

W-H355 and W-H355R Wireless Intelligent Temperature Sensors

One FireLite Place
Northford, CT 06472
Phone: 203.484.7161

SPECIFICATIONS

Maximum Operating Voltage:	3.3 VDC
Maximum Standby Current:	210µA
LED Current:	10 mA
Maximum Transmit RF Power:	17dBm
Radio Frequency Range:	902-928 MHz
Operating Humidity Range:	10% to 93% Relative Humidity, Non-condensing
Installation Temperature:	32°F to 100°F (0°C to 38°C)
Fixed Temperature Rating:	135°F (57°C) W-H355 and W-H355R
Rate-of-Rise Detection:	Responds to greater than 15°F/minute W-H355R
Battery Type:	4 Panasonic CR123A or 4 Duracell DL123A
Battery Life:	1 year minimum
Battery Replacement:	Upon TROUBLE BATTERY LOW display and/or during annual maintenance
Height:	2.4" (61 mm) installed in B501W Base
Diameter:	4.0" (102 mm) installed in B501W Base
Weight:	8.1 oz. (230 g) installed in B501W base with 4 batteries

This sensor must be installed in compliance with the control panel system installation manual and the SLC Wireless Gateway Manual. The installation must meet the requirements of the Authority Having Jurisdiction (AHJ). Sensors offer maximum performance when installed in compliance with the National Fire Protection Association (NFPA); see NFPA 72.

GENERAL DESCRIPTION

Models W-H355 and W-H355R are intelligent sensors that utilize a state-of-the-art thermistor sensing circuit for fast response. These sensors are designed to provide open area protection with 50 foot spacing capability as approved by UL 521. Model W-H355 is a fixed temperature sensor with 135°F fixed temperature alarm. Model W-H355R is a rate-of-rise temperature sensor with 135°F fixed temperature alarm. Rotary decade switches are provided for setting the sensor's address. (Figure 1)

Two LEDs on the sensor are controlled by the panel to indicate sensor status. Remote LED annunciator capability is available as an optional accessory (Part No. RA400Z/RA100Z).

Fire-Lite panels offer different features sets across different models. As a result, certain features of the W-H355 and W-H355R may be available on some control panels, but not on others. The possible features available in the W-H355 and W-H355R, if supported by the control unit are:

- The panel controls the LED operation on the sensor. Operational modes include red, green and amber colors in various solid or blink patterns.

Please refer to the operation manual for the UL listed control unit for specific operation of the W-H355 and W-H355R .

The W-H355 and W-H355R require compatible addressable communications to function properly. Connect these sensors to listed-compatible control panels only.

NOTE: Do not attach the base and detectors to temporary structures such as removable ceiling tiles such that the placement could be altered. To prevent changes in device placement, permanently secure the structure or mount the detector across the ceiling panel support as shown in Figure 2.

BATTERY REPLACEMENT

Low battery levels on the wireless devices are displayed as a trouble on an annunciator. Therefore when the message "TROUBLE BATTERY LOW" is displayed, replace the battery in the device. This message is an indication that approximately one week of battery life remains.

To replace the batteries in a wireless device use the following steps:

1. Have 4 CR123A (or DL123A) batteries available
2. The system allows 200 seconds to replace the batteries before the device is noted as missing and will activate the Rescue Mode within the wireless system.
3. Remove the detector from the base.
4. Open the battery compartment refer to Figure 3. Note: The battery compartment cover may be left attached at the hinges during battery replacement.
5. Remove the used batteries and replace with new batteries. The battery compartment is designed such that the batteries can only align in the appropriate direction. Do not force the batteries into the openings.
6. Replace the battery compartment cover.
7. Return the device to its original location.

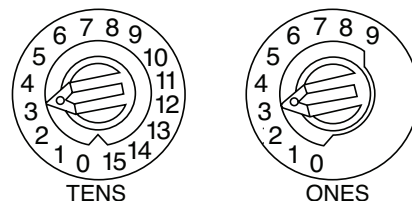
CAUTION

Dust covers provide limited protection against airborne dust particles during shipping. Dust covers must be removed before the sensors can sense smoke. Remove sensors prior to heavy remodeling or construction.

TAMPER RESISTANCE

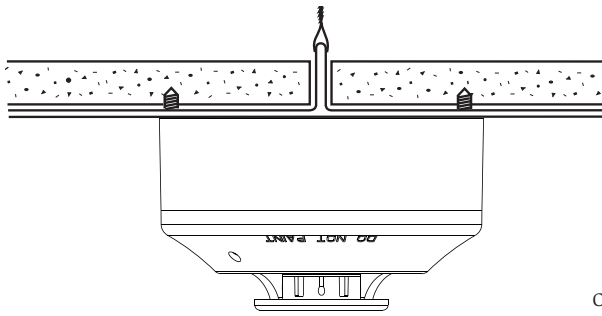
Models W-H355 and W-H355R include a tamper-resistant capability that prevents their removal from the base without the use of a tool. Refer to the base manual for details on making use of this capability. The base also includes a magnet for tamper resistance. The magnet activates a supervisory tamper fault at the panel if the detector is removed from the base.

FIGURE 1. ROTARY ADDRESS SWITCHES:



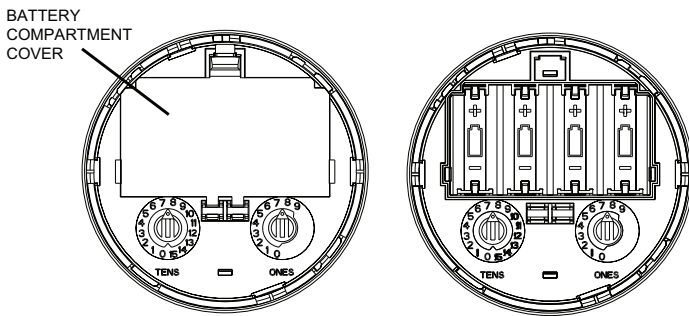
C0162-00

FIGURE 2. CEILING PANEL SUPPORT:



C2016-00

FIGURE 3. BATTERY COMPARTMENT:



C1092-00

TESTING

Before testing, notify the proper authorities that the system is undergoing maintenance, and will temporarily be out of service. Disable the system to prevent unwanted alarms.

