OneVue™ Sync Repeater Transmitter

Install Guide

Product Models: TX4001NR
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# Table of Contents

72MHz OneVue Sync solution overview ................................................................................................................ 4  
  Architecture .................................................................................................................................................. 4  
  Time synchronization ..................................................................................................................................... 4  
  Monitoring .................................................................................................................................................. 5  
  Transmitter power-failure operation .............................................................................................................. 5  
  Typical system setup illustration: 1 Watt Transmitter with Repeater Transmitters ........................................... 7  

Specifications: OneVue Sync Repeater Transmitter ........................................................................................... 8  

Install OneVue Sync Repeater Transmitter ......................................................................................................... 9  
  Installation requirements .................................................................................................................................. 9  
  Step 1: Mount Transmitter and establish connections .................................................................................... 10  
  Last Step: Configure Transmitter .................................................................................................................. 10  

Configure Transmitter ........................................................................................................................................ 11  
  How does it work? .......................................................................................................................................... 11  
  What's the difference between OneVue Monitor and Standalone configuration? ........................................... 11  
  Configure Transmitter for OneVue Monitor use ............................................................................................ 12  
  Configure Transmitter for Standalone Use (not monitored) .......................................................................... 21  

OneVue network requirements .......................................................................................................................... 28  
  Network communication protocols .................................................................................................................. 28  

Safety, Regulatory, and Warranty Information ...................................................................................................... 30  
  Safety Instructions and Warnings .................................................................................................................. 30  
  Federal Communications Commission (FCC) / Industry Canada (IC) .............................................................. 30  
  Radio Standards Specifications (RSS) ........................................................................................................... 31  
  5 YEAR LIMITED WARRANTY ...................................................................................................................... 33  

Technical Support .................................................................................................................................................. 34
72MHz OneVue Sync solution overview

Learn how the solution works and how the system devices provide synchronized time.

Architecture
The 72MHz OneVue Sync solution provides critical notifications and synchronized time using a 72MHz radio frequency to transmit a wireless signal to all system devices. The frequency allows the wireless signal to broadcast through common building materials and across longer distances with less potential for signal interference.

The system consists of a single Transmitter with an internal or external antenna, a GPS Receiver (optional), Repeater Transmitter (optional), and the system time and event devices in a single building, to a campus wide deployment.

Time synchronization

• **Time source**
  Once a Transmitter has received its time from either a GPS Receiver or NTP time source or a main Transmitter, it sets its internal clock. It then wirelessly broadcasts its received time over a 72MHz radio frequency to the system clocks. As a result, time devices are precisely synchronized to each other and all time, schedules, and events are kept current.

• **Transmitter frequency and channel**
  Transmitters operate on channels with 20kHz bandwidths and 72MHz radio frequency and is preset to one of the channels licensed by the FCC/IC to minimize interference on these frequencies and channels.

• **Transmitter transmit (broadcast) schedule**
  1 Watt Transmitter with an internal antenna: Transmits a time signal continuously, 24 hours a day.
  1, 5, or 30 Watt Transmitters with an external antenna: Transmits (broadcasts) a time signal 24 hours a day ONLY between the 39th to the 6th minute of each hour, and changes to a standby mode and does NOT transmit a time signal during the 7th to the 38th minute of each hour.

• **Analog Clocks and Digital Clocks/Timers signal search**
  **Analog Clock signal search frequency:** six pre-scheduled times a day at 10:01, 2:01 and 6:01 AM and PM clock time (not the actual time of the day), a clock's receiver turns on to search for a Transmitter signal to receive a time update, starting with the previously stored channel number.
  **Digital Clock/Timer signal search frequency:** every 10 minutes on the 5's (5, 15, 25, 35, 45, 55 minutes) of the hour, a clock's receiver turns on to search for a Transmitter signal to receive a time update.

When a clock has not received a valid signal/time update for three consecutive days, it displays a visual signal loss indicator; an analog clock's second hand advances and pauses continuously (stepping) and a digital clock/timer's colons flash. A clock may display the correct time, but it's not synchronized and its time may drift.
• **5 and 30 Watt Transmitters**

A lightning arrester is housed inside the enclosure and helps protect the Transmitter and amplifier from lightning damage during severe weather. However, Primex cannot guarantee that all damage will be prevented even with the lightning arrester installed.

A high-power amplifier increases the output power of the base Transmitter. The amplifier is housed in the Transmitter’s industrial style enclosure for safety reasons. Transmitter includes an externally mounted antenna and an RF power power amplifier that increases the output power allowing it to transmit at a greater distance.

**Monitoring**

Unique to 72MHz OneVue Sync Transmitters they can be monitored and managed remotely from the OneVue cloud-based software. During installation a Transmitter is required to be configured for use with OneVue or as a standalone device. Primex strongly recommends configuration with OneVue, which does require a Transmitter to have an Ethernet network connection.

The primary difference between the two configurations is that Primex remote support services are provided with the OneVue Monitor configuration. This is due to the Transmitter reports its status and events to OneVue over the facility's network and its settings can be viewed and managed from OneVue. This allows Primex to investigate and provide remote support for service incidents.

- **OneVue Monitor Configuration**
  
  In addition to providing remote support services, this configuration allows access to all OneVue features. The features include device settings, alerts, reports, and over-the-air (OTA) firmware updates.

- **Standalone Configuration**
  
  Transmitter settings are viewed and updated onsite, locally at the Transmitter from the app and its status is monitored locally from its front panel LED status indicators.

  Examples of when Standalone Configuration would be acceptable include during construction and the facility's network is not active, its install location does not have access to an available network port, or remote support services are not required.

**Transmitter power-failure operation**

During a power failure, the Transmitter continues to track time with the last valid time signal that it received. Once the power had been restored, the Transmitter begins to broadcast (even without a valid time signal) to the down-stream components. Once the Transmitter has been powered on for a few hours, it’s capable of keeping track of time off its internal backup power for up to eight hours.

- The system has a fail-safe design. If the failure of a system component or power loss to a component occurs, all down-stream components continue normal operations using their own internal time base.
- If after a specified period of time communication has not been restored, a visual indicator of a loss of communication appears and remains until communication is restored. Loss of communication visual indicators: Transmitter front panel LED indicator, flashing colon on LED digital clocks/timers; and stepping of second hand on analog clocks.
NOTE

Transmitter with an external antenna

- In the event of a facility wide power outage, a Transmitter broadcasts continuously for 8 hours upon the restoration of power, synchronizing all Primex devices throughout the facility.
- In the event power to a Transmitter is shut off and turned back on (power cycled), the Transmitter broadcasts continuously for 8 hours. Power-cycling the Transmitter can be used to set/reset system devices. It’s not recommended to power-cycle a Transmitter when it is in an Error status.
Typical system setup illustration: 1 Watt Transmitter with Repeater Transmitters

A Repeater Transmitter is an optional unit to supplement and extend signal coverage.

