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INSTALLATION INSTRUCTIONS SERIES RSSA/RSSB/RSSG/RSSR STROBE APPLIANCES

Use this product according to this instruction manual. Please keep this instruction manual for future reference.

GENERAL:

Series RSSA/RSSB/RSSG/RSSR Strobes can provide a non-synchronized strobe appliance when connected directly to a fire alarm control panel (FACP), or provide a synchronized strobe appliance when used in conjunction with a Sync Module (SM), Dual Sync Module (DSM) or Wheelock power supplies with patented sync protocol. Series RSS strobes with amber, blue, green and red lens are UL Listed under Standard 1638 (Visual Signaling Appliance) for Private Mode Emergency General Utility Signaling. The RSS strobes are intended for ceiling mount or wall mount with the backboxes specified in these instructions (See Mounting Options). The RSS models have an integrated strobe mounting plate (SMP) that can be mounted to a single-gang, double-gang, 4" backbox, 100mm European backbox or SHBB surface backbox. The strobe uses a xenon flashtube with solid state circuitry enclosed in a polycarbonate lens to provide maximum visibility and reliability for effective visible signaling. All inputs are polarized for compatibility with standard reverse polarity supervision of circuit wiring by an FACP.

⚠ WARNING: PLEASE READ THESE INSTRUCTIONS CAREFULLY. FAILURE TO COMPLY WITH ANY OF THE FOLLOWING INSTRUCTIONS, CAUTIONS AND WARNINGS COULD RESULT IN IMPROPER APPLICATION, INSTALLATION AND/OR OPERATION OF THESE PRODUCTS IN AN EMERGENCY SITUATION, WHICH COULD RESULT IN PROPERTY DAMAGE AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.

⚠ WARNING: CANDELA SETTING WILL DETERMINE THE CURRENT DRAW OF THE PRODUCT.

SPECIFICATIONS:

<i>Table 1: Models and Ratings</i>					
Model Code	Candela	Voltage	Maximum DC RMS Current Draw	Maximum FWR RMS Current Draw	Mounting Options
RSS-24110W	110	24 VDC	0.300	0.455	A,B,C,D
RSS-24MCC	15/30/75/95	24 VDC	Table 2	Table 2	A,B,C,D
RSS-24MCCH	115/177	24 VDC	Table 2	Table 2	A,B,C,D

NOTES:

1. Candela is measured on axis. Models with MCC strobes have 4 field-selectable candela settings: 15, 30, 75, 95 cd. Models with MCCH strobes have 2 field-selectable candela settings: 115 and 177 cd. MCC and MCCH candela settings are rated for clear lens - derate approximately 25% for amber, 55% for green, 70% for blue and 80% for red lens.
2. All strobes operate from 16 to 33 volts at 1 flash/second using filtered or full-wave-rectified DC voltage.
3. Strobes with Amber Lens meet the required light distribution patterns defined in UL 1971.
4. All models are for indoor use with a temperature range of +32°F to +120°F (0°C to +49°C) and maximum humidity of 85% RH. The effect of shipping and storage temperatures shall not adversely affect the performance of the appliance when it is stored in the original cartons and is not subjected to misuse or abuse.

<i>Table 2: Strobe Current (AMPS)</i>												
	MCC Max DC RMS Current Draw				MCC Max FWR Current Draw				MCCH Max DC RMS Current Draw		MCCH Max FWR Current Draw	
MCC Setting	15	30	75	95	15	30	75	95	115	177	115	177
16-33 VDC	0.065	0.105	0.189	0.249	0.110	0.170	0.280	0.375	0.300	0.420	0.455	0.645

⚠ WARNING: CHECK THE MINIMUM AND MAXIMUM OUTPUT OF THE POWER SUPPLY AND STANDBY BATTERY AND SUBTRACT THE VOLTAGE DROP FROM THE CIRCUIT WIRING RESISTANCE TO DETERMINE THE APPLIED VOLTAGE TO THE STROBES.

