

**INSTALLATION INSTRUCTIONS  
 SERIES AMT MULTITONE STROBE APPLIANCE**

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

**GENERAL:**

The AMT Multitone Strobe Appliance is UL Listed under Standard 1971 for Emergency Appliances for the Hearing Impaired and UL Standard 464 for Audible Appliances. Model AMT-24MCW is also ULC Listed under Standard CAN/ULC-S526-07 for Visual Signaling and under Standard CAN/ULC-S525-07 for Audible Signal Devices for Fire Alarm Systems. Models with amber, blue, green and red lens are UL Listed under Standard UL1638 (Visual Signaling Appliance) for Private Mode Emergency and General Utility Signaling. The AMT 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. They are listed for **wall mount only**, with the backboxes specified in these instructions (See wiring and mounting information). Models with 1575W strobes are listed at 15 candela under UL Standard 1971 and meet 75 candela intensity on axis with low current draw. The 24MCW model strobe can provide 4 selectable candela settings (15, 30, 75, 110). The AMT Multitone Strobe Appliances use a xenon flashtube with solid state circuitry enclosed in a polycarbonate lens to provide maximum visibility and reliability for effective visible signaling.

Cooper Notification's AMT Appliances are unique multitone alarm signals with separate input terminals for each sound. They are the ideal choice for suppression systems and emergency signaling systems where distinctive multiple alarm conditions are required. Eight groups of three self-prioritized sound outputs are provided with separate electrically isolated input terminals for each sound (see Table 2 and Table 8 for sound selections). Sound output can be field set to provide either HIGH (HI) dBA or STANDARD (STD) dBA sound output level.

All AMT Multitone Strobe models are designed for use with either filtered or unfiltered Full-Wave-Rectified (FWR) input voltage. The AMT Multitone Strobe Appliances have separate input terminals for alarm tone activation and strobe activation. The strobes can be easily field programmed to operate independently or in unison with all of the audible alarms. All inputs are polarized for compatibility with standard reverse polarity supervision of circuit wiring by a fire alarm control panel (FACP).

**NOTE:** All Canadian Installations should be in accordance with the Canadian Standard for the Installation of Fire Alarm Systems - CAN/ULC-S524 and Canadian Electrical Code, Part 1. Final acceptance is subject to Authorities Having Jurisdiction.

**⚠ WARNING: PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE USING THIS PRODUCT. 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.**

**SPECIFICATIONS:**

<b>Table 1: UL/ULC Listed Models</b>							
Model	UL Ratings at 10 Feet				ULC Ratings at 10 Feet		
	Regulated Voltage (VDC/VRMS)	Voltage Range (VDC/VRMS)	Strobe Candela (cd)	Reverberant dBA At 10 Feet	Voltage Range (VDC/VRMS)	Strobe Candela (cd)	Anechoic dBA at 10 Feet
AMT-241575W*	24	16.0-33.0	15	64-94	-	-	-
AMT-24MCW	24	16.0-33.0	15/30/75/110	76-94	16.0-33.0	15/30/75/110	80-99

\* 1575 models are Listed at 15cd and meet 75 on axis.

**NOTE:**

1. Strobes will produce 1 flash per second over the "Regulated Voltage" Range.
2. Strobe with clear lens meet the required light distribution patterns defined in UL 1971 and ULC-S526-07. Strobes with amber lens meet the required light distribution patterns per UL 1971.
3. All models are UL 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 do not adversely affect the performance of the appliances when stored in the original cartons and are not subjected to misuse.
4. Candela ratings in Table 1 are rated for clear lens. Derate approximately 25% for amber, 55% for green, 70% for blue and 80% for red.

<b>Table 2: Ratings for AMT Multitone Audible Signals</b>	
Tone	Tone Description
Horn	Broadband Horn (Continuous)
Bell	1560Hz Modulated (0.07 Sec. ON/Repeat)
March Time Horn	Horn (0.25 Sec. ON/0.25 Sec. OFF/Repeat)
Code 3 Horn*	Horn (ANSI S3.41 Temporal Pattern)
Code 3 Tone*	500Hz (ANSI S3.41 Temporal Pattern)
Slow Whoop	500-1200Hz Sweep (4.0 Sec. ON/0.5 Sec. OFF/Repeat)
Siren	600-1200Hz Sweep (1.0 Sec. ON/Repeat)
HI/LO	1000/800Hz (0.25 Sec. ON/Alternate)
Vibrating Chime	700Hz (1.0 Sec. Decay/Repeat)

\* For ULC applications, only Code 3 Horn and Code 3 Tone are required to meet the ULC minimum of 85 dBA and the audible signal temporal pattern mandated by the National Building Code of Canada.

