

About this Manual

This manual is included as a quick reference for installation. For further information on the use of this device with an FACU, please refer to the panel's manual.

Note: This manual should be left with the owner/operator of this equipment.

This manual covers the following models. **R** indicates a red model.

SPPS-204-25(R)-WP Weather protected wall mounted speaker/strobe 25V, white (red)

SPPS-204-70(R)-WP Weather protected wall mounted speaker/strobe 70V, white (red)

SPP-204-25(R)-WP Weather protected wall/ceiling mounted speaker 25V, white (red)

SPP-204-70(R)-WP Weather protected wall/ceiling mounted speaker 70V, white (red)

Accessory: MP-300 End of line resistor 3.9 kΩ

Notes

- DO NOT PAINT OR ALTER FACTORY APPLIED FINISH IN ANY WAY.
- Wiring must be in accordance with CSA C22.1 Section 32, NFPA 70, and NFPA 72.

Description

The SPP-204 series weather protected speaker and SPPS-204 weather protected speaker/strobe provide a wide range of audible and visual settings in a single compact device. The candela settings on the speaker/strobe can be field-configured for 15, 30, 75, 110, 185, and 15/75 cd.

Dimensions

8 5/8" (219 mm) W
7 7/16" (189 mm) H
4 7/16" (112 mm) D

Specifications

| | |
|---------------------------------|---|
| Operating temperature: | -40 °C to +66 °C (-40 F to 151 F) |
| Humidity range: | 95% relative humidity at 60 °C (140 F) |
| Strobe flash rate | 1 Hz (1 flash per sec.)* |
| Nominal strobe voltage: | Regulated 24 VDC / 24 VFWR |
| Operating strobe voltage range: | 16-33 VDC/VFWR |
| Nominal speaker voltage: | 25V or 70.7Vrms |
| Speaker size | 4" |
| Terminal wire gauge | 12-22 AWG |
| Installation environment: | Outdoor environment wet location |

***Note:** For FWR signaling use a Mircom or Secutron panel.

Setting the Candela (SPPS-204 models)

The candela can be set to 15, 30, 75, 110, 185, 15/75.

Note: 185 cd setting is for General Signaling only.

The factory default setting is 15.

1. Pull out the candela selector from the device.
2. Re-insert the selector tab into the notch so that the desired candela setting is in the middle and shows through the window when the cover is in place.
(When removing or inserting the candela selector, ensure to keep it straight).

Note: Select the candela setting before installing the device in the mounting plate.

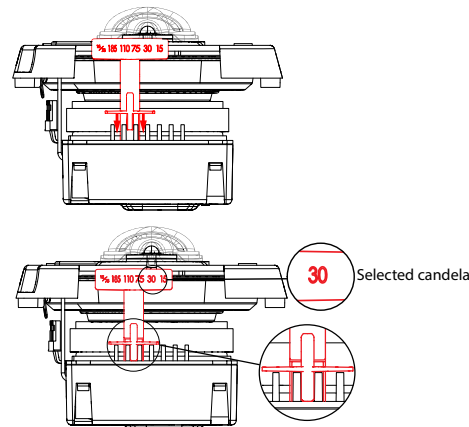


Figure 1: Inserting candela selector

Setting the DIP Switches

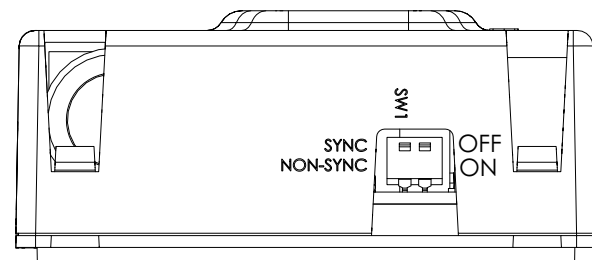


Figure 2: DIP switch

| Input* | DIP Switch 1 |
|--|---------------|
| Regulated 24 VDC/FWR (Non-synchronized) | ON |
| Synchronized | OFF (default) |

***Note:** Use "SYNC" when flash synchronization is required, either through an external synchronization module or compatible FACU or PSU supporting MGC sync protocol.

