairing. Locking local access ensures the systems are secure and can only be accessed by authorized users on your MX Cloud account. All users on the MX Cloud account will automatically receive the digital key and will not be required to access the pairing button when on-site. Refer to the MX Field App for more information at [support.carmanah.com](https://support.carmanah.com).

- Local access locked – pairing button is disabled in the system’s power module. Only authorized MX Cloud users on your account can connect to the system locally via the MX Field App.
- Local access unlocked – pairing button is enabled in the system’s power module. Any user with access to the power module for pairing can connect to the system locally via the MX Field App.

To lock or unlock local access follow the steps below:

1. Select all systems that are to be locked/unlocked by using the checkboxes to the left.
2. Click on Local Access and choose Lock or Unlock.
3. Click on Lock Local Access or Unlock Local Access to complete.



System Management

Search Name or Serial Number

<input type="checkbox"/> System Name	Status	Local Access	Alert Notification	Last Check In Date
<input checked="" type="checkbox"/> 1st and Main Serial Number: 2306015013019	<span style="color: green;">●</span>	<span style="border: 2px solid orange; border-radius: 50%; padding: 2px;">🔓</span>		2024-03-24
<input type="checkbox"/> Central High School Serial Number: 2306015013010	<span style="color: green;">●</span>			2024-03-25

Launch Bulk Operation Mode Change

Download Alerts and Events

Please select at least one system to use buttons listed down below.

Transfer Ownership

Reset Digital Keys

Local Access

Alert Notifications

System Management

Search Name or Serial Number

<input type="checkbox"/> System Name	Status	Local Access	Alert Notification	Last Check In Date
<input type="checkbox"/> 1st and Main Serial Number: 2306015013019	<span style="color: green;">●</span>	<span style="border: 2px solid orange; border-radius: 50%; padding: 2px;">🔒</span>		2024-03-25
<input type="checkbox"/> Central High School Serial Number: 2306015013010	<span style="color: green;">●</span>			2024-03-25

Launch Bulk Operation Mode Change

Download Alerts and Events

Please select at least one system to use buttons listed down below.

Transfer Ownership

Reset Digital Keys

Local Access

Alert Notifications

### NOTE

The MX Field Technician role is a convenient way to provide local access to a contractor or technician without allowing them access to your systems in MX Cloud. See [Section 8](#) for more information.


## 7.7 Alert Notifications

Alert Notifications relate to email/SMS alerts that are sent for each system. See [Section 9.2](#) to opt-in to alerts.


- Alert notifications silenced – prevents email/SMS notifications for each selected system from being sent to opted-in MX Cloud users on the account.
- Alert notifications enabled - enables email/SMS notifications for each selected system to opted-in MX Cloud users on the account.

To silence or enable alert notifications follow the steps below:

1. Select all systems that are to be silenced/enabled by using the checkboxes to the left.
2. Click on Alert Notifications and choose Silence or Enable.
3. Click on Silence Alert Notifications or Enable Alert Notifications to complete.



Enabling alert notifications for a system allows email and SMS notifications for warnings or critical alerts to be sent to users and admins, based on their profile settings.



Silencing alert notifications for a system prevents sending of email and SMS notifications for warnings or critical alerts to users and admins. The system will continue to register alerts, but no notifications will be sent. This feature is intended to reduce the number of alerts a user receives during system maintenance and testing.

### System Management

<input type="checkbox"/>	System Name	Status	Local Access	Alert Notification	Last Check In Date
<input checked="" type="checkbox"/>	1st and Main Serial Number: 2306015013019	<span style="color: green;">●</span>			2024-03-24
<input type="checkbox"/>	Central High School Serial Number: 2306015013010	<span style="color: green;">●</span>			2024-03-25

Launch Bulk Operation Mode Change

Download Alerts and Events

① Please select at least one system to use buttons listed down below.

