# Honeywell HMI

# **Touch Panel Interface**



**User Guide** 

| ntroduction                                 | 5   |
|---|-----|
| About HMI                                   | 5   |
| Reference documents                         |     |
| Conventions                                 | 5   |
| Understanding HMI user interface            | 6   |
| Touch screen display                        | 6   |
| Home page                                   | 6   |
| Getting started                             | 7   |
| Setting up HMI                              | 7   |
| Managing the User account                   |     |
| Prerequisite                                | 7   |
| To access the user account                  | 7   |
| Logging on to a user account                | 8   |
| To log on from the Home page                |     |
| Changing a user account password            |     |
| To change the account password              |     |
| Logging Out from a user account             |     |
| To log out from HMI                         |     |
| Language settings                           |     |
| To set the preferred language               |     |
| Password expired                            | 9   |
| Managing Fast Access List                   | 10  |
| About Fast Access List                      | 1C  |
| Creating a Fast Access List                 | 10  |
| To create and name a Fast Access list       | 10  |
| Adding datapoints to a Fast Access List     | 11  |
| To add the data points                      |     |
| Removing datapoints from a Fast Access List |     |
| To remove the data points                   |     |
| Renaming a Fast Access List                 |     |
| To rename a Fast Access List                |     |
| Deleting a Fast Access List                 |     |
| To delete a Fast Access List                | 13  |
| Managing Alarms                             | 14  |
| About alarm                                 | 14  |
| Alarm page signs                            | 14  |
| Viewing the datapoints causing alarm        | 15  |
| To view the data points in alarm            | 1.5 |

| Unacknowledged alarm   | 16 |
|--|----|
| To acknowledge an alarm  | 16 |
| Alarm history  | 17 |
| To view the alarm history                                      | 17 |
| Managing Datapoints  | 18 |
| Viewing and modifying a datapoint value                        | 18 |
| To view and modify a data point value                          | 18 |
| Filtering the datapoints                                       | 19 |
| To filter data points  | 19 |
| Adding a datapoint to a Fast Access List                       | 20 |
| To add a data point to a Fast Access List                      | 20 |
| Managing Points In Manual                                      | 21 |
| Viewing the Points in Manual                                   | 21 |
| To view the points in manual                                   | 21 |
| Setting the datapoints to Auto mode                            | 21 |
| To set the data points to Auto mode                            | 21 |
| Setting a Datapoint to Auto mode and managing the properties   | 22 |
| To set a data point to the auto mode and manage the properties | 22 |
| Managing Time Programs   | 23 |
| Adding a time value to a Schedule                              | 23 |
| To add a new time value to a schedule                          |    |
| Deleting a time value from a Schedule                          | 25 |
| To delete a time value from as schedule                        |    |
| Copying the time values to another day of a Schedule           | 25 |
| To copy a time value to another day of a schedule              |    |
| Adding a Calendar entry to an Exceptions                       |    |
| To add a Calendar entry to an Exceptions                       |    |
| Adding a time value to an Exceptions                           |    |
| To add a time value to an Exceptions                           |    |
| Managing the Schedule settings                                 |    |
| To manage the schedule settings                                |    |
| Adding a new Calendar entry                                    |    |
| To add a new Calendar entry                                    |    |
| Deleting a Calendar entry                                      |    |
| To delete a Calendar entry                                     |    |
| Modifying the date specification of a Calendar entry           |    |
| To modify the date specification of a Calendar entry           |    |
| Date type pages  | 31 |
| Specific date  | 21 |

| To set a specific date for a Calendar entry | 31 |
|---|----|
| Specific date range                         |    |
| To set a date range for a Calendar entry    |    |
| Recurring event                             |    |
| To set the recurring date                   |    |
| Managing Settings                           | 33 |
| Configuring Lock screen time                | 33 |
| To configure the lock screen time           |    |
| Configuring Point list setting              |    |
| To configure the point list setting         |    |
| Configuring Auto refresh rate               | 33 |
| To set the auto refresh rate of the HMI     | 33 |
| Configuring Auto logout time                | 34 |
| To configure the auto logout time           | 34 |
| Viewing Device information                  | 35 |
| Viewing the Device information              | 35 |
| To view Device information                  |    |
| Froubleshooting                             | 36 |

### INTRODUCTION

#### **About HMI**

HMI is a user-friendly, ergonomically designed, and robust device for Niagara plant controllers. The device is built with a capacitive touch-screen display that provides the operator with functions to view and manage the controller data points, alarms, time schedules, and calendars.

HMI supports a maximum of 20 user accounts.

Each user can perform the following typical functions in their user account on HMI.

- View and command points.
- Create and modify Fast Access point lists.
- View and acknowledge controller Alarms.
- View and manage the BACnet<sup>TM</sup> Schedules, Exceptions, and Calendars.



#### NOTE:

The HMI device is compatible only with N-ADV-134-H, N-ADV-133-H and N-ADV-122-H controllers.

#### Reference documents

- HMI Product Datasheet (31-00585): Describes HMI and its features.
- HMI Mounting Guide (31-00554): Describes how to mount the HMI on various environments.
- HMI Quick Start Guide (31-00587): Contains short procedures to enable the users to quickly use the device.
- HMI Driver Guide (31-00590): Describes how to configure and set up the HMI using Niagara workbench.

#### **Conventions**

The conventions for hand gestures used to navigate through the screens on the HMI display:

- Tap: Quickly touch and release to select a control or item; equivalent to a mouse-click.
- Swipe: Quickly slide one or more fingers across the screen to reveal controls or to scroll through lists or groups of items; equivalent to scroll.

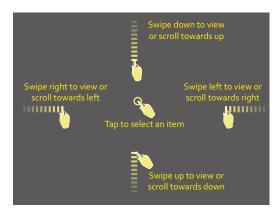


Figure 1. Hand Gestures Convention

# UNDERSTANDING HMI USER INTERFACE

This chapter describes various HMI icons, pages, and other user interface features. The user must familiarize themselves with HMI user interface before using the device.

# **Touch screen display**

HMI display is a capacitive touchscreen display.

#### Home page

The Home page displays the menu icons, the username of logged in person, the connected controller name, and the controller time.

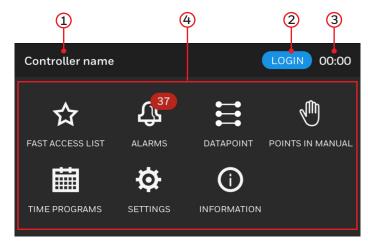


Figure 2. Home page

- 1. Name of the controller connected to HMI.
- 2. Username of the user who logged in to HMI.
- 3. Controller time.
- 4. Navigation menu icons.

# **GETTING STARTED**

This chapter explains setting up HMI after connected to the controller. It also explains managing the user accounts, language settings, and password reset locally in the device for a factory fresh controller.



#### NOTE:

If you perform any changes through HMI, avoid restarting the controller for 60 seconds to apply the changes in the controller.

# Setting up HMI

The setting up of HMI includes creating FAL. Fast access list elements can be created locally in the HMI device. Fast Access List can also be created using the Niagara workbench and downloaded to the targeted controller using the Niagara workbench. Whatever the method is followed, these elements can be managed by the field technician in the HMI.

Refer to the HMI Driver Guide (31-00590) to create FAL form Niagara.

# Managing the User account

This section contains the procedure to enable the user account locally on the HMI user interface. For version and later, the user account credentials are created in the Niagara workbench and the user can use it to log in to the device. There are some password rules needs to be followed while creating account in Niagara workbench.

#### **Password Rules:**

- Do not use the same number in the pin (E.g. 000000, 444444).
- Do not repeat the same number three times in the pin (E.g. 133356, 135363).
- Do not use the 123456 sequence as a pin.
- Do not reuse the last used password.

#### **Prerequisite**

Make sure that the controller certificate is installed on the plant controller to where you connect HMI. For more information on downloading the controller certificate to the plant controller, see the Niagara Platform Guide.

#### To access the user account

1. Plug in the RJ11 cable end into HMI port and the other end into the controller HMI interface. A welcome page displays the firmware loading progress as Initializing...from 0% to 100%. The version number of the firmware appears at right bottom of the welcome page.



Figure 3. Welcome Page



# NOTE:

The HMI firmware will be updated automatically when it is connected to the controller if HMI finds a newer version of the firmware.