**⚠ WARNING: FOR UL/ULC APPLICATIONS THESE APPLIANCES WERE TESTED TO THE REGULATED 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.**

**⚠ 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. THE MAXIMUM WIRE IMPEDENCE BETWEEN STROBES SHALL NOT EXCEED 35 OHMS.**

Use Tables 3, 3A, 4, and 4A to determine the highest value of "Rated Current" for an individual AMT strobe (across the expected operating voltage range of the AMT strobe). Add strobe current from Table 3 or 3A to audible appliance current from Table 2 and 2A to obtain total current for each unit, if the strobe and audible are wired to operate in unison on a single circuit. 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.

**NOTE:** The maximum number of strobes on a single notification appliance circuit shall not exceed 50.

<b>Table 3: UL Current Ratings for Horn Only (AMPS)</b>			
Tone	HI/LO Volume	Maximum RMS Current Per UL 464	
		DC	FWR
Horn	HI	0.108	0.092
	STD	0.043	0.050
Bell	HI	0.053	0.040
	STD	0.026	0.028
March Time	HI	0.108	0.092
	STD	0.035	0.050
Code 3 Horn	HI	0.108	0.092
	STD	0.043	0.050
Code 3 Tone	HI	0.060	0.051
	STD	0.030	0.031
Slow Whoop	HI	0.112	0.092
	STD	0.044	0.050
Siren	HI	0.102	0.078
	STD	0.038	0.043
HI/LO	HI	0.064	0.049
	STD	0.030	0.034
Chime	HI	0.041	0.033
	STD	0.020	0.022

<b>Table 3A: Current Ratings for AMT Multitone Audible Appliances</b>					
Tone	Tone Description	Maximum RMS Current (AMPS)			
		16-33VDC		16-33VFWR	
		HI	STD	HI	STD
Horn	Broadband Horn (Continuous)	0.108	0.043	0.092	0.050
Bell	1560 Hz Modulated (0.07 Sec. ON/Repeat)	0.057	0.026	0.040	0.028
March Time Horn	Horn (0.25 Sec. ON/0.25 Sec. OFF/Repeat)	0.108	0.035	0.092	0.050
Code 3 Horn	Horn (ANSI S3.41 Temporal Pattern)	0.108	0.043	0.092	0.050
Code 3 Tone	500 Hz (ANSI S3.41 Temporal Pattern)	0.060	0.030	0.051	0.031
Slow Whoop	500-1200Hz Sweep (4.0 Sec. ON/0.5 Sec. OFF/Repeat)	0.112	0.044	0.092	0.050
Siren	600-1200Hz Sweep (1.0 Sec. ON/Repeat)	0.102	0.038	0.078	0.043
HI/LO	1000/800 Hz (0.25 Sec. ON/Alternate)	0.064	0.030	0.049	0.034
Vibrating Chime	700Hz (1.0 Sec. Decay/Repeat)	0.041	0.020	0.044	0.029

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

<b>Table 4: Current Ratings for 24MCW (Strobe Only)</b>						
Maximum RMS Current (AMPS)						
UL Voltage		ULC Voltage	15cd	30cd	75cd	110cd
DC	16-33VDC	16-33VDC	0.060	0.092	0.165	0.220
FWR	16-33VRMS	16-33VRMS	0.102	0.155	0.253	0.347

<b>Table 4A: UL Current Ratings for 241575W (Strobe Only)</b>		
Maximum RMS Current (AMPS)		
UL Voltage		241575W
DC	16-33VDC	0.090
FWR	16-33VRMS	0.145

**⚠ WARNING: MAKE SURE THAT THE TOTAL RMS CURRENT REQUIRED BY ALL APPLIANCES THAT ARE CONNECTED TO THE SYSTEM'S PRIMARY AND SECONDARY POWER SOURCES, APPLIANCE CIRCUITS, SM, DSM SYNC MODULES AND WHEELOCK POWER SUPPLIES DOES 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.**