For illustration purposes only. Drawings not to scale. Refer to installation guide for complete instructions.

Install overview
Main Transmitter must be operational before installing Repeater Transmitters and other Sync and Notify devices.

For each transmitter complete the below steps:
1. Verify install requirements and mount Transmitter.
2. Main Transmitter GPS time source only: install GPS Receiver. Refer to Transmitter with internal antenna setup examples. Repeater Transmitters receive time signal from main Transmitter.
3. Establish Transmitter connections:
   - GPS, Ethernet, Internal Antenna, AC power
   - Main Transmitter
   - Notify-Critical Notifications: wire Transmitter contact closure terminal block to event input source.
4. Configure Transmitter with ODC app.
5. Verify Transmitter operation.
6. When all Transmitters are operational, install additional system devices
   - Infoboards only: configure with ODC app prior to installation.

Transmitter install requirements
- Transmitter location: minimum of 4 ft. (1.2 m) above floor.
- 4 ft. (1.2 m) Internal Antenna: requires vertical clearance and minimum of 5 ft. (1.5 m) away from large, solid metal objects.
- AC power: 120 VAC outlet located within 5 ft. (1.5 m) from Transmitter
- Ethernet connection: OneVue configuration and main Transmitter NTP time source.

Optional system components
- 1 Watt Transmitter shelf 24 in. (60.9 cm)

1 Watt Transmitter specifications
Dimensions: 17 in. L x 12 in. W x 7.1 in. D
(43.2 cm x 30.5 cm x 4.32 cm)
Weight: 9 lb. (4 kg)

AC power supply
Input: 120-240VAC, 50/60 Hz, 0.8 Amp
Max. Output: 9 VDC, 2.5 Amp
6 ft. (1.8 m) power cord
## Specifications: OneVue Sync Repeater Transmitter

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Frequency Range</td>
<td>72MHz</td>
</tr>
<tr>
<td>Channels</td>
<td>49 channels available (pre-programmed prior to shipping)</td>
</tr>
<tr>
<td>Channel Bandwidth</td>
<td>20KHz</td>
</tr>
<tr>
<td>Maximum Transmission</td>
<td>1 Watt (at Transmitter)</td>
</tr>
<tr>
<td>Radio Technology</td>
<td>Narrowband FM</td>
</tr>
<tr>
<td>Bluetooth Technology</td>
<td>Bluetooth® low energy (v5) wireless technology. To allow pairing with OneVue Device Configurator (ODC) app for configuration and setting management.</td>
</tr>
<tr>
<td>User-defined Settings</td>
<td>Locally at device with OneVue Device Configurator (ODC) app</td>
</tr>
<tr>
<td></td>
<td>• Time Zone, Daylight Saving Time with bypass option, NTP Servers (up to three), Transmit Schedule (power-on), Normal Transmit Schedule, Firmware, Transmit Channel, Repeater Channel</td>
</tr>
<tr>
<td></td>
<td>• NTP Servers (up to three), Legacy Clock Time Zone, Alarm Delay, Firmware, Unresponsive Timeout, Check-in Interval</td>
</tr>
<tr>
<td>Dimensions</td>
<td>17 in. L x 12 in. W x 1.7 in. D (43.2 cm x 30.5 cm x 4.32 cm)</td>
</tr>
<tr>
<td>Weight</td>
<td>9 lb. (4.08 kg)</td>
</tr>
<tr>
<td>Power Supply</td>
<td>Input: 120 VAC, 50/60 Hz, 0.6 Amp. Output: 9 VDC, 1.78 Amp. 6 ft. (1.83 m) cord</td>
</tr>
<tr>
<td>Front Panel</td>
<td>Four LED status indicators (Power, Transmit, Caution, Error) and Bluetooth labeled push-button to pair with the Primex OneVue Device Configurator (ODC) app.</td>
</tr>
<tr>
<td>Rear Panel</td>
<td>DC input: connection to supplied AC power supply</td>
</tr>
<tr>
<td></td>
<td>Network LAN port: RJ-45 Ethernet, 100/10 Mbps, 802.3 Ethernet</td>
</tr>
<tr>
<td></td>
<td>Dry Contact Closure Terminal Block with removable connector: for use with OneVue Notify with Critical Notifications</td>
</tr>
<tr>
<td></td>
<td>Pinhole button: initiate manual check-in to OneVue (press and release with jewelers screwdriver or other small object)</td>
</tr>
<tr>
<td></td>
<td>Not applicable to model: GPS IN port (MiniDIN 7-Pin) and Baseboard Monitor port (MiniDIN 9-Pin)</td>
</tr>
<tr>
<td>Top Panel</td>
<td>Internal Antenna connection.</td>
</tr>
<tr>
<td>Operating Range</td>
<td>32° to 122° F (0° to 50° C), non-condensing environment</td>
</tr>
<tr>
<td>Warranty</td>
<td>5 Year</td>
</tr>
</tbody>
</table>

Canadian Notice: The manufacturer rated output power of this equipment is for single carrier operation. For situations when multiple carrier signals are present, the rating would have to be reduced by 3.5 dB, especially where the output signal is re-radiated and can cause interference to adjacent band users. This power reduction is to be by means of input power or gain reduction and not by an attenuator at the output of the device.

All specifications are subject to change without notice.
Install OneVue Sync Repeater Transmitter

This topic provides the requirements and procedures to install a 1 Watt Repeater Transmitter with an internal antenna.

For a system with more than one Transmitter, first configure and install the main Transmitter and verify it received a valid time signal and then configure Repeater Transmitter(s). When all Transmitters are configured and installed, you can then configure and install the system clocks or InfoBoards.

Installation requirements

When planning the system installation of a Transmitter with an internal antenna, Primex recommends taking into consideration the below requirements. Location is extremely important to ensure the best operation of your system.

1 Watt Transmitter with Internal Antenna location requirements

Location and mounting must meet all of the following requirements.