Transfer Ownership    Reset Digital Keys

Local Access ▾    Alert Notifications ▾

### System Management

<input type="checkbox"/>	System Name	Status	Local Access	Alert Notification	Last Check In Date
<input type="checkbox"/>	1st and Main Serial Number: 2306015013019	<span style="color: green;">●</span>			2024-03-25
<input type="checkbox"/>	Central High School Serial Number: 2306015013010	<span style="color: green;">●</span>			2024-03-25

Launch Bulk Operation Mode Change

Download Alerts and Events

① Please select at least one system to use buttons listed down below.

Transfer Ownership    Reset Digital Keys

Local Access ▾    Alert Notifications ▾

## 8.0 Users

### 8.1 Overview







The Users screen allows you to manage the users on your MX Cloud account. This screen is only available to MX Admins.

User Management

Invite User to Account

Search

Search Name

Name	Email	User's Role	Last Login	
Jane Doe	janedoe@carmanah.com		never logged in	
John Smith	johnsmith@carmanah.com		never logged in	
Mike Battagello	mbattagello@synapse-its.com		2024-03-19	

### User List

Each user in the account will be listed and show the following:

- Name of the user
- Email of the user
- User's role
- Last login date/time



A search bar is provided in the upper right to search for a specific user.

User Management

Invite User to Account

Search

Mike

Name	Email	User's Role	Last Login	
Mike Battagello	mbattagello@synapse-its.com		2024-03-19	

There are four functions available on the Users screen:


1. Review the current user list.
2. Invite new users.
3. Change a user's role.
4. Delete the user.

## 8.2 Invite User to Account

MX Cloud offers four user roles:

1. **MX Admin** – full access to the account.
2. **MX Operator** – can do everything but access System Management and User screens.
3. **MX Field Technician** – receive digital keys for local access but no MX Cloud access.
4. **MX Observer** – has read-only access to the account.

See the image below for an overview of each role.



The image is a dark blue rectangular box containing four entries, each with a small icon and a text description of a user role. The roles are listed vertically: MX Admin (shield icon), MX Operator (gears icon), MX Field Technician (key icon), and MX Observer (eye icon).

- MX Admin** The highest level of account authority. Manage all account aspects, including adding/removing users and transferring system ownership. One or more MX Admins are required for each account.
- MX Operator** Can manage and edit all systems within the MX account but cannot edit users or transfer system ownership.
- MX Field Technician** Are provided Digital Keys to all systems in the account but cannot access the account through MX Cloud. Ideal for field technicians who require local access to systems through the MX Field App.
- MX Observer** Receive read-only access to your account. They can view the account through MX Cloud but cannot make any changes or edits to systems or users.

To invite a new user, follow the steps below:

1. Click on Invite User to Account.
2. Enter a valid email for the user you want to invite. Select the user's role from the drop-down.
3. Click on Invite User to complete.
4. Users must follow the instructions in the welcome email to gain access to the account.

**Invite New MX Cloud User to MX102546 - 0 - Sample Customer** ×

Enter the new user's email address below. They will receive an email invitation to set up their profile, password and log in.

Please enter user's email.

MX Operator

MX Admin

MX Operator

MX Field Technician

MX Observer

**Invite New MX Cloud User to MX102546 - 0 - Sample Customer** ×

Enter the new user's email address below. They will receive an email invitation to set up their profile, password and log in.

Please enter user's email.

Please choose a user's role.

Invite User

**User Management**

Invite User to Account

🔍

Name	Email	User's Role ⓘ	Last Login	
Carmanah User	user@carmanah.com		2024-03-07	
Jane Doe	janedoe@carmanah.com		never logged in	
John Smith	johnsmith@carmanah.com		never logged in	
Mike Battagello	mbattagello@synapse-its.com		2024-03-19	

**NOTE**

Users that are added will show once they have followed the information in the welcome email to complete their setup.





## 8.3 Change User Role

MX Admins can change any user's role by clicking on their respective User's Role icon.