A factory fresh HMI boots up after connecting to a controller and followed by data points downloading. After successful data point downloading, the home screen is displayed for login.

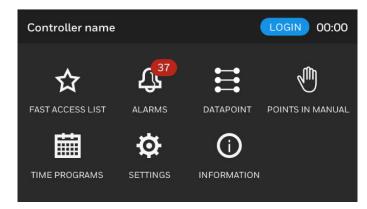


Figure 4. Home Page

# Logging on to a user account

A user can log on to the device from the Home page.



#### NOTE:

Only one user can log in to a device at a time.

### To log on from the Home page

- 1. On the Home page, tap the **LOGIN** button. A list of usernames appears.
- 2. Tap your username.
- 3. Enter your six-digit password, which is given by admin.



#### NOTE:

If you enter the wrong password 10 times, then you will be blocked from login. Contact Admin to reset your password.

4. Tap the **LOGIN** button.

The home page appears with your username at the top.

# Changing a user account password

After the first time login, change the password provided by the admin. The users can change their password anytime using the old password. If the users cannot change the password themselves, contact the admin to reset the password.

#### To change the account password

1. Tap your username on the Home page.

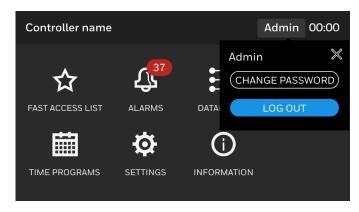


Figure 5. Home Page

- 2. Tap CHANGE PASSWORD.
- 3. Enter the old six-digit password and tap **NEXT**.
- 4. Enter a new six-digit password and tap **NEXT**.

#### **Password Rules:**

- Do not use the same number in the pin (E.g. 000000, 444444).
- Do not repeat the same number three times in the pin (E.g. 133356, 135363).
- Do not use the 123456 sequence as a pin.
- Do not reuse the last used password.
  - Re-enter the new six-digit password and tap SAVE.
     The Action is success message appears.

# Logging Out from a user account

The users must log out from the device after completing the task on the device to allow the other users to log on to the device. However, HMI automatically logs out the user account after 5 minutes (adjustable in SETTINGS) of user inactivity.

#### To log out from HMI

1. Tap your username on the Home page.

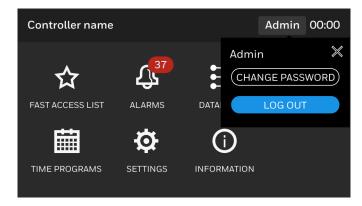


Figure 6. Home Page

#### 2. Tap LOG OUT.

# Language settings

HMI can support English (default), Spanish, French, German, Italian, Dutch, Danish, Finnish, Simplified Chinese, and Korean. You can set the language at any time.



#### NOTE:

For Chinese and Korean language support, You must download the language package to the controller. For more information, see Niagara Online user guide.

#### To set the preferred language

1. On the Home page, tap the **SETTINGS** icon. The **SETTINGS** page appears.

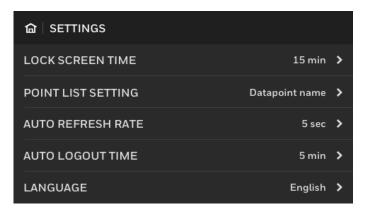


Figure 7. Setting Screen

- 2. Tap LANGUAGE.
- 3. Select a language, and tap **SAVE**.



#### NOTE:

Scroll the Language page to view more lanquages.

# **Password expired**

This section contains procedure to reset the password for user account locally in HMI.

The Password for the user accounts expire every 180 days from the date of the password set. If the password is expired, the account will disappear when the user tries to log in. Reset the password from the Niagara workbench to access the account again in HMI device. To reset the password after account expiry, refer Getting Started with Niagara guide.



# NOTE:

The expiry duration of 180 days is not default and can be configured only in Niagara workbench as desired. Never expire is the default. To improve the security of the device, please set the expiry duration from the Niagara workbench.

### MANAGING FAST ACCESS LIST

This chapter describes procedures to create and manage the Fast Access List and its elements locally in HMI. To create and manage the Fast Access List on the Niagara workbench, refer to the Niagara Advanced HMI Driver Guide.



#### NOTE:

If you perform any changes through HMI, avoid restarting the controller for 60 seconds to apply the changes in the controller.

#### About Fast Access List

A Fast Access List groups the different types of data points of the controller and helps to quickly access and manage the data points. You can create a Fast Access List in HMI and add the preferred data points of the controller to the list.

You can perform the following functions to a Fast Access List on HMI:

- Create a Fast Access List and name the list
- Add the data points to a Fast Access List
- Renaming an existing Fast Access List
- Remove the data points from the Fast Access List
- Delete a Fast Access list

# **Creating a Fast Access List**

This section provides instructions to create and name the Fast Access Lists in HMI. Fast Access Lists can also be created using the Niagara workbench and the lists appear on HMI when connected to a plant controller. However, HMI displays a maximum of 100 Fast Access Lists in total.

Fast Access Lists created in HMI can be merged back to the Niagara workbench. For more information, see the Niagara user guide.

#### To create and name a Fast Access list

1. On the Home page, tap the **FAST ACCESS LIST** icon.

The **FAST ACCESS LIST** page appears. It may contain existing Fast Access Lists if available.

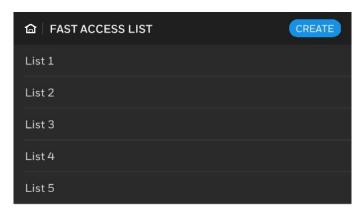


Figure 8. Fast Access List main page

2. Tap on **CREATE**. The **NAME** page appears.

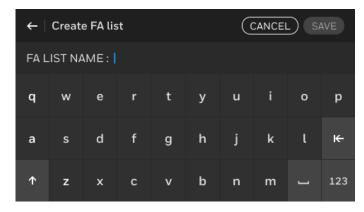


Figure 9. Fast Access List Name page

 Enter the name of the Fast Access List and add datapoints to the Fast Access List. To add Datapoints, see "To add the data points" on page 11.



#### NOTE:

At least one Datapoint should be added to the Fast Access List while creating the Fast Access List.

#### 4. tap CREATE.

A Fast Access List is created and appears at bottom of the Fast Access List main page.



#### NOTE:

Do not use the same name that is already used for other Fast Access List in the controller.



#### NOTE:

The Fast Access Lists created in HMI are linked to the controller objects. When you try to connect HMI to another controller, the Fast Access Lists belong to the previous controller will be deleted from HMI permanently.

# Adding datapoints to a Fast Access List

You can add data points of the controller to a Fast Access List. A N-ADV-XXXXX series controller can support up to 4100 Max Numeric points, 2000 Max Boolean points, and 1000 Max Enum points, average state text is 5. These data points can be filtered based on their type and selected to add to a Fast Access List. The added data points are displayed on the Fast Access List when the list is selected to view. You can add a maximum 50 data points to a Fast Access List.

#### To add the data points

 On the Fast Access List page, tap a Fast Access List where you want to add data points.
 The corresponding Fast Access List page appears.

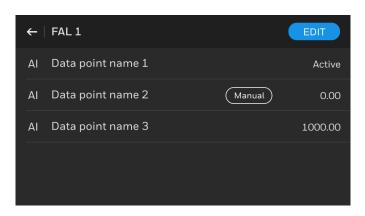


Figure 10. Fast Access List Screen

- 2. Tap Edit.
- Tap ADD button.
   The Search datapoint page appears. It displays the list of point types.

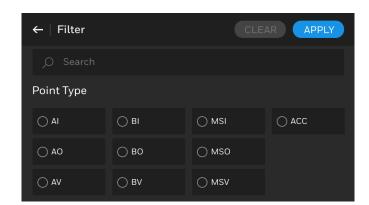


Figure 11. Datapoint Filter - Point Type

4. Select one or more Data points and tap **NEXT**. The **Search result** page appears with data points that are filtered from the filtered data point type.

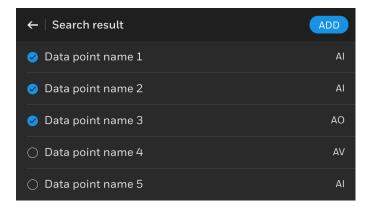


Figure 12. List of filtered Datapoints

 Select the required data points and tap ADD.
 The selected data points are added to the Fast Access List.

