

INSTALLATION INSTRUCTIONS MULTI-CANDELA AUDIBLE STROBE APPLIANCE (WALL MOUNT VERSION)

IMPORTANT – All audible and visual signaling appliances must be installed in accordance with all applicable national and local fire alarm codes and any other required regulatory agencies.

Series Multi-Candela Audible Strobe Appliance (AS-MC) is the industry's first 2-wire horn strobe alarm appliance that provides 4 selectable candela settings (15, 30, 75, 110). Siemens Audible Strobe Appliances provide a selectable continuous or code 3 horn tone and non-synchronized strobe when connected directly to a Fire Alarm Control Panel (FACP). They can also provide a synchronized code 3 (or March time) horn tone and synchronized strobe when connected to a notification appliance circuit running the Siemens sync protocol. The AS-MC Appliance is UL Listed under Standard 1971 for Emergency Appliances for the Hearing Impaired and UL Standard 464 for Audible Signal Appliances. The AS-MC is also ULC Listed under Standard CAN/ULC-S526-02 for Visual Signaling Appliances and Standard CAN/ULC-S525-99 for Audible Signaling Appliances. This appliance is listed for **wall mounting and indoor use only** and is equipped with a universal mounting plate (UMP) that can be mounted to single-gang, double-gang, 4" backbox, 100mm European backbox or SHBBS surface backbox (See wiring and mounting information). The AS-MC Appliance uses a xenon flashtube with solid state circuitry enclosed in

a polycarbonate lens to provide maximum visibility and reliability for effective visible signaling.

The AS-MC Appliance can be field set to provide either high (HI) dBA, medium (MED) dBA or low (LO) dBA sound output.

NOTE: The Code 3 temporal pattern (1/2 second on, 1/2 second off, 1/2 second on, 1/2 second off, 1/2 second on, 1-1/2 off and repeat) is specified by ANSI and NFPA 72 for standard emergency evacuation signaling. **The Code 3 Horn should be used only for fire evacuation signaling and not for any other purpose.**

This model is designed for use with either filtered DC (VDC) or unfiltered full-wave-rectified (VRMS) input voltage. All inputs are polarized for compatibility with standard reverse polarity supervision of circuit wiring by an FACP.

NOTE: All Canadian installations should be in accordance with the Canadian Standard for the Installation of Fire Alarm Systems - CAN/ULC-S524-01 and Canadian Electrical Code, Part 1. Final acceptance is subject to authority having jurisdiction (AHJ).

NOTE: Refer to P/N 315-096363 for the maximum number of appliances on a single notification appliance circuit.

SPECIFICATIONS:

Table 1: UL/ULC Ratings				
Model*	Operating Voltage (Special Application) Per UL 1971/464 (VDC/VRMS)	Voltage Range Per CAN/ULC-S526-02/S525-99 (VDC/VRMS)	Strobe Candela (cd)	Mounting Options
AS-MC	16.0-33.0	20.0-31.0	15/30/75/110	A,B,C,D

*Available in red and white.

Table 2: dBA Sound Output							
Description	Volume	Reverberant Per UL 464			Anechoic dBA Per CAN/ULC-S525-99 at 10 Feet		
		16.0VDC	24.0VDC	33.0VDC	20.0VDC	24.0VDC	31.0VDC
Continuous Horn	Low	80	83	86	88	90	91
	Medium	85	88	91	93	95	97
	High	88	91	93	97	99	100
Code 3 Horn (or March Time)**	Low	75	79	82	88	90	91
	Medium	80	84	86	93	95	97
	High	84	87	90	97	99	100

**Available in sync mode only.

Table 2A: ULC Directional Characteristics
-3 dBA: 48 degrees left, 41 degrees right
-6 dBA: 50 degrees left, 58 degrees right

NOTES:

1. Strobe will produce 1 flash per second over the Input Voltage range.
2. This strobe/horn model meets the required light distribution patterns defined in UL 1971 and ULC-S526-02.
3. This model is UL/ULC Listed for indoor use with a temperature range of +32 F to +120 F (0 C to +49 C) and maximum humidity of 93%, ± 2% 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 not subjected to misuse or abuse.

When calculating the total current: Use Table 3 to determine the highest value of "RMS Current" for an individual AS Appliance then multiply the value by the total number of AS Appliances. Be sure to add the currents for any other appliances powered by the same source and include any required safety factors.

THESE APPLIANCES WERE TESTED TO THE VOLTAGE LIMITS OF 16.0-33.0 VOLTS FOR 24V MODELS USING FILTERED DC OR UNFILTERED FULL-WAVE-RECTIFIED VOLTAGE. DO NOT APPLY VOLTAGE OUTSIDE OF THIS RANGE.

Note: Refer to the installation instructions for the appropriate NAC to find the maximum allowed voltage drop. Use this value along with the current draw for the appliance to determine the allowable wire resistance. The maximum wire resistance between strobes shall not exceed 35 ohms. This appliance is not designed to be used on coded systems in which the applied voltage is cycled on and off.

CANDELA SETTING WILL DETERMINE THE CURRENT DRAW OF THE PRODUCT.