Tone	HI/LO Volume	dBA Reverberant Ratings Per UL 464			dBA Anechoic Ratings Per CAN/ULC-S525-07		
		16V	24V	33V	16V	24V	33V
Horn	HI	89	92	94	96	98	99
	STD	82	86	88	90	92	93
Bell	HI	80	84	87	89	91	92
	STD	73	78	81	84	86	87
March Time	HI	84	88	91	96	98	99
	STD	79	82	85	90	92	93
Code 3 Horn	HI	84	88	90	96	98	99
	STD	78	81	84	90	92	93
Code 3 Tone	HI	81	84	87	92	94	95
	STD	75	78	82	87	89	90
Slow Whoop	HI	85	88	90	96	98	99
	STD	79	83	86	91	93	94
Siren	HI	85	89	91	95	97	98
	STD	79	83	85	90	92	93
HI/LO	HI	82	86	88	90	92	93
	STD	77	81	83	85	87	88
Chime	HI	74	78	81	86	88	89
	STD	66	71	74	80	82	87

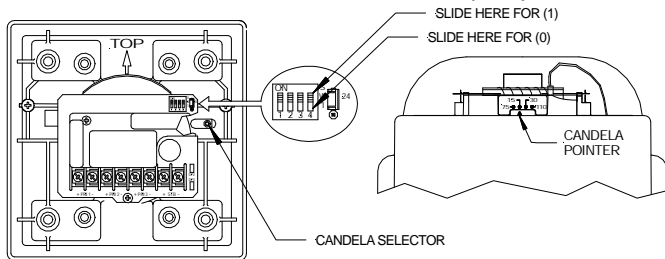
24VDC	Horizontal	-3dBA: 25 degrees left, 30 degrees right
		-6dBA: 45 degrees left, 60 degrees right
	Vertical	-3dBA: 10 degrees upward, 84 degrees downward
		-6dBA: 48 degrees upward, 90+ degrees downward

**⚠ WARNING: THE AMT MULTITONE STROBE APPLIANCE MUST BE FIELD SET TO THE DESIRED dBA SOUND OUTPUT LEVEL AND ALARM TONE BEFORE THEY ARE INSTALLED. THIS IS DONE BY PROPERLY ADJUSTING A FOUR POSITION SWITCH IN ACCORDANCE WITH THESE INSTRUCTIONS. INCORRECT SETTINGS WILL RESULT IN IMPROPER PERFORMANCE AND MAY DAMAGE THE PRODUCT, WHICH COULD RESULT IN PROPERTY DAMAGE AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.**

**AMT MULTITONE SETTINGS:**

The Switch (SW1) of the AMT Multitone Strobe Appliances, shown in Figure 2, is used to set the desired alarm tone and dBA sound output level. The factory settings are shown below. **Read these instructions carefully before changing any of these factory settings.**

**Figure 1: PC Board Layout Showing Location of Candela Selector and Switch (SW1)**



The factory settings for the 24VDC models are:

- HIGH dBA: SW1 POS 1 = 1
- Priority 1 (PRI 1) HORN TONE: } SW1 POS 2, 3, 4 = 1, 1, 1
- Priority 2 (PRI 2) BELL TONE: }
- Priority 3 (PRI 3) SIREN TONE: }

**STEP 1: (AMT-24MCW ONLY)**

Factory setting is on 15 Candela.  
 Move the candela selector to the desired setting.  
 The setting is indicated by the pointer and can be seen on the bottom side of the lens.

**⚠ 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. IMPROPER SETTING OF THE CANDELA**

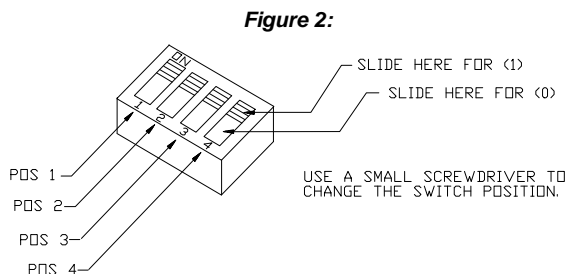
**SELECT SWITCH MAY RESULT IN OPERATION AT THE WRONG CANDELA, WHICH COULD RESULT IN PROPERTY DAMAGE AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.**

**STEP 2:**

Set desired dBA sound output level as follows (Refer to Figure 2):

AMT Multitone Appliances cannot be field set for input voltage. AMT Multitone Strobe Appliances are field set for dBA sound output level by adjusting a four position Switch (SW1) as shown in Table 6 and Figure 2. Use SW1 Position 1 to select the dBA sound output level.