# Removing datapoints from a Fast Access List

You can remove the required data points from a Fast Access List. The removed data points are only removed from the Fast Access List, not from the controller.

#### To remove the data points

1. On the **FAST ACCESS LIST** page, tap the Fast Access List from where you want to remove data points.

The list of data points associated with the Fast Access List appears.

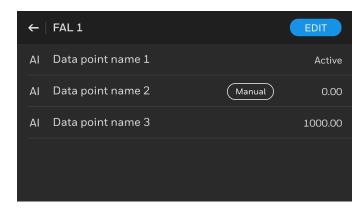


Figure 13. Fast Access List Edit Page

2. Tap the **EDIT** button.

The list of data points available in the Fast Access List appears.

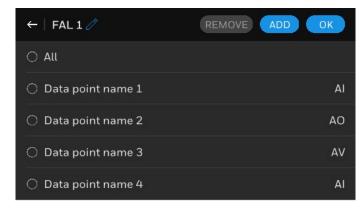


Figure 14. List of Datapoints

- 3. Tap to select one or more data points.
- 4. Tap the **REMOVE** button.
  The selected data points are removed from the Fast Access List.

# **Renaming a Fast Access List**

You can rename a Fast Access List anytime. Renaming a Fast Access List does not affect the associated data points.

#### To rename a Fast Access List

- 1. On the **FAST ACCESS LIST** page, tap a list that you want to rename.
- 2. Tap the **EDIT** button and then tap on pencil icon.

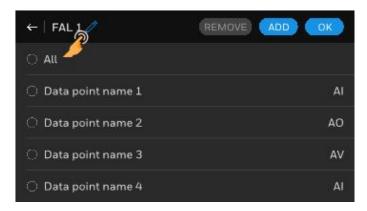


Figure 15. Edit Fast Access List Name

3. Enter a new name.



Do not use the same name that is already used for other Fast Access List in the controller.

4. Tap RENAME.

# **Deleting a Fast Access List**

You can delete a Fast Access List without deleting its data points.

#### To delete a Fast Access List

 On the FAST ACCESS LIST page, swipe a Fast Access List to the left, which you want to delete. After sliding, the DELETE button appears at end of the row.

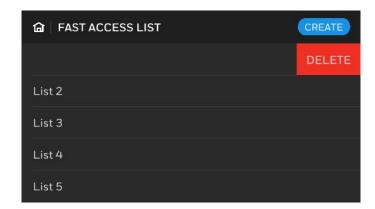


Figure 16. Deleting Fast Access List

2. Click **DELETE** button to Delete the Fast Access List.

Now deleted FAL will not appear on the Fast access list main page.

# MANAGING ALARMS

This chapter describes the Alarm icon and its associated functionalities.



#### NOTE:

If you perform any changes through HMI, avoid restarting the controller for 60 seconds to apply the changes in the controller.

#### **About alarm**

Alarms are configured for data points to indicate the conditions that may require supervisory control. HMI helps to view and manage the data points alarm. It also groups the alarms into Urgent, High, and Low categories. You can view and acknowledge the alarms on HMI. To configure alarm services with Niagara workbench, Refer Niagara Advanced HMI Driver Guide.

Additionally, the alarm icon on the Home page shows the number of data points which are currently in alarm condition as an icon notification 15.

# Alarm page signs

The alarm menu pages contain various signs with different color codes to indicate the severity of the alarm, limits, and status of the alarms associated with relevant data points. The following table describes the available signs with color codes of the alarm pages.

Table 1. Alarm page signs

| Command                   | Description                                |
|---------------------------|--|
| $\bigcirc$                | Normal                                     |
| A                         | Urgent alarm                               |
| A                         | High alarm                                 |
| A                         | Low alarm                                  |
| ◆ ◆                       | Urgent, High, and Low alarms in high limit |
| ₩ ₩ ₩                     | Urgent, High, and Low alarms in low limit  |
| (1) (1)                   | Urgent, High, and Low alarms off normal    |
| $\otimes \otimes \otimes$ | Urgent, High, and Low alarms in fault      |

# Viewing the datapoints causing alarm

The alarm tab shows all the data points that are currently in alarm state. This includes both data points where the alarm has been acknowledged and not acknowledged.

#### To view the data points in alarm

1. On the Home page, tap the ALARMS icon. The alarm main page appears.

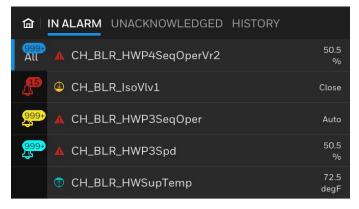


Figure 17. Alarm Main Page - In ALARM Tab



#### NOTE:

Under the IN ALARM tab, on the left side of the page, tap the All, Red, Yellow, or Cyan colored icons. The relevant data points list appears on the right side of the page.

- · All icon: Displays all data points with alarms of all priorities.
- **Red** icon: Displays only the data points with Urgent severity alarm.
- Yellow icon: Display only the data points with High severity alarm.
- Cyan icon: Display only the data points with Low severity alarm.

2. Tap an alarm name.

The corresponding alarm property page appears. The alarm property page describes the nature of event state transition.



Figure 18. Alarm Property Page

3. If you want to view the associated data point property page, tap the information icon available at top right of the page. The associated data point property page appears.

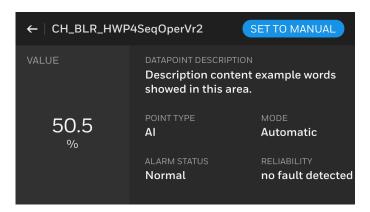


Figure 19. Data Point Property Page



# NOTE:

Scroll on the right side of the page to see more details about the alarm.

4. Tap the SET TO MANUAL button to set the data point to manual mode so you can modify its value. If the point is currently in Manual, tap directly on the displayed value or tap **EDIT** to change the value.

# Unacknowledged alarm

The unacknowledged alarm page displays the alarms which the user has not acknowledged.

#### To acknowledge an alarm

1. On the alarm main page, tap the UNACKNOWL-EDGED tab.

A list of data points with unacknowledged alarms appears in order based on the time and date they occurred.

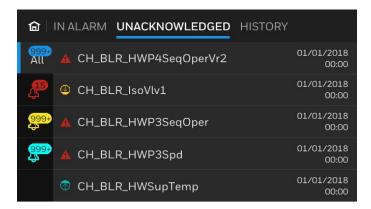


Figure 20. Unacknowledged Alarm List

# NOTE:

On the left side of the page, tap the All, Red, Yellow, or Cyan colored icons. The relevant data points list appears on the right side of the page.

- All icon: Display all data points with alarms of all priorities.
- Red icon: Display only the data points with Urgent severity alarm.
- Yellow icon: Display only the data points with High severity alarm.
- Cyan icon: Display only the data points with Low severity alarm.
- Tap a data point whose alarm you want to acknowledge.

2. The corresponding alarm property page appears.

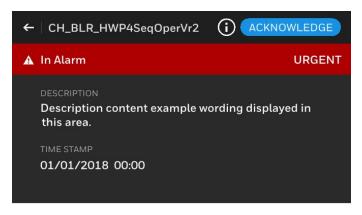


Figure 21. Unacknowledged Alarm Property Page

- 3. Tap the ACKNOWLEDGE button and tap Yes to acknowledge the alarm. The alarm is acknowledged.
- 4. If you want to view the associated data point property page, tap the information icon ① on the alarm property page.

The associated data point property page appears.

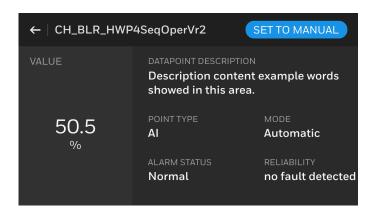


Figure 22. Data Point Property Page



# NOTE:

On the property page, LABEL may not be displayed for some data points. Scroll on the right side of the page to see more details about the alarm.

5. Tap the **SET TO MANUAL** button to set the data point to manual mode so you can modify its value. If the point is currently in Manual, tap directly on the displayed value or tap **EDIT** to change the value.

# **Alarm history**

The History tab displays the history of all alarms of the data points.

#### To view the alarm history

 On the alarm main page, tap the HISTORY tab.
 A list of data points whose event state transition caused alarms.