Invite User to Account

Q

Search Name

Name	Email	User's Role ?	Last Login
Carmanah User	user@carmanah.com		2024-03-07
Jane Doe	janedoe@carmanah.com		never logged in
John Smith	johnsmith@carmanah.com		never logged in
Mike Battagello	mbattagello@synapse-its.com		2024-03-19

To change a user's role, follow the steps below:

1. Click on the desired User's Role icon.
2. Choose the new role for this user.
3. Click on Change Role to complete.

User's Role

Changing Carmanah User's role

Current Role

MX Operator

New Role

MX Operator

MX Operator

MX Admin

MX Field Technician





MX Observer

Change

Invite User to Account

Q

Search Name

Name	Email	User's Role ?	Last Login
Carmanah User	user@carmanah.com		2024-03-07
Jane Doe	janedoe@carmanah.com		never logged in
John Smith	johnsmith@carmanah.com		never logged in
Mike Battagello	mbattagello@synapse-its.com		2024-03-19

**NOTE** Users cannot adjust their own roles once created.

## 8.4 Delete User

MX Admins can delete any user by clicking the trash can icon to the right of the name of the user you want to remove.









To delete a user, follow the steps below:

1. Click on the trash can icon to the right of the desired user.
2. Confirm that this is the user you wish to delete.
3. Click on Delete to complete.

Invite User to Account

Q

Search Name

Name	Email	User's Role ?	Last Login	
Carmanah User	user@carmanah.com		2024-03-07	
Jane Doe	janedoe@carmanah.com		never logged in	
John Smith	johnsmith@carmanah.com		never logged in	
Mike Battagello	mbattagello@synapse-its.com		2024-03-19	

Remove User

×

Do you want to remove Carmanah User from your account?







Delete

Cancel

Invite User to Account

Q

Search Name

Name	Email	User's Role ?	Last Login	
Jane Doe	janedoe@carmanah.com		never logged in	
John Smith	johnsmith@carmanah.com		never logged in	
Mike Battagello	mbattagello@synapse-its.com		2024-03-19	

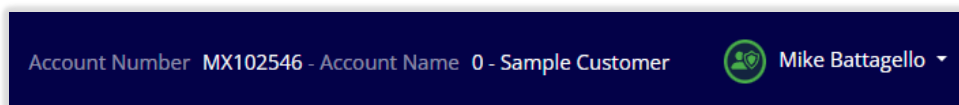
### NOTE

Users may be deleted using this function as long as one MX Admin is active. You cannot delete your own account.

## 9.0 Account and Profile Management

### 9.1 Overview

Clicking on your name in the upper right corner provides access to manage your profile details, access help and support resources and set your notification preferences.



### 9.2 User Profile

This screen allows for setting up the following:

- User's first and last name
- User's mobile phone number (for SMS notifications)
- User's alert notification preferences
- Two-factor authentication

Alert notifications will be sent to your profile email address and mobile phone number on this screen. Once all edits have been made, click on Submit to save.

### Profile and Notification Preferences

**User Information**  
for mbattagello@synapse-its.com

First Name <sup>\*</sup> Last Name <sup>\*</sup>

Mike Battagello

Phone Number <sup>\*</sup> (used for SMS notifications - See below)

250-123-4567

**Notifications**  
Opt in to receive notifications.

**Note:** These notification settings will apply to all systems in this account. Individual systems can be silenced on the System Management page.  
Notifications will only apply to systems with active subscriptions.

Select the types of notifications you want to receive:

Email/SMS	Triggers <span>●</span>	Warnings <span>●</span>	Critical Alerts <span>●</span>	Subscription Reports
Will be sent to mbattagello@synapse-its.com	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Will be sent to phone number above	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A

**Two-Factor Authentication**  
Bring more safety to your accounts.

**Note:** Two-Factor Authentication settings will apply to all your accounts.

☐ Enable Two-Factor Authentication via Email.  
☐ Enable Two-Factor Authentication via SMS.  
☒ Disable Two-Factor Authentication.