- Multi-story building: locate main Transmitter on the top floor; significantly improves coverage to the lower floors due to the “umbrella” pattern of transmission
- Transmitter mounting location: a minimum of 4 ft. (1.2 m) above the floor.
- Transmitter shelf mounting: 18 in. L x 3 in. W x 16.5 in. mounting shelf available from Primex.
- Transmitter enclosure clearance: located in an area that allows for required clearance.
  Enclosure dimension: 2 in. H x 17 in. W x 12 in. D (5.08 cm x 43.18 cm x 30.48 cm). Required wall area is 24 in. W x 18 in D.
  Allow a minimum of 43 in. (1.09 m) vertical clearance; includes internal antenna 40.8 in. H (1.03 m) and Transmitter enclosure height of 2 in. (5.08 cm)
- Internal antenna clearance: requires vertical clearance and distance of a minimum 5 ft. (1.5 m) from large, solid objects, such as lockers or filing cabinets. Antenna should never make contact with metal objects, especially electrical conduit or wiring of any kind, and proximity to these should be avoided. Internal Antenna height: 40.8 in. (1.03 m).
- AC power: located within 5 ft. (1.5 m) from a 120 VAC electrical outlet. 10 AMP dedicated service recommended.
  AC power supply (supplied): Input: 120 VAC, 50/60 Hz, 0.6 Amp. Output: 9 VDC, 1.78 Amp. 6 ft. (1.83 m) cord
- Ethernet connection (OneVue Monitor and NTP time source): located in close proximity to an Ethernet port.
- Environment: located in an indoor controlled environment that is 32° to 122° F (0° to 50° C) and a non-condensing humidity environment.

Required tools and equipment

The following tools and equipment are recommended and can be purchased from Primex.

- 1 Watt Transmitter Shelf. 18 GA metal, epoxy coated, 18 in. L x 3 in. H x 16.5 in. D
- Uninterrupted Power Supply (UPS)
Step 1: Mount Transmitter and establish connections

1. Mount Transmitter.
   Verify all install requirements are met.

2. Attach Internal Antenna
   The supplied antenna is attached onto the top case of the Transmitter.
   Carefully screw the supplied internal antenna onto the Transmitter. Turn the antenna clockwise, being careful to
   avoid cross-threading the antenna. The antenna must be snug and flat against the case.

3. Establish Ethernet connection (NETWORK LAN). Required for NTP time source and OneVue Configuration.
   Insert a network cable into the RJ-45 Ethernet port/Network LAN port. Plug the other end into a network Ethernet
   jack.

4. Connect AC power.
   Connect the supplied AC power supply into the Transmitter AC power input. Plug the two-prong plug into a 120
   VAC wall outlet.

Last Step: Configure Transmitter

The last step is to configure the Transmitter with the OneVue Device Configurator (ODC) app. A Transmitter will not
operate until it’s configured.

OneVue Sync Transmitters can be configured for use with OneVue Monitor or as a Standalone device. To receive
remote support services from Primex, OneVue Monitor configuration is required. There is no cost associated with
OneVue Monitor and is the configuration method recommended by Primex.
Configure Transmitter

For a new system deployment or when adding or replacing a OneVue Sync Transmitter, the Transmitter is required to be configured onsite with the ODC app. A Transmitter will not operate until it is configured.

The ODC app is available for both iOS and Android mobile devices. Download the app from the App Store or Google Play™ store. Search for Primex OneVue Device Configurator.

Once you download the app, the app guides you through the entire process and the Transmitter is configured through the Bluetooth pairing connection between your mobile device and the Transmitter. It's a simple, easy process that provides onsite configuration.

⚠️ IMPORTANT
For a system with more than one Transmitter, first configure and install the main Transmitter and verify it received a valid time signal and then configure Repeater Transmitter(s). When all Transmitters are configured and installed, you can then configure and install the system clocks or InfoBoards.

How does it work?
The ODC app and a OneVue Sync Transmitter wirelessly communicate over a Bluetooth pairing connection. During this connection, the Transmitter settings are entered into the app and the settings are then wirelessly downloaded to the Transmitter.

- **Bluetooth pairing connection**
  OneVue Sync Transmitters are equipped with a wireless Bluetooth radio component that is activated from its front panel Bluetooth pairing button. When the pairing button is pressed and released, the Transmitter becomes discoverable and the ODC app searches for and then pairs with the Transmitter to establish a wireless Bluetooth connection.

- **Two configuration options available: OneVue Monitor or Standalone**
  OneVue Sync Transmitters can be configured for use with OneVue Monitor or as a Standalone device. To receive remote support services from Primex, OneVue Monitor configuration is required. There is no cost associated with OneVue Monitor and is the configuration method recommended by Primex.

What’s the difference between OneVue Monitor and Standalone configuration?
The primary difference is that Primex remote support services are provided with OneVue Monitor configuration. This is due to the Transmitter reports its status and events to OneVue over the facility's network and its settings can be viewed and managed from OneVue. This allows Primex to investigate and provide remote support for service incidents.
• OneVue Monitor Configuration (Connect to OneVue) [12]
  In addition to providing remote support services, provides access to OneVue features. Features include managing
device settings, alerts, reports, and over-the-air (OTA) firmware updates.

• Standalone Configuration [21]
  Transmitter settings are viewed and updated onsite, locally at the Transmitter from the app and its status is
monitored locally from its front panel LED status indicators.
  Examples of when Standalone Configuration would be acceptable include during construction and the facility's
network is not active, its install location does not have access to an available network port, or remote support
services are not required.
  When configured as Standalone, at anytime the Transmitter can changed to OneVue Monitor from the app.

Configure Transmitter for OneVue Monitor use
This topic provides the steps required to configure a OneVue Sync Transmitter to be managed and monitored from
OneVue. Be sure to complete the steps in the order as they appear below.

For a system with more than one Transmitter, first configure and install the main Transmitter and verify it received a
valid time signal and then configure Repeater Transmitter(s). When all Transmitters are configured and installed, you
can then configure and install the system clocks or InfoBoards.

Step 1: Verify configuration requirements are met

• Transmitter
  All external components installed, including external antenna and GPS Receiver.
  All connections established and Transmitter is powered on.
  Main Transmitter connections include AC power, GPS Receiver (for GPS time source), external or internal antenna,
  and Ethernet network.
  Repeater Transmitter connections include AC power, internal antenna, and Ethernet network.

• App login requirements
  Your OneVue User Profile assigned to an Account Admin or Network Admin Role.

• OneVue Network Requirements
  Verify facility's network meets the OneVue Network Requirements [28].

• OneVue wired Ethernet network profile
  Transmitter requires an Ethernet network connection and assigned to a OneVue wired network profile. From the app,
you can select an existing wired network profile or if a network is not available, you will be required to create a new
network.

• NTP time source
  Transmitter requires connection to Ethernet network.
  Verify NTP Server IP address(es). By default, set to the OneVue account NTP Servers.