Decibel Level	SW1 Settings
<b>HIGH dBA:</b>	Set SW1 POS 1 on 1 (Factory Setting)
<b>STD dBA:</b>	Set SW1 POS 1 on 0



**⚠ WARNING: DOUBLE CHECK THE SWITCH (SW1) SETTINGS TO MAKE SURE THEY ARE CORRECT. IMPROPER SETTINGS CAN DAMAGE THE UNIT OR RESULT IN NO SOUND OUTPUT OR A dBA SOUND OUTPUT LEVEL THAT IS BELOW THE MINIMUM CODE REQUIREMENTS FOR PUBLIC MODE FIRE PROTECTION. THIS COULD RESULT IN PROPERTY DAMAGE, SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.**

**⚠ CAUTION:** If Multitone Strobe Appliances are operated within 15 inches of a person's ear, they can produce a sound pressure level that exceeds the maximum 120 dBA permitted by ADA and OSHA rules. Exposure to such sound levels can result in damage to a person's hearing.

**STEP 3:**

Set the desired alarm tones as follows (Refer to Figure 2 and Table 7):

AMT Multitone Strobe Appliances are field set for any one of eight groups of self-prioritized tones by setting a four position switch (SW1) as shown in Figure 2 and Table 7. Use SW1 POS 2,3,4 to select the desired alarm tones.

Tones			Switch Settings		
PRI 1	PRI 2	PRI 3	POS 2	POS 3	POS 4
Horn	Bell	Siren	1	1	1
Code 3 Horn	Siren	Vibrating Chime	1	0	1
Slow Whoop	March Time Horn	HI/LO	0	0	1
March Time Horn	HI/LO	Vibrating Chimes	1	1	0
Code 3 Horn	Bell	Siren	0	1	1
Siren	Horn	Vibrating Chime	0	1	0
Bell	March Time Horn	Siren	1	0	0
Code 3 Tone	HI/LO	Siren	0	0	0

**NOTE:** The prioritized tones contained in each group is factory pre-set which can not be changed.

**NOTE:** The Code 3 Horn and Code 3 Tone (set on HIGH dBA) incorporate the temporal pattern specified by ANSI/NFPA for standard emergency evacuation signaling. They should be used only for fire evacuation signaling and not for any other purpose.

The Horn and Bell Tones can be used on coded systems with a minimum On-Time of 1/4 second if the audible and strobe are wired to operate independently. All other tones are recommended for use only on continuous (non-coded) systems.

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

**LIGHT OUTPUT:**

**Table 8A: MCW UL Light Output - Horizontal Plane**

Horizontal Angle (in deg.)	15cd		30cd		75cd		110cd	
	UL Min.	Typ. 15cd	UL Min.	Typ. 30cd	UL Min.	Typ. 75cd	UL Min.	Typ. 110cd
0	15.0	22	30.0	44	75.0	110	110.0	158
5	13.5	22	27.0	42	67.5	114	99.0	162
10	13.5	23	27.0	42	67.5	110	99.0	156
15	13.5	22	27.0	41	67.5	110	99.0	153
20	13.5	21	27.0	40	67.5	108	99.0	153
25	13.5	20	27.0	38	67.5	102	99.0	139
30	11.3	20	22.5	38	56.3	103	82.5	142
35	11.3	18	22.5	36	56.3	97	82.5	135
40	11.3	18	22.5	35	56.3	93	82.5	130
45	11.3	20	22.5	39	56.3	103	82.5	143
50	8.3	19	16.5	37	41.3	93	60.5	133
55	6.8	14	13.5	27	33.8	71	49.5	98
60	6.0	15	12.0	30	30.0	73	44.0	102
65	5.3	15	10.5	28	26.3	71	38.5	97
70	5.3	14	10.5	25	26.3	64	38.5	88
75	4.5	12	9.0	23	22.5	54	33.0	76
80	4.5	10	9.0	17	22.5	47	33.0	64
85	3.8	5	7.5	10	18.8	25	27.5	33
90	3.8	7	7.5	15	18.8	39	27.5	52

