

Primex XR 72MHz Synchronized Time Solution

XR Personal Series LCD Clock Install & User Guide



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Primex, Inc.

Primex is a leading provider of synchronized time and environmental monitoring solutions. Our solutions automate and maintain facility compliance, increase efficiencies, enhance safety and reduce risk for organizations in the healthcare, education, manufacturing and government vertical markets.

Worldwide Headquarters

965 Wells Street, Lake Geneva, WI 53147

Phone: 1-262-729-4853 | email: info@primexinc.com | www.primexinc.com

About this Guide

Typographical Conventions

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

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

Safety Precautions

The Personal Series Clock is designed for indoor use only and is not weather protected. Operating the clock outdoors, or in wet areas, is an electrical hazard and may damage the clock while nullifying the warranty.

Equipment Precautions

To avoid possible electric shock and damage to an Personal Series Clock, make sure the batteries are removed when working on it.

Cleaning Recommendations

Clean the Personal Series Clock by wiping it down with commonly used disinfectants or water.

Immersion or spraying of the clock may cause permanent damage. Be sure to test any cleaning solutions on a small area of the clock before using it on the entire clock.

Regulatory Compliance

FCC Compliance

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Radio Frequency Interference

This equipment has been tested and found to comply with the limits for a Class B analog device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Limits


To comply with FCC RF exposure requirements in section 1.1307, a minimum separation distance of 20 cm is required between the antenna and all persons.

European Union Declaration of Conformity and Restrictions

Hereby, Primex Inc. declares that this equipment:

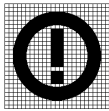
Primex Personal Series LCD Clock

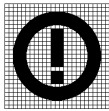
complies with the essential requirements and other relevant provisions of Directive 1999/5/EC.

This equipment is marked with  and can be used throughout the European community.

This indicated compliance with the R&TTE Directive 1999/5/EC and meets the relevant parts of following technical specifications:

- EN 300 328 – Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband Transmission Systems; Data transmission equipment operating in the 2.4GHz ISM band and using spread spectrum modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE directive.
- EN 301 489-17 – Electromagnetic Compatibility and Radio Spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 17 Specific Conditions for Wideband Data and HIPERLAN Equipment.
- EN 60950 – Low Voltage Directive (Safety)
- EN 50385 – Product standard to demonstrate the compliances of radio base stations and fixed terminal stations for wireless telecommunication systems with the basic restrictions or the reference levels related to human exposure to radio frequency electromagnetic fields.



Marking by the symbol  indicates that usage restrictions apply.

- Indoor use: maximum power (EIRP*) of 100 mW for the entire 2400-2483.5 MHz frequency band.
- Outdoor use: maximum power (EIRP*) of 100 mW for the 2400-2454 MHz band and with maximum power (EIRP*) of 10 mW for the 2454-2483 MHz band.

NOTE Exposure to Radio Frequency Radiation To comply with RF exposure compliance requirements, a separation distance of at least 20 cm must be maintained between the antenna of this device and all person

The technical documentation relevant to the above equipment will be held at:

Primex | 965 Wells Street | Lake Geneva, WI 53147 | Phone: (262) 729-4853

Company Representative: Mike O'Brien, General Manager

Signed:



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Specifications

The Personal Series LCD Clock can be installed anywhere indoors within range of the Primex Transmitter. At 2:01, 6:01, and 10:01 AM and PM daily, the unit synchronizes its time by scanning the last channel from which it received a signal. The scan terminates after one minute if a signal is not received.

Specifications

The Personal Series LCD Clock can be installed anywhere indoors within range of a Primex Transmitter.

Features

- Synchronous timekeeping with XR Transmitter.
 - Automatically adjusts for Daylight Saving Time
 - Configurable backlight illuminates display in low lighting
 - Easel stand for desk or tabletop use
 - Clock Lock feature for secure wall-mounted installation
-

Operation

- Supplied in a 12 hour model or 24-hour model*
- Automatically adjusts for Daylight Saving Time
- Displays time, date and day of the week
- Synchronizes with the Primex XR Transmitter

* Cannot be modified to switch between hour format.

Signal scan search frequency

At 2:01, 6:01, and 10:01 AM and PM daily, the clock synchronizes its time by scanning the last channel from which it received a signal. The scan terminates after one minute if a signal is not received.

