



# Smart-Comm™ Message Board Display Settings User Guide

OneVue Managed Time Solution



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## About Primex

Primex is a leading provider of solutions that automate and maintain facility compliance, increase efficiencies, enhance safety and reduce risk for enterprise organizations in the healthcare, retail pharmacy, education, manufacturing and business vertical markets.

The solutions delivered by Primex include Environmental Monitoring, Managed Time and School Bell Scheduling.

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## SMART-COMM™ MESSAGE BOARD CLOCK

Smart-Comm Message Board Clocks connect to your facility's Ethernet network to download settings from your OneVue account and obtain time from a NTP Server.



## MANAGE MESSAGE BOARD SETTINGS

From the profile of a Message Board, you can manage its settings. The settings include its name, assigned Business Unit and location, color and brightness level of its digits, 2-line display option, and Time Zone and NTP Server.

To view the profile settings of a Message Board, from OneVue go to **Devices > Message Boards >** select the **Name** link.

### View Message Board Profile

From the profile of a Message Board you can manage its settings. Settings include its name, assigned Business Unit and Location, color and brightness level of its LED digits, its 2-line display, and its NTP Server and time zone.

### How to view the profile of a Message Board

1. Go to **Devices > Message Boards**.
2. Select the **Name** link of the Message Board. Its profile settings are displayed. For more information, see "Message Board Setting Specifications" below.

### Message Board Setting Specifications

The specifications below identify the settings configured in the profile of a Message Board.

**Name** - commonly identifies the installation location. It's recommended to develop a standard naming convention to allow you to easily locate a Message Board if maintenance should be required. Allows up to a maximum of 50 characters.

**Label** - information printed on the label affixed to the Message Board by Primex during device configuration. By default, set to the first 20 characters of the clock Name. Allows up to a maximum of 20 characters.

**Description** - identifies the model of the device.

**Gateway ID** - the unique 12-character ID (MAC address) of the gateway component of the Message Board.

#### Advanced Options

Select Show Advanced Options to view the settings below.

**Business Unit** - if your account is set up to manage user access by Business Unit, you may need to assign a Message Board to its applicable Business Unit. By default, set to your account Business Unit.

**Location** - if your account is set up to manage user access by location, assign the Message Board to its applicable location.

User entered information, which is commonly used to share information among users.

#### Message Board Settings

**Color** - sets the LED digit color of the 2-lines displayed. Color options - All Red (default), All Green, All White, Red(Top)/White (Bottom), and White (Top)/Red (Bottom)

**Brightness Level** - sets the brightness level of the LED digits. Options include: 25%, 50% (default), 75% and 100%.

#### Display Options

**Show** - sets what is displayed on line 1 and line 2 of the Message Board. Options include:

- **Time-Date setting** - the first line displays the current time (hh:mm:ss format) and the second line displays the current date (mm/dd/yy format).
- **Time-Message setting** - the first line displays the current time (hh:mm:ss format) and the second line displays a unique message. The message allows up to a maximum of 64 characters, including spaces.

#### Enable Time Zone / NTP Change

Setting that enables Time Zone or NTP Server setting changes to be downloaded to Message Board. When the checkbox is selected and a setting change is saved, the change is scheduled to be downloaded to the Message Board during next connection to the facility's Ethernet network.

When a change is downloaded to the Message Board, it continuously reboots for approximately 6 minutes. Once downloaded, deselect the checkbox and select Save to stop the device from rebooting. 12 minutes after a setting change is saved, the change expires; under the assumption the change was downloaded to the Message Board.

**Time Zone** - select a specific time zone or set to Default. Default indicates either set to the account's time zone or its assigned location's time zone. The Default Time Zone is displayed in (parentheses). If assigned to a location, the Default time zone is the location's time zone.

**NTP Server 1 & 2** - enter the IP Address(es) or set to Default. Default indicates either set to the account's NTP Servers or its assigned location's NTP Servers. Use of external NTP Servers requires that port 123 is open to UDP traffic to allow a Message Board to connect to an external server.

Primex recommends using the facility's designated NTP Servers, and set two valid NTP Servers to ensure a reasonable level of accuracy can be maintained. Use of a Domain name for the NTP Server, such as time.nist.gov, requires Domain Name resolution (DNS).

## Set the Name of a Message Board

The Name commonly identifies its installation location. It's recommended to develop a standard naming convention to allow you to easily locate a device if maintenance should be required.

By default, the name of a Message Board is set to its 12-character Device ID (MAC address).