Step 2: Download ODC app or verify app is up to date
Download the Primex OneVue Device Configurator app from the App Store or Google Play™ store. If you already have
the app, turn on automatic updates or check for updates prior to configuring a device.
Mobile device requirements

- iOS (Apple® iPhone or iPad): Requires iOS version 11 or later
- Android (phone or tablet): Requires version 5.0 or later

![Important Note]

Before you begin to configure a device be sure your mobile device:

- Battery life is 25% or greater
- Bluetooth is enabled
- Connected to Wi-Fi or mobile connection

**Step 3: Configure Transmitter**

1. Open the OneVue Device Configurator (ODC) app.
2. Select Connect to OneVue.
3. Enter your OneVue **Username** and **Password** and select **Log In**.
4. Select the **OneVue account** the Transmitter is to be added to.
   Option only appears if your user login is associated to more than one OneVue account.

5. Set Transmitter into **Bluetooth discoverable mode**.
   From the Transmitter's front panel, press and release the Bluetooth pairing button. Transmitter is discoverable for the next two minutes (Power LED is illuminated and Transmit LED flashes).

6. From available devices, select the **Transmitter**. If multiple devices listed, verify the 12-character MAC address located on the Transmitter back panel.
   If Transmitter is not listed, select the app **Refresh** icon.
7. Verify its factory specifications.
   MAC Address: Unique 12-character MAC Address discoverable on the facility's network. The MAC address is printed on a label located on the Transmitter's back panel.
   Model: Identifies the Primex device model. All OneVue Sync Transmitters are identified by Transmitter (TX400).
   Tx Mode: Identifies the Transmitter hardware configuration. Indicates if 1, 5, or 30 Watt and internal or external antenna.

8. Configure its **Network**. Select an existing wired network or if a network is not available enter a new network profile. Once complete, select **Continue**.
   If a Non-DHCP network (static IP address), select DHCP off and enter the IPv4 settings.

9. Enter a **Name** for the Transmitter.
   Uniquely identifies the Transmitter and should identify its install location, which allows the device to be located when service is required.
10. Verify **Call Sign** (preset by Primex).

Transmitter is registered and licensed to operate over the 72MHz radio frequency with the Federal Authority having jurisdiction (U.S.: FCC/Canada: ISED). Primex files the license application with the Federal Authority having jurisdiction on behalf of the system owner. The FCC/ISED license includes the Call Sign and the effective and expiration date. Once issued the system owner is responsible for maintaining the license.

- **If the license was issued and received prior to shipment:** Primex configures the licensed Call Sign.
  Under penalty of FCC/ISED compliance laws: DO not edit a configured Call Sign without authorization from Primex or system owner.

- **If the license was not available at time of shipment:** Primex configures the Transmitter with a temporary Call Sign. A temporary Call Sign is identified by "WT & the owner’s phone number". If you have been provided the licensed Call Sign, update at the time of configuration.
  If configuration is completed with a temporary Call Sign, it's required to be updated to the licensed Call Sign. The Call Sign can be updated directly from the app. Optionally, contact Primex to request a Transmitter Call Sign update.

11. Verify **Time Zone** is set to install location.

Transmitter (main): Time Zone transmitted (broadcasted) to system devices and Repeater Transmitter(s).

Repeater Transmitter: setting does not apply; receives and re-transmits time signal received from main Transmitter.

12. Verify its **Time Source**.

The app detects the Transmitter time source.

- **When GPS connection is detected:** Displays GPS Time Received.

- **When GPS connection is not detected or a Repeater Transmitter:** Displays the OneVue account NTP Server settings.
  If NTP Servers are to be different, update the settings. When updated the NTP settings are saved to the Transmitter profile. The OneVue account NTP settings are not updated.
Dynamic setting: Displays RF Channel when configuring a main Transmitter and displays Receive Channel when configuring a Repeater Transmitter.

**RF Channel (only applies to the main Transmitter)**

- Set to the Channel Number the Transmitter transmits its time signal and events on, which is then received by the system devices.

⚠️ **WARNING**
DO NOT change RF Channel without authorization from Primex or system owner.

**Receive Channel (only applies to a Repeater Transmitter)**

When the Repeater Transmit Channel setting, located in advanced settings, is set to a number (not Off), the app automatically changes the RF Channel setting to Receive Channel.

Repeater Transmitter searches for and receives time and event signals from this channel and re-transmits the signal received, which is then received by system devices within its wireless RF range.

- Set to the main Transmitter’s RF Channel Number.

14. Repeater Transmitter only. Select **Advanced Options** to configure its Repeater Transmit Channel.
Set to a Channel Number the Repeater Transmitter is to transmit (broadcast) its time signal on. To avoid interference, set to a number that is less than or greater than 2 channels from another Transmitter.

<table>
<thead>
<tr>
<th>CONFIGURATION EXAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>System with Main Transmitter and two Repeater Transmitters.</td>
</tr>
<tr>
<td>Main Transmitter</td>
</tr>
<tr>
<td>RF Channel: 1</td>
</tr>
<tr>
<td>Repeater Transmit Channel: Off</td>
</tr>
<tr>
<td>Repeater Transmitter (A)</td>
</tr>
<tr>
<td>Receive Channel (RF Channel): 1</td>
</tr>
<tr>
<td>Repeater Transmit Channel: 4</td>
</tr>
<tr>
<td>Repeater Transmitter (B)</td>
</tr>
<tr>
<td>Receive Channel (RF Channel): 1</td>
</tr>
<tr>
<td>Repeater Transmit Channel: 7</td>
</tr>
</tbody>
</table>
15. Optional settings, select **Advanced Options**.

**With Daylight Saving Time**

By default enabled and the time zone DST rules are observed. When de-selected, it overrides the time zone DST rules and uses standard time. This option is available to allow a manual override to not observe DST time.

⚠️ **CAUTION**

The settings below (Transmit Continuously and Normal Transmit) should only be changed when requested or approved by an authorized Primex support technician.

**Transmit Continuously**

Number of hours the Transmitter continuously transmits a time signal after a power up (on). During a system install, this allows other system devices to receive a time signal at the time of installation.

**Normal Transmit**

The schedule the Transmitter transmits (broadcasts) a time signal from a start hour to end hour based on a 24 hour time period.

- **1 Watt Transmitter with an internal antenna and Repeater Transmitter**
  
  By default, set to transmit 24 hours a day (0 to 0).

- **Transmitter with an external antenna only (specific minute transmit schedule set by the factory)**
  
  1, 5, or 30 Watt Transmitters with an external antenna ONLY transmit a time signal between the 39th to the 6th minute for each hour set in its Normal Transmit schedule and changes to a standby mode and does NOT transmit a time signal during the 7th to the 38th minute of each hour. This setting is set by the factory and cannot be changed.

  For example, when its Normal Transmit schedule is set to 24 hours, each day at 12:39 AM it starts transmitting and at 1:06 AM it stops transmitting and from 1:07 AM to 1:38 AM it is in standby mode and does not transmit a time signal. Then for each hour it starts to transmit again at the 39th minute of the hour and ends at the 6th minute and from the 7th to the 39th minute of the hour is in standby mode. This sequence will repeat each hour.