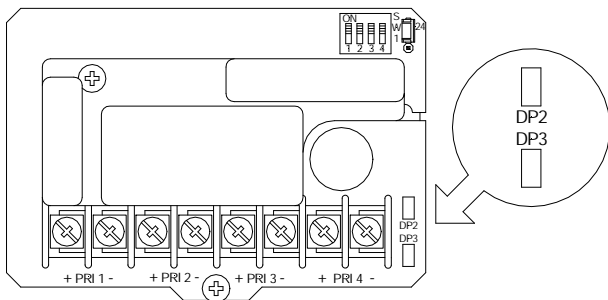
**Table 8B: MCW UL Light Output - Vertical Plane**

Vertical Angle (in deg.)	15cd		30cd		75cd		110cd	
	UL Min.	Typ. 15cd	UL Min.	Typ. 30cd	UL Min.	Typ. 75cd	UL Min.	Typ. 110cd
0	15.0	23	30.0	45	75.0	113	110.0	160
5	13.5	24	27.0	48	67.5	119	99.0	166
10	13.5	21	27.0	39	67.5	101	99.0	143
15	13.5	19	27.0	39	67.5	102	99.0	136
20	13.5	19	27.0	37	67.5	98	99.0	122
25	13.5	18	27.0	35	67.5	88	99.0	122
30	13.5	15	27.0	31	67.5	80	99.0	106
35	9.8	17	19.5	31	48.8	84	71.5	112
40	6.9	13	13.8	24	34.5	62	50.6	86
45	5.1	7	10.2	12	25.5	33	37.4	44
50	4.1	6	8.1	11	20.3	29	29.7	41
55	3.3	6	6.6	11	16.5	28	24.2	38
60	2.7	5	5.4	10	13.5	27	19.8	37
65	2.4	5	4.8	10	12.0	27	17.6	37
70	2.3	6	4.5	10	11.3	27	16.5	37
75	2.0	5	3.9	10	9.8	26	14.3	36
80	1.8	5	3.6	9	9.0	25	13.2	33
85	1.8	5	3.6	9	9.0	24	13.2	33
90	1.8	2	3.6	5	9.0	12	13.2	17

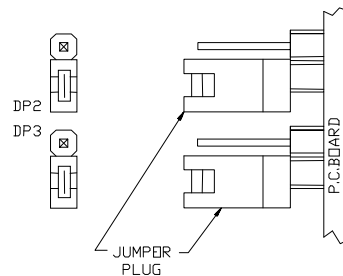
**STROBE SETTINGS:**

The jumper plugs (DP2 and DP3), shown in Figure 3, are used to set for simultaneous actuation of the strobe with all 3 of the audible inputs or for independent actuation of the strobe.

**Figure 3: PCB Layout Showing Location Of Jumper Plugs DP2 & DP3**



**Figure 4: Independent Strobe Actuation Setting**



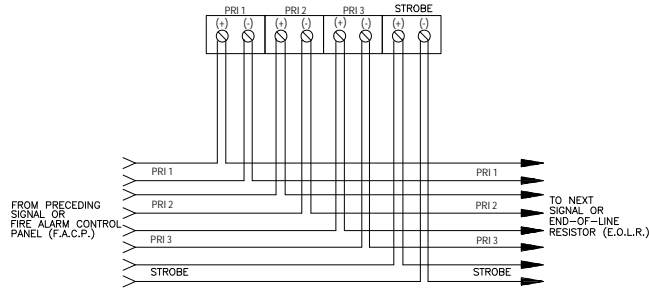
For independent strobe actuation, set the jumper plugs DP2 and DP3 as shown.

The factory setting is for simultaneous actuation of the strobe with all 3 audible inputs.

**NOTE:** The strobe input is required only for independent actuation of the strobe.

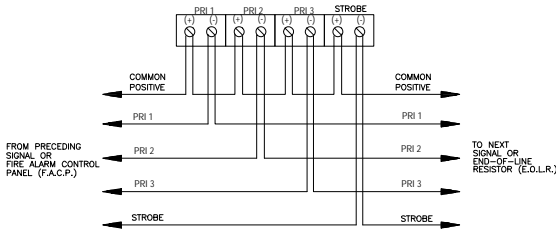
**WIRING DIAGRAMS:**

**Supervised System**



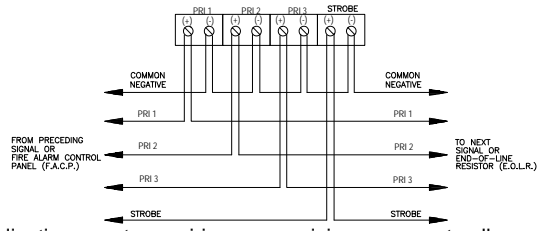
Isolated inputs are provided for independent supervision and actuation of the three audible inputs and strobe.