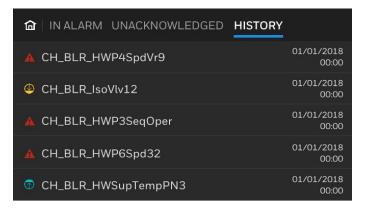


Figure 23. Alarm History

2. Tap a data point whose alarm history you want to view.

The corresponding data point alarm history page appears.

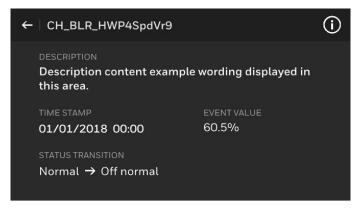


Figure 24. Alarm Property Page

3. If you want to view the associated data point property page, tap the information icon on the alarm property page.

The associated data point property page appears.

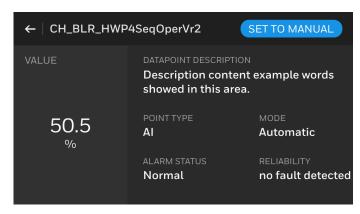


Figure 25. Datapoint Property Page

### MANAGING DATAPOINTS

This chapter describes the DATAPOINT icon and its associated functionalities.

The **DATAPOINT** icon helps you to view, filter, and manage all data points and its properties.



#### NOTE:

If you perform any changes through HMI, avoid restarting the controller for 60 seconds to apply the changes in the controller.

# Viewing and modifying a datapoint value

The DATAPOINT main page displays all data points of the controller collectively on one page. This page helps you view, filter, search, and modify the values of the data points. This page also displays the manual /auto status of the data points.

#### To view and modify a data point value

1. On the Home page, tap the DATAPOINT icon. The **DATAPOINT** page appears with the first five data points of the list.

The list may contain multiple pages which is shown as pagination number at the bottom of the page and the pagination will disappear after three seconds.

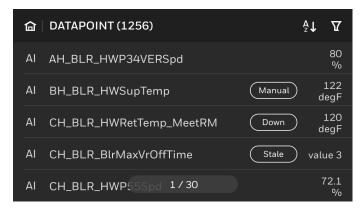


Figure 26. DATAPOINT Main Page

2. Scroll the page to view more data points.

Tap [2] icon to short the Datapoint list alphabetically. If **A** appears at the top, the list is shorted from A to Z. If **Z** appears at the top, the list is shorted from 7 to A.



# NOTE:

You can see a manual symbol to the right of a data point that represents the data point in manual mode. On the right end, the data point value is displayed. Refer below table for other status symbols.

**Table 2. Datapoint Status Symbol** 

| Symbol         | Description  |
|----------------|--|
| Manual         | Point is manually overrider in HMI or<br>Tools with priority 8 (Input point is out of<br>service is True)  |
| Down/Offline   | This controller point is offline, cannot get<br>the latest value and status, and not<br>support to override in this state                            |
| Disable        | The controller point is manually disabled, cannot get the latest value and status, not support to override in this state                             |
| Stale          | Controller have not received a requested response for this points within the configured times (Tuning period), not support to override in this state |
| Manual (HOA)   | Point is manually overrider in HOA with priority 1, cannot set to auto in this state   |
| Out of service | Point out of service is True, only for input points  |
| Fault          | Point in Fault alarm status  |
| Alarm          | Point has a value in alarm range, for Out of range, or off normal alarms   |
| UnackedAlarm   | Point alarm event has not yet received user acknowledgment   |

3. Tap a data point.

The corresponding data point property page appears.

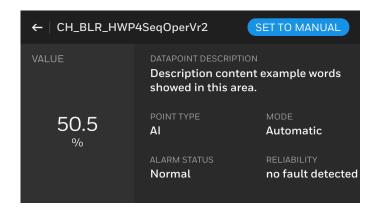


Figure 27. Datapoint Property Page



# NOTE:

On the data point property page, tap on the data point name (header) to view its full name.

- 4. On the right pane of the property page, scroll to view additional properties of data point available on next pages.
- 5. If you want to modify the value of a data point, tap the **SET TO MANUAL** button. If the point is currently in Override, tap directly on the displayed value or tap **EDIT** to change the value. The value modification page appears.
- 6. Enter a new value.
- 7. Tap **SAVE**.

The data point is set to override mode and a new value is assigned.



#### NOTE:

The length of the data point name is extended to the second line if the name has more characters.



#### NOTE:

Status of Override (HOA) for below devices will display differently based on the device.

**Override (HOA)** - **Manual** status symbol will display for Legacy Panelbus devices.

**Override (HOA) - Manual (HOA)** status symbol will display for I/O devices.

# Filtering the datapoints

You can filter the data points from the main list based on the data point type.

#### To filter data points

1. On the **DATAPOINT** page, at top right, tap the filter vicon. The **Filter** page appears.

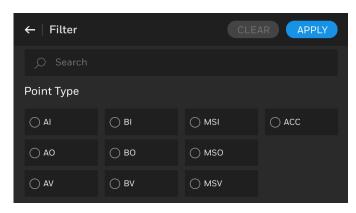


Figure 28. Data Point Filter Page

- 2. Select the data point types to filter and scroll the page.
- Select the points from where you want to filter data points and tap **APPLY**. The filtered data points appear.

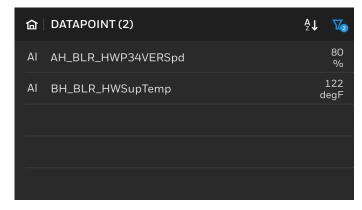


Figure 29. Filtered Datapoints



#### NOTE:

The filter icon changes to white color. It represents that the data points appearing on the page are based on the filters.

If no datapoint is available based on filter, "No result found" page will appear.

- 4. To clear the filter, tap the white color filter icon again. The filter page appears.
- 5. Tap the **CLEAR** button. It clears all the filtered point type.

# Adding a datapoint to a Fast Access List

You can add a data point to an existing Fast Access List from the DATAPOINT main page.

#### To add a data point to a Fast Access List

 On the **DATAPOINT** page, swipe a data point to the left.

The **Add to Fast Access List** button appears at the right end of the data point row.

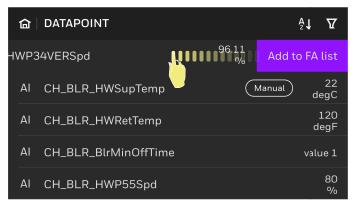


Figure 30. Data Point Filter Page

2. Tap Add to Fast Access List.
The Choose a list to add page appears. It contains

a list of existing Fast Access Lists.

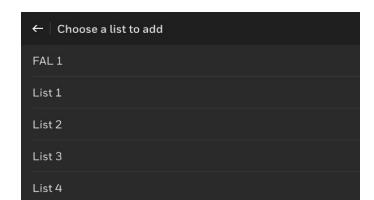


Figure 31. Choose a List to Add

3. Tap a Fast Access List where you want to add the data point.

The data point is successfully added to the Fast Access List. The **Add to Fast Access List** button will change to **Fast Access List** with green color. If the data point is already added to a Fast Access List, then the Fast Access List button will appear in green color by default.

# MANAGING POINTS IN MANUAL

This chapter describes the Points in Manual icon and its associated functionalities.

The **Points in Manual** page groups and displays the controller's data points that are in manual mode. This page allows you to manage the data point and its properties.



#### NOTE:

If you perform any changes through HMI, avoid restarting the controller for 60 seconds to apply the changes in the controller.

# Viewing the Points in Manual

This section provides instructions to view the data points in manual mode.

#### To view the points in manual

On the Home page, tap the **POINTS IN MANUAL** icon.

The **POINTS IN MANUAL** page appears with a list of data points in manual mode. For symbol details See "Datapoint Status Symbol" on page 18.

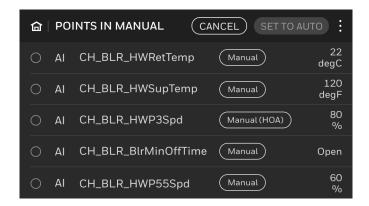


Figure 32. Points in Manual

# Setting the datapoints to Auto mode

The **Points In Manual** page allows you to change the manual mode of a data point to its auto mode. You can set the selected data points or all data points to auto mode at the same time.



#### NOTE:

HOA Manual point will not return to Auto mode

#### To set the data points to Auto mode

1. On the **Points in Manual** page, tap **SELECT**. The selection option is enabled for data points and the **SET TO AUTO** button appears at the top right of the page. For symbol details See "Datapoint Status Symbol" on page 18.