## How to set the name of a Message Board

1. Go to **Devices > Message Boards**.
2. From the list, select the **Name** link.
3. From the **Name** field, enter its name. Allows up to a maximum of 50 characters.
4. Select **Save** to apply a change.

## Set 2-line Display Format

You can set what is displayed on the 2-lines of a Message Board. The display can be set to either Time-Date or Time-Message.

- **Time-Date setting** - the first line displays the current time (hh:mm:ss format) and the second line displays the current date (mm/dd/yy format).
- **Time-Message setting** - the first line displays the current time (hh:mm:ss format) and the second line displays a unique message. The message allows up to a maximum of 64 characters, including spaces.

The 2-line display is set in the profile of a Message Board. You can also set the display of multiple Message Boards at the same time.

## How to set the 2-line display of a Message Board

1. Go to **Devices > Message Boards**.
2. From the list, select the **Name** link.
3. Select **Show Advanced Options**.
4. From the **Display Options > Show** section, select an **option**.

If set to Time-Message, enter the message to be displayed. Allows up to a maximum of 64 characters, including spaces.

5. Select **Save**.

**NOTE:**

A Message Board automatically connects to facility's Ethernet network every five minutes. During each connection, the Message Board downloads its latest OneVue setting configuration file that includes pending updates.

## How set the 2-line display of multiple Message Boards at the same time

1. Go to **Devices > Message Boards**.
2. From the list, select each **Message Board**. When selected, a checkmark is displayed in the row of each Message Board selected.
3. Select **Edit Selected**. The Mass Edits window is displayed.
4. From the **Display Options > Show**, select an **option**.

If set to Time-Message, enter the message to be displayed. Allows up to a maximum of 64 characters, including spaces.

5. Select **Update All Selected Message Boards**.

**NOTE:**

A Message Board automatically connects to facility's Ethernet network every five minutes. During each connection, the Message Board downloads its latest OneVue setting configuration file that includes pending updates.

## Set Digit Color and Brightness Level

You can set the LED digit color and brightness level of a Message Board's display.

Digit color options include All Red, White or Green, Red/White (first line is displayed in red and the second line is displayed in white) and White/Red (first line is displayed in white and the second line is displayed in red).

The brightness level can be set to 25%, 50%, 75% and 100%. For areas that have limited light, it's best to set to a higher brightness level.

## How to set the LED digit color or brightness level of a Message Board

1. Go to **Devices > Message Boards**.
2. From the list, select the **Name** link.
3. Select **Show Advanced Options**.
4. From the **Message Board Settings**, update the Color and/or Brightness Level settings.

Color options - All Red (default), All Green, All White, Red(Top)/White (Bottom), and White (Top)/Red (Bottom)

Brightness Level options - 25%, 50%, 75% and 100%.

5. Select **Save**.

**NOTE:**

A Message Board automatically connects to facility's Ethernet network every five minutes. During each connection, the Message Board downloads its latest OneVue setting configuration file that includes pending updates.

## How set the LED digit color or brightness level of multiple Message Boards at the same time

1. Go to **Devices > Message Boards**.
2. From the list, select each **Message Board**. When selected, a checkmark is displayed in the row of each Message Board selected.

3. Select **Edit Selected**. The Mass Edits window is displayed.

4. From the **Message Board Settings**, update the Color and/or Brightness Level settings.

Color options - All Red (default), All Green, All White, Red(Top)/White (Bottom), and White (Top)/Red (Bottom)

Brightness Level options - 25%, 50%, 75% and 100%.

5. Select **Update All Selected Message Boards**.

**NOTE:**

A Message Board automatically connects to facility's Ethernet network every five minutes. During each connection, the Message Board downloads its latest OneVue setting configuration file that includes pending updates.

## Set Time Zone and NTP Servers

A Smart-Comm™ Message Board connects to a NTP Server to obtain UTC time and then synchronizes the received time to its Time Zone. A Message Board also connects to your facility's Ethernet network every 5 minutes download its OneVue configuration settings.

When you need to change the NTP Servers or Time Zone for a Message Board, update its settings in OneVue and the setting changes are scheduled to be downloaded to the Message Board during its next network connection.

The Time Zone and NTP Servers are set in the profile of a Message Board. You can also set the NTP Servers or Time Zone of multiple Message Boards at the same time.

## How to set the NTP Servers or Time Zone for a Message Board

To verify the change, it's recommended to complete this procedure while at the Message Board.