**Unsupervised System  
Common Positive**



For applications not requiring supervision: Connect all positive (+) terminals to the power source. The negative (-) terminal for each signal will actuate the appliance.

**Unsupervised System  
Common Negative**

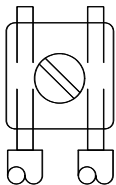


For applications not requiring supervision: connect all negative (-) terminals to the power source. The positive (+) terminal for each signal will actuate the appliance.

In case of simultaneous inputs, the three audible outputs are self-prioritized as follows: 1st priority= PRI 1; 2nd priority = PRI 2; 3rd priority = PRI 3.

Leave any unused inputs disconnected.

**⚠ WARNING: NFPA CODES REQUIRE SIGNALING DEVICES TO BE SUPERVISED. CHECK TO BE CERTAIN THAT UNSUPERVISED SIGNALING DEVICES DO NOT VIOLATE ANY APPLICABLE CODES.**



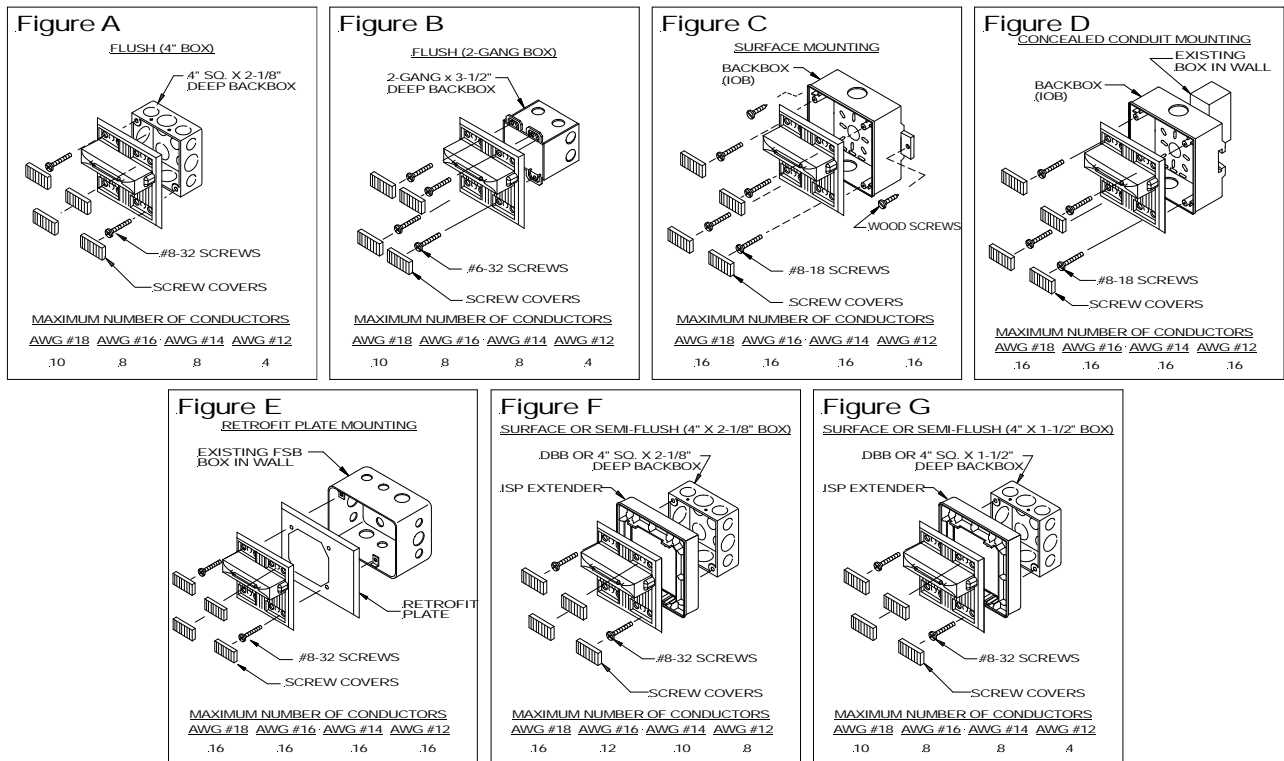
1. AMT Multitone Strobe models have in-out wiring terminals that accept two #12 to #18 American Wire Gauge (AWG) wires at each screw terminal. Strip leads 3/8 inches and connect to screw terminals.
2. Break all in-out wire runs on supervised circuits to assure integrity of circuit supervision as shown on left. The polarity shown in the wiring diagrams is for operation of the appliances. The polarity is reversed by the FACP during supervision.

