Smart-Sync™ Bridge (BC100/BC100-E) Install Guide

Smart-Sync™ Synchronized Time

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Legal Notice

Printed in the USA.

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REGULATORY APPROVALS

FCC Compliance

Pursuant to FCC 15.21 of the FCC rules, changes not expressly approved by Primex might cause harmful interference and void the FCC authorization to operate this product.

FCC Radio Frequency Interference

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

This devices complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions.

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Channel

The Wireless Channel sets the radio frequency used for communication.

- Access Points use a fixed Channel. You can select the Channel used. This allows you to choose a Channel which provides the least interference and best performance. In the USA and Canada, 11 channel are available. If using multiple Access Points, it is better if adjacent Access Points use different Channels to reduce interference.
- In "Infrastructure" mode, Wireless Stations normally scan all Channels, looking for an Access Point. If more than one Access Point can be used, the one with the strongest signal is used. (This can only happen

within an ESS).

- Is using "Ad-hoc" mode (No Access Point), all Wireless stations should be set to use the same Channel. However, most Wireless stations will still scan all Channels to see if there is an existing "Ad-hoc" group they can join.

Note: This equipment marketed in the USA is restricted by firmware to only operation on 2.4 GHz channel 1-11

Radio Standards Specification (RSS)

This device complies with Industry Canada's 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;

(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 dans la section 2.5 de RSS 102 et la conformité à l'exposition de RSS-102 rf, utilisateurs peut obtenir l'information canadienne sur l'exposition et la conformité de rf.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

Cet émetteur ne doit pas être Co-placé ou ne fonctionnant en même temps qu'aucune autre antenne ou émetteur. Cet équipement devrait être installé et actionné avec une distance minimum de 20 centimètres entre le radiateur et votre corps.

CONTENTS

Specifications & Features Smart-Sync™ Bridge

A Smart-Sync Bridge is a network communication device that sends and receives data from Smart-Sync Clocks over its connection to a Smart-Sync Bluetooth Network, and sends data to and downloads settings from your OneVue account over its connection to your facility's Ethernet or Wi-Fi network.

Smart-Sync Bridge Specifications

Power

AC-power: 5V DC USB Mini B (5 pin) connector interface, 5 feet (1.5 meter) cable, Input: 100-240 VAC, 50/60 Hz, 0.4A, Output: 5V DC, 1.0A max

Optional AC-power extension cable: USB power cable 6.5 feet (2 meter), Mini B (5 pin) M and Mini B (5 pin) F connector

Battery backup power: 3.0v Primex Lithium/Iron Disulfide Battery Pack or two AA 1.5V Energizer® Ultimate Lithium batteries. When solely operating on continuous battery-backup power, its estimated battery life is up to one (1) day.

Power over Ethernet (PoE): compliant with IEEE 802.3af standard and compatible with 802.3at standard

Operation

Ethernet or Wi-Fi network connection: transmits Smart-Sync devices statuses to OneVue, downloads pending setting updates from OneVue, and connects to NTP Server to receive UTC time.

Smart-Sync Bluetooth Network connection: sends OneVue setting updates and received UTC time to Smart-Sync Clocks and receives statuses from Smart-Sync Clocks.

Alerts: visual LED and LCD display indicators

Internal Stored Clock Capacity: 1400 Smart-Sync Clocks

Check-In Interval: system defined

During Deployment mode, the first 8 hours after a Smart-Sync Bridge is powered on, its operation is unique during this time period.

- Smart-Sync Bridge automatically connects to the facility's network at the 15th and 45th minute of each hour. During each connection, it obtains UTC time from a NTP Server and checks-in to OneVue to download pending setting changes.
- Smart-Sync Bluetooth Network automatically builds at the 20th and 50th minute of each hour. After each build, a Smart-Sync Bridge automatically checks-in to OneVue to send received Smart-Sync Clock data.

Bluetooth® Wireless Communication Protocol

Bluetooth® Low Energy (BLE) Wireless Technology, version 4.1

Bluetooth Range: up to 80 feet (24.3 meters)

Network Communication

Power over Ethernet (PoE) model - Compliant with IEEE 802.3af standard and compatible with 802.3at standard

Wireless (Wi-Fi) Networking Protocols: 802.11b, 11g, 11n single stream (2.4 GHz)

Security Protocols: None, WEP (Open & Shared), WPA (TKIP & AES), WPA2 (TKIP & AES)

Encryption Protocols: TLS 1.2

Network Communication Protocols: Hypertext Transfer Protocol Secure (HTTPS)

IP Addressing: Dynamic Host Configuration Protocol (DHCP), static IP addressing

Data Packet Size: typically less than 5 kilobytes (kB)

Enclosure

Enclosure: ABS plastic

Dimension: 4.7" H x 3.7" W x 1.3" D (11.93 cm x 9.39 cm x 3.30 cm)

Weight: 0.3 lbs (136 gram) with 2 AA batteries

Display: Liquid crystal display (LCD), dimension: 0.75" H x 1.38" W (1.90 cm x 3.50 cm)

LED Status Indicator: green, yellow, red

Mounting: wall or surface-mount

Device may be cleaned with a cloth moistened with water or a common disinfectant. Be sure to test any cleaning solution on a small area before applying solution to entire device.