All sensors must be tested after installation and periodically thereafter. Testing methods must satisfy the Authority Having Jurisdiction (AHJ). Sensors offer maximum performance when tested and maintained in compliance with NFPA 72.

The sensor can be tested in the following ways:

A. Functional: Magnet Test (P/N M02-04-01 or M02-09-00)

1. Place the optional test magnet against the cover in the magnet test area, as shown in Figure 4, to activate the test feature.
2. The LEDs should latch on within 10 seconds, indicating alarm and annunciating the panel.
3. Reset the detector at the system control panel.

B. Direct Heat Method (Hair dryer of 1000 – 1500 watts).

1. From the side of the detector, direct the heat toward the sensor. Hold the heat source about 6 inches (15 cm) away to prevent damage to the cover during testing.
2. The LEDs on the detector should light when the temperature at the detector reaches the alarm setpoint. If the LEDs fail to light, check the power to the detector and the wiring in the detector base.
3. Reset the detector at the system control panel.

A sensor that fails any of these tests should be cleaned as described under CLEANING, and retested. If the sensor fails after cleaning, it must be replaced and returned for repair.

When testing is complete, restore the system to normal operation and notify the proper authorities that the system is back in operation.

CLEANING

Before removing the detector, notify the proper authorities that the smoke detector system is undergoing maintenance and will be temporarily out of service.

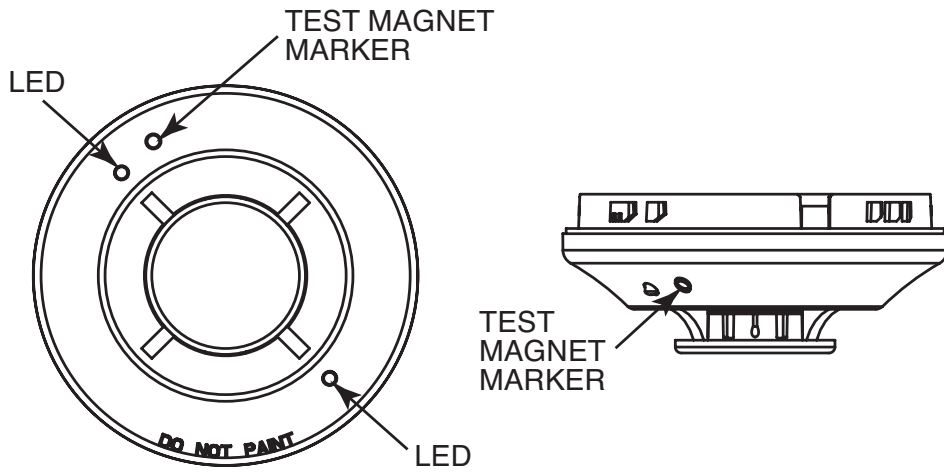
Disable the zone or system undergoing maintenance to prevent unwanted alarms.

It is recommended that the sensor be removed from its mounting base for easier cleaning and that sensors be cleaned at least once a year. Use a vacuum cleaner to remove dust from the sensing chamber (Figure 5).

SPECIAL NOTE REGARDING SMOKE DETECTOR GUARDS

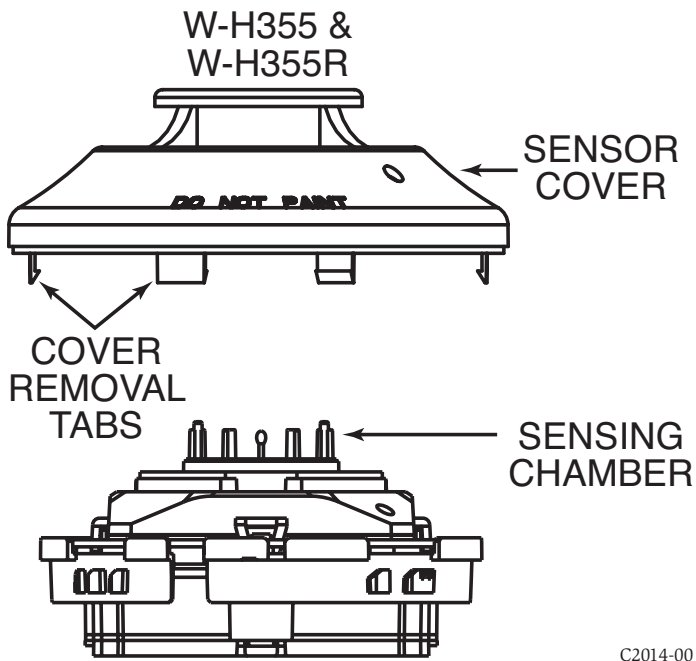
Smoke detectors are not to be used with detector guards unless the combination has been evaluated and found suitable for that purpose.

FIGURE 4. MAGNET TEST MARKERS:



C0152-00

FIGURE 5. DETECTOR COMPONENTS:



C2014-00

FM CLASSIFICATION

RTI ratings are for installations which must comply with FM 3210.

W-H355 RTI:	FAST
W-H355R RTI:	V2-FAST

Please refer to insert for the Limitations of Fire Alarm Systems

FCC STATEMENT

This device 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.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital 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 separation between the equipment and receiver.
- Connect the equipment into 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.