Table 3: Current Ratings (AMPS)					
Maximum RMS Current with Hi dBA Setting					
Input Voltage		15cd	30cd	75cd	110cd
DC	16.0-33.0VDC	0.094	0.133	0.212	0.283
FWR	16.0-33.0VRMS	0.134	0.191	0.307	0.405
Maximum RMS Current with Med dBA Setting					
Input Voltage		15cd	30cd	75cd	110cd
DC	16.0-33.0VDC	0.079	0.117	0.202	0.269
FWR	16.0-33.0VRMS	0.119	0.183	0.292	0.397
Maximum RMS Current with Low dBA Setting					
Input Voltage		15cd	30cd	75cd	110cd
DC	6.0-33.0VDC	0.073	0.112	0.193	0.260
FWR	16.0-33.0VRMS	0.112	0.176	0.287	0.393

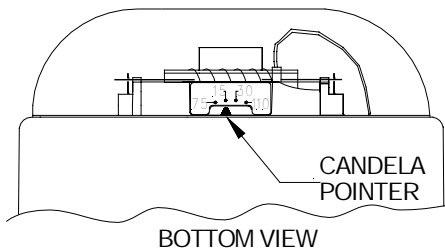
Note: These notification appliances are UL Listed as "Special Application". They are intended to be used only with Siemens notification appliance circuits.

WARNING: MAKE SURE THAT THE TOTAL RMS CURRENT REQUIRED BY ALL APPLIANCES THAT ARE CONNECTED TO THE SYSTEM'S PRIMARY AND SECONDARY POWER SOURCES 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.

CANDELA AND SOUND OUTPUT SETTINGS:

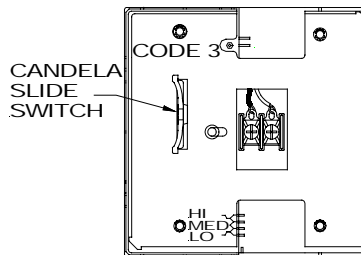
To set the candela, slide the switch to the desired setting. The setting is indicated by the pointer and label visible on the bottom side of the lens.

Figure 1:



Factory setting is on Medium dB, Code 3 (or March Time) and 15 candela.

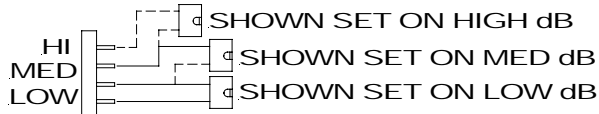
Figure 2: Showing Location of Jumper Plug (Back View)



WARNING: THE CANDELA SELECT SWITCH MUST BE FIELD SET TO THE REQUIRED CANDELA INTENSITY BEFORE INSTALLATION. WHEN CHANGING THE SETTING OF THE CANDELA SELECT SWITCH, MAKE CERTAIN THAT IT "CLICKS" IN PLACE. AFTER CHANGING THE CANDELA SETTING, THE APPLIANCE MUST BE RETESTED TO VERIFY PROPER OPERATION.

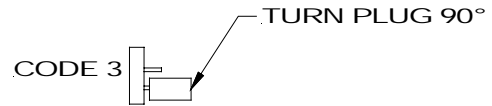
WARNING: THE AUDIBLE STROBE APPLIANCES MUST BE FIELD SET TO THE DESIRED TONE AND dBA SOUND OUTPUT LEVEL BEFORE THEY ARE INSTALLED. THIS IS DONE BY PROPERLY INSERTING JUMPER PLUGS IN ACCORDANCE WITH THESE INSTRUCTIONS.

Figure 3: Jumper plug settings for High, Medium, Low and Code 3 (or March Time)



(Use needle nose pliers to pull and properly set the jumper plugs)

Figure 4: Jumper plug setting for Continuous Horn



No jumper plug is needed for continuous horn setting. However, it is recommended that the jumper plug be retained in the unit for future use (if needed) as shown in Figure 4.

NOTE: The AS-MC must be set for Code 3 (or March Time) when used with a synchronized notification appliance circuit (NAC).

WIRING AND MOUNTING INFORMATION:

CAUTION: The following figures (A-D) 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. 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.