Dimensions

- Physical Dimensions: 7.5 in. H (19.1 cm) x 11.5 in. W (29.2 cm) x 1.75 in. D (4.5 cm)
 - Calendar Display Dimension: 3.81 in H (9.7 cm) x 5.5 in W (14 cm)
 - Time Display Screen Dimension: 2.25 in. H (5.7 cm) x 5.5 in W (14 cm)
 - Color: Silver
 - Weight: 1.25 lbs. (.57 kg)
-

Power

- Battery Powered Model: 4 C-cell alkaline batteries
- Estimated Battery Life: Assumes typical clock operation

Backlight On Time: Off | Battery Life: 8 years

Backlight On Time: Low (8 hours per day) | Battery Life: 3.9 years

Backlight On Time: High (8 hours per day) | Battery Life: 1.7 years

Environment

- Operating Temperature Range: 32° to 120° F (0° to 49° C)
-

Installation

- Indoor use only
 - Wall mount with patented anti-theft clock lock or easel stand for desk or tabletop use
-

All specifications are subject to change without notice.

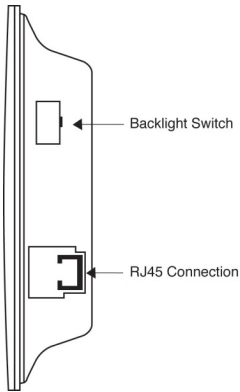
Backlight Operation

A switch on the side of the Personal Series LCD Clock sets the backlight to 'High', 'Low', or 'Off'. 'High' and 'Low' select the intensity of the backlight. When set to 'High' or 'Low', an optical sensor on the top of the clock samples available light to determine whether to turn on the backlight.

NOTE

Backlight use significantly affects battery life. To extend battery life, turn the backlight to 'Off' or operate the backlight on 'Low'

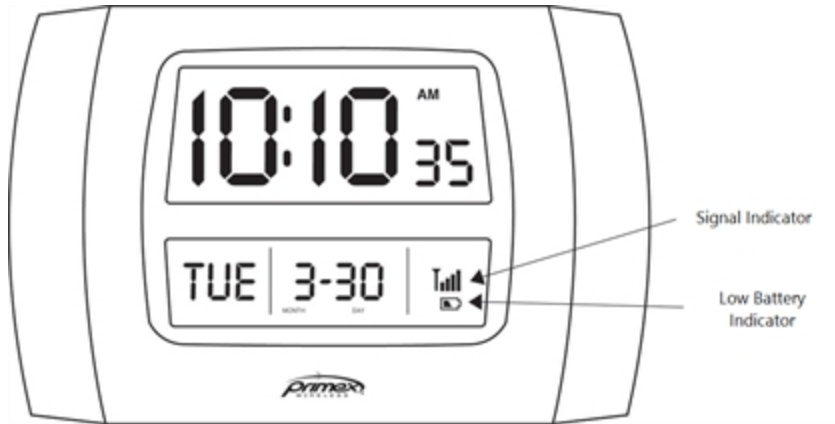
Backlight switch illustration



Operational Indicators

The Personal Series Clock features easy-to-read time, day of the week, and month-date display as well as two operational indicators.

Front view - Personal Series Clock



Operational indicators - Personal Series Clock

| Icon | Behavior | Status |
|-----------------------|--|--|
| Signal Indicator | Solid | Normal operation |
| | Display shows dashes and bars appear and disappear on tower icon | Unit is powering up and a signal has not been received |
| | Flashing | Unit has not received a signal for at least 4 days |
| Low Battery Indicator | Visible | Low battery |

Battery Use Recommendation

- Use only high quality Alkaline batteries
- Always use fresh, superior-quality batteries, with an expiration date at least five years past the installation date.
- Batteries should be the same type and date code.
- The use of heavy duty and zinc carbon batteries is not recommended, as they will not last as long as high-quality name-brand alkaline batteries.

WARNING

Do Not Use Lithium or Rechargeable Cells.

Setup Procedures

The Personal Series LCD Clock comes fully assembled and is setup with a few easy steps, as described below.

Initializing (setup) guidelines

- Before initializing, verify the Primex Transmitter is operating properly with adequate building coverage.
- During initialization, the clock receives a signal from a system Transmitter.
- Transmitter with external antenna broadcast for only 27 minutes each hour, from 39 minutes before the hour to 6 minutes after the following hour. If you have a Transmitter with an external antenna, follow these guidelines to efficiently initialize Personal Series Clocks.