**Presets 1 through 5**

This setting only applies to the OneVue Notify solution.

- Sets Main Transmitter's contact closure terminal block inputs, which activates the five critical notification events (1 through 5).
Default is Normally Open (NO) and when a checkbox is not selected the Preset (contact closure input) is set to Normally Closed (NC).

- Normally Open (NO) is required when integrated with the Notify Critical Notification Panel.
- Settings may be required to be changed when integrated with a third-party system that activates critical notification events.

16. Select **Save**.

Settings are downloaded to the Transmitter and initiates its first-time check-in to OneVue.

17. **Verify Transmitter checked-in to OneVue.** It may take up to two minutes to check-in.

Log in to **OneVue > go to Devices > Transmitters > verify its Last Check-in.**
18. From the front of the Transmitter, verify it is not in a **Caution** or **Error** state.

The LED indicators indicate the current state of the Transmitter and signify warnings and errors. When first powered on all LEDs turn on for two seconds. When in Bluetooth pairing mode the Power LED is solid green and Transmit LED flashes.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>LED</th>
<th>What it means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>Green</td>
<td>Powered on.</td>
</tr>
<tr>
<td></td>
<td>Illuminated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Solid</td>
<td></td>
</tr>
<tr>
<td>Transmit</td>
<td>Green</td>
<td>Actively transmitting.</td>
</tr>
<tr>
<td>(Main</td>
<td></td>
<td>Standby mode is activated by the hourly minute transmit schedule set by the factory. A Transmitter with an external antenna transmits a time signal from the 39th to the 6th minute of each hour and changes to a standby mode during the 7th to the 38th minute of each hour. Each hour it transmits is based on its Normal Transmit schedule.</td>
</tr>
<tr>
<td>Transmitter &amp; Repeater Transmitter)</td>
<td>Illuminated</td>
<td>In standby mode and is not transmitting.</td>
</tr>
<tr>
<td></td>
<td>Solid</td>
<td></td>
</tr>
<tr>
<td>Transmit</td>
<td>Green</td>
<td>In no-transmit mode and is not transmitting. No-transmit mode is activated during the hour(s) it is not set to transmit per its Normal Transmit schedule.</td>
</tr>
<tr>
<td>(Main</td>
<td>Flashing</td>
<td>Repeating a signal from the main Transmitter.</td>
</tr>
<tr>
<td>Transmitter only with external antenna)</td>
<td></td>
<td>Repeaters alternate from transmitting to receiving every few seconds, LED rotates from Green Illuminated Solid to Green Flashing.</td>
</tr>
<tr>
<td>Transmit</td>
<td>Off</td>
<td></td>
</tr>
<tr>
<td>(Repeater Transmitter only)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caution</td>
<td>Yellow</td>
<td>Transmitter is in Caution state due to a condition below.</td>
</tr>
<tr>
<td></td>
<td>Illuminated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Solid</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>Time Sync Failure</strong>: Failed to receive a valid time signal from its time source (GPS or NTP).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>Bad Output Power</strong>: Transmitter is not transmitting at the appropriate power level.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>PLL Diagnostics</strong>: Transmitter having trouble locking onto a channel and cannot broadcast time or events.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>VSWR Errors</strong>: Transmitter antenna error from either the antenna position or cabling.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>No GPS in 48 Hours</strong>: Transmitter has not received time from its time source for more than 48 hours.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>No PPS in 48 Hours</strong>: Transmitter time has not been synchronized by 1PPS (1 pulse per second) for more than 48 hours.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>GPS Cable Break</strong>: Transmitter has detected an error with the GPS connection; either due to a line break, water ingress, or the cable length is greater than 200 ft. (60.9 m).</td>
</tr>
<tr>
<td>Error</td>
<td>Red</td>
<td>Transmitter is in an Error state due the condition below.</td>
</tr>
<tr>
<td></td>
<td>Illuminated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Solid</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>When in an Error state, the Transmitter has NEVER established a valid time signal and is using its internal Real Time Clock (RTC).</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transmitter does not transmit a time signal to the system devices when in this Error state.</td>
</tr>
</tbody>
</table>

**NOTE**

During first-time configuration, it can take up to 10 minutes for the Transmitter to connect to its time source and receive a valid time signal.
Configure Transmitter for Standalone Use (not monitored)

This topic provides the steps to configure a Transmitter for Standalone Use, which it will not be monitored or have a connection to OneVue. Be sure to complete the steps in the order as they appear below.

For a system with more than one Transmitter, first configure and install the main Transmitter and verify it received a valid time signal and then configure Repeater Transmitter(s). When all Transmitters are configured and installed, you can then configure and install the system clocks or InfoBoards.

Step 1: Verify configuration requirements are met

Verify the requirements below are met before you begin configuring a OneVue Sync Transmitter.

- **Transmitter**
  All external components are installed including an external or internal antenna and GPS Receiver, and all connections have been established, and the Transmitter is powered on.
  The main Transmitter connections include its AC power, GPS Receiver (for GPS time source), internal or external antenna, and an Ethernet network connection if NTP is its time source.
  Repeater Transmitter external connections include its AC power and internal antenna.

- **NTP time source**
  The main Transmitter requires connection to wired Ethernet network and NTP Servers IP address (up to three allowed). If wired Ethernet network is a Non-DCHP network, the IPv4 network settings are required during configuration.
  Port UDP 123 is required to be open for use with external Network Time Protocol (NTP) Servers. Use of internal NTP Servers is also supported.

Step 2: Download ODC app or verify app is up to date

Download the Primex OneVue Device Configurator app from the App Store or Google Play™ store. If you already have the app, turn on automatic updates or check for updates prior to configuring a device.

**Mobile device requirements**

- iOS (Apple® iPhone or iPad): Requires iOS version 11 or later
- Android (phone or tablet): Requires version 5.0 or later

**IMPORTANT**

Before you begin to configure a device be sure your mobile device:

- Battery life is 25% or greater
- Bluetooth is enabled
- Connected to Wi-Fi or mobile connection
Step 3: Configure Transmitter

1. Open ODC app.

2. Select Standalone Configuration.

3. Set Transmitter into Bluetooth discoverable mode.
   From the Transmitter’s front panel, press and release the Bluetooth pairing button. Transmitter is discoverable for the next two minutes (Power LED is illuminated and Transmit LED flashes).

4. From available devices, select the Transmitter. If multiple devices listed, verify the 12-character MAC address located on the Transmitter’s back panel.
   If the Transmitter is not listed, select the app Refresh icon.