**NOTE:** Wiring method shall be in accordance with CSA C22.1, Canadian Electrical Code, Part 1, Safety Standard for Electrical Installations, Section 32.

**MOUNTING OPTIONS:**

**⚠ 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 Notification 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.



#### MOUNTING NOTES:

**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. AMT Multitone Strobe models can be flush mounted to a standard 4 inch square by 2-1/8 inch deep electrical box (Figure A) or a standard 2-gang by 3-1/2" inch minimum deep electrical box (Figure B).
2. All models can also be surface mounted to Wheelock's model IOB backbox (Figure C or D) or to a 4" square backbox (model DBB or BB) with Wheelock's model ISP extender (Figure F and G).
3. AMT Multitone Strobe models can also be retrofitted to an existing FSB backbox to replace Wheelock's model 7001 Strobe Horn when used with Wheelock adaptor plate model RP (Figure E).
4. All models are supplied with four snap-in covers to hide the mounting holes and provide an attractive installation. The snap-in covers are interchangeable and have slots on each end so they can be removed if necessary (by prying them up with a thin blade screwdriver). To insert snap-in cover, slide the outside edge of the cover (furthest edge from the strobe lens) partially into the mounting hole recess; then align the cover so it is parallel to the grille (not tilted) and snap cover into place.
5. The IOB surface backbox has 1/2 inch conduit knockouts on two sides. It has a variety of knockouts on the back for mounting it to recessed electrical boxes and for wire entrances (Figure D). It can also be mounted to a surface with the two mounting ears that are supplied. The ears slide into slots on the back of the box (Figure C). Use appropriate anchors for the wood screws that are supplied with the box (if necessary).
6. The IOB includes a prefastened gasket and four hole plugs. Make sure the condensation drain holes on the box face down and that the box is vertical to permit drainage of any moisture. Use the mounting ears to secure the box (do not use the back knockouts). Use the hole plugs to seal the unused mounting holes on the AMT Multitone grille (press them in securely from the back side of the grille). Mount the unit to the IOB with the four #8-18 screws supplied with the box.
7. Mounting hardware for each mounting option is supplied.
8. Conduit entrances to the backbox should be selected to provide sufficient wiring clearance for the installed product. When extension rings are required, conduit should enter through the backbox, not the extension ring. Use Steel City #53151 (1-1/2" deep) or #53171 (2-1/8" deep) extension rings (as noted in the mounting options) or equal with the same cut-out area.
9. When terminating field wires, do not use more lead length than required. Excess lead length could result in insufficient wiring space for the signaling device.
10. 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.
11. Do not pass additional wires (used for other than the signaling device) through the backbox. Such additional wires could result in insufficient wiring space for the signaling device.

**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.

The AMT-24MCW's 110cd setting is Listed for use in sleeping or non-sleeping areas when installed in accordance with appropriate NFPA Standards and the Authority Having Jurisdiction.

**⚠ WARNING:** INSTALLATION OF COOPER NOTIFICATION 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 EMERGENCY.

**⚠ 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 NOTIFICATION 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 NOTIFICATION 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.

**⚠ WARNING:** THE AMT STROBE APPLIANCE IS A "FIRE ALARM DEVICE - DO NOT PAINT."

**⚠ WARNING:** NFPA CODES REQUIRE SIGNALING APPLIANCES TO BE SUPERVISED. CHECK TO BE CERTAIN THAT UNSUPERVISED SIGNALING APPLIANCES DO NOT VIOLATE ANY APPLICABLE CODES.

**NOTE:** NFPA 72/ANSI 117.1 Conform to ADDAAG Equivalent Facilitation Guidelines in using fewer, higher intensity strobes within the same protected area.

These appliances can produce a distinctive three pulse Temporal Pattern Fire Alarm Evacuation Signal (For total evacuation in accordance with NFPA 72).

**⚠ 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 immunity from electrical noise (e.g. audio crosstalk).

**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.

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