Environment

For indoor use only and is not weather protected. Operating a device outdoors or in wet areas is an electrical hazard and may damage the device while nullifying its warranty.

Operating Temperature: 32° to 122° F (0 ° to 50 °C), indoor use only

Storage Temperature: -4° to 140° F (-20 ° to 60 °C)

Certifications

FCC, CE, and IC compliant

LCD Display

The LCD display of a Smart-Sync Bridge provides a visual reporting of its current operating state - the segments below are displayed indicating its current state.

Segment	Description
Bton	Indicates the device is in Normal operating mode; allowing its connection to Smart-Sync Bluetooth Network and Ethernet or Wi-Fi network.
NTP	Indicates its connection to a NTP Server has failed three (3) consecutive times and its UTC time is not accurate. The red LED flashes during this state.
NoNt	Indicates the device is in No Network mode. During installation, when a network is not available, set the device to No Network mode to allow its connection to Smart-Sync Clocks over the Smart-Sync Bluetooth Network. When a network is available, the device must be set back to Normal mode (Bton). For more information, see "No Network mode" on page 12.
No Signal	Indicates its last connection to an Ethernet or Wi-Fi network failed. For PoE or Ethernet use, a failed check-in may be due to a network connection cannot be established. For Wi-Fi network use, a failed check-in may be due to the device is not within range of a wireless signal or the wireless signal strength is not adequate for normal operation. If the device is powered by AC or Power over Ethernet (PoE), the yellow LED indicator flashes during this state.
Signal Ok	Indicates its last connection to an Ethernet or Wi-Fi network and check-in to OneVue was successful.
LOW	When operating solely on battery-backup power, indicates its estimated battery life is less than 25%. It's recommended to replace the batteries.
Lbat	When operating solely on battery-backup power, indicates its battery level is critically low. Data is not logged or transmitted to OneVue during this state.
Up	A firmware update is being applied to the device. Data is not logged or transmitted to OneVue during this state.
Con	The device is in configuration mode. The config icon is also displayed. Data is not logged or transmitted to OneVue during this state.

LED Indicators

A Smart-Bridge has three LED indicators, located on the front of the device, that provide a visual indicator of its current status.

LED indicator specifications

> Note:
> When power is applied to the device, the LCD segments display and LED indicators briefly illuminate.

LED	Status	Device Power
Green LED Illuminated	Normal	AC or PoE power: LED is illuminated Battery-power only: LED is disabled to conserve battery life. Upon power up, illuminates for 2 seconds
Yellow LED Flashing	Low Battery Unresponsive (1 connection to NTP Server)	AC or PoE power: LED is illuminated and flashes. Refer to the LCD display to identify the status resulting in the condition. Either indicates a low battery status or an Unresponsive status. Unresponsive status - indicates during its last connection to the Ethernet or Wi-Fi network, it failed to connect to a NTP Server to obtain UTC time.
Red LED Flashing	Unresponsive	Indicates its connection to the Ethernet or Wi-Fi network has failed for three (3) consecutive times; it has not checked-in to OneVue or obtained UTC time from a NTP Server.

Service Buttons

A Smart-Sync Bridge has two service buttons located on the front of the device.

Service buttons specifications

Action	Button	Use
No Network mode	 (press and hold for 3 seconds)	During installation, when a Ethernet or Wi-Fi network is not available, the device must be set to No Network mode. During this mode, the device does not connect to the facility's network. For more information, see "No Network mode" on the facing page.
Dismiss LED Alert		During an Alarm state, pressing the silence button stops the LED from flashing.
Initiate Manual Check-in		Pressing the check-in button during normal operation initiates a check-in to your OneVue Account and its connection to a NTP Server to obtain UTC time. During a check-in, all data is transmitted to your OneVue account and any pending updates are downloaded to the device. When the check-in button is pressed, the LCD display indicates its connection by the showing the number sequence below. Number 1 displayed - radio powered on Numbers 12 displayed - connected to facility's Ethernet or Wi-Fi network Numbers 123 displayed - connected to NTP Server and obtained UTC Time Numbers 1234 displayed - connected to OneVue; sends Smart-Sync Clock statuses to OneVue and downloads update pending settings During an active check-in connection, additional pressing of the check-in button is ignored. If a check-in fails, all data is stored in the device's non-volatile memory; up to a maximum of 1400 clocks.

No Network mode

No Network mode is required when an Ethernet or Wi-Fi network is not available during installation. During this mode, the Smart-Sync Bridge does not connect to the facility's network to check-in to OneVue or obtain UTC time from a Network Server.

During No Network mode, the Smart-Sync Bridge is required to be configured with local time, which allows Smart-Sync Clocks to receive and set their time to the local time configured in the bridge. Local time is configured using the Primex Device Configuration software.