5. Verify its factory specifications.
   MAC Address: Unique 12-character MAC Address discoverable on the facility’s network. The MAC address is printed on a label located on the Transmitter’s back panel.
   Model: Identifies the Primex device model. All OneVue Sync Transmitters are identified by Transmitter (TX400).
   Tx Mode: Identifies the Transmitter hardware configuration. Indicates if 1, 5, or 30 Watt and internal or external antenna.
6. Enter a Name for the Transmitter. 
   Uniquely identifies the Transmitter and should identify its install location, which allows the device to be located when service is required.

7. Verify Call Sign (preset by Primex). 
   Transmitter is registered and licensed to operate over the 72MHz radio frequency with the Federal Authority having jurisdiction (U.S.: FCC/ Canada: ISED). Primex files the license application with the Federal Authority having jurisdiction on behalf of the system owner. The FCC/ISED license includes the Call Sign and the effective and expiration date. Once issued the system owner is responsible for maintaining the license.

   - If the license was issued and received prior to shipment: Primex configures the licensed Call Sign. 
     Under penalty of FCC/ISED compliance laws: DO not edit a configured Call Sign without authorization from Primex or system owner.
   
   - If the license was not available at time of shipment: Primex configures the Transmitter with a temporary Call Sign. A temporary Call Sign is identified by "WT & the owner’s phone number". If you have been provided the licensed Call Sign, update at the time of configuration.

     If configuration is completed with a temporary Call Sign, it’s required to be updated to the licensed Call Sign. The Call Sign can be updated directly from the app. Optionally, contact Primex to request a Transmitter Call Sign update.

8. Set its Time Zone to the install location. 
   Transmitter (main): Time Zone transmitted (broadcasted) to system devices and Repeater Transmitter(s).

   Repeater Transmitter: setting does not apply; receives and re-transmits time signal received from main Transmitter.

   The app detects the Transmitter time source.

   - When GPS connection is detected: Displays GPS Time Received.
   
   - When GPS connection is not detected or a Repeater Transmitter: Displays the OneVue account NTP Server settings.

     If NTP Servers are to be different, update the settings. When updated the NTP settings are saved to the Transmitter profile. The OneVue account NTP settings are not updated.
10. Set its **RF Channel/Receive Channel**.

Dynamic setting: Displays RF Channel when configuring a main Transmitter and displays Receive Channel when configuring a Repeater Transmitter.

**RF Channel (only applies to the main Transmitter)**

- Set to the Channel Number the Transmitter transmits its time signal and events on, which is then received by the system devices.

⚠️ **WARNING**

DO NOT change RF Channel without authorization from Primex or system owner.

**Receive Channel (only applies to a Repeater Transmitter)**

When the Repeater Transmit Channel setting, located in advanced settings, is set to a number (not Off), the app automatically changes the RF Channel setting to Receive Channel.

Repeater Transmitter searches for and receives time and event signals from this channel and re-transmits the signal received, which is then received by system devices within its wireless RF range.

- Set to the main Transmitter’s RF Channel Number.

11. Repeater Transmitter only. Select **Advanced Options** to configure its **Repeater Transmit Channel**.

Set to a Channel Number the Repeater Transmitter is to transmit (broadcast) its time signal on. To avoid interference, set to a number that is less than or greater than 2 channels from another Transmitter.

<table>
<thead>
<tr>
<th>CONFIGURATION EXAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>System with Main Transmitter and two Repeater Transmitters.</td>
</tr>
<tr>
<td>Main Transmitter</td>
</tr>
<tr>
<td>RF Channel: 1</td>
</tr>
<tr>
<td>Repeater Transmit Channel: Off</td>
</tr>
<tr>
<td>Repeater Transmitter (A)</td>
</tr>
<tr>
<td>Receive Channel (RF Channel): 1</td>
</tr>
<tr>
<td>Repeater Transmit Channel: 4</td>
</tr>
<tr>
<td>Repeater Transmitter (B)</td>
</tr>
<tr>
<td>Receive Channel (RF Channel): 1</td>
</tr>
<tr>
<td>Repeater Transmit Channel: 7</td>
</tr>
</tbody>
</table>
12. Optional settings, select **Advanced Options**.

**With Daylight Saving Time**

By default enabled and the time zone DST rules are observed. When de-selected, it overrides the time zone DST rules and uses standard time. This option is available to allow a manual override to not observe DST time.

⚠️ **CAUTION**

The settings below (Transmit Continuously and Normal Transmit) should only be changed when requested or approved by an authorized Primex support technician.

**Transmit Continuously**

Number of hours the Transmitter continuously transmits a time signal after a power up (on). During a system install, this allows other system devices to receive a time signal at the time of installation.

**Normal Transmit**

The schedule the Transmitter transmits (broadcasts) a time signal from a start hour to end hour based on a 24 hour time period.

- **1 Watt Transmitter with an internal antenna and Repeater Transmitter**
  
  By default, set to transmit 24 hours a day (0 to 0).

- **Transmitter with an external antenna only (specific minute transmit schedule set by the factory)**
  
  1, 5, or 30 Watt Transmitters with an external antenna ONLY transmit a time signal between the 39th to the 6th minute for each hour set in its Normal Transmit schedule and changes to a standby mode and does NOT transmit a time signal during the 7th to the 38th minute of each hour. This setting is set by the factory and cannot be changed.

  For example, when its Normal Transmit schedule is set to 24 hours, each day at 12:39 AM it starts transmitting and at 1:06 AM it stops transmitting and from 1:07 AM to 1:38 AM it is in standby mode and does not transmit a time signal. Then for each hour it starts to transmit again at the 39th minute of the hour and ends at the 6th minute and from the 7th to the 39th minute of the hour is in standby mode. This sequence will repeat each hour.

**Presets 1 through 5**

This setting only applies to the OneVue Notify solution.

- Sets Main Transmitter's contact closure terminal block inputs, which activates the five critical notification events (1 through 5).
Default is Normally Open (NO) and when a checkbox is not selected the Preset (contact closure input) is set to Normally Closed (NC).

- Normally Open (NO) is required when integrated with the Notify Critical Notification Panel.
- Settings may be required to be changed when integrated with a third-party system that activates critical notification events.

13. Select **Save**.

   Settings are downloaded to the Transmitter.
14. From the front of the Transmitter, verify it is not in a **Caution** or **Error** state.

