



# Smart-Comm™ Message Board Clock Install 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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## About this Guide

### Audience

This guide is intended for users tasked with installing Smart-Comm Message Board Clock for use with the Primex OneVue Managed Time solution.

### Content messaging

This guide includes notes, cautions, and warnings content that highlights important messages.

Typeface	Indicates
Note	Indicates something important or useful.
Caution	Indicates a command or procedure may have an unwanted or undesirable result.
Warning	Indicates a command or procedure that could be dangerous to system or device.
Example	Provides an example of the topic.

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## INSTALL MESSAGE BOARD

A Smart-Comm™ Message Board Clock is an Ethernet synchronized communication device. It operates as a digital LED clock that can be configured to display time and date or time with a custom 64-character scrolling message.



## How it Works

A Smart-Comm™ Message Board Clock is an Ethernet synchronized communication device that functions as a clock and provides custom messaging.

- Connects to facility's Ethernet network every five (5) minutes - automatically downloads its OneVue configuration settings and obtains UTC time from NTP Server and synchronizes received time to its Time Zone.
- Customize its display from OneVue - from a Message Board profile, set its LED digit color and brightness level and what is shown on its 2-line display.
- Manage its NTP Servers and Time Zone from OneVue - from a Message Board profile, set its NTP Servers and Time Zone settings.

### How to get started

**Install the Smart-Comm™ Message Board Clock** - installation includes connecting the Message Board to your facility's Ethernet network, mounting the Message Board, and verifying its network connection.

**Manage configuration settings from OneVue** - from the profile of a Message Board, you can manage its settings. Settings include its Name, Color and Brightness Level of its LED digits, 2-line display options, Time Zone and NTP Servers, and assigned Business Unit and Location (optional).

## Specifications - Smart-Comm™ Message Board Clock

AC-Power Supply 100-265 VAC at 50-60Hz, 10 feet (3 m) power cord with 3-prong plug

Power Consumption: 150W Max, 20W Typical

### Network Communication

Ethernet 10/100 Base-T (RJ45) and standard Cat 5 or Cat 6 cabling

### Operation

Automatically adjusts for Daylight Saving Time (DST)

Two line display: set to either Time (line 1)-Date (line 2) or Time (line 1)-Message (line 2). Message line allows up to a maximum of 64 characters. Time format: hh:mm:ss and Date format: mm/dd/yy.

LED digit display color: set to a single color or a two line color

LED digit dimmer options: 100%, 75%, 50%, and 25%

Connects to Ethernet network every five minutes to obtain time from NTP server and download setting changes from OneVue

### Enclosure

Enclosure: metal with black powder coat finish

Dimension: 6.9" H x 30.5" W x 2.5" D (17.5 cm x 77.4 cm x 6.3 cm)

Weight: 8 lb (3.6 kg)

LED Digits: 16 pixel high by 96 pixel wide; 2-lines, single sided

Mounting: wall or ceiling/suspended mount

### Environment

Operating Temperature: -30° F to 150° F (-34° C to 64° C). Indoor use only

Relative humidity up to 90% non-condensing

### Certifications

CE approved

ETL Listed, conforms to ANSI/UL STD 48 and certified to CAN/CSA, STD C2.2 No.207

FCC Part 15, Class A

## Installation Requirements

Refer to the Important Safety Instructions before installing, operating or performing maintenance.

### What's Supplied

(1) Smart-Comm™ Message Board Clock

(1) AC power cord - 10 ft (3 m) cord with 3-prong plug

(1) Ethernet cable

(1) Wall-mount bracket kit - includes two brackets, two 5/16"-18 screws, and four #10 screws 1-1/2" long

### What's Required

Before you begin installation verify the requirements below.

- **3-prong socket-outlet** - located within 10 ft (3 m) from installation location.
- **Active DHCP Ethernet Network Port at installation location** - a Message Board requires a connection to an Ethernet network to obtain time from a NTP Server and download its settings from OneVue.
- **For optional Ceiling/Suspended-mount** - steel 5/16"-18 threaded rod eye bolt or another type of threaded piece (not supplied).
- **OneVue user account with Bell Controllers/Message Boards Device Class** - required view Message Boards from OneVue.