Small quantity of clocks: initialize the clocks during the window in which the Transmitter is broadcasting.

Large quantity of clock: power cycle (power off, power on) the Transmitter, causing it to broadcast continuously for 8 hours, during which you can initialize the clocks.

- Allow sufficient time to allow the full initialization procedure to be performed without interruption.
- While the initialization procedure can be performed in a convenient central location, such as a maintenance facility, once the Personal Series Clock is hung or placed in its intended location, verify the clock has sufficient signal for normal operation.

How to initialize (set up) a Personal Series Clock

1. On the back of the clock, remove the cover on the battery holder.
2. Insert 4 C-cell alkaline batteries into the battery holder. Insert the batteries with the battery '+' end to the '+' end of the battery holder to achieve proper battery orientation.
3. When power is applied:
 - All elements on the LCD display light up and the unit beeps once.
 - After four seconds, dashes appear on the display and remain until the clock's receiver locates a time signal.
 - Its receiver searches until a signal is found, scanning rapidly through 72MHz channels.
 - Its receiver looks for a signal for 1 minute, and then switches to scanning in 30-minute intervals until receiving a signal.
 - Normal operation begins once a signal is received.

Initialize (Set Up) Personal Series Clock

The Personal Series Clock comes fully assembled and sets automatically with a few easy steps.

Learn about the Guidelines providing what you need to know before you begin, battery use recommendations, and How to initialize a Personal Series Clock.

Guidelines

Before you begin, be sure to learn about the guidelines.

- Before initializing, verify the Primex Transmitter is operating properly with adequate building coverage. During initialization, the clock receives a signal from the Primex Transmitter.

- A Transmitter with Internal Antenna broadcasts its synchronized time continuously to the system clocks and devices.
- Transmitters with an External Antenna broadcast for only 27 minutes each hour, from 39 minutes before the hour to 6 minutes after the following hour. If you have a Transmitter with an external antenna, follow these guidelines to efficiently initialize your Personal Series Clocks.

Small quantity of Personal Series Clocks: Initialize the clocks during the window in which the Transmitter is broadcasting.

Large quantity of Personal Series Clocks: power cycle (unplug and plug in) the Transmitter, causing it to broadcast continuously for 8 hours, during which you can initialize the clocks.

- Allow sufficient time so the full initialization procedure can be performed without interruption.
- While the initialization procedure can be performed in a convenient central location, such as a maintenance facility, once the Personal Series Clock is located at its final installation location, see *Verify Adequate Signal*.

Battery use recommendations

- Use only high quality Alkaline batteries
- Always use fresh, superior-quality batteries, with an expiration date at least five years past the installation date.
- Batteries should be the same type and date code.
- The use of heavy duty and zinc carbon batteries is not recommended, as they will not last as long as high-quality name-brand alkaline batteries.

WARNING

Do Not Use Lithium or Rechargeable Cells.

How to initialize a Personal Series Clock

1. On the back of the Personal Series Clock, remove the cover on the battery holder.
 2. Insert 4 C-cell alkaline batteries into the battery holder. Insert the batteries with the battery '+' end to the '+' end of the battery holder to achieve proper battery orientation.
- All elements on the LCD display will light up and the unit will beep once.
 - After four seconds, dashes will appear on the display and remain until the unit's receiver locates a time signal.
 - The receiver will search until a signal is found, scanning rapidly through 72MHz channels.
 - The receiver will look for a signal for 1 minute, and then switch to scanning in 30-minute intervals until receiving a signal.
 - Normal operation begins once a signal is received.

Verify Adequate Signal

Before placing the Personal Series LCD Clock at its final installation location, verify the presence of the Transmitter signal in that area.

Guidelines

- Ensure that the system Transmitter is broadcasting during the time you are verifying the signal.
 - Transmitters with external antennas broadcast for only 27 minutes each hour, from 39 minutes before the hour to 6 minutes after the following hour. If you have a Transmitter with an external antenna, be sure to perform this procedure during this time. Alternatively, you can power cycle the Transmitter, causing it to broadcast continuously for 8 hours while you complete this procedure.
-

How to verify adequate signal

1. Hold the clock near the location where you plan to hang or display it.
2. Push and IMMEDIATELY release the button located on the back of the clock. The clock will beep.