The LED indicators indicate the current state of the Transmitter and signify warnings and errors. When first powered on all LEDs turn on for two seconds. When in Bluetooth pairing mode the Power LED is solid green and Transmit LED flashes.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>LED</th>
<th>What it means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>Green</td>
<td>Powered on.</td>
</tr>
<tr>
<td></td>
<td>Illuminated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Solid</td>
<td></td>
</tr>
<tr>
<td>Transmit</td>
<td>Green</td>
<td>Actively transmitting.</td>
</tr>
<tr>
<td>(Main Transmitter &amp; Repeater Transmitter)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Flashing</td>
<td>Standby mode is activated by the hourly minute transmit schedule set by the factory. A Transmitter with an external antenna transmits a time signal from the 39th to the 6th minute of each hour and changes to a standby mode during the 7th to the 38th minute of each hour. Each hour it transmits is based on its Normal Transmit schedule.</td>
</tr>
<tr>
<td>Transmit</td>
<td>Off</td>
<td>In no-transmit mode and is not transmitting. No-transmit mode is activated during the hour(s) it is not set to transmit per its Normal Transmit schedule.</td>
</tr>
<tr>
<td>(Main Transmitter only with external antenna)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transmit</td>
<td>Green</td>
<td>Receiving a signal from the main Transmitter.</td>
</tr>
<tr>
<td>(Repeater Transmitter only)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caution</td>
<td>Yellow</td>
<td>Transmitter is in Caution state due to a condition below.</td>
</tr>
<tr>
<td></td>
<td>Illuminated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Solid</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>Time Sync Failure</strong>: Failed to receive a valid time signal from its time source (GPS or NTP).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>Bad Output Power</strong>: Transmitter is not transmitting at the appropriate power level.</td>
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<td>• <strong>PLL Diagnostics</strong>: Transmitter having trouble locking onto a channel and cannot broadcast time or events.</td>
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<tr>
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<td>• <strong>VSWR Errors</strong>: Transmitter antenna error from either the antenna position or cabling.</td>
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<td></td>
<td>• <strong>No GPS in 48 Hours</strong>: Transmitter has not received time from its time source for more than 48 hours.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>No PPS in 48 Hours</strong>: Transmitter time has not been synchronized by 1PPS (1 pulse per second) for more than 48 hours.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>GPS Cable Break</strong>: Transmitter has detected an error with the GPS connection; either due to a line break, water ingress, or the cable length is greater than 200 ft. (60.9 m).</td>
</tr>
<tr>
<td>Error</td>
<td>Red</td>
<td>Transmitter is in an Error state due the condition below.</td>
</tr>
<tr>
<td></td>
<td>Illuminated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Solid</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>When in an Error state, the Transmitter has NEVER established a valid time signal and is using its internal Real Time Clock (RTC)</strong>.</td>
</tr>
</tbody>
</table>

Transmitter does not transmit a time signal to the system devices when in this Error state.

![NOTE](https://example.com/note.png)

- **NOTE**
  - During first-time configuration, it can take up to 10 minutes for the Transmitter to connect to its time source and receive a valid time signal.
OneVue network requirements

The information below provides the details required to allow Primex devices equipped with Ethernet, Power over Ethernet (PoE), or Wi-Fi technology to communicate over a facility's network to OneVue.

Network communication protocols

The OneVue platform is designed, developed, and managed in-house, allowing Primex to control the user experience and provide the highest level of reliability and security.

To support the myriad of network security and protocol standards in today's business environment, Primex Wi-Fi enabled devices offer an array of options for secure network connectivity. This ensures our customers can use and leverage our full line of products without adding costly additional IT infrastructure.

Power over Ethernet (PoE) and Ethernet specifications

Applies to: OneVue Sense Temperature, Differential Pressure, Water Leak, and, Contact Closure Sensors, OneVue Sync Transmitters, Sync Bluetooth Bridge, Notify Bell Controller, and Notify InfoBoards.

• Power over Ethernet (PoE): Compliant with IEEE 802.3af standard
• Network Communication Protocols: Hypertext Transfer Protocol Secure (HTTPS)/TLS
• IP Addressing: Dynamic Host Configuration Protocol (DHCP), static IP addressing
• Data Packet Size: typically less than 5 kilobytes (kB)

Network port requirements

Primex Ethernet, PoE, and Wi-Fi enabled devices communicate to OneVue over your facility's network using the Hypertext Transfer Protocol Secure (HTTPS) protocol. OneVue client and device data is encrypted in transmit and all sensitive data is encrypted at rest. An outbound HTTPS connection is established by each device and once complete the IP address is released.

The following ports must be open to allow for outgoing OneVue device communication from your network.

• **Port TCP 443**: required to be open to allow Hypertext Transfer Protocol over TLS/SSL (HTTPS) communication with OneVue and Wi-Fi, Power over Ethernet (PoE)/Ethernet enabled devices.
• **Port UDP 123**: used by Wi-Fi, Power over Ethernet (PoE)/Ethernet devices to access an external NTP Server. Port is required to be open for use with external Network Time Protocol (NTP) Servers. Use of internal NTP Servers is also supported.

Network firewall requirements

The OneVue platform runs on the Amazon Web Services (AWS) cloud infrastructure. Organizations with network firewalls in place must proactively allow outbound network communication and file downloads through specific OneVue Domains and URLs. The files downloaded include the Sync device clock list, Notify device schedules, and device setting updates.
OneVue is a high-availability (HA) platform that may change IP addresses at anytime, therefore OneVue does not support the use of firewall IP address filtering.

If firewall supports wildcards

<table>
<thead>
<tr>
<th>Domain filters</th>
<th>URL filters</th>
</tr>
</thead>
<tbody>
<tr>
<td>*.primexonevue.com</td>
<td>https://*.primexonevue.com</td>
</tr>
<tr>
<td>us-east-1-production.s3.amazonaws.com</td>
<td><a href="https://us-east-1-production.s3.amazonaws.com">https://us-east-1-production.s3.amazonaws.com</a></td>
</tr>
</tbody>
</table>

If firewall does not support wildcards

<table>
<thead>
<tr>
<th>Domain filters</th>
<th>URL filters</th>
</tr>
</thead>
<tbody>
<tr>
<td>console.primexonevue.com</td>
<td><a href="https://console.primexonevue.com">https://console.primexonevue.com</a></td>
</tr>
<tr>
<td>deviceapi-alt.primexonevue.com</td>
<td><a href="https://deviceapi-alt.primexonevue.com">https://deviceapi-alt.primexonevue.com</a></td>
</tr>
<tr>
<td>deviceapi.primexonevue.com</td>
<td><a href="https://deviceapi.primexonevue.com">https://deviceapi.primexonevue.com</a></td>
</tr>
<tr>
<td>onevueapi.primexonevue.com</td>
<td><a href="https://onevueapi.primexonevue.com">https://onevueapi.primexonevue.com</a></td>
</tr>
<tr>
<td>us-east-1-production.s3.amazonaws.com</td>
<td><a href="https://us-east-1-production.s3.amazonaws.com">https://us-east-1-production.s3.amazonaws.com</a></td>
</tr>
</tbody>
</table>

Email and voice communication

OneVue generates email alert and report notifications and voice alert notifications. To ensure email notifications are received by system users, please ensure support@primexonevue.com is added to your email program's safe sender list. OneVue voice alert notifications are sent from phone number (608) 709-7043.
Safety, Regulatory, and Warranty Information

Primex OneVue Sync Transmitter models: TX400, TX4001NR, TX4005EM, TX40030EM

Safety Instructions and Warnings

Some of the following information may not apply to your particular product model; however, as with any electronic product, precautions should be observed during installation, operation, and maintenance.