1. Go to **Devices > Message Boards**.
2. Select the **Name** link of the Message Board.
3. Select **Show Advanced Options**.
4. From **Enable Time Zone/NTP Change**, select the checkbox and update the settings.

**Time Zone** - select a specific time zone or set to Default. Default indicates either set to the account's time zone or its assigned location's time zone. The Default Time Zone is displayed in (parentheses). If assigned to a location, the Default time zone is the location's time zone.

**NTP Server 1 & 2** - enter the IP Address(es) or set to Default. Default indicates either set to the account's NTP Servers or its assigned location's NTP Servers. Use of external NTP Servers requires that port 123 is open to UDP traffic to allow a Message Board to connect to an external server.

Primex recommends using the facility's designated NTP Servers, and set two valid NTP Servers to ensure a reasonable level of accuracy can be maintained. Use of a Domain name for the NTP Server, such as time.nist.gov, requires Domain Name resolution (DNS).

5. Select **Save**.

A Message Board connects to Ethernet network every 5 minutes to download the OneVue setting changes and obtain UTC time from a NTP Server.



**NOTE:**

When a change is downloaded to the Message Board, it continuously reboots for approximately 6 minutes. Once downloaded, deselect the checkbox and select Save to stop the device from rebooting. 12 minutes after a setting change is saved, the change expires; under the assumption the change was downloaded to the Message Board.

If the Message Board did not download the change, verify the device has an Ethernet connection and repeat this procedure.

## How to set the Time Zone or NTP Servers of multiple Message Boards at the same time

1. Go to **Devices > Message Boards**.
2. From the list, select each **Message Board**. When selected, a checkmark is displayed in the row of each Message Board selected.
3. Select **Edit Selected**. The Mass Edits Message Boards window is displayed.
4. From **Enable Time Zone/NTP Server toggle**, select the checkbox and update the settings.

**Time Zone** - select a specific time zone or set to Default. Default indicates either set to the account's time zone or its assigned location's time zone. The Default Time Zone is displayed in (parentheses). If assigned to a location, the Default time zone is the location's time zone.

**NTP Server 1 & 2** - enter the IP Address(es) or set to Default. Default indicates either set to the account's NTP Servers or its assigned location's NTP Servers. Use of external NTP Servers requires that port 123 is open to UDP traffic to allow a Message Board to connect to an external server.

Primex recommends using the facility's designated NTP Servers, and set two valid NTP Servers to ensure a reasonable level of accuracy can be maintained. Use of a Domain name for the NTP Server, such as time.nist.gov, requires Domain Name resolution (DNS).

5. Select **Update All Selected Message Boards**.

A Message Board connects to Ethernet network every 5 minutes to download OneVue pending setting changes and obtain time from a NTP Server. When a setting change is downloaded to the Message Board, it automatically reboots.

If the Message Board did not receive a setting change, verify the device has an Ethernet connection and repeat this procedure.

12 minutes after the checkbox is selected and setting changes are saved, the system automatically expires the Enable Time Zone/NTP Change - indicating there are no pending changes to be downloaded during its next check-in. This automatic behavior is due to it's expected that a change will be download to the Message Board within 12 minutes of enabling the setting and saving the changes.

## Assign Business Unit to Message Board Clock

If your account is set up to manage user access by Business Unit, you may need to assign a Message Board Clock to its applicable Business Unit. By default, a Message Board is set to your account Business Unit.

The Business Unit is set in the profile of a Message Board. You can also set the Business Unit to multiple Message Boards at the same time.

## How to set the Business Unit assigned to a Message Board

1. Go to **Devices > Message Boards**.
2. Select the **Name** link of the Message Board.
3. Select **Show Advanced Options**.
4. From the **Business Unit** drop-down list, select a Business Unit.
5. Select **Save**.

## How to set the Business Unit of multiple Message Boards at the same time

1. Go to **Devices > Message Boards**.
2. From the list, select each **Message Board**. When selected, a checkmark is displayed in the row of each Message Board selected.
3. Select **Edit Selected**. The Mass Edit window is displayed.
4. From the **Business Unit** drop-down list, select a Business Unit.
5. Select **Update All Selected Message Boards**.

All of the selected Message Boards are assigned to the Business Unit.

## Assign a Location to Message Board Clock

If your account is set up to manage user access by Location, you may need to assign a Message Board Clock to its applicable Location.

The Location is set in the profile of a Message Board. You can also set the Location of multiple Message Boards at the same time.

