FW2981R Series

Conventional Strobe

Maple Armor

General Description

The UL-approved FW2981R series strobe features 6-level adjustable light intensity (15–177cd, 22–186mA), field-adjustable via FW2411 (15cd default). Pair with optional FW901R-WP (UL base + seal, press-fit adhesive) & UL-listed WBB (fittings included) for IP55 (TUV-verified). Indoor: Order FW2981R-FIRE (w/base); outdoor: FW2981R-FIRE-WOB (no base) + waterproof components.

FW901R-WP

FW2981R

WBB

FW901R

Features

- Low power consumption and high performance

- Six levels of light outputs

- UL94 V-0 flammability rating for all plastic components

- "FIRE" marking on surface with 1.8 cm character height

- With the optional waterproof base and waterproof mounting back box, the product achieves an overall IP55 ingress protection rating.

Synchronization Feature

Optical signal synchronization is enabled through the FW951 Synchronization Module.

FW951 SYNC MODULE

Set the operating mode of the Strobe to Adaptive using the FW4211 Programmer, then connect the synchronization module to the 24VDC circuit to achieve Strobe synchronization.

FW2981R series is a **UL approved** (covers strobe, installation base, and weather-proof back box) strobe device, compliant with relevant UL standards.

The light intensity of the strobe is **6-level adjustable**. Specifically, it can output a minimum light intensity of **15 candelas** and a maximum of **177 candelas**, with a corresponding power consumption ranging from **22 milliamperes** to **186 milliamperes**.

The **factory-default light intensity** is set to **15 cd**. If a higher light intensity level is preferred, the adjustment can be performed **on-site**. The light intensity is set via the **model FW2411 handheld programmer**.

This strobe **can achieve an IP55 ingress protection rating** when installed together with the **optional FW901R-WP waterproof base** and **WBB waterproof back box** (TUV test report CN2565UV001).

The **FW901R-WP weatherproof base** is manufactured via the **press-fit assembly** of the **UL approved mounting base (Model FW901R)** and the **weatherproof seal (Model MA-BWA-M)**, using a dedicated **outdoor weatherproof adhesive**. It delivers **excellent weatherproof performance and durability**.
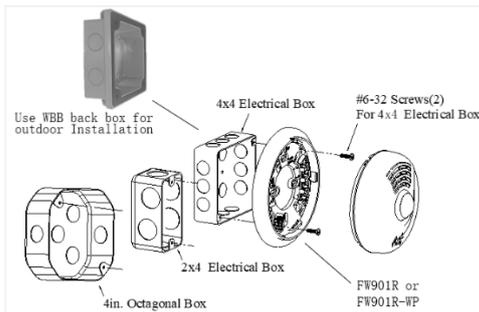
The **WBB** is **UL-listed**. It comes standard with **4 mounting screws and 2 flame-retardant, waterproof cable glands** in the package.

For **indoor installation**, only the **FW2981R-FIRE** needs to be ordered, as it already includes the **FW901R base**.

For **outdoor installation**, the **FW2981R-FIRE-WOB (no base included in the package)**, **FW901R-WP waterproof base** and **WBB waterproof back box** must be ordered **together**.
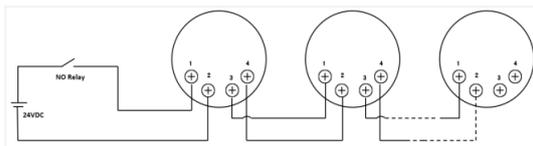
Specification

Operating Voltage	16 to 33 VDC (regulated 24VDC)
Effective Light (cd)	177, 140, 110, 75, 30, 15

Operating Temperature	-10° C to 55° C (14° F to 131° F)
Operating Humidity	0 to 95% RH Non-condensing

Strobe Pattern	1 flash per second
Wire Size	12 to 18 AWG

Light Level	177cd	140cd	110 cd	75 cd	30 cd	15 cd
RMS Current (mA)	186	145	116	85	26	22

Installation and wiring

The product fits 4x4 back box, 2x4 back box and 4-inch. Octagonal box. Add WBB back box and replace with FW901R-WP weatherproof base for installing FW2981R for out-door use.

This product will start strobe operation once supplied with a stable 24V voltage.

Wiring Diagram

Standards

UL 1971: Standard for Signaling Devices for the Deaf and Hard of Hearing

UL 1638: Visible Signaling Devices for Fire Alarm and Signaling Systems

ULC - S526: Standard for Visible Signaling Devices for Fire Alarm and Signaling Systems

EN60529 Ingress Protection (IP) Rating System for electrical equipment enclosures.

Listings and Approvals

UL

ULC

TUV IP55

Compatibility

Independent mode: External 24VDC power supply

Installation bases: FW901R, FW901R-WP

Weather-proof back box: WBB

Sync. Module: Maple Armor Model FW951

The maximum load current of the FW951 is 3A. It is required to calculate the cumulative current based on the light output settings of the strobes, and determine the number of strobes that a single FW951 can support. It is recommended to reserve a 20% buffer for the load capacity.

For details, refer to DOC-FW951-UM-R1.3 for FW951 Sync. Module installation.

Ordering Information

Model	Ordering Code	Description	Listing	UOM	COO	MOQ	MPQ
FW2981R	FW2981R-FIRE	STROBE, RED, "FIRE" PRINTING ON SURFACE, INDEPENDENT MODE AND LOWEST LIGHT INTENSITY SETTING AS DEFAULT, BASE INCLUDED	UL.ULC	ea.	China	1	1
FW2981R	FW2981R-FIRE-WOB	STROBE, RED, "FIRE" PRINTING ON SURFACE, INDEPENDENT MODE AND LOWEST LIGHT INTENSITY SETTING AS DEFAULT, NEED TO ORDER BASE	UL.ULC	ea.	China	1	1
FW901R	FW901R	INSTALLATION BASE, RED, WITH OUTER FLANGE	UL.ULC	ea.	China	1	1
FW901R-WP	FW901R-WP	INSTALLATION BASE, RED, WITH OUTER FLANGE, UL BASE + SEAL, PRESS-FIT ADHESIVE	TUV IP5	ea.	China	10	10
WBB	WBB	WEATHER-PROOF BACK BOX, RED, FITTINGS INCLUDED	TUV IP5	ea.	China	10	10
FW2411	FW2411	MAPLE ARMOR HANDHELD PROGRAMMER	UL	ea.	China	1	1
FW951	FW951	Synchronization Module	UL	ea.	China	1	1
FW800	FW800	Surface mounting base for FW951 module	UL	ea.	China	1	1
FW434	FW434G	Double-layer installation, 16-bit module box, gray	UL	ea.	China	1	1
FW435	FW435G	Double-layer installation, 8-bit module box, gray	UL	ea.	China	1	1
FW430-MB-12	FW430-MB-12	Single-layer installation, 12-bit module box, with wire trough, with terminal block, gray	\	ea.	China	1	1
FW430-MB-20	FW430-MB-20	Single-layer installation, 20-bit module box, with wire trough, with terminal block, gray	\	ea.	China	1	1