When the facility's network is available, the device must be set back to Normal (Bton) mode to allow its network connection to the facility's Ethernet or Wi-Fi network.

How to set a Smart-Sync Bridge to No Network mode

> WARNING:
> Use of AC-power is required when operating in No Network mode. When operating on only continuous battery backup-power, the device's estimated battery life is only up to one (1) day.

1. Press and Hold the  button for 3 seconds.
2. Verify **NoNt** is shown on the LCD display, which indicates it's in No Network mode.

   Next, configure the bridge with the computer's local time.

How to configure the bridge with local time

The bridge sets its internal time to your computer's local time. If you want to bridge to receive time from a different time zone, change your computer's time zone before beginning this procedure.

> WARNING:
> Do not remove power from the bridge during this procedure - it must remain powered on at all times.

1. Download and install the Primex Device Configuration software.

   Installation requires administrator permission and a computer with Windows® 7 or 10 (32 and 64-bit). If you do not have administrator permission, contact your IT department to install the software.

   To download the software from your OneVue account, go to **Help** > **Devices** > **Primex Device Configuration Software** > **Download Configuration Software**

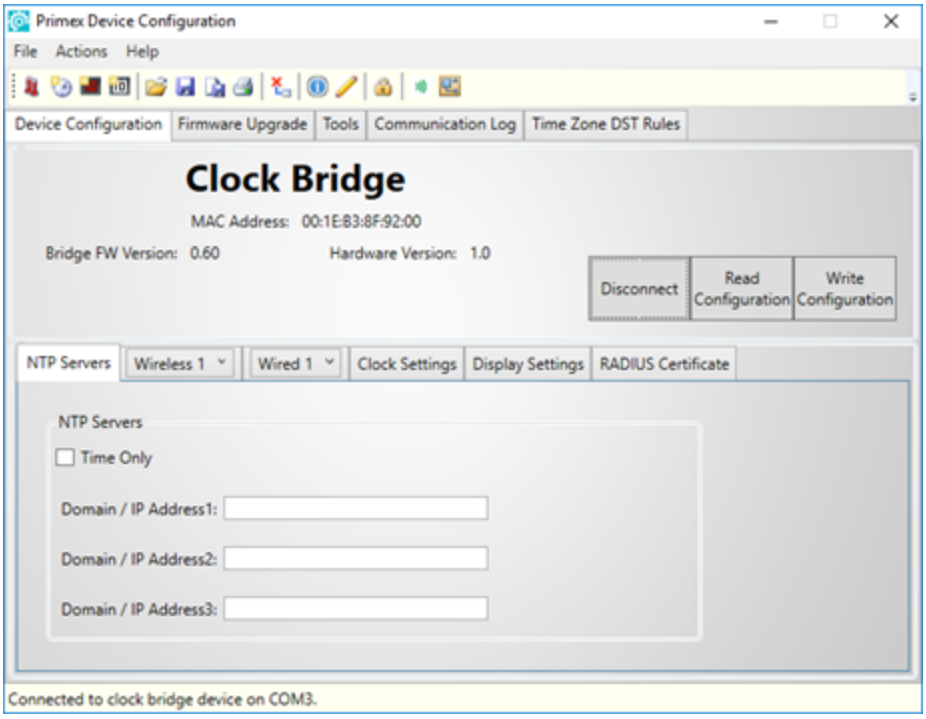
2. Plug the supplied Primex USB configuration cable into a USB port on your computer.
3. Plug the configuration cable mini-USB connector into the bridge's USB mini port.

   The bridge detects the connection to your computer and enters configuration mode. The **LCD displays the letters Con** and the Config icon is displayed indicating the device is in configuration mode.

4. Open the Primex Device Configuration software. Go to **All Programs** > **Primex** > **Primex Device Configuration** or from your computer desktop, double-click on the Primex Device Configuration icon.
5. From the Enter Password window, enter the factory default password (case sensitive) - **Primex1**

6. Select **Connect**. A connection between your computer and the bridge is established.
7. Verify the notification area located in the lower-left of the screen, displays **Connected to clock bridge device on COMx**, which indicates the connection is established.
8. Select **Read Configuration**.
9. Select **Write Configuration**. From the Confirmation Needed window, select **Yes**
10. Select **Disconnect**. The connection between the software and device is ended.
11. Remove the USB connection between the bridge and your computer.

You can now begin installing the Smart-Sync Clocks.



How to set a Smart-Sync Bridge back to Normal mode (Bton)

When a network is available, the device must be set to normal mode to allows its connection to the facility's network.

1. Press and Hold the  button for 3 seconds to exit No Network mode.
2. Verify that Bton is displayed on the LCD.
3. Power cycle the device - it then enters the 8-hour Deployment mode.

   During Deployment mode, the first 8 hours after a Smart-Sync Bridge is powered on, its operation is unique during this time period.