## How to assign a Location to a Message Board

1. Go to **Devices > Message Boards**.
2. Select the **Name** link of the Message Board.
3. Select **Show Advanced Options**.
4. From the **Location** drop-down list, select a Location.
5. Select **Save**.

## How to set the Location of multiple Message Boards at the same time

1. Go to **Devices > Message Boards**.
2. From the list, select each **Message Board**. When selected, a checkmark is displayed in the row of each Message Board selected.
3. Select **Edit Selected**. The Mass Edit window is displayed.
4. From the **Location** drop-down list, select a Location.
5. Select **Update All Selected Message Boards**.

All of the selected Message Boards are assigned to the Location.

## TROUBLESHOOTING

Having trouble with a Message Board Clock? Learn about some of the common troubleshooting topics and solutions.

If the solutions provided do not resolve an issue, be sure to contact your Primex Certified Sales and Service Partner for additional technical assistance or Primex Technical Support.

## During installation the time and date is red in color and periodically changes to time only

This indicates the Message Board has not connected to the Ethernet network.

### Possible solutions

Verify its network connection

1. Verify the Message Board is connected to an Ethernet network jack.
2. Perform a power-reset: power off the Message Board, unplug the network cable, power back on, and plug the network cable back in. Verify the Message Board's "amber-network light" is flashing, which indicates network activity. Wait up to 20 to 30 seconds for the Message Board to successfully cycle through its power-reset. If the issue is not resolved, complete the following steps.
3. During its power-on sequence, the Message Board is to receive an IP Address from the facility's DHCP server. If "NO-DHCP" continues to be displayed, it cannot connect to the network. Contact the facility's IT department for additional assistance.
4. Retrieve the Message Board's unique MAC Address. Log in to **OneVue** and go to **Devices > Message Boards >** from the list, write down its 12-character **Gateway ID**. Example: 98:76:54:32:01:A9.
5. This step validates the Message Board's connection to the Ethernet network. From a computer that is on the same network as the Message Board, open a web browser and enter the URL: [https://s3.amazonaws.com/us-east-1-production/message\\_board\\_configs/#MACADDR#.xml](https://s3.amazonaws.com/us-east-1-production/message_board_configs/#MACADDR#.xml) and **Replace #MACADDR# with the 12-character Gateway ID excluding the colons (:)**. (Example: [https://s3.amazonaws.com/us-east-1-production/message\\_board\\_configs/9876543201A9.xml](https://s3.amazonaws.com/us-east-1-production/message_board_configs/9876543201A9.xml))
6. If the URL entered does not load, either the Amazon URL or the Message Board's MAC address is being blocked by the network. Contact the facility's IT department for additional assistance.

## Message Board's display is blank

The Message Board's display may be blank due to its power status or its Ethernet network connection.

### Possible solutions

1. Verify its power cord connection from the Message Board to the 3-prong outlet.
2. Perform a power-reset: power off the Message Board, unplug the network cable, power back on, and plug the network cable back in. Verify the Message Board's "amber-network light" is flashing, which indicates network activity. Wait up to 20 to 30 seconds for the Message Board to successfully cycle through its power-reset.
3. It may take up to five (5) minutes for the Message Board to connect to network. Upon its network connection, it synchronizes its time with its NTP time source(s) and downloads its OneVue configuration setting updates.

## From the Devices menu, the Message Boards option is not displayed

Your user account is required to be assigned to the Bell Controllers/Message Boards Device Class to view the Message Boards menu item. In addition, to view a specific Message Board, your user account must be assigned to the Business Unit and/or Location assigned to the Message Board.

### Possible solutions

1. Request a user assigned to an Admin role verify that your user account is assigned to the Bell Controllers/Message Boards Device Class.
2. Request a user assigned to an Admin role to verify the role(s) assigned to your user account includes the Business Unit or Location assigned to the Message Board(s).

If the solutions provided do not resolve an issue, be sure to contact your Primex Certified Sales and Service Partner for additional technical assistance or Primex Technical Support.

## Display or Time Zone setting updates are not displayed on the Message Board

A Message Board Clock automatically connects to the facility's Ethernet network every five (5) minutes. During each connection, the Message Board downloads its OneVue configuration setting change updates.