## Mount and Connect

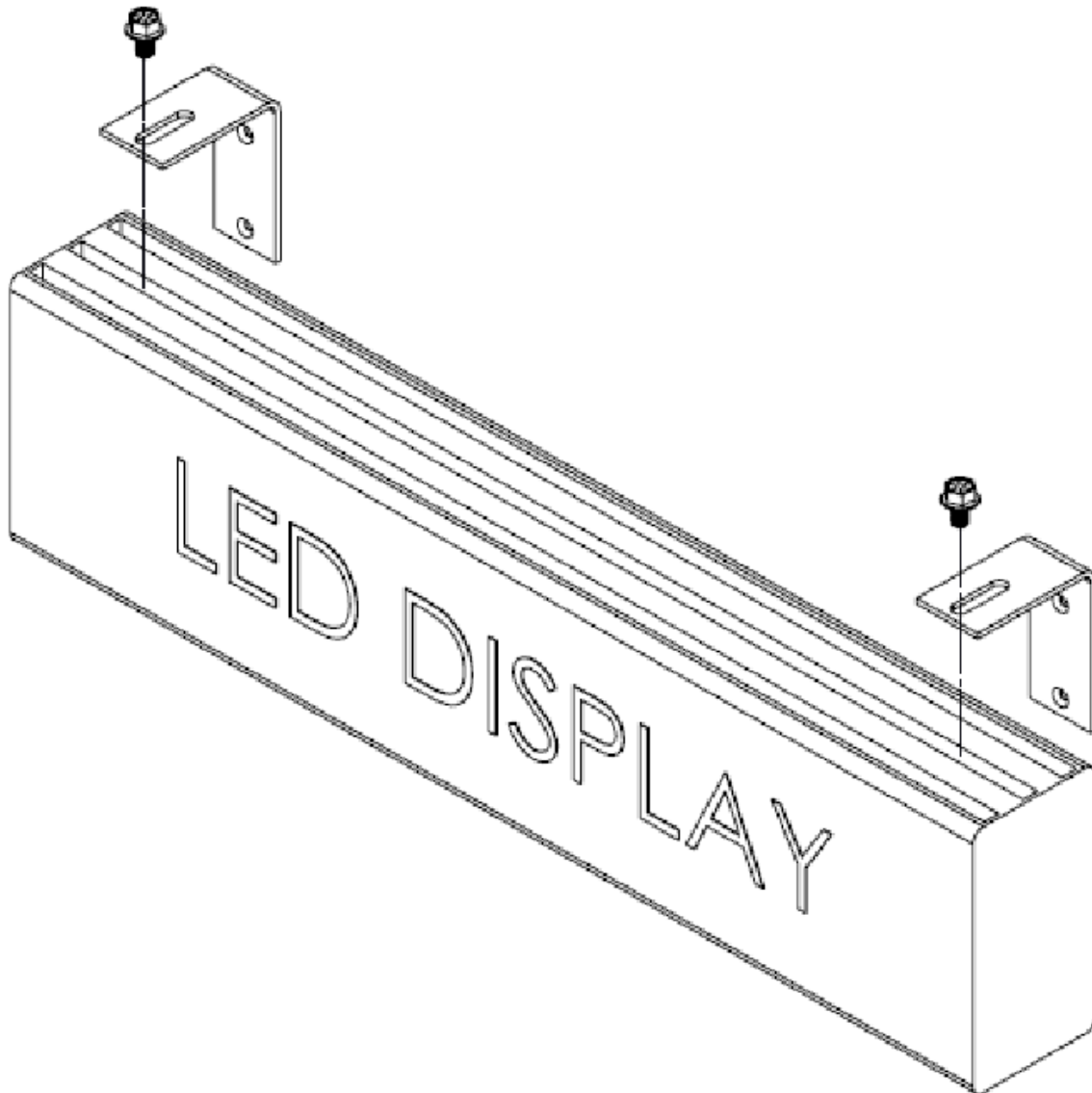
A Message Board can be installed by way of a wall-mount or the optional ceiling/suspended mount.

**NOTE:**

The power plug may be removed and cord cut to length for hardwired (pigtail) installation. Pigtail installation requires a 120V~ power line in a junction box installed by a licensed electrician. Leave a minimum of 6 inches (15 cm) of cord inside the junction box.