Submit

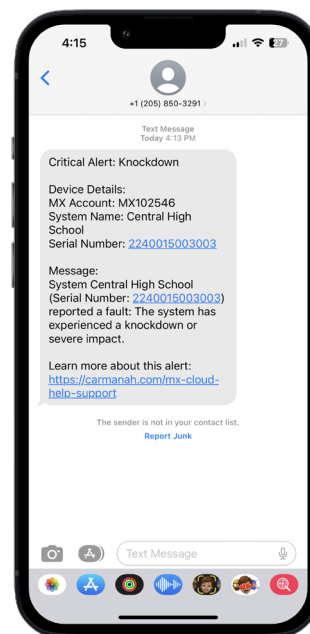
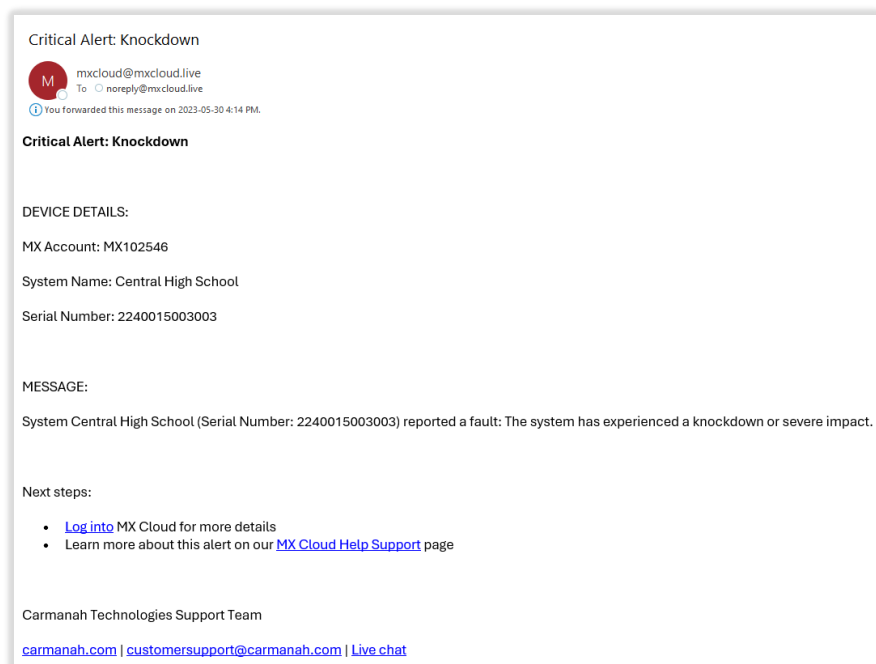
Select the types of notifications you want to receive:

Email/SMS	Triggers <span>●</span>	Warnings <span>●</span>	Critical Alerts <span>●</span>	Subscription Reports
Will be sent to mbattagello@synapse-its.com	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Will be sent to phone number above	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A



## Notifications

Below is an example of what information you will receive with an email or SMS alert.

**NOTE**

It is recommended, at a minimum, to select critical alerts for SMS and/or email notifications.

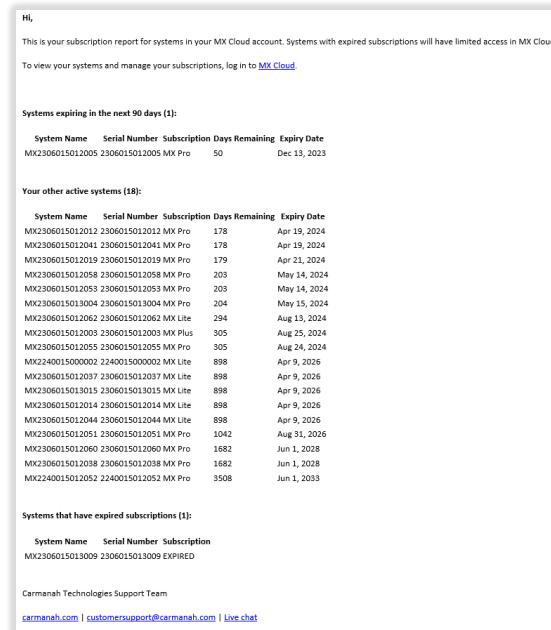
**NOTE**

Whitelist or flag this email address as a “safe sender” – [mxcloud@mxcloud.live](mailto:mxcloud@mxcloud.live). This will help receive email alerts successfully into your inbox, if opted-in. Check your spam or junk folder as required.