⚠ CAUTION: Strobes are not designed to be used on coded systems in which the applied voltage is cycled on and off.

⚠ WARNING: MAKE SURE THAT THE TOTAL AVERAGE/RMS CURRENT REQUIRED BY ALL APPLIANCES THAT ARE CONNECTED TO THE SYSTEM'S PRIMARY AND SECONDARY POWER SOURCES, APPLIANCE CIRCUITS, SM AND DSM SYNC MODULES DO NOT EXCEED THE POWER SOURCES' RATED CAPACITY OR THE CURRENT RATINGS OF ANY FUSES ON THE CIRCUITS TO WHICH THESE APPLIANCES ARE WIRED. OVERLOADING POWER SOURCES OR EXCEEDING FUSE RATINGS COULD RESULT IN LOSS OF POWER AND FAILURE TO ALERT OCCUPANTS DURING AN EMERGENCY, WHICH COULD RESULT IN PROPERTY DAMAGE AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.

When calculating the total currents: Use Table 1 and 2 to determine the highest value of Average/RMS current for an individual strobe (across the expected operating voltage range of the strobe). Then multiply the value by the total number of strobes; be sure to add the currents for any other appliances, including audible signaling appliances, powered by the same source and include any required safety factors.

MCC STROBE CANDELA SELECTION:

Figure 1A: MCC

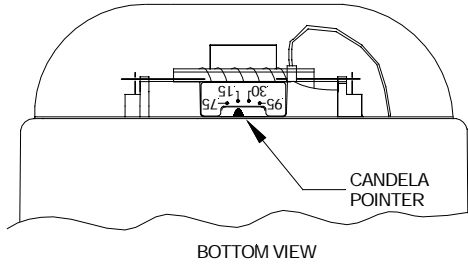
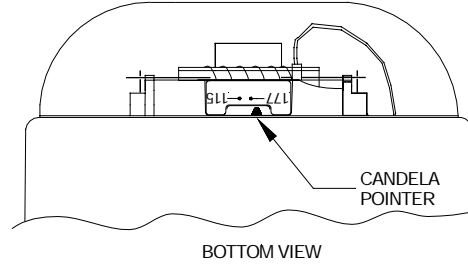


Figure 1B: MCCH



NOTE: The strobe candela selector is pre-set at 15cd for MCC and 177cd for MCCH strobes. To change the strobe candela move selector switch, insert screwdriver into slot shown on the bottom side of the strobe. The setting is indicated by a pointer and can be seen on the bottom side of the lens. See Figures 1A and 1B.

WIRING AND MOUNTING INFORMATION:

CAUTION: The following figures show the maximum number of field wires (conductors) that can enter the backbox used with each mounting option. If these limits are exceeded, there may be insufficient space in the backbox to accommodate the field wires and stresses from the wires could damage the product.

Although the limits shown for each mounting option comply with the National Electrical Code (NEC), Cooper Wheelock recommends use of the largest backbox option shown and the use of approved stranded field wires, whenever possible, to provide additional wiring room for easy installation and minimum stress on the product from wiring.