- Never operate the Transmitter without the antenna being properly connected to the Transmitter. Operating the Transmitter without an antenna can lead to permanent damage of the Transmitter and poses a safety risk.
- Do not touch an internal or external antenna while broadcasting. Touching an external antenna could result in a skin burn or other injuries.
- Standard acceptance procedures must be followed prior to operating this equipment in the proximity of life support systems.
- Do not operate the Transmitter outdoors, in wet areas where there is standing water, or in areas where there is condensation or the risk of condensation. Use in any of these environments will damage the device and void the warranty.
- Do not open the Transmitter to alter the internal elements in any way. This will void the warranty and could lead to unsafe conditions, malfunction, and violations of FCC/IC regulations.
- Do not use a metal ladder during installation of the external antenna.
- During external antenna installation, be sure to wear shoes with rubber soles and heals and wear protective clothing with long sleeves and rubber gloves.
- Do not install an external antenna on a wet or windy day when lighting or thunder is in the area or near power lines. Power lines, telephone lines, and guy wires look the same. As a precaution please assume any wire can electrocute you.
- The installation, maintenance, or removal of an external antenna requires qualified, experienced personnel. The installation instructions are written for such installation personnel.
- External antenna systems should be inspected once a year by qualified personnel to verify proper installation, maintenance, and condition of equipment.

Primex disclaims any liability or responsibility for the results of improper or unsafe installation practices.

Federal Communications Commission (FCC) / Industry Canada (IC)

Primex OneVue Sync Transmitter models: TX400, TX4001NR, TX4005EM, TX40030EM

License Requirements

- Operation of the Transceiver requires a FCC/IC operating license, which must be obtained prior to operation.
- FCC licenses must be renewed every 10 years and the IC licenses must be renewed annually.
• As a service, Primex will file the license application if the system owner desires it. A system owner that does not want Primex to file for the original site license will be required to complete a waiver form, file the required application, and receive a valid license from the FCC/IC prior to use. If you have any questions or need any assistance, please contact Primex Technical Support.

• Primex requires a copy of the licenses in order to complete the factory presets.

Product Compliance

• This device complies with Part 90 and Part 15 of the FCC rules and RSS-119 of Industry Canada.

  5 and 30 Watt Transmitter: Canada IC 4256A-FM72 (TX/RX/LED). The term "IC:" before the certification/registration number signifies only that the Industry Canada technical specifications were met.

• Operation of this device is subject to the following two conditions:
  (1) This device may not cause harmful interference.
  (2) This device must accept any interference, including interference that may cause undesired operation.

• Changes or modifications to any part of the Primex system components not expressly approved by Primex could void the system owner's FCC/IC authority to operate the equipment.

Radio Frequency (RF) Exposure

• 1 Watt Transmitter: To comply with FCC/IC RF exposure requirements for mobile transmitting devices, the Transmitter is only to be used or installed in locations where there are at least 35 cm separation distance between the antenna of the Transmitter and all persons.

• 5 and 30 Watt Transmitter: To comply with FCC OET65 and Industry Canada RF exposure requirements, the antenna is only to be used or installed in locations where the following antenna separation guidelines exist when the Transceiver is in operation. Distance above roofline is for direct line of sight only. Distance Above Roofline: 8.95 ft. (2.72 m).

Radio Standards Specifications (RSS)

Primex OneVue Sync Transmitter models: TX400, TX4001NR, TX4005EM, TX40030EM

This device complies with Industry Canada licence-exempt RSSs.

Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.
Le dispositif rencontre l’exemption des limites courantes d’évaluation de routine dans la section 2.5 de RSS 102 et la conformité à l’exposition de RSS-102 RF. Les utilisateurs peuvent obtenir l’information canadienne sur l’exposition à la RF et la conformité avec celle-ci.

This equipment should be installed and operated with a minimum distance of 35 centimeters between the radiator and your body.

Cet équipement devrait être installé et utilisé avec une distance minimum de 35 centimètres entre le radiateur et votre corps.
5 YEAR LIMITED WARRANTY

Warranty applies to: 72MHz OneVue Sync Transmitters, GPS Receiver, ClassicSync Transmitters (XR and 14000 Series), and 72MHz Analog Clocks, Digital Clocks and Timers.

Primex, Inc. warrants this product to be free from defects in materials and workmanship for a standard of five (5) years from the date of purchase. All product accessories, including external antennas and kit components, wireless tone generator, wireless data receiver, and UPS backup, are warranted for a period of one (1) year against material or manufacturing defects from the date of purchase. Primex, Inc. 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

(1) Physical damage to this product; (2) Product failure or damage caused by improper installation, lack of periodic maintenance, improper or abnormal use, misuse, neglect or accident (3) Damage caused by another device or software used with this product (including, but not limited to, damage resulting from use of non-Primex brand or approved parts, consumables or accessory items); (4) Problems arising from anything other than defects in materials or workmanship; and (5) Consumables or other items requiring periodic maintenance or replacement with ordinary wear and tear, including, but not limited to, product batteries and cables. This warranty is VOID if this product has been altered or modified in any way (including, but not limited to, attempted warranty repair other than by Primex or an authorized service partner).

LIMITATION OF LIABILITY

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, Inc. 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.

TO OBTAIN WARRANTY SERVICE

If, after following the instructions in the product manual, you are certain the product is defective, contact Primex Technical Support to assist with troubleshooting the issue. If the issue cannot successfully be resolved and the product is under warranty, a RMA (Return Material Authorization) will be generated. The RMA form will be provided via email with detailed instructions for the return. All merchandise returned must be shipped to Primex, Inc. Attn: Returns Dept., N3211 County Road H, Lake Geneva, WI 53147. Primex, Inc. 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, installation and 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 inquires.

When contacting Technical Support

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

Please have the following information available:

• Customer ID/Account Name
• Problem description/error messages
• Device hardware information
• Troubleshooting performed

Primex Technical Support

Hours: 8:00 AM to 5:00 PM CT, Monday through Friday

Phone: 1-262-729-4860

Email: service@primexinc.com

Web: www.primexinc.com/support