### Wall-mount

Installation is completed with the supplied wall-mount bracket kit.



1. Locate wall studs and align each bracket to a stud location. Brackets are to be spaced at a minimum of 16 inches (40 cm) separation and level in respect to each other.

2. Mount brackets to wall using the supplied #10 screws 1-1/2" long or an alternate fastener appropriate for the wall construction.
3. Attach brackets to Message Board using the supplied 5/16"-18 screws and washers. Insert screws from the top of bracket through the slot and screw into T-Nuts located in the center channel on the top-side of the Message Board.
4. Adjust position and tighten both screws to secure Message Board.
5. Insert supplied Ethernet cable into Message Board and network port.
6. Apply power to the Message Board.

When power is applied, the Message Board attempts to connect to the Ethernet network. When connected to the network, it briefly displays its network IP address, downloads its OneVue configuration settings, connects to a NTP Server to obtain UTC time, and synchronizes the received time to its time zone.

7. Verify its connection to Ethernet network - indicated by what's shown on its display.

**Successful connection** - time is displayed on line 1 and line 2 displays Your Message Board has been successfully connected! (all digits are green in color).

**Failed connection** - time is displayed on line 1 and date is displayed on line 2 (all digits are red in color).

## Optional Ceiling/Suspended-mount

Installation is completed by attaching threaded rods or eye bolts to the T-Nuts located in the center channel on the top-side of the Message Board, permitting it to be suspended from a ceiling.

1. To mount, screw either 5/16"-18 threaded rod or eye bolt or another threaded piece (not supplied) into the T-Nuts located on the top-side railing slot.

## Configure NTP Server & Time Zone from OneVue

Once connected to Ethernet network, you can update its display, NTP Servers and Time Zone settings from OneVue.

1. From OneVue (<https://console.primexonevue.com>), go to **Devices > Message Boards**> select the **Name** link of the Message Board, by default its Name is its 12-character Device ID (MAC address).
2. From **Enable Time Zone/NTP Change**, select the checkbox and update the settings.

### 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.

## TROUBLESHOOTING

Having trouble with a Smart-Comm™ 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 Smart-Comm™ 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 NTP Time Source and Time Zone" on page 1.

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.
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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.

## ONE-YEAR LIMITED WARRANTY

### WARRANTY COVERAGE

Primex warrants this product to be free from defects in materials and workmanship for a standard of ONE (1) YEAR from the date of purchase. Primex will at its sole option, repair or replace any components that fail in normal use. Such repairs or replacements will be made at no charge to the customer for replacement parts. The customer will be responsible for any transportation costs. This warranty does not cover failures due to misuse, abuse, accidental or unauthorized alterations or repairs.

The warranties and remedies contained herein are exclusive and in lieu of all other warranties express or implied or statutory, including any liability arising under any warranty or merchantability or fitness for a particular purpose, implied, statutory or otherwise. In no event shall Primex be liable for any incidental, special, indirect or consequential damages, whether resulting from the use, misuse or inability to use this product or from defects in the product. Some states do not allow this exclusion or limitation of incidental or consequential damages so the above limitations or exclusion may not apply to you.

### OBTAINING WARRANTY SERVICE

To obtain warranty service: If after following the instructions in the product guide, you are certain the product is defective, please contact Primex Technical Support to assist with troubleshooting the issue. If the issue cannot successfully be resolved and the product is under warranty, an RMA (Return Material Authorization) will be generated. The RMA form will be provided via email with detailed instructions for the return.

Primex retains the exclusive right to repair or replace the unit at its sole discretion. All merchandise returned must be shipped to Primex, Attn: Returns Dept., N3211 County Road H, Lake Geneva, WI 53147. Primex retains the exclusive right to repair or replace the unit at its sole discretion. Such shall be your sole exclusive remedy for any breach of warranty.

## 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

Hours 8:00 a.m. to 5:00 p.m. CST | Monday through Friday

Phone: 1-262-729-4860

Email: [techsupport@primexinc.com](mailto:techsupport@primexinc.com)

Web: [www.primexinc.com/support](http://www.primexinc.com/support)