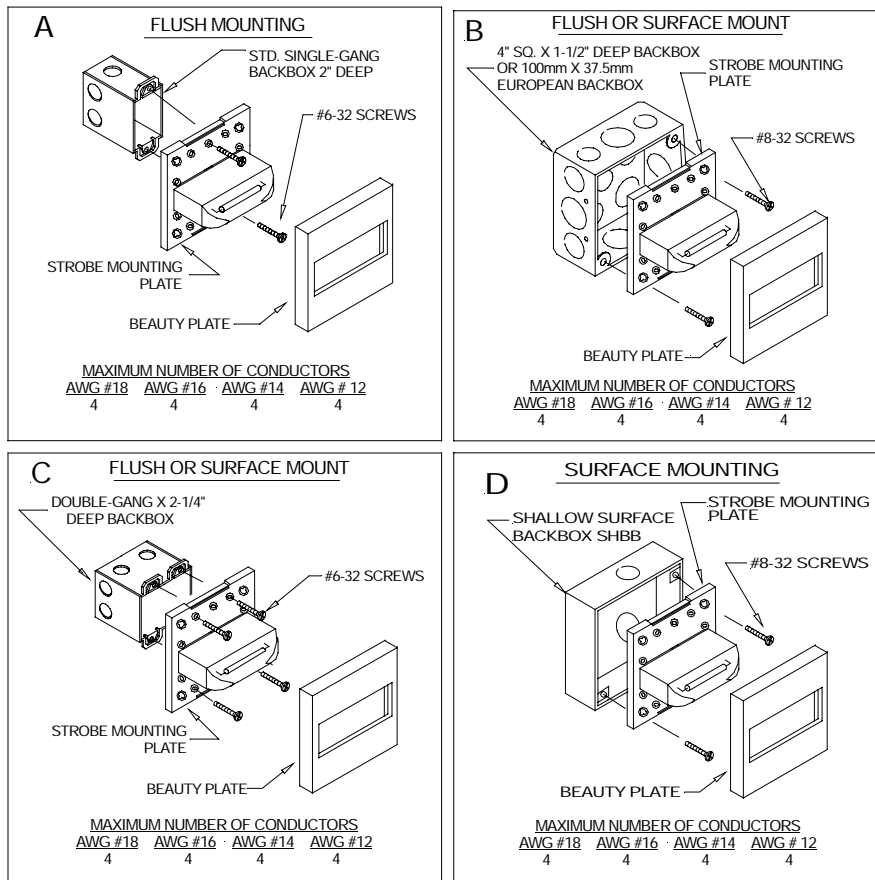


Figure 2: Wiring Diagrams

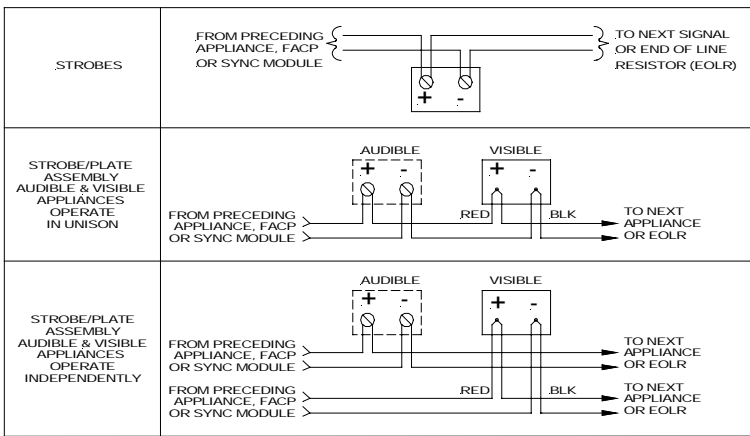
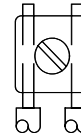


Figure 3:



- All strobe appliances have in-out wiring terminals that accepts two #12 to #18 American Wire Gauge (AWG) wires at each screw terminal. Strip leads 3/8 inches and connect to screw terminals.
- Break all in-out wire runs on supervised circuits to assure integrity of circuit supervision as shown in Figure 3. Strobe/Plate assembly has two red leads and two black leads for in-out wiring. The polarity shown in the wiring diagrams is for the operation of the appliances. The polarity is reversed by the FACP during supervision.

Refer to the instruction sheets for SM (P83123), DSM (P83177) or Wheelock power supplies for additional information.

MOUNTING PROCEDURES:

CAUTION: Check that the installed product will have sufficient clearance and wiring room prior to installing backboxes and conduit, especially if sheathed multiconductor cable or 3/4" conduit fittings are used.