Use "NON-SYNC" when the appliances do not need to be synchronized.

Note: DIP switch 1 default setting is OFF, synchronized.

Note: DIP switch 2 is not used. By default it is OFF.

Wiring

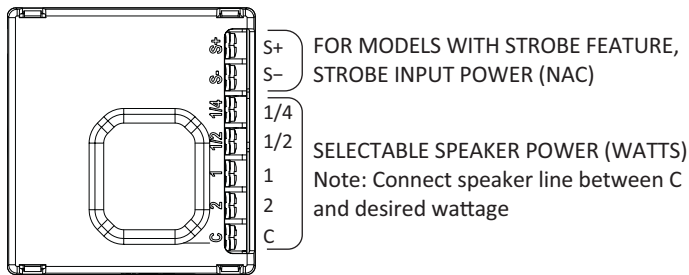


Figure 3: Wiring taps

Note: This device should be installed as per applicable local codes and standards and per the requirements of the authorities having jurisdiction. Use the information in this document to determine the total power or current of the devices. The total power or current of the devices must not exceed the output rating of the power source. Refer to the FACU installation guide for the wire size required according to the loop length and device's power usage. For maximum strobe operating current, please refer to Table 3.

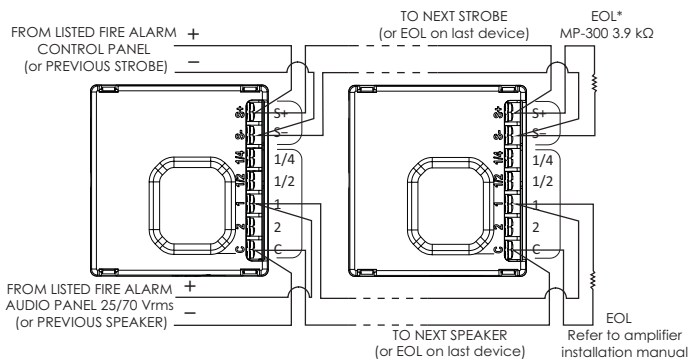


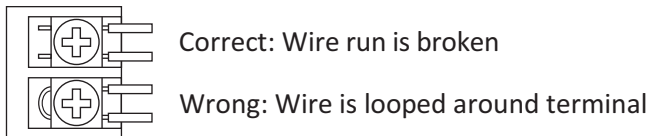
Figure 4: Device connection

***Note:** When using with Mircom or Secutron panel or sync module, use MP-300 (3.9 kΩ).

Note: Wiring must be in accordance with CSA C22.1, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations section 32 and NFPA 70.

CAUTION

FOR SYSTEM MONITORING - FOR ALL TERMINALS, DO NOT USE LOOPED WIRE UNDER TERMINALS. BREAK WIRE RUN TO PROVIDE SUPERVISION OF CONNECTIONS.



Weather Protected Enclosure

The enclosure is rated for Outdoor Environment Wet Location.

-40 °C to +66 °C (-40 F to 151 F)

