Helios W.E.S. 1000 & 2000

(Wireless Emergency Stop)

User Guide

E6, Version 1.2

Contact Information

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Warranty Information and Technical Support

Please inquire with the distributor of your W.E.S. system for any warranty and technical support related issue.

The W.E.S. System carries with it a one year limited warranty at time of purchase.

Legal Notice

CAUTION The E-Stop system is not a replacement to the emergency stop button; it is an addition to its functionality. The system uses commercial radio frequency network that MAY be subject to interference.

Do not tamper with the settings or configuration of the handset of the 1000 or 2000 series E-Stop. Doing so may render the system inoperable. Only a qualified technician should modify or repair the equipment.

Contents

Preface

Purpose

This document is an overview of installation procedures, usage and hardware specifications for W.E.S 1000 and 2000 models

1 Product Overview

1.1 W.E.S Series

The Helios W.E.S. is a supplemental emergency stop system allowing workers to stop machinery and equipment using a personally carried transmitter. The WES system enables a worker or supervisor to open a relay that can be used to immediately disconnect the power to equipment from where the individual is located or from the unit by activating the stop button.

1.2 Layout

The W.E.S. panel is comprised of the following components

1. Enabled Light
2. Alarm Light
3. Reset Button
4. Stop Button

Fig. 1.1 – W.E.S. 2000 Base panel

1.3 Standard Equipment/Components

Your system will come with the following equipment included:

1. W.E.S base station
2. Signaling transmitter

1.3.1 W.E.S Base

The W.E.S. base is a polycarbonate enclosure housing status lights, stop button, reset button antenna and mounting points.
Internally there is a user replaceable 250V 15A Fuse

1.3.2 Signaling transmitter

The signaling transmitter may be one of a handful of transmitters designed for functionality in different environments. See documentation specific to the handheld device assigned to your base unit.

Note: The handset and and a W.E.S. unit are normally configured to work together. Some units are programmed to restrict which handsets will trigger the alarm state. Always test and ensure you are using the correct handset for your system. If in doubt test it to ensure it will work.

2 Installation

See Helios W.E.S. **E5 Install Guide**

3 Operation

3.1 Base Unit:

When power is supplied to the base unit the red “Alarm” LED will be on, And the relay contacts will be open (In the alarm state the output relay contacts will be open). The base unit will always start in the “Alarm” state when powering up.

To Enable: Press and hold the “Reset Button” until the green “Enable” led comes on and the red “Alarm” LED goes out. (In the enable state the output relay contacts are closed)

If the panel will not turn on the “Enabled” light when pressing the reset button, check to ensure the push stop button is not depressed or that there are no handsets with an active alarm.

While the system is displaying the green “Enabled” LED the relay contacts are closed and the equipment wired to the base should be functional depending on your installation and procedures.

Activating the E-Stop Alarm

An E-Stop can be initiated in two ways, locally via the E-stop switch located on the front of the unit and remotely via the wireless remote.

- Pressing the Large Red E-stop button on the face of the unit will open the relay contact, the “Alarm” LED will come on and the “Enable” LED will turn off.

- Pressing the stop button on the handset will open the relay contact, the “Alarm” led will come on and the “Enable” led will turn off.

Reset the system
If the system has been set into alarm mode by either the button or the transmitter the red “Alarm” light will be on and the system will look the same as when it was first powered on.

1. If the system alarm was initiated via the E-stop switch, twisting the Estop button clockwise will disengage the E-Stop.
2. If the system alarm was initiated via handheld, reset or disable the handheld that is transmitting the alarm and then wait 10 seconds before resetting. For safety reasons when the system is set into alarm mode via a transmitter the system has a time out period before you may enable the equipment again.
3. After waiting 10 seconds press the reset switch until the enable light comes on and the alarm light goes out. (The relay contacts will close). If the enable light shows green but turns off immediately after releasing the equipment is still in alarm mode.
    a. If the wireless transmitter was used wait another 10 seconds before attempting to reset the system
    b. If there is a handset still currently in alarm, or the E-Stop button is still depressed the W.E.S. will not enable as long as there is a valid alarm state.

3.2 Testing

It is recommended the W.E.S. System be tested before every use to ensure you are using the correct handset and the system is functioning properly.
To conduct a full test, enable the W.E.S. System and ensure the green “Enable” light turns on and then trigger a stop using the wireless handset. Ensure the W.E.S. triggers into alarm mode right away and your equipment is disconnected. If the handheld does not trigger the alarm commence troubleshooting as follows.

4 Troubleshooting

Problem	Check/Solution
Relay contacts will not close	Check on board fuse, replace as necessary
Reset button does not enable unit	Ensure stop button is not engaged Check that all transmitters are not in alarm mode
Handset does not trigger alarm when activated	Ensure handset is on and is the correct unit for your W.E.S System

5 Specifications

5.1 W.E.S. Base station

Unit Certifications

QPS Field Certification	UL certified for US applications. UL 508 & CSA 22.2 #14

	NEC 2011 NFPA 70 & 71 AHJ's accepted Canada and US Labeled CSA model code SPE 1000

Electrical

Line Supply Voltage	90-260Vac Single phase
Typical Power consumption	100mA
Max output current consumption	500 mA
Max E-Stop Relay current	15A
Max E-Stop Relay Voltage	250Vac

Radio Transceiver

GPRS Module	902-928MHz (frequency hopping spread spectrum)

Housing

Dimensions	7.5"H, 7.5"W, 7.5"D (19x19x19cm)
Certifications	NEMA Type 1,2,3,4,4X, 12 and 13 IEC 60529, IP66 Flammability V-O per UL94 UV rating (f1) per UL746C stabilized for outdoor use RoHA Compliant

Handset/Transmitter

Specific to handset	See specific handset documentation

6 Documentation Version

Version	Date	Details
1.0	April 1, 2015	Initial Document Release
1.1	April 16, 2015	Minor Updates/Fixes
1.2	July 7, 2015	Legal notice upgrade, and 1000 & 2000 usage for single document