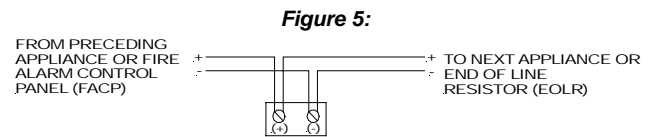
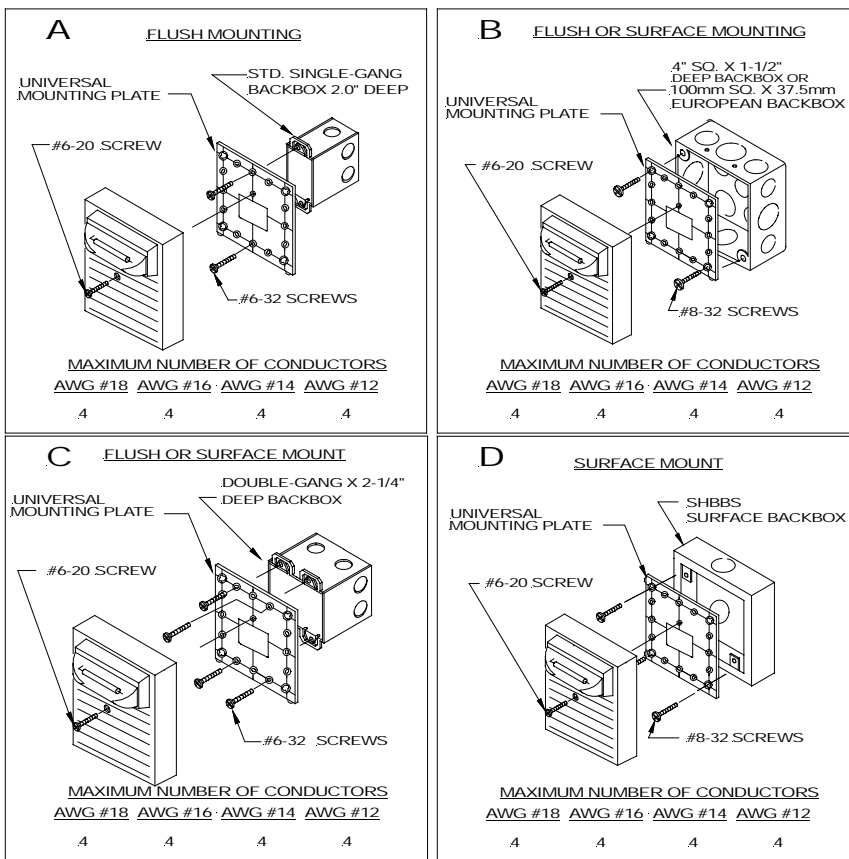
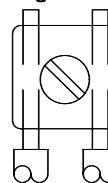


Figure 6:





- AS-MC Appliance has in-out wiring terminals that accepts two #12 to #18 American Wire Gauge (AWG) wires at each screw terminal. Strip leads 3/8" inches for connection to screw terminals.
- Break all in-out wire runs on supervised circuit supervision as shown in Figure 6. The polarity shown in the wiring diagrams is for the operation of the appliances. The polarity is reversed by the FACP during supervision.

MOUNTING PROCEDURES:

- This model can be flush mounted to a standard single-gang backbox (Figure A), 4" backbox (Figure B) or double-gang backbox (Figure C). They can also be surface mounted to a 4" or 100mm backbox (Figure B), a double-gang backbox (Figure C) or a SHBBS surface backbox (Figure D). Mounting hardware for each mounting option is supplied. For proper mounting, be sure to use the mounting screws supplied with the unit.
- The Universal Mounting Plate (UMP) must be oriented correctly when it is mounted to the backbox. Turn the UMP so that the arrow above the words "Horizontal Strobe" points to the top side of the UMP.
- 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.
- When terminating field wires, do not use more lead length than required. Excess lead length could result in insufficient wiring space for the signaling appliance. 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.
- Thread the 4 field wires through the opening of the UMP. Mount the UMP to backbox.
- Connect 4 field wires to the AS-MC terminal block (polarity must be observed). Bend the 4 field wires up 90° at the connection to the terminal block.
- Carefully push the 4 field wires into the backbox through the opening of the UMP by hand.
- Hook the 2 slots on the inside wall of the AS-MC onto the 2 tabs of the UMP and screw the AS-MC to the UMP using the #6-20 screw supplied.

The 110cd strobe setting is Listed for use in sleeping or non-sleeping areas when installed in accordance with appropriate NFPA Standards and AHJ.

 **WARNING: INSTALLATION OF THE 110 CANDELA STROBE PRODUCTS IN SLEEPING AREAS SHOULD BE WALL MOUNTED AT LEAST 24" BELOW THE CEILING AS FOLLOWS: (1) THE ON-AXIS (DIRECTLY IN FRONT OF LENS) LIGHT OUTPUT SHOULD BE DIRECTED AT THE EYE-LIDS OF THE SLEEPING PERSON, E.G. PILLOW END OF BED, BED HEAD; (2) NO PART OF THE BED SHALL BE MORE THAN SIXTEEN (16) FEET FROM THE STROBE NOTIFICATION APPLIANCE. INSTALLERS MUST ADVISE OWNERS AND OPERATORS OF BUILDINGS WITH SLEEPING OCCUPANTS, E.G. HOTELS AND MOTELS, TO WARN GUESTS, RESIDENTS AND EMPLOYEES TO NOT MOVE THE BED LOCATION TO A POSITION VIOLATING POINTS (1) AND (2) ABOVE OR SERIOUS INJURY AND/OR LOSS OF LIFE MAY OCCUR DURING A FIRE MEERGENCY.**

 **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, IT IS STRONGLY RECOMMENDED 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. IT IS STRONGLY RECOMMENDED THAT THE INTENSITY AND COMPOSITE FLASH RATE OF INSTALLED STROBES COMPLY WITH LEVELS ESTABLISHED BY APPLICABLE LAWS, STANDARDS, REGULATIONS, CODES AND GUIDELINES.**

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital appliance, 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.