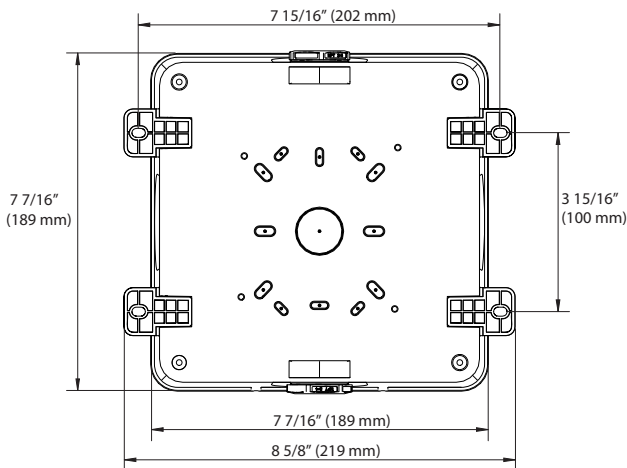


Figure 5: Enclosure bottom view

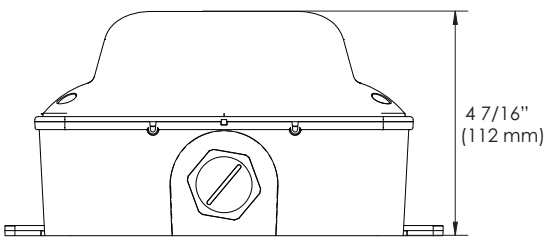


Figure 6: Enclosure side view

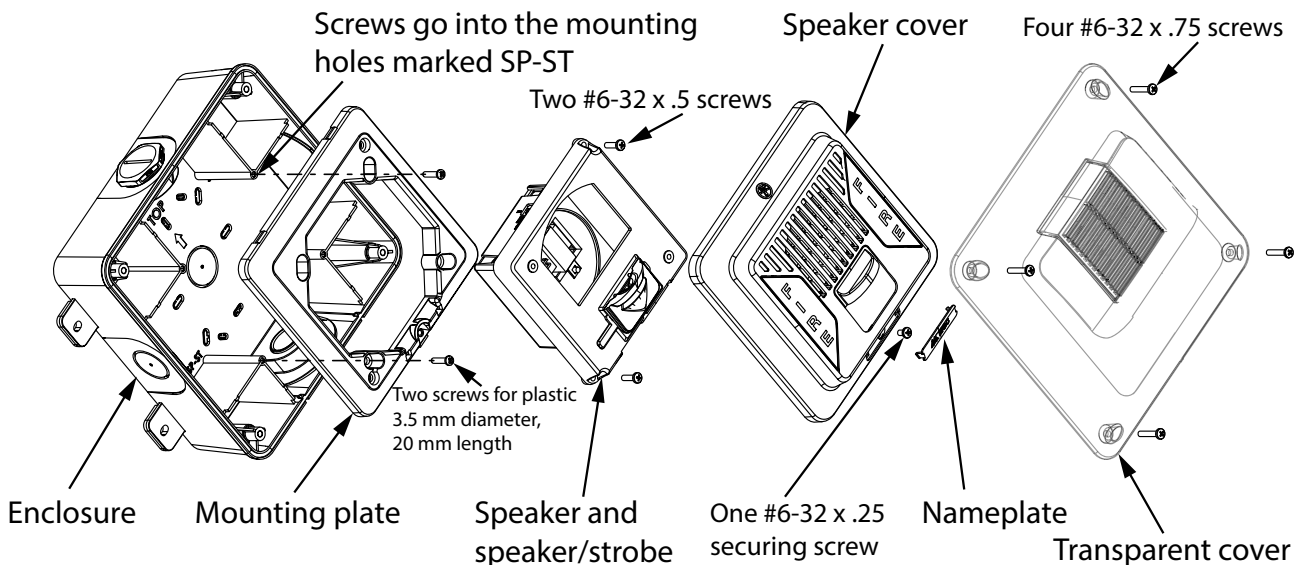


Figure 8 Mount the speaker and speaker/strobe in enclosure

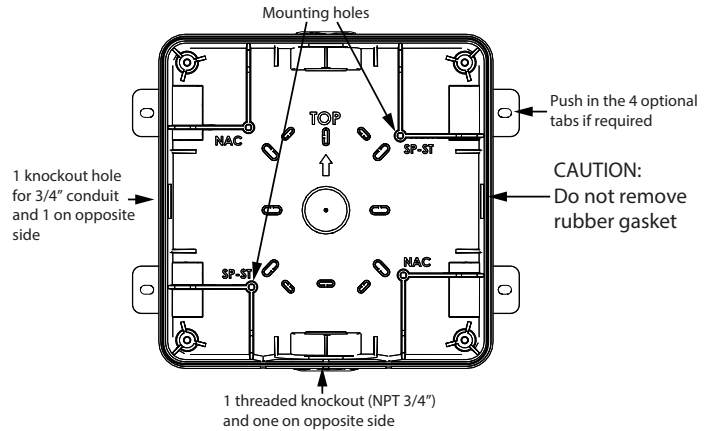


Figure 7: Top view without cover

Note: Apply outdoor-rated weatherproof silicone to the 2 mounting holes and around the conduit connectors.