### Possible solutions

1. Verify the setting changes were saved, go to **Devices > Message Boards** > select the **Name link** of the Message Board to view its profile.
2. Verify at minimum that five (5) minutes has passed since the updates were made in OneVue.
3. Verify its network connection.
  1. Verify the Message Board is connected to an Ethernet network jack.
  2. Perform a power-reset: power off the Message Board, unplug the network cable, power back on, and plug the network cable back in. Verify the Message Board's "amber-network light" is flashing, which indicates network activity. Wait up to 20 to 30 seconds for the Message Board to successfully cycle through its power-reset. If the issue is not resolved, complete the following steps.
3. During its power-on sequence, the Message Board is to receive an IP Address from the facility's DHCP server. If "NO-DHCP" continues to be displayed, it cannot connect to the network. Contact the facility's IT department for additional assistance.
4. Retrieve the Message Board's unique MAC Address. Log in to **OneVue** and go to **Devices > Message Boards** > from the list, write down its 12-character **Gateway ID**. Example: 98:76:54:32:01:A9.
5. This step validates the Message Board's connection to the Ethernet network. From a computer that is on the same network as the Message Board, open a web browser and enter the URL: [https://s3.amazonaws.com/us-east-1-production/message\\_board\\_configs/#MACADDR#.xml](https://s3.amazonaws.com/us-east-1-production/message_board_configs/#MACADDR#.xml) and **Replace #MACADDR# with the 12-character Gateway ID excluding the colons (:)**. (Example: [https://s3.amazonaws.com/us-east-1-production/message\\_board\\_configs/9876543201A9.xml](https://s3.amazonaws.com/us-east-1-production/message_board_configs/9876543201A9.xml))
6. If the URL entered does not load, either the Amazon URL or the Message Board's MAC address is being blocked by the network. Contact the facility's IT department for additional assistance.

## Time displayed is not correct

Incorrect time could be either due to its configured Time Zone or it has not connected to a NTP Server for a period of time that has resulted in its time to drift.

### Possible solutions

Verify its configured Time Zone and NTP Server settings and complete the update procedure. The NTP Server settings are commonly provided by the facility's IT department. For more information, see "Set Time Zone and NTP Servers" on page 8.

Verify its network connection.

1. Verify the Message Board is connected to an Ethernet network jack.
2. Perform a power-reset: power off the Message Board, unplug the network cable, power back on, and plug the network cable back in. Verify the Message Board's "amber-network light" is flashing, which indicates network activity. Wait up to 20 to 30 seconds for the Message Board to successfully cycle through its power-reset. If the issue is not resolved, complete the following steps.
3. During its power-on sequence, the Message Board is to receive an IP Address from the facility's DHCP server. If "NO-DHCP" continues to be displayed, it cannot connect to the network. Contact the facility's IT department for additional assistance.
4. Retrieve the Message Board's unique MAC Address. Log in to **OneVue** and go to **Devices > Message Boards >** from the list, write down its 12-character **Gateway ID**. Example: 98:76:54:32:01:A9.
5. This step validates the Message Board's connection to the Ethernet network. From a computer that is on the same network as the Message Board, open a web browser and enter the URL: [https://s3.amazonaws.com/us-east-1-production/message\\_board\\_configs/#MACADDR#.xml](https://s3.amazonaws.com/us-east-1-production/message_board_configs/#MACADDR#.xml) and **Replace #MACADDR# with the 12-character Gateway ID excluding the colons (:)**. (Example: [https://s3.amazonaws.com/us-east-1-production/message\\_board\\_configs/9876543201A9.xml](https://s3.amazonaws.com/us-east-1-production/message_board_configs/9876543201A9.xml))
6. If the URL entered does not load, either the Amazon URL or the Message Board's MAC address is being blocked by the network. Contact the facility's IT department for additional assistance.



## TECHNICAL SUPPORT

You may require Technical Support when you have questions about product features, system configuration or troubleshooting. Support services are delivered in accordance with your organization's support agreement, end user licenses agreements, and warranties, either with a Primex Certified Sales and Service Partner or directly with Primex.

### Support through Primex Certified Sales and Service Partners

Ensuring our customers experience excellent service is of utmost importance to Primex. Our network of Certified Sales and Service Partners offer technical support services for Primex products.

If you have purchased Primex products or have a service agreement with a Primex Partner, they are your primary contact for all Technical Support inquiries.

### When contacting Primex Technical Support

Make sure you have satisfied the system requirements that are listed in your product documentation. Also, you should be at the computer or device on which the problem occurred, in case it's necessary to replicate the problem.

When you contact Primex Technical Support, please have the following information available:

- Customer ID/Account Name
- Problem description/error messages
- Device hardware information
- Troubleshooting performed before contacting Primex
- Recent network changes

### Primex Technical Support

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