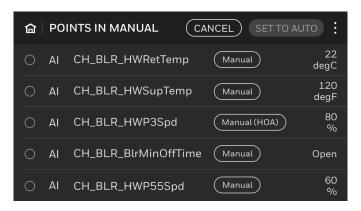


Figure 33. Point in Manual Selection Page

- Select the required data points that need to be changed to auto mode.
   Upon selection, the SET TO AUTO button is highlighted.
- 3. Tap the **SET TO AUTO** button.
  - The selected data points are set to auto mode.
- 4. If you want to set all data points to auto mode, tap the three dot option button available at the top right of the page.

The **SET ALL TO AUTO** button appears and deselect the HOA manual point.

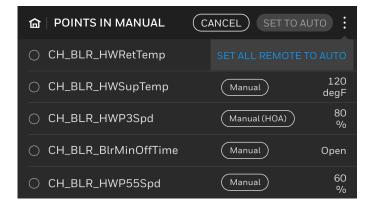


Figure 34. SET ALL TO AUTO Button

5. Tap **SET ALL TO AUTO** to return all the points in manual mode to Auto except HOA manual points.

# Setting a Datapoint to Auto mode and managing the properties

You can set a selected point to auto mode and modify the data point properties.

### To set a data point to the auto mode and manage the properties

1. On the **Points in Manual** page, tap on a data point. The corresponding data point property page appears.

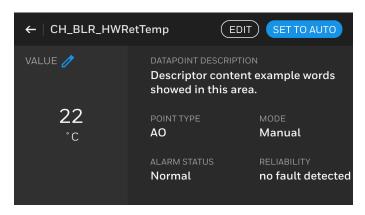


Figure 35. Datapoint property page

2. Tap the **SET TO AUTO** button to set the data point to auto mode.

3. To modify the value of the data point, tap the **EDIT** button or tap on the value. The value editing page appears.



# NOTE:

The value on the page is editable only if a blue colored pen icon appears next to the value.

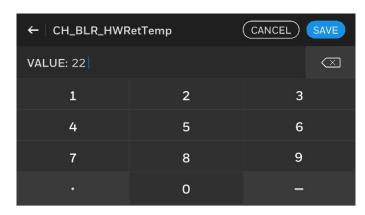


Figure 36. Datapoint value editing page

- 4. Enter a new value.
- 5. Tap **SAVE**.

The data point value is updated.

# MANAGING TIME PROGRAMS

This chapter describes the Time programs icon and its associated functionalities.

Time programs refer to Schedules, Exceptions, and Calendars available in the controller. You can manage the existing Schedules, Exceptions, and Calendars of the controller.



#### NOTE:

You cannot add or delete any Schedules, Exceptions, and Calendars using HMI.



#### NOTE:

If you perform any changes through HMI, avoid restarting the controller for 60 seconds to apply the changes in the controller.

### Adding a time value to a Schedule

In addition to the existing time values, you can add new time values to already available schedules in the controller.

#### To add a new time value to a schedule

On the Home page, tap the TIME PROGRAMS icon.

The schedule main page appears which lists all schedules available in the controller.

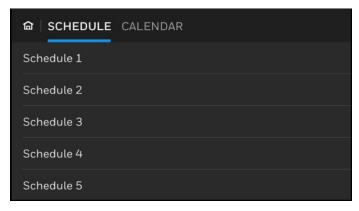


Figure 37. List of Schedules

2. Tap a schedule where you want to add a new time value.

The corresponding schedule page appears.

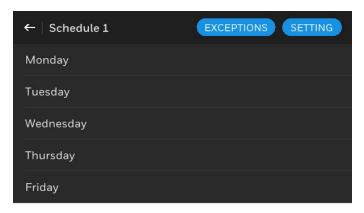


Figure 38. Schedule days

3. Tap a day where you want to add a new time value. The corresponding day page appears which contains existing time values.

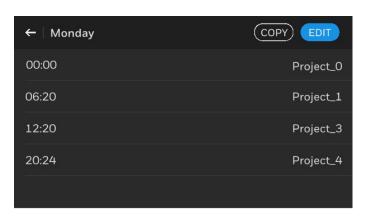


Figure 39. Existing Time values of a day

4. Tap the **EDIT** button.

The **DELETE**, **ADD**, and **OK** buttons appear at the top right of the page.

5. Tap the **ADD** button, to add a new value. The **Add time & value** page appears.

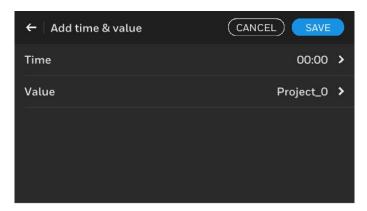


Figure 40. Add Time and Value Page

6. Tap **Time**. The **Time** page appears.

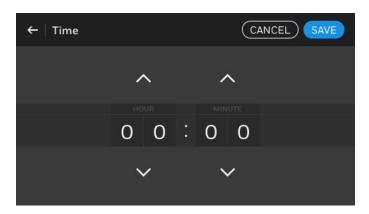


Figure 41. Time page

- 7. Tap or long press the up or down arrow to set **HOUR** and **MINUTE**.
- 8. Tap **SAVE**. The **Add time & value** page appears.
- 9. Tap Value.

The **Select value page** (Binary, Multi-state, or Analog) appears based on the type of input needs to be added.

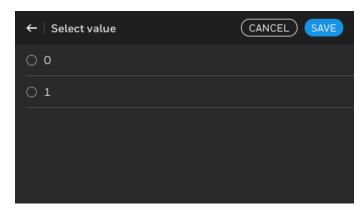


Figure 42. Select Value page (binary)

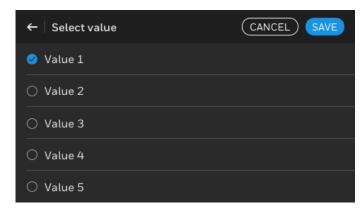


Figure 43. Select Value Page (multi-state)

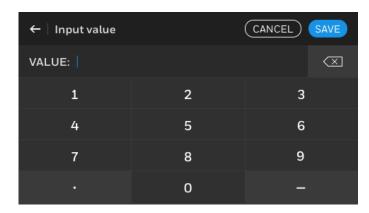


Figure 44. Select Value Page (analog)

- 10. If the page is,
- Binary type page, tap 0 or 1
- Multi-state type page, tap a value
- Analog type page, enter the required value.
- 11. Tap **Save**.
- On the Add time and value page, tap SAVE.
   A new time and value have been added to the day of a schedule.

# Deleting a time value from a Schedule

You can delete one or more time values from a schedule

#### To delete a time value from as schedule

On the Home page, tap the TIME PROGRAMS icon.

The schedule main page appears which lists all schedules available in the controller.

2. Tap a schedule from where you want to delete a time value.

The corresponding schedule page appears.

3. Tap a day from where you want to delete a time value.

The corresponding day page appears, which contains existing time values.

4. Tap the **EDIT** button.

The page enables the selection of existing time values and displays the **DELETE** button at the top right of the page.

Select one or more time values that need to be deleted.

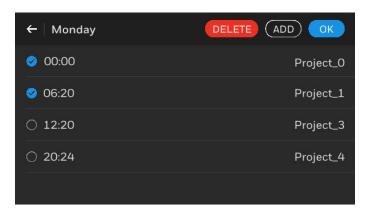


Figure 45. Deleting a Time value

- 6. Tap the **DELETE** button.
  The selected time values are deleted.
- 7. Tap **OK** to exit from the edit mode.

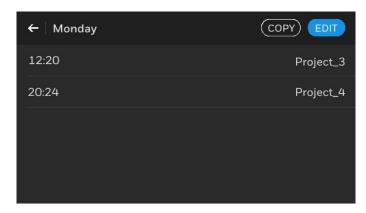


Figure 46. Time Value Page after exit edit mode

# Copying the time values to another day of a Schedule

You can copy the entire time values of a day and paste to other days of the same schedule.

# To copy a time value to another day of a schedule

- On the Home page, tap the TIME PROGRAMS icon
  - The schedule main page appears which lists all schedules available in the controller.
- 2. Tap a schedule from where you want to copy the time values of a day.
- 3. Tap a day from where you want to copy the time values. The corresponding day page appears with existing time values.