   - Smart-Sync Bridge automatically connects to the facility's network at the 15th and 45th minute of each hour. During each connection, it obtains UTC time from a NTP Server and checks-in to OneVue to download pending setting changes.
   - Smart-Sync Bluetooth Network automatically builds at the 20th and 50th minute of each hour. After each build, a Smart-Sync Bridge automatically checks-in to OneVue to send received Smart-Sync Clock data.

4. Press and release the Check-in button  to initiate a manual check-in to validate the device can connect to your facility's network and OneVue account. The LCD displays a series numbers indicating its connection sequence.

   Number 1 displayed - radio powered on

   Numbers 12 displayed - connected to facility's Ethernet or Wi-Fi network

   Numbers 123 displayed - connected to NTP Server and obtained UTC Time

   Numbers 1234 displayed - connected to OneVue; sends Smart-Sync Clock statuses to OneVue and downloads update pending settings

5. Verify the device LCD displays **Signal OK** and **Bton (normal mode)**. Signal Ok indicates the device has successfully connected to your facility's network.

Check-In to OneVue

A Smart-Sync Bridge checks-in to your OneVue account and obtains UTC time from a NTP Server at a daily system specified interval.

> Note:
> During No Network Mode, the bridge does connect to an Ethernet or Wi-Fi network, therefore cannot check-in to OneVue. No Network mode is for use only when a network is not available at the facility, commonly during new construction.

When the device check-in button  is pressed, a manual check-in is initiated.

When the check-in button is pressed, the device LCD displays its connection sequence.

Number 1 displayed - radio powered on

Numbers 12 displayed - connected to facility's Ethernet or Wi-Fi network

Numbers 123 displayed - connected to NTP Server and obtained UTC Time

Numbers 1234 displayed - connected to OneVue; sends Smart-Sync Clock statuses to OneVue and downloads update pending settings

During an active check-in connection, additional pressing of the check-in button is ignored.

If a check-in fails, all clock data is stored in the device's non-volatile memory; up to a maximum of 1400 clocks.

Install Smart-Sync™ Bridge

A Smart-Sync Bridge can be installed either by a surface or wall-mount method. The mounting method is commonly dependent on its installation location area. Both techniques can be used together if desired.

> Note:
> Wi-Fi or Non-DCHP Ethernet network only - a Smart-Sync Bridge is required to be configured with your OneVue account ID and Wi-Fi or Non-DHCP network settings before it's installed at its permanent installation location. Verify the device can successfully check-in to your OneVue account at its installation location. For more information, see "Check-In to OneVue" on the previous page.

Deployment Examples

These deployment examples provide a visual illustration of various deployments, including deploying the Smart-Sync™ Synchronized Time in a building with single floors and multiple floors. Different facility layouts and interiors may present a variety of considerations when planning an accurate and effective deployment.

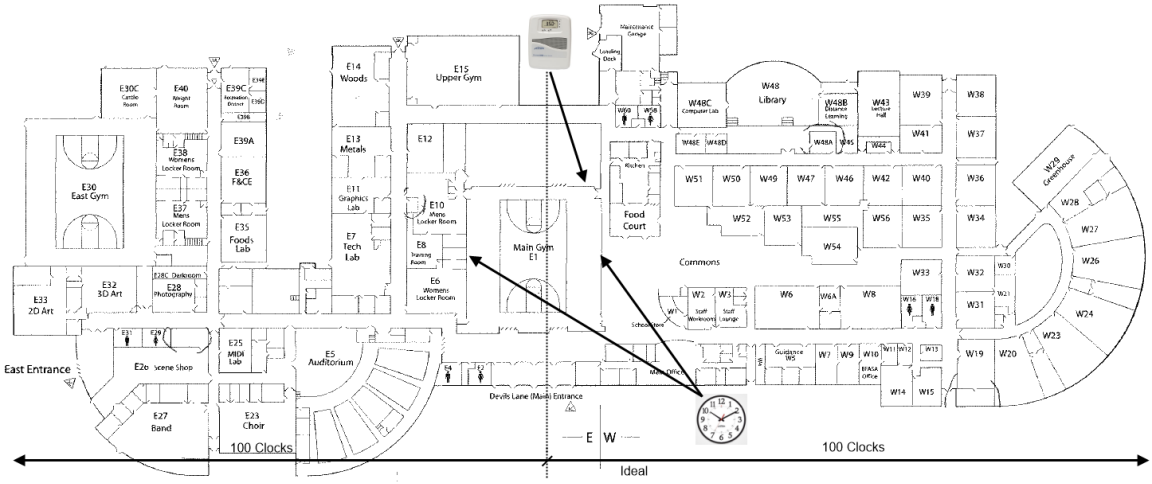
These deployment examples are to be referenced as general guidelines and it's recommended that a Smart-Sync Site Survey is completed. The results of the survey provide a deployment guide for the installation of Smart-Sync devices at your facility.

