



FIRE SENTRY CORP.™

Used for Testing FSC Model SS2, SS3, and SS4 Detectors

SPECIFICATIONS

FSC Model No.

FT-2145

Portable, Explosion-Proof UV/IR Test Lamp

FM-Approved for Class I, Div. 1 & 2 Hazardous Areas

This portable "UV/IR" Test Lamp is used to test "end-to-end" Fire Sentry Corporation (FSC) Model SS2, SS3, and SS4 series Multi-Spectrum Electro-Optical Fire and Flame Detectors and the SF16 Detector only and will not test other manufacturers' UV/IR flame detectors. Other manufacturers' UV/IR Test Lamps should not be used to test Fire Sentry Corporation Detectors because Fire Sentry Detectors are designed to reject pulsing test lights as false alarm sources. This indoor/outdoor Test Lamp is powered by rechargeable batteries and is the replacement for the obsolete Model FT-2045 Test Lamp.

Model No. FT-2145 UV/IR Test Lamp - FM-Approved Explosion-Proof

- **General Description:** This new handheld "UV/IR" Test Lamp replaces the discontinued Model No. FT-2045.
 - The new FT-2145 is smaller, lighter, and more compact than the FT-2045 and features plug-in user replaceable parts for long operational life.
 - The UV/IR Test Lamp is FM Approved for use in Class I, Div. 1 & 2 Area Classification indoors or outdoors.
 - The FT-2145 is used only to test Fire Sentry Corporation Model SS2, SS3, and SS4 series Multi-Spectrum Fire Detectors and the SF16 Detector "end-to-end".
 - It is powered by a rechargeable, long-life, more capacity, "memory-free" nickel hydride battery pack.

IMPORTANT NOTE: The Model FT-2145 Test Lamp will only activate Fire Sentry Corporation SS2, SS3, and SS4 Detectors and the Model SF16 Detector and will not activate other manufacturers' UV/IR flame detectors. Other manufacturers' UV/IR Test Lamps used to test Fire Sentry Corporation Detectors because Fire Sentry Detectors are designed to reject pulsing test lights as false alarm sources.

- **Source Output Energy:** The ultraviolet (UV) source bulb and gold-plated infrared (IR) reflector lamp generates modulated radiant spectral energy in UV and IR wavelengths causing the Detector to ALARM.
- **Weight and Size:** 4.81 in. diameter x 4.40 in. high and 4 pounds (approx.).
- **Housing:** Copper-free aluminum (less than 0.4%) with powder coated paint finish. FM-Approved Explosion-Proof, Class I, Div. 1 & 2, Groups B, C, D; Class II, Div. 1 & 2, Groups E, F, & G, and Class III, NEMA 3, 4 Weather-proof, Tamper-Resistant.
- **Temperature Range:** -40 to +85 C, (-40 to +185 F) Operating and Storage.
- **Electrical Connections:** To recharge the Test Lamp's internal 12 VDC battery pack, unscrew the top housing cover and connect the AC/DC wall converter supplied by Fire Sentry Corporation. Plug the 110/220 VAC wall charger into a standard 120/220-volt AC receptacle. (Use only the Fire Sentry Corporation AC/DC wall converter, part number PSU-15, which supplies regulated 15 VDC at 1.33 amps.)
- **Warranty:** One year from date of purchase.
- **Notes:**
 1. **Battery Recharging** – Recharge the internal battery pack with Fire Sentry's Part No. PSU-15 100 – 240 VAC wall charger (see above) that includes worldwide interchangeable receptacle plugs. A fully charged battery pack should test typically up to 20 Detectors.
 2. **FOV Reduction** - To reduce the Tester's radiated field-of-view (FOV) for selectively testing Detectors, secure one cylindrical tube around the Tester's front lid. Lengthening the tube correspondingly reduces the Test Lamp's radiated energy field-of-view.
 3. **CAUTION** - When the UV source bulb is on, it glows with a faint bluish-green light in the visible and relatively intense invisible UV in the 180 to 240 nm spectral band. Do NOT stare directly at the UV bulb for prolonged periods of time since it produces invisible short-band UV energy. Wear glasses or protective goggles for prolonged observation of any UV source such as an arc welder, mercury vapor lamp, quartz-halogen lamp, etc.
 4. **Replaceable Parts** - The IR gold-plated reflector lamp, UV source bulb, and nickel-metal hydride battery pack are user replaceable plug-in parts. If these parts fail, contact Fire Sentry Corporation Customer Service for information on ordering replaceable parts.

Instruction for Using and Maintaining the FT-2145 UV/IR Test Lamp

CAUTION: Avoid looking directly into the Test Lamp when it is operating!

The FT-2145 Test Lamp, which replaces the obsolete FT-2045, only will test the Fire Sentry SS2, SS3, SS4 and SF-16 Detectors. This Test Lamp will not calibrate or change the configuration of the Detectors in test. It generates modulated radiant spectral energy in UV and IR wavelengths causing the Detector to ALARM.

Testing a Detector:

1. Hold the Test Lamp approximately 2-12 feet (0.6-3.6 meters) directly in front of the Detector. Distances may vary with ambient light levels especially in outdoor installations. Some practice may be required to find the optimum distance.
2. Depress the pushbutton switch to turn ON the Test Lamp and the Test Lamp's gold-plated reflector lamp source will flash on and off repeatedly and its UV source bulb will illuminate.
3. Hold steady for about 3-6 seconds or until the Detector goes into ALARM (red LEDs on the Detector will illuminate – for the SS3, one red LED will illuminate and the ALARM relay will activate).
4. Turn OFF the Test Lamp by depressing the pushbutton switch.
5. Repeat the procedure for testing “end-to-end” other FSC UV/IR Multi-Spectrum Detectors.

Charging the Test Lamp:

The Test Lamp has a rechargeable metal nickel hydride battery pack and will require charging after extended use. A 110 / 220 VAC wall charger with interchangeable receptacle plugs for worldwide use is supplied with the Test Lamp. To charging the battery pack, the housing window lens cover must be removed from the Test Lamp. This procedure MUST be done in a non-hazardous area. To charge the battery pack:

- a) Unscrew the front housing window lens cover counterclockwise and remove it.
- b) Make certain that the Test Lamp is OFF or the battery pack will not charge.
- c) Plug the wall charger's output connector into the power receptacle in the front faceplate of the Test Lamp.
- d) Plug the wall charger into an AC power outlet; the red LED on the face of the Test Lamp will turn on.
- e) Allow 3 to 4 hours for complete charging. Use ONLY the wall charger supplied by Fire Sentry Corporation.

Maintenance:

1. Make certain that the Test Lamp is fully charged before each use.
2. Handle the Test Lamp with care since both the UV bulb and IR gold-plated reflector lamp have fragile elements that can be damaged or broken if mishandled.
3. Always keep the Test Lamp turned OFF when not in use in order to conserve the battery charge and extend the life of the reflector lamp.
4. When charging the Test Lamp, make certain that the pushbutton switch is pressed OFF or the battery will not charge.
5. A fully charged Test Lamp typically should supply sufficient radiant energy up to 20 detectors.

Spare Parts:

- Battery Pack, 12 VDC P/N: PW-3123-0005
- 110/220 VAC Wall Charger P/N: PSU-15
- IR Gold-plated Reflector Lamp P/N: LAMP-3135-0002
- UV Source Bulb P/N: DT-3124-0001

Note: This specification subject to change without notice.