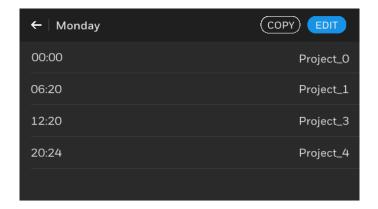


Figure 47. Copy Schedule page

4. Tap the **COPY** button. It copies all time values available on the page.

The **Copy to** page appears. It shows the available days of the schedule.

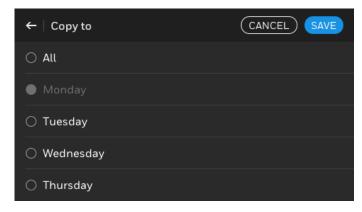


Figure 48. Copy day page

- Select one or more days to paste the copied time values.
- 6. Tap **SAVE**. The copied time values are pasted to the selected day or days.

# Adding a Calendar entry to an Exceptions

You can add a Calendar entry such as a specific date, date range, or recurring date to an Exception.

#### To add a Calendar entry to an Exceptions

- On the Home page, tap the TIME PROGRAMS icon.
  - The schedule main page appears, which lists all schedules available in the controller.
- 2. Tap a schedule where you want to add a calendar entry.
  - The corresponding schedule page appears, which contains the configured days.

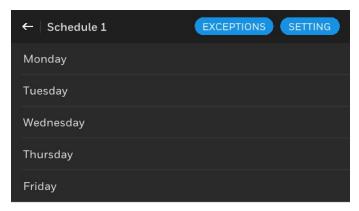


Figure 49. Schedule detail page

3. Tap the **EXCEPTIONS** button. The list of existing Exceptions appears.

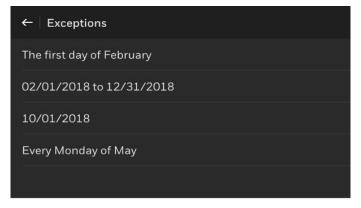


Figure 50. Exception list

- 4. Tap an Exceptions where you want to add a new Calendar entry.
  - The corresponding Exceptions page appears, containing the time values available in the Exceptions.

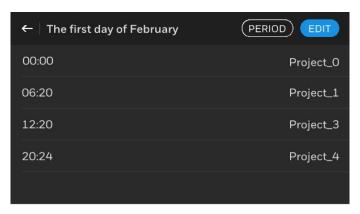
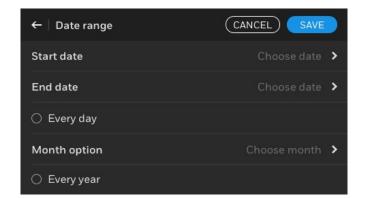
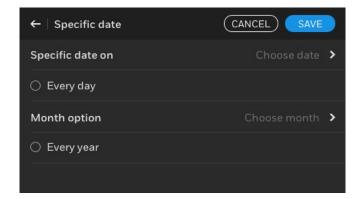


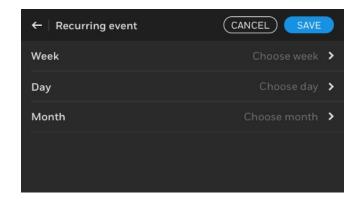
Figure 51. Exception page

5. Tap the **PERIOD** button.

According to the Exceptions date type entry, one of the following date entry pages appears. For more information about the date type, see the "Date type pages" section on page 31.







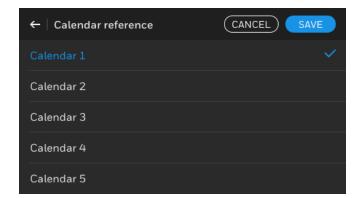


Figure 52. Date Type page

6. Enter the required values, and tap **SAVE**.

# Adding a time value to an Exceptions

You can create and add one or more time values to an Exceptions.

#### To add a time value to an Exceptions

- 1. On the schedule main page, tap a schedule where you want to add a new time value to an exception.
- 2. Tap the **EXCEPTIONS** button. The list of existing exceptions appears.
- Tap an Exception.
   The corresponding Exceptions page appears with already existing time values.

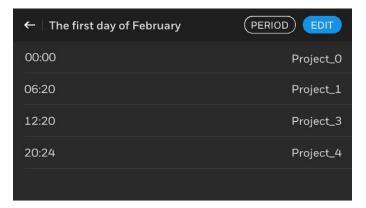


Figure 53. Exception page

- 4. Tap the **EDIT** button.
  - The **DELETE**, **ADD**, and **OK** buttons appear at the top right of the page.
- 5. To add a new time value to the exception, tap the **ADD** button.
  - The Add time & value page appears.
- 6. Tap Value.
  - The **Select value** page (Binary, Multi-state, or Analog) appears based on the type of input needs to be added.

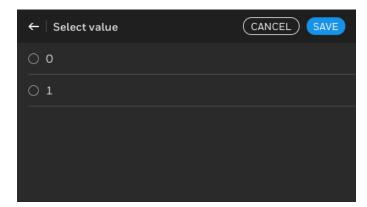


Figure 54. Select Value page (binary)

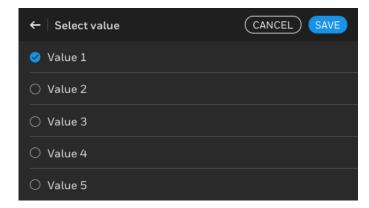


Figure 55. Select Value page (multi-state)

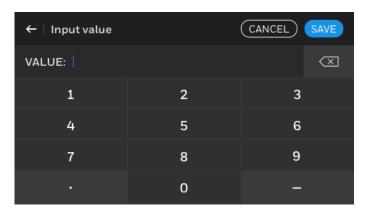


Figure 56. Select Value page (analog)

- 7. If the page is,
- Binary type page, tap 0 or 1
- Multi-state type page, tap a value
- Analog type page, enter the required value.
- 8. Tap **Save**.
- On the Add time and value page, tap SAVE.
   A new time and value have been added to the day of a schedule.

# Managing the Schedule settings

You can manage the settings of a schedule, including the validity period and the default value of the schedule. You can also view the list of data points associated with the schedule.

#### To manage the schedule settings

From the schedule main page, under the **Schedule** tab, tap a Schedule to view or modify the settings.
 The corresponding schedule page appears.

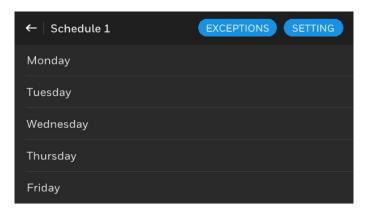


Figure 57. Schedule page

Tap the **SETTING** button.The **Schedule setting** page appears.

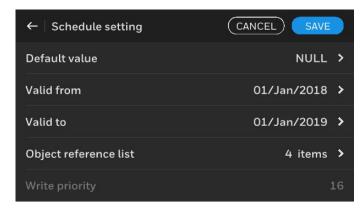


Figure 58. Schedule setting page

- Tap **Default value** to modify the default value of the schedule.
- 4. Tap **Valid from** to modify the start date of the schedule.
- 5. Tap **Valid to** to modify the end date of the schedule.
- 6. Tap **object reference list** to view the data point lists associated with the schedule.
- After any modification, tap SAVE in the Schedule setting page.

# Adding a new Calendar entry

You can add a new Calendar entry to the controller in addition to the existing Calendar entry of the calendar.

#### To add a new Calendar entry

1. On the schedule main page, tap the **CALENDAR** tab.

A list of calendars already configured in the controller appears.

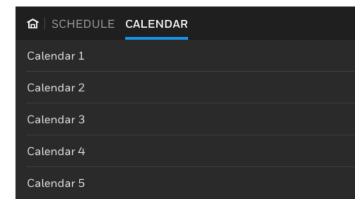


Figure 59. List of Calendars page

2. Tap a calendar where you want to add a new Calendar entry.

A list of calendar entries appears.

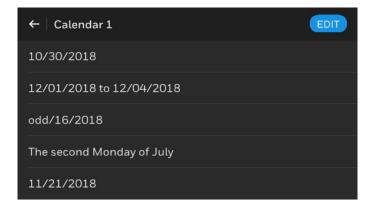


Figure 60. List of Calendar entry page

3. Tap **EDIT**.

The **DELETE**, **ADD**, and **OK** buttons appear at the top right of the page.