1. This RSS model can be flush mounted to a standard single-gang backbox (Figure A), 4" or 100mm backbox (Figure B) or double-gang backbox (Figure C). It can also be surface mounted to a 4" or 100mm backbox (Figure B), double-gang backbox (Figure C) or the SHBB (Figure D). Mounting hardware for each mounting option is supplied.
2. Conduit entrances to the backbox should be selected to provide sufficient wiring clearance for the installed product. Do not pass additional wires (used for other than the signaling appliance) through the backbox. Such additional wires could result in insufficient wiring space for the signaling appliance.
3. When terminating field wires, do not use more lead length than required. Excess lead length could result in insufficient wiring space for the appliance.
4. Use care and proper techniques to position the field wires in the backbox so that they use minimum space and produce minimum stress on the product. This is especially important for stiff, heavy gauge wires and wires with thick insulation or sheathing.
5. This RSS model has an integrated Strobe Mounting Plate (SMP) which must be oriented correctly when it is mounted to the backbox. Turn the SMP so that the arrow above the words "Horizontal Strobe" points to the top side.
6. Mount the SMP first to the backbox. Next slide the beauty plate over the SMP until the 2 snaps of the beauty plate engage with the SMP.
7. The beauty plate can be removed from the strobe assembly once engaged. First, gently insert a screwdriver into one of the slots located on the top and bottom edges of the beauty plate. Second, gently pull away from the wall with the inserted screwdriver to disengage the snap. Third, repeat the first and second steps for the second slot. Finally, gently lift the beauty plate away from the SMP.

WARNING: REMOVAL OF THE BLACK COVER AT THE BACK OF THE MOUNTING PLATE COULD RESULT IN SEVERE ELECTRIC SHOCK.

WARNING: WHEN INSTALLING STROBES IN AN OPEN OFFICE OR OTHER AREAS CONTAINING PARTITIONS OR OTHER VIEWING OBSTRUCTIONS, SPECIAL ATTENTION SHOULD BE GIVEN TO THE LOCATION OF THE STROBES SO THAT THEIR OPERATING EFFECT CAN BE SEEN BY ALL INTENDED VIEWERS, WITH THE INTENSITY, NUMBER, AND TYPE OF STROBES BEING SUFFICIENT TO MAKE SURE THAT THE INTENDED VIEWER IS ALERTED BY PROPER ILLUMINATION, REGARDLESS OF THE VIEWER'S ORIENTATION. FAILURE TO DO SO COULD RESULT IN PROPERTY DAMAGE AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.

WARNING: A SMALL POSSIBILITY EXISTS THAT THE USE OF MULTIPLE STROBES WITHIN A PERSON'S FIELD OF VIEW, UNDER CERTAIN CIRCUMSTANCES, MIGHT INDUCE A PHOTO-SENSITIVE RESPONSE IN PERSONS WITH EPILEPSY. STROBE REFLECTIONS IN A GLASS OR MIRRORED SURFACE MIGHT ALSO INDUCE SUCH A RESPONSE. TO MINIMIZE THIS POSSIBLE HAZARD, COOPER WHELOCK STRONGLY RECOMMENDS THAT THE STROBES INSTALLED SHOULD NOT PRESENT A COMPOSITE FLASH RATE IN THE FIELD OF VIEW WHICH EXCEEDS FIVE (5) Hz AT THE OPERATING VOLTAGE OF THE STROBES. COOPER WHELOCK ALSO STRONGLY RECOMMENDS THAT THE INTENSITY AND COMPOSITE FLASH RATE OF INSTALLED STROBES COMPLY WITH LEVELS ESTABLISHED BY APPLICABLE LAWS, STANDARDS, REGULATIONS, CODES AND GUIDELINES.

CAUTION: Check the installation instructions of the manufacturers of other equipment used in the system for any guidelines or restrictions on wiring and/or locating Notification Appliance Circuits (NAC) and notification appliances. Some system communication circuits and/or audio circuits, for example, may require special precautions to assure electrical noise immunity (e.g. audio crosstalk).

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 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: 1) Reorient or relocate the receiving antenna, 2) Increase the separation between the equipment and receiver, 3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected, and 4) Consult the dealer or an experienced radio/TV technician for help.

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