Single floor | less than 200 clocks

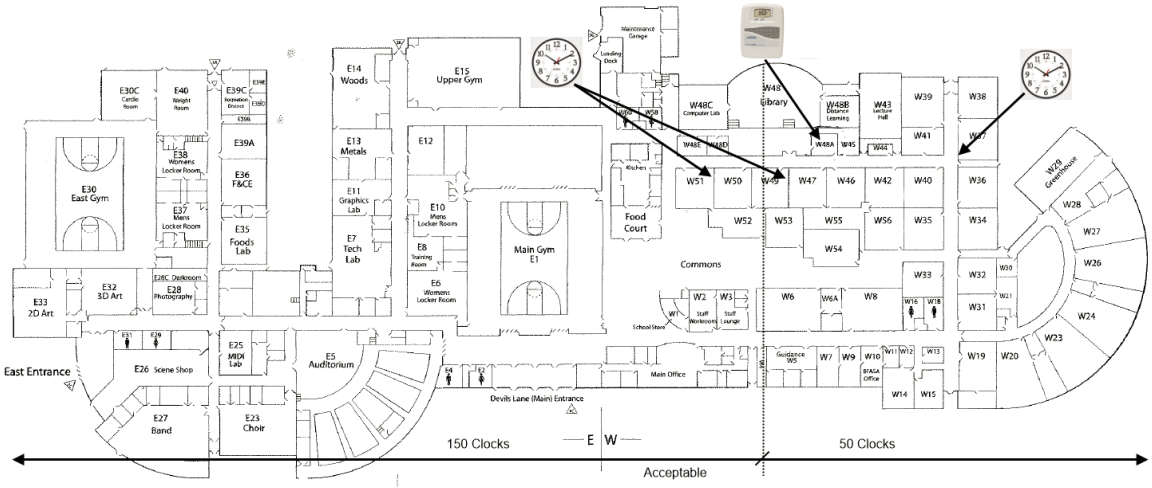
General guidelines

- Install Smart-Sync Bridge off a corridor and ideally in a central location.
- Always install and power-on a Smart-Sync Bridge before installing Smart-Sync Clocks.
- Start by installing Smart-Sync Clocks that are located closest to the Smart-Sync Bridge and then work outward. A Smart-Sync Clock should always be first powered on at its designated installation location.
- It's recommended to measure the Bluetooth signal strength at the installation location of the first clock - to verify its Bluetooth wireless connection and communication path to the Smart-Sync Bridge.
- If a clock fails to set its time, measure the Bluetooth signal strength at an installation location. This determines if the location has adequate Bluetooth signal strength, resulting in no coverage gap.

Ideal deployment illustration



Acceptable deployment illustration

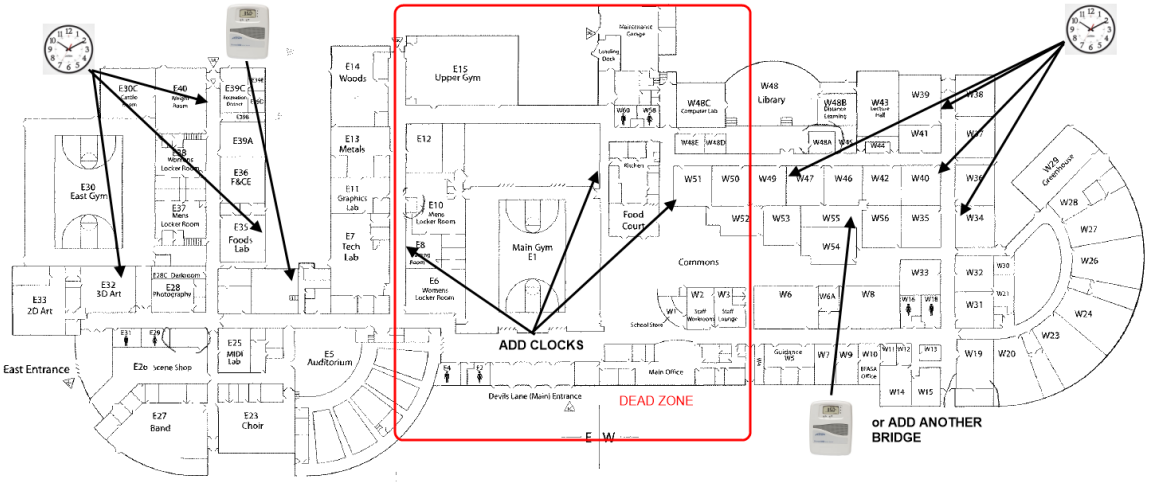


Coverage gap detected post-installation

Scenario - a coverage gap was detected post-installation.

Recommendation - install Smart-Sync Bridge beyond coverage gap.

Alternate recommendation - install an additional Smart-Sync Clock to resolve coverage gap.