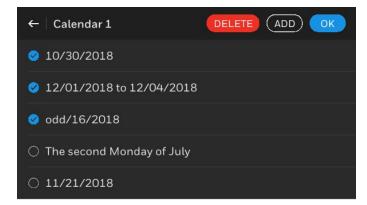


Figure 61. Adding new Calendar entry

4. Tap **ADD**.

The **New entry** page appears.

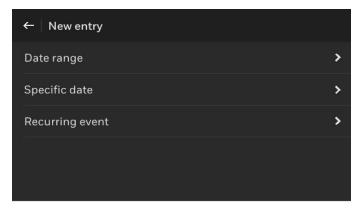


Figure 62. New entry page

- 5. Tap a date type to define the date specification for your Calendar entry. For more information about the date type, see the "Date type pages" section on page 31.
- 6. After defining the date specification for the Calendar entries, tap the **SAVE** button on the respective pages.

The newly added Calendar entry is added and listed at the bottom of the corresponding calendar page.

# **Deleting a Calendar entry**

On deleting a Calendar entry from a calendar, the associated schedules and exceptions will become invalid.

#### To delete a Calendar entry

- Tap the CALENDAR tab.
   A list of calendars configured in the controller appears.
- 2. Tap a calendar whose Calendar entry you want to delete.
  - A list of Calendar entries appears.
- 3. On the top right, tap the **EDIT** button. The **DELETE**, **ADD**, and **OK** buttons appear at the top right of the page. The page allows you to select the Calendar entries available on the list.

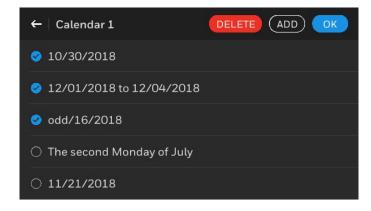


Figure 63. Deleting a Calendar entry

- 4. Select one or more Calendar entries that you want to delete.
- 5. Tap the **DELETE** button.

# Modifying the date specification of a Calendar entry

You can modify the date specification of existing Calendar entries.

# To modify the date specification of a Calendar entry

- On the schedule main page, tap the CALENDAR tab.
  - A list of calendars appears.
- 2. Tap a calendar whose Calendar entries you want to modify.
  - A list of Calendar entries available in the calendar appears.

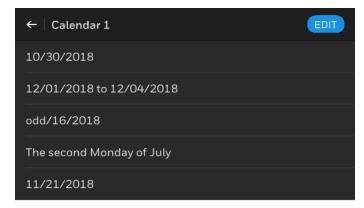


Figure 64. List of Calendar entry page

3. Tap a Calendar entry whose date specification you want to modify.

The corresponding date type page appears.

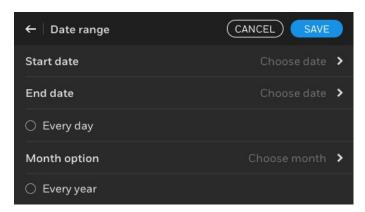


Figure 65. Date range page

- 4. Modify the date specifications. For more information about the date type page "Date type pages" section on page 31.
- 5. Tap **SAVE**.

# DATE TYPE PAGES

The date type pages allow you to define the date specification for new Calendar entries used for assigning events. HMI has three date type pages to cover all types of date specifications.

# Specific date

If you want to create a Calendar entry for an event to execute on a specific date, choose the specific date type. If required, you can make the Calendar entry repeat for every day, month, or year. For example, if a Calendar entry is a holiday, you can choose a date and make it repeat every year.

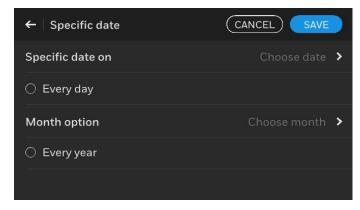


Figure 66. Specific date

### To set a specific date for a Calendar entry

1. Tap Specific date on. The Date page appears, which displays a calendar.

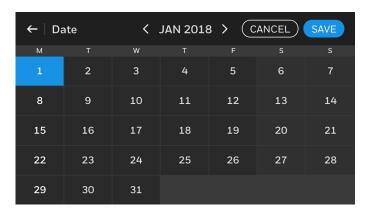


Figure 67. Calendar page

- 2. Select a date from the calendar
- 3. Tap **SAVE**.
- 4. If you want to repeat the event for every day, then tap the **Every day** option.
- 5. If you want to repeat the event for every month or every odd month or every even month, then tap Month option.
- 6. If you want to repeat the event for every year, then tap the Every year option.
- 7. Tap **SAVE**.

### NOTE:

Calendar dates cannot overlap. Example: for Calendar entry A, if you have set the specific date as June 11, 2022, you cannot set the same date for another Calendar entry B.

If the Every day, Every week, and Every year options are selected for a specific date, you cannot add more than one Calendar entry.

# Specific date range

If you want to create a Calendar entry for an event to execute between specific date ranges, choose the specific date range. You can also configure the event to execute for every day, month, or year.

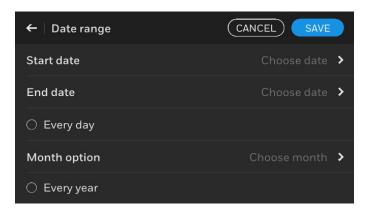


Figure 68. Date range

#### To set a date range for a Calendar entry

- 1. Tap Start date.
  - The Start date page appears.
- 2. Select a date to set the start date for the date range.
- 3. Tap End date.
  - The **End date** page appears.
- 4. Select a date to set the end date for the date range.
- 5. If you want to repeat the event for every day, then tap the **Every day** option.
- 6. If you want to repeat the operation for every month or every odd month or every even month, then tap Month option.
- 7. If you want to repeat the operation for every year, then tap the **Every year** option.
- 8. Tap **SAVE**.



#### NOTE:

Calendar dates cannot overlap. If a date range is already defined, a new Calendar entry cannot have a specific date, date range, or recurring event in this date. Example: For Calendar entry A, if you have set the date range from 06/05/2022 to 05/08/2022, you cannot set the same date range for another Calendar entry B.

The Date Range From value must be less than Date Range To value.

# Recurring event

If you want to create a Calendar entry for an event that needs to be executed on required days, then choose the recurring event.

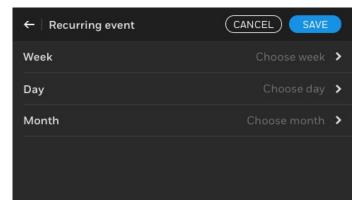


Figure 69. Recurring event

#### To set the recurring date

- 1. Tap Week.
  - The Week of month options page appears.
- 2. Tap a week.
  - The **Day of week options** page appears.
- 3. Tap a day and tap **SAVE**.
- 4. Tap Month.
  - The **Month options** page appears.
- 5. Tap a month and tap **SAVE**.
- 6. Tap **SAVE** in the **Recurring event** page.



### NOTE:

Calendar dates cannot overlap. If a date range is already defined, a new Calendar entry cannot have a specific date, date range, or recurring event in this date.

### MANAGING SETTINGS

This chapter contains the sections to change the settings of the HMI device.

HMI settings allows you to modify the lock screen time, point list setting, auto refresh rate, and auto log out time. The settings can be configured through a user account HMI settings configuration does not affect the controller related operations.



#### NOTE:

If you perform any changes through HMI, avoid restarting the controller for 60 seconds to apply the changes in the controller.

# **Configuring Lock screen time**

You can configure the lock screen time of HMI. By default, HMI enters the lock screen after 30 minutes of the user inactivity on the device where the display is dimmed and reactivates when the user touches the display.

#### To configure the lock screen time

- On the Home page, tap the SETTINGS icon. The SETTINGS page appears.
- 2. Tap LOCK SCREEN TIME. The Lock screen time page appears.

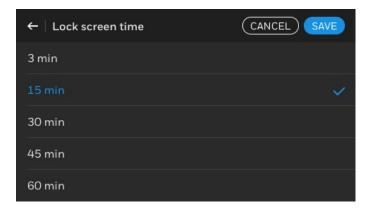


Figure 70. Lock Screen Time Page

- 3. Tap a time duration.
  For example, if the **3 minutes** option is selected then the HMI display will enter the sleep mode after 3 minutes of user inactivity on the device.
- 4. Tap SAVE.