The clock scans all channels looking for a Transmitter signal. Once the clock finds a channel with a Transmitter signal, it emits a series of beeps. The clock beeps each time a valid time signal is received, which should be once per second. The beeping continues for one minute.

Once the clock finds a channel with a Transmitter signal, a series of beeps will sound from the clock. The clock will beep each time a valid time signal is received, which should be once per second. The beeping will continue for one minute.

If the clock is in a marginal signal area, it will beep once every few seconds. No beeping means no signal is received. The Personal Series Clock will work in marginal signal areas but may have a slightly reduced battery life.

Hang a Personal Series LCD Clock

A Personal Series LCD Clock is for indoor use only.

Mounting options

Depending on your security needs, there are two options for hanging a Personal Series Clock.

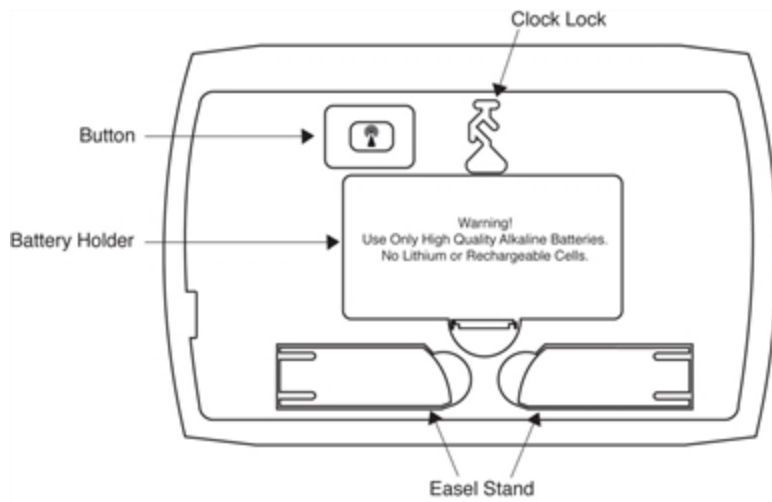
Clock Lock mount - the most secure method uses the Clock Lock feature, which is a specially designed hanger at the top center of the clock. The Clock Lock is designed to prevent accidents if the clock is bumped, and it may reduce theft by requiring a particular combination of moves to remove the clock.

Standard mount - to avoid the Clock Lock feature altogether, use a finishing nail with no head angled at 45 degrees into the wall in place of headed screws and anchors. The clock can be removed like a standard clock. Use the screw and anchor provided. If you choose not to use the provided screw and anchor, you can substitute a #4 screw. The screw must protrude from the wall 1 in. (.25 cm).

Tabletop Use

The Personal Series LCD Clock has an easel stand on the back of the clock.