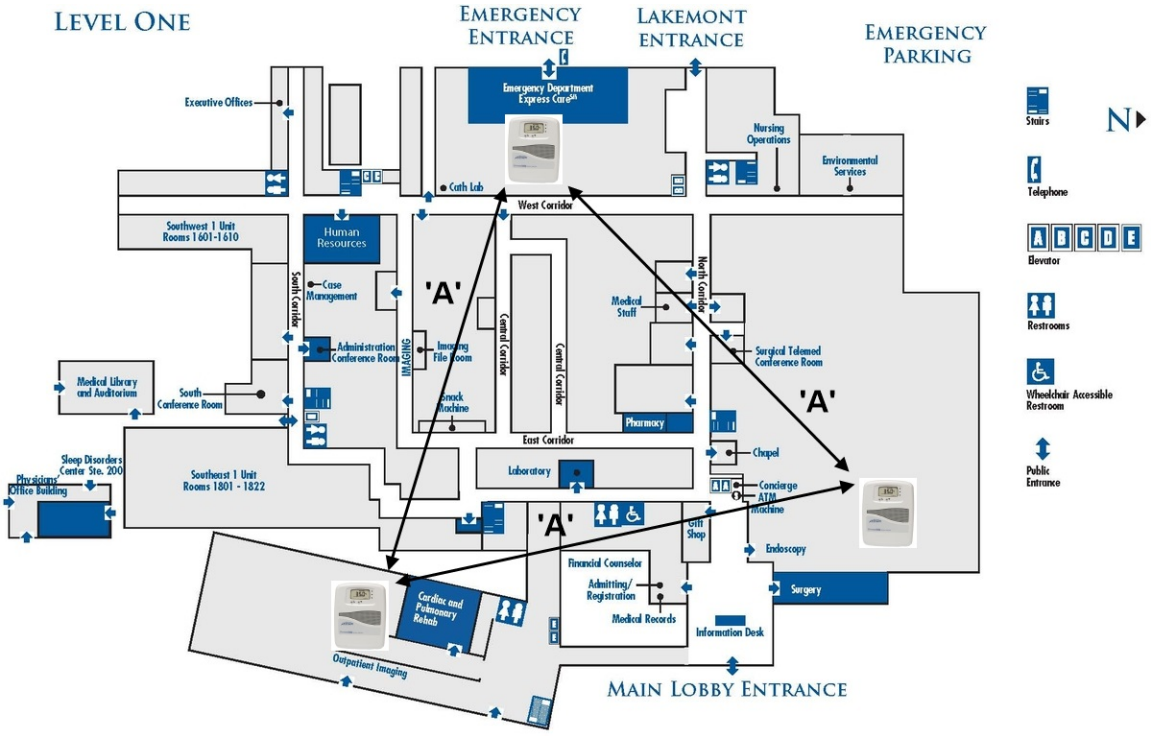


Single floor | greater than 250 Smart-Sync Clocks and multiple Smart-Sync Bridges

Deployment guidelines

- Install Smart-Sync Bridges in outward third of physical space to ensure coverage.
- Do not install multiple Smart-Sync Bridges in close proximity to each other.
- Start by installing Smart-Sync Clocks that are located closest to the Smart-Sync Bridge and then work outward. A Smart-Sync Clock should always be first powered on at its designated installation location.
- If a clock fails to set its time, measure the Bluetooth signal strength at an installation location. This determines if the location has adequate Bluetooth signal strength, resulting in no coverage gap.

Ideal deployment illustration

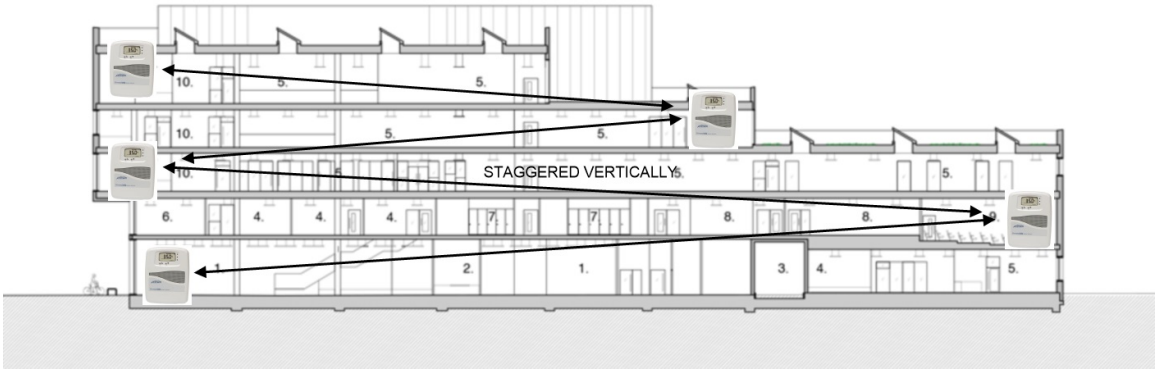


Multi-floor | Smart-Sync Bridge on each floor

General guidelines

- A single Smart-Sync Bridge installed on each floor.
- The single floor general guidelines apply per floor.
- Avoid installing the Smart-Sync Bridges in a vertical column above each other - stagger the bridge installation locations across the multiple floors.
- If a clock fails to set its time, measure the Bluetooth signal strength at an installation location. This determines if the location has adequate Bluetooth signal strength, resulting in no coverage gap.