# **Configuring Point list setting**

Generally, a data point is provided with a name and a descriptor. You can configure which one is to be shown on the HMI display. As per the configuration, the data

point name or descriptor is displayed across all the pages of HMI wherever it is applicable. Datapoint name is default setting.

#### To configure the point list setting

- 1. On the Home page, tap the **SETTINGS** icon. The **SETTINGS** page appears.
- 2. Tap **POINT LIST SETTING**. The **Point list setting** page appears.

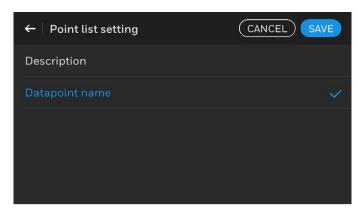


Figure 71. Descriptor Setting Page

3. Tap an option and tap SAVE.

# **Configuring Auto refresh rate**

HMI refreshes itself every 5 seconds to display the realtime data of the controller. You can increase or decrease the auto-refresh rate up to a maximum of 5sec, Depending on the HMI load.

#### To set the auto refresh rate of the HMI

- 1. On the Home page, tap the **SETTINGS** icon. The **SETTINGS** page appears.
- 2. Tap AUTO REFRESH RATE.

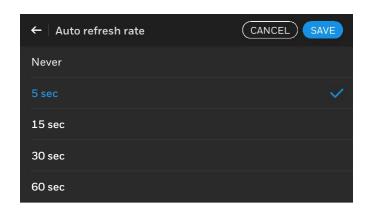


Figure 72. Auto Refresh Rate Page

- 3. Select a time interval.
- 4. Tap **SAVE**.

# **Configuring Auto logout time**

By default, HMI terminates log on sessions within 15 minutes of login. You can configure it to increase or decrease the auto log out time.

# To configure the auto logout time

- 1. In the Home page, tap the **SETTINGS** icon. The **SETTINGS** page appears.
- 2. Tap **AUTO LOGOUT TIME**. The **Auto logout time** page appears.

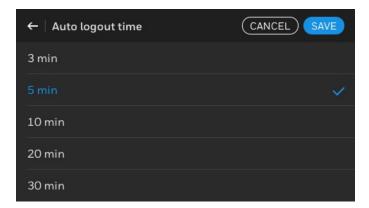


Figure 73. Auto logout time page

- 3. Tap a time duration for auto logout.
- 4. Tap **SAVE**.

# **VIEWING DEVICE INFORMATION**

This chapter contains details about the device information.

Device information displays the following information about HMI

**Table 3. Viewing Device Information** 

| MANUFACTURER                     | Honeywell   |
|----------------------------------|---|
| PRODUCT<br>FAMILY                | Niagara   |
| MODEL NAME                       | Model name of the controller<br>connected to HMI<br>(N-ADV-134-H,<br>N-ADV-133-H,<br>N-ADV-122-H) |
| CONTROLLER NAME                  | Controller connected to HMI   |
| DEVICE ID                        | Controller BACnet <sup>TM</sup> device ID<br>(Hardware)   |
| HOST ID                          | Host ID of the controller connected to HMI  |
| IP ADDRESS 1                     | IP address of the controller connected to HMI   |
| IP ADDRESS 2                     | IP address of the controller connected to HMI   |
| CONTROLLER<br>NIAGARA<br>VERSION | Niagara version of the controller connected to HMI  |
| BACNET<br>VERSION                | BACnet <sup>TM</sup> version  |
| HMI FIRMWARE VERSION             | HMI firmware version  |

# **Viewing the Device information**

Each HMI has unique device information.

#### To view Device information

1. Tap the **INFORMATION** icon on the Home page. The **INFORMATION** page appears.

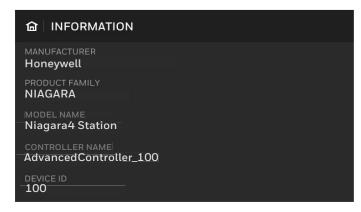


Figure 74. Device information



# NOTE:

Scroll the page to view the next five device information lines available on the second page.

# **TROUBLESHOOTING**

This chapter contains troubleshooting information of the HMI device.

Table 4. Troubleshooting

| Error Message                             | Problem Cause  | Remedy  |
|---|--|---|
| HMI root CA<br>validation failure         | HMI root CA is damaged.  | Contact Honeywell regional TAC for repair/replacement.  |
| HMI certificate is unavailable            | HMI certificate is damaged.  | Contact Honeywell regional TAC for repair/replacement.  |
| HMI certificate<br>length is out of limit | HMI certificate is invalid.  | Contact Honeywell regional TAC for repair/replacement.  |
| Certificate request timeout               | The controller is failed to request the HMI certificate in time. It happens due to communication problem between controller and HMI.   | <ol> <li>Check the communication between the controller and HMI and make sure the communication is working properly.</li> <li>Check the configuration and status of the controller and make sure the controller is working properly.</li> <li>Reduce the load in the network/controller (Ex: Point count and logic in the controller) and try again.</li> </ol>                     |
| Invalid controller certificate            | <ul> <li>The certificate of the controller connected with HMI is invalid.</li> <li>The controller date/time is not synced with current time zone.</li> </ul>   | 1. Check the controller time is synced with the regional time zone. To sync the time zone, refer to the Change Date/Time section in the Niagara Platform Guide and HMI Driver Guide-31-00590.  2. Install a valid certificate for the controller and then connect with HMI. To reinstall the controller certificate, refer to Niagara Platform Guide and HMI Driver Guide-31-00590. |
| Communication timeout                     | The controller connected with HMI is failed to respond to the HMI certificate requests.  | <ol> <li>Check the communication between the controller and HMI and make sure the communication is working properly.</li> <li>Check the configuration and status of the controller and make sure the controller is working properly.</li> <li>Reduce the load in the network/controller (Ex: Point count and logic in the controller) and try again.</li> </ol>                     |
| Invalid data                              | The communication data from the controller is invalid. This message will be displayed during HMI initialization. It happens when the controller responds with any one of the following wrong data for the HMI requests (Device Restore Time, Object List, Point Mode, Object Name, Point Description, Schedule, Calendar, State text, ScheduleRefPoints, and Time Date). | <ol> <li>Check the communication between the controller and HMI and make sure the communication is working properly.</li> <li>Check the configuration and status of the controller and make sure the controller is working properly.</li> <li>Reduce the load in the network/controller (Ex: Point count and logic in the controller) and try again.</li> </ol>                     |

| Error Message           | Problem Cause  | Remedy  |
|-------------------------|--|---|
| Invalid number of users | <ul> <li>No user accounts or more than 20 user accounts exist in the controller. (or)</li> <li>HMI is failed to read the user accounts from the controller.</li> </ul> | Check the user list in the controller via the Niagara workbench and make sure the number of users ranges from 1 to 20 and download the same binaries to the controller. Refer to Getting Started with Niagara guide and HMI Driver Guide-31-00590.                    |
| Invalid user status     | One or more user account may be blocked so the HMI is failed to read the user list of the controller during initialization.  | Check the user list in the controller via the Niagara workbench. Reconfigure the User accounts in the Niagara Supervisor and download the HMI binaries to the controller. Refer to Getting Started with Niagara guide and HMI Driver Guide-31-00590.                  |
| Invalid user list       | HMI is failed to read the user list from the controller or the controller is failed to reply to the HMI user list reading request.                                     | Check the user list in the controller via the Niagara workbench. Reconfigure the User accounts in the Niagara Supervisor workbench and download the HMI binaries to the controller. Refer to Getting Started with Niagara Studio guide and HMI Driver Guide-31-00590. |

| Honeywell makes no representations or warrant omissions or mistakes in this document, nor sha   | purposes only. The content and the product described ar<br>es with respect to this document. In no event shall Honey<br>ll it be liable for any damages, direct or incidental, arising<br>roduced in any form or by any means without prior written | well be liable for technical or editorial<br>out of or related to the use of this |
|---|---|---|
| Hanayayall Duilding Tackwalagias  |   |   |
| Honeywell Building Technologies 715 Peachtree Street, N.E., Atlanta, Georgia, 30308, United States. https://buildings.honeywell.com/us/en | <ul><li>U.S. Registered Trademark</li><li>©2023 Honeywell International Inc.</li><li>31-00586-01 Rev. 08-23</li></ul>   | Honeywell   |