## Subscription Reports

Account administrators are automatically opted into subscription reports. Other users will not have access to this feature. An email will be sent each quarter with the following:

- Subscriptions expiring in the next 90 days
- Active subscriptions not expiring soon
- Expired subscriptions



To stop receiving these emails uncheck this box.

## Two-Factor Authentication

This opt-in feature is useful in increasing safety with your profile. If either option is chosen you will be prompted to enter a unique code each time you log in. Once enabled you can disable two-factor authentication by selecting Disable Two-Factor Authentication.

### Two-Factor Authentication

Bring more safety to your accounts.

**Note:** Two-Factor Authentication settings will apply to all your accounts.

- ☐ Enable Two-Factor Authentication via Email.
- ☒ Enable Two-Factor Authentication via SMS.
- ☐ Disable Two-Factor Authentication.

**MX Cloud™**

Enter the verification code we sent to you.

The code was sent to this phone number: \*\*\*-\*\*\*-716

Enter code

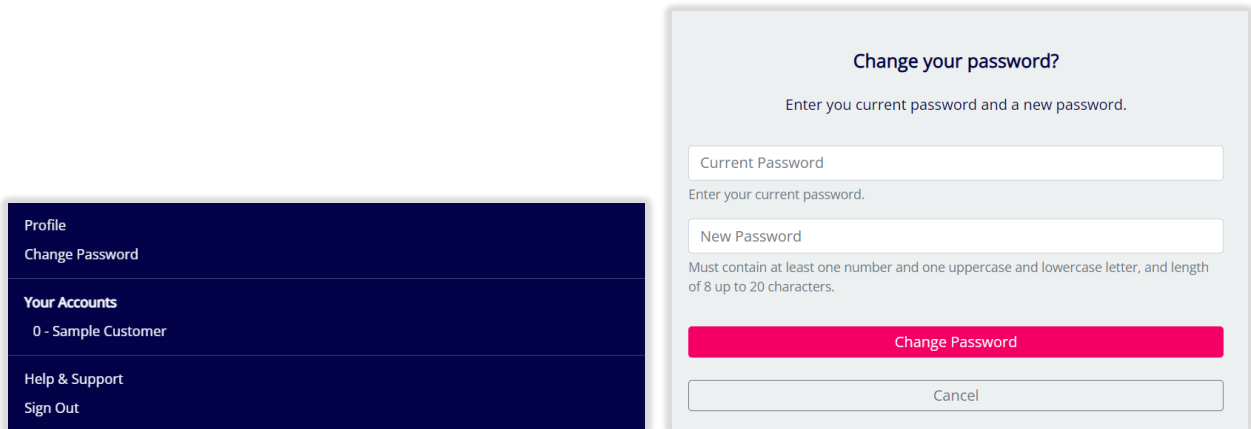
Verify

By logging in, you agree with Carmanah's [Terms of Service](#), [Privacy Policy](#), and [End-user Licensing Agreement](#).

## 9.3 Change Password

This screen allows a user to change their password:

1. Enter your current password.
2. Enter your new password.
3. Click on Change Password to save the new password. Clicking on Cancel will abort the change and bring you back to the dashboard.



## 9.4 Miscellaneous

### Your Account

This will list all accounts with which you are associated. Most users will only see one account, but if you are a member of multiple accounts, each account will be listed here. Clicking on the account name will take you to that specific account.

### Help & Support

This hyperlinked URL will take you to the Carmanah website for frequently asked questions (FAQ) and this MX Cloud guide.

### Sign Out

This will sign you out of your MX Cloud account and take you back to the login screen.



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**Technical Support:**

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