Ideal deployment illustration



What's Needed - Smart-Sync Bridge Installation

Inspect the package contents to verify the included components are present and no damage has occurred during shipping.

What's included

(1) Smart-Sync Bridge

(1) Smart-Sync Bluetooth Antenna

(1) AC-power adapter

(1) Primex 3.0v Lithium/Iron Disulfide Battery Pack (contains 2 AA 1.5V Energizer® Ultimate Lithium batteries)

> Note:
> Devices using AC or PoE power can also use battery power as a backup power source in the event of a power loss. During battery backup, the device operates on battery power and continues to function for up to one (1) day on continuous battery power.

(2) Sets of 3M™ Dual Lock Fastener & Tape, 2" x 1" strips

(1) USB configuration cable; supplied with a device order only. For use with the Primex Device Configuration software to set a bridge to No Network mode, manually configure network settings or troubleshoot device network connectivity issues. It's recommended to save this cable for future use.

Optional accessories

AC-power extension cable

What you need - recommended

Self-adhesive hook-and-loop mounting tape to secure cables

Installation Location Guidelines

Where the Smart-Sync Bridge is mounted impacts its use and operation. It's recommended to view the Deployment Examples to ensure proper placement of your Smart-Sync Bridge devices.

The guidelines below should be taken into consideration to ensure the installation location provides optimal performance.

> WARNING:
> If an Ethernet or Wi-Fi network is not available at the time of installation, the Smart-Sync Bridge is required to be set to No Network mode to allow its communication with Smart-Sync Clocks over the Smart-Sync Bluetooth Network. For more information, see "No Network mode" on page 12.

Recommend installation location guidelines

- Mount the Smart-Sync Bridge high-up on a wall and clear of any metal obstructions to best propagate a Bluetooth Radio Frequency (RF) signal.
- Allow for enough open area to orient the Smart-Sync antenna to point straight down (vertically) from the device to maximize its signal reception.
- A Smart-Sync Clock is installed or planned to be installed within 80 feet (24.3 meters) from the mounting location. You can also measure the Bluetooth signal strength at its installation location to determine if the location has adequate Bluetooth signal strength.
- AC-power - verify an outlet is located within 5 feet (1.5 meters) from the mounting location.
- Ethernet/PoE use - verify an Ethernet enabled network port is in close proximity to the mounting location.
- Wi-Fi network use - verify there is a wireless signal strength of -60db or better at its mounting location. It's recommended to measure the strength with a Wi-Fi analyzer app on your mobile phone.

> Note:
> The device is shock and vibration resistant; however, be careful not to drop or install the device in a location where it could be exposed to excessive vibration.

Surface-Mount Installation

A Smart-Sync Bridge can be mounted to the outside surface of a wall or other type of unit using the supplied 3M™ Dual Lock™ Tape strips.

How to surface-mount a Smart-Sync Bridge

1. Verify the location meets the Installation Location Guidelines.
2. Prepare the mounting area to ensure maximize adhesion. If there is moisture, dry the area first.
3. Press a black fastener strip and a clear adhesive strip together.
4. Remove the backing off of the clear adhesive strip(s) and affix to the back of the device. It's recommended to place the strip(s) horizontally.
5. Remove the backing off of the black fastener strip and affix to mounting surface; creating a secure mount between the device and the mounting surface.
6. Verify the strips are securely fastened together and the device mount is secure.
7. Remove the device cover; simultaneously press the two tabs located on the top side of the device.
8. Insert the 3.0v Primex Lithium/Iron Disulfide Battery Pack or two 1.5v Lithium AA batteries. Follow the symbols showing the correct way to position the positive (+) and negative (-) ends of the battery pack.
9. Located to the lower-right of the battery compartment, set the battery on/off switch to the Up (On) position.
10. Replace the device cover.
11. Orient the Smart-Sync Bluetooth Antenna to point straight down (vertically) from the device to maximize its signal reception, and verify it's securely attached to device.
12. Apply power to the device; AC or PoE. It's recommended to dress the cables with self-adhesive hook-and-loop mounting tape.
13. When power was applied, the device automatically initiated a check-in to your OneVue account. Verify the device LCD displays **Signal OK**, which indicates the device has successfully checked-in to your OneVue account.
14. If the LCD screen does not display Signal OK, it's recommended to initiate a manual check-in to validate the device can connect to your facility's network at the installation location. Press and release check-in button .

    The device's LCD displays its check-in connection sequence.

    Number 1 displayed - radio powered on

    Numbers 12 displayed - connected to facility's Ethernet or Wi-Fi network

    Numbers 123 displayed - connected to NTP Server and obtained UTC Time

    Numbers 1234 displayed - connected to OneVue; sends Smart-Sync Clock statuses to OneVue and downloads update pending settings

During an active check-in connection, additional pressing of the check-in button is ignored.

During Deployment mode, the first 8 hours after a Smart-Sync Bridge is powered on, its operation is unique during this time period.