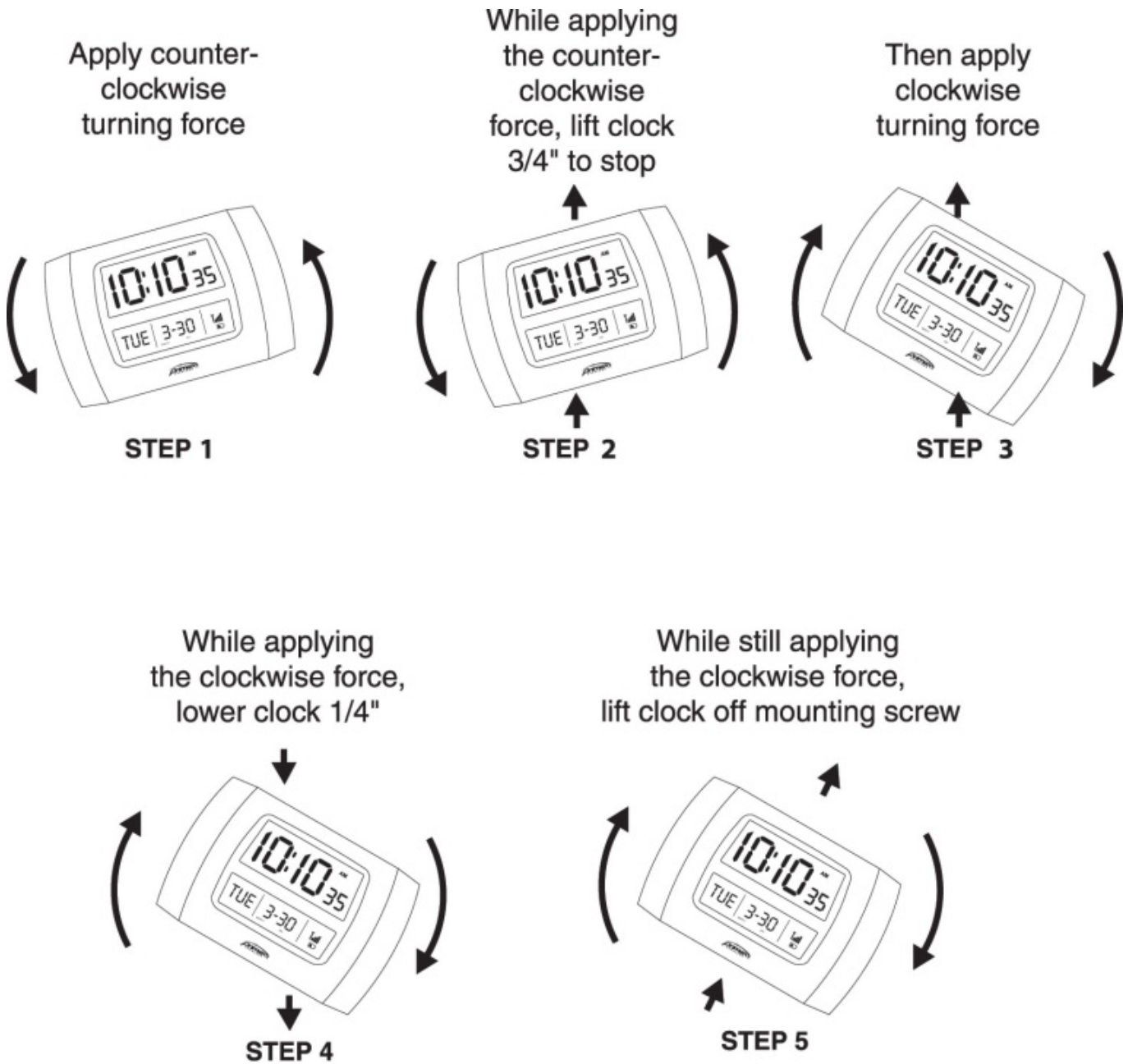
To place the clock on a table or desk, simply unfold both sides of the easel stand.



Remove from Clock Lock Mount

To remove an Personal Series LCD Clock from a Clock Lock mount, follow the steps illustrated below.

How to remove Personal Series Clock from Clock Lock Mount



Replace Batteries

The Personal Series LCD Clock notifies the user when the batteries need to be changed by showing the "Low Battery" symbol on the clock display.

Battery use recommendation

- Use only high quality Alkaline batteries
- Always use fresh, superior-quality batteries, with an expiration date at least five years past the installation date.
- Batteries should be the same type and date code.
- The use of heavy duty and zinc carbon batteries is not recommended, as they will not last as long as high-quality name-brand alkaline batteries.

WARNING

Do Not Use Lithium or Rechargeable Cells.

How to replace batteries

1. Remove the clock from its location to access the back of the clock.

NOTE

If the clock is mounted using the Clock Lock feature, a specific movement is required to remove the clock. To learn more, view "Remove from Clock Lock Mount" on the previous page.

2. Remove the battery holder cover.
3. Remove the old batteries and wait 10 seconds.
4. Insert four alkaline C-cell batteries.
5. Replace the battery holder cover.

When the batteries are in place, the Personal Series Clock begins its initialization sequence.

- All elements on the LCD display light up and the unit emits a single beep.
- After four seconds, dashes appear on the display and remain until the unit's receiver locates a channel signal. The receiver searches until a signal is found, scanning rapidly through 72MHz channels. The receiver looks for a time signal for 1 minute, and then switches to scanning in 30 minute intervals until receiving a signal.
- Normal operation begins once a signal is received.

Support

To obtain additional technical documentation for Primex products, visit the Support area on our website at www.primexinc.com

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

Support through Primex Certified Sales and Service Partners

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

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

When contacting Primex Technical Support

Make sure you have satisfied the system requirements 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

Primex Technical Support

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

Phone: 1-262-729-4860

Email: techservices@primexinc.com | Web: www.primexinc.com/support

Five Year Limited Warranty

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* from an authorized reseller or directly from Primex. 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 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, 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 guide, 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.

* applies to products sold on or after June 1, 2018.