Mounting to the Wall or Ceiling

MGC recommends spacing speaker/strobe appliances in compliance with CAN/ULC S524 and NFPA72.

Note: Select the candela setting prior to installing the device in the mounting plate.

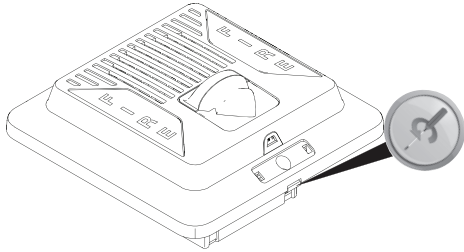
Mount the unit to the wall or ceiling depending on the model.

When mounting on the wall, mount the enclosure with the word TOP at the top, and mount the device with the MGC nameplate at the bottom.

1. Before mounting, disassemble the unit as shown in figure 8.
2. Secure the enclosure directly to the wall or ceiling.
3. Attach the mounting plate to the 2 holes marked SP-ST on the enclosure with the 2 included mounting screws.
4. Attach the speaker or speaker/strobe to the mounting plate with the 2 included screws.
5. Attach the top cover with the included securing screw and snap the nameplate over the securing screw.
6. Secure the transparent cover over the assembly with the 4 included screws.

Removing the Speaker Cover from the Mounting Plate

To remove the device from the mounting plate, remove the nameplate and the securing screw, then insert a flathead screwdriver into the slot between the device and the mounting plate, and rotate the screwdriver.



Audible Ratings

Table 1: Overall Sound Pressure Level (Reverberant)

| Power Tap (W) | Reverberant OSPL 10 ft (dBA) |
|---------------|------------------------------|
| 2 | 84.9 |
| 1 | 83.5 |
| 1/2 | 80.9 |
| 1/4 | 78 |

Representative of speaker/strobe and speaker only, both 25 and 70.7V input

Table 2: Directional Sound Characteristics

| Horizontal Axis | |
|-----------------|------------|
| Angle | OSPL (dBA) |
| +53° | -3 |
| ±90° | -5.3 |
| Vertical Axis | |
| Angle | OSPL (dBA) |
| ±52° | -3 |
| ±90° | -5.3 |

Strobe Ratings

Table 3: Strobe Operating RMS Currents (mA)

| Candela | Regulated 24 VDC | Regulated 24 VFWR |
|---------|------------------|-------------------|
| 15 | 33 | 27 |
| 30 | 55 | 58 |
| 75 | 98 | 110 |
| 110 | 193 | 212 |
| 185* | 276 | 269 |
| 15/75 | 102 | 108 |

* 185cd setting is for General Signaling only

Table 4: Light Output

| Degrees | % of Candela Rating | |
|--------------|-----------------------|------------------------------------|
| | Horizontal Dispersion | Vertical Dispersion, Wall to Floor |
| ± 0 | 146 | 151 |
| ± 5 | 143 | 163 |
| ± 10 | 141 | 156 |
| ± 15 | 135 | 145 |
| ± 20 | 131 | 144 |
| ± 25 | 127 | 135 |
| ± 30 | 123 | 134 |
| ± 35 | 115 | 100 |
| ± 40 | 103 | 85 |
| ± 45 | 100 | 71 |
| ± 50 | 92 | 64 |
| ± 55 | 83 | 60 |
| ± 60 | 85 | 57 |
| ± 65 | 96 | 46 |
| ± 70 | 45 | 48 |
| ± 75 | 49 | 39 |
| ± 80 | 45 | 33 |
| ± 85 | 52 | 29 |
| ± 90 | 36 | 24 |
| Compound ±45 | 32 | - |

Note: The values in Table 4 are shown as percentages of the rated light output at any candela setting.

Warranty

Purchase of all MGC products is governed by:

<https://www.mircom.com/product-warranty>

<https://www.mircom.com/purchase-terms-and-conditions>

<https://www.mircom.com/software-license-terms-and-conditions>

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