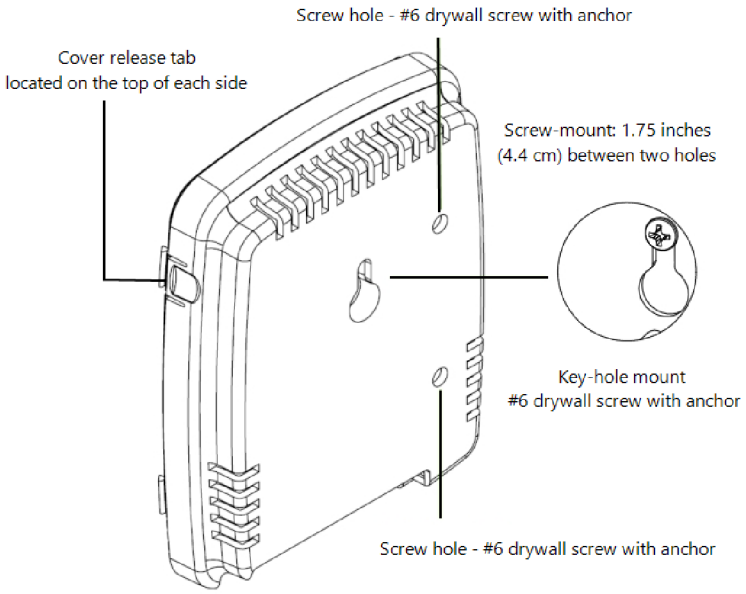
- Smart-Sync Bridge automatically connects to the facility's network at the 15th and 45th minute of each hour. During each connection, it obtains UTC time from a NTP Server and checks-in to OneVue to download pending setting changes.
- Smart-Sync Bluetooth Network automatically builds at the 20th and 50th minute of each hour. After each build, a Smart-Sync Bridge automatically checks-in to OneVue to send received Smart-Sync Clock data.

Wall-Mount (Key-Hole) Installation

A Smart-Sync Bridge can be mounted directly to a wall surface by way of a key-hole mount. If a secure-mount is required, the screw mount installation can be applied with use of two #6" drywall screws and anchors.

How to install a Smart-Sync Bridge to a solid, level wall surface using the key-hole mount method

1. Remove the device cover; simultaneously press the two tabs located on the top side of the device.
2. Insert the 3.0v Primex Lithium/Iron Disulfide Battery Pack or two 1.5v Lithium AA batteries. Follow the symbols showing the correct way to position the positive (+) and negative (-) ends of the battery pack.
3. Located to the lower-right of the battery compartment, set the battery on/off switch to the Up (On) position.
4. Replace the device cover.
5. Determine the mounting location by referencing the key-hole slot located on the back of the device.
6. Mark and pre-drill a mounting hole into the wall surface. 1.75" distance between the two key-hole slots.
7. Insert wall anchor into each mounting hole.
8. Insert a screw into the wall anchor, leaving approximately 3/8" of the screw head exposed for hanging.
9. Attach the device to the wall surface by sliding the key-hole slot onto the mounting screw. Ensure the device is properly secured and level.
10. Orient the Smart-Sync Bluetooth Antenna to point straight down (vertically) from the device to maximize its signal reception and verify its securely attached to device.



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settings

During an active check-in connection, additional pressing of the check-in button is ignored.

During Deployment mode, the first 8 hours after a Smart-Sync Bridge is powered on, its operation is unique during this time period.

- Smart-Sync Bridge automatically connects to the facility's network at the 15th and 45th minute of each hour. During each connection, it obtains UTC time from a NTP Server and checks-in to OneVue to download pending setting changes.
- Smart-Sync Bluetooth Network automatically builds at the 20th and 50th minute of each hour. After each build, a Smart-Sync Bridge automatically checks-in to OneVue to send received Smart-Sync Clock data.

Troubleshooting

Having trouble with a Smart-Sync Bridge? 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.

How to Measure the Bluetooth Signal Strength at Installation Location

To determine if a Smart-Sync device location has adequate signal strength, you can measure the Bluetooth signal strength at the installation location.

Primex recommends using the nRF Connect for Mobile - allows you to scan and explore Bluetooth® low energy devices. nRF Connect for Mobile is available for iOS and Android™ devices and can be downloaded from the App Store or Google Play.

- Smart-Sync Bridge devices advertise as **Bridge** and Smart-Sync Clocks advertise as **PrimexClock**. The device's 12-character Device ID is displayed to uniquely identify each device advertising.
- Smart-Sync Clock - the Bluetooth Radio Frequency (RF) signal is required to be **-1 to -85 dBm** at the installation location.
- Smart-Sync Bridge - the Bluetooth Radio Frequency (RF) signal is required to be **-1 to -75 dBm** at the installation location.

Warranty

Two Year Limited Warranty

Primex warrants this product to be free from defects in materials and workmanship for a standard of two (2) years 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.

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 inquires.

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 7:00 am to 7:00 pm CST | Monday through Friday

Telephone: (800) 404-8112

Email: techsupport@primexinc.com

Fax: (262) 248-0061

Web: www.primexinc.com/support