4603-9101 REMOTE ANNUNCIATOR

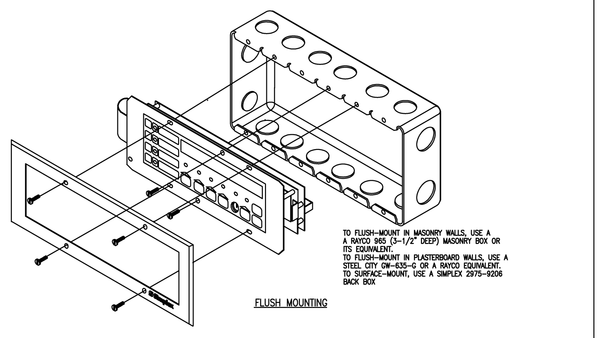
PRODUCT INFORMATION

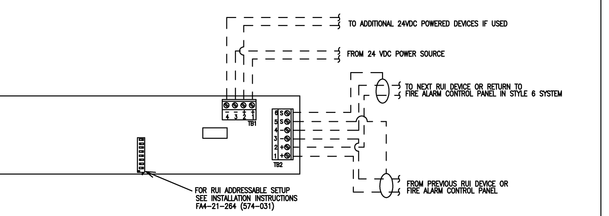
FEATURES:
- UL LISTED
- FM APPROVED
- FLUSH MOUNT ON STANDARD ELECTRICAL BOXES

SPECIFICATIONS:
- VOLTAGE: 24VDC NOMINAL
- CURRENT: ALARM 170mA
  SUPERVISORY 30mA
- OPERATING TEMPERATURE: 32° F TO 120° F
- HUMIDITY RANGE: 10% TO 90% RH FROM 32° F TO 104° F
- STANDARD TRIM: BEIGE (SUPPLIED WITH BOTH SLOTTED AND TAMPERPROOF SCREWS)

OPTIONS
- BRUSHED ALUMINUM TRIM: 4603-9111
- SURFACE BOX: 2975-9206
- DIMENSIONS 11 3/32"L X 4 5/8" W X 2 3/4"D
- FINISH: LIGHT BROWN ENAMEL

NOTES:
1. ALL WIRING TO BE No. 18 AWG OR TO LOCAL CODE.
2. ALL WIRING SUPERVISED
3. WIRE TO BE 18 AWG TWISTED SHIELDED PAIR RECOMMENDED CONSULT SFM SALES ENGINEERING FOR EXCEPTIONS. 2500 FT (ONE WAY MAX COMMUNICATION LINE POWER TO 24 VDC 1200 OR 9600 BAUD
4. WHEN WIRING LEAVES THE BUILDING, OVER VOLTAGE PROTECTORS ARE REQUIRED. SEE 2081-9044 WHERE IT ENTERS THE BUILDING. SEE 2081-9044 WHERE IT ENTERS THE NEXT BUILDING. TBO 2081-9044 (MAY)





4098-9792 STANDARD SENSOR BASE

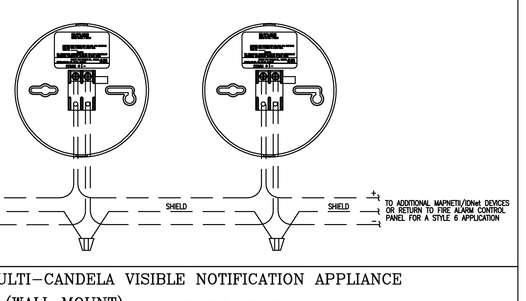
PRODUCT INFORMATION

FEATURES:
- UL LISTED, FM APPROVED
- TRUEALARM ANALOG SENSORS PROVIDES DIGITAL TRANSMISSION OF ANALOG VALUES FOR ENHANCED ALGORITHMS, OR EIGHT TWO WIRE COMMUNICATIONS
- FIRE ALARM CONTROL PANEL PROVIDES:
  - PROVISIONAL SENSITIVITY SELECTION FOR EACH SENSOR
  - PEAK VALUE LOGGING ALLOWING ACCURATE ANALYSIS FOR SENSITIVITY SELECTION
  - AUTOMATIC COMPENSATION FOR DRIFT
  - DISPLAY OF SENSITIVITY IN PERCENT PER FOOT
  - MULTISENSE ALARM OPERATION
  - ABILITY TO DISPLAY AND PRINT DETAILED SENSOR INFORMATION IN PLAIN ENGLISH LANGUAGE
- PHOTOELECTRIC SMOKE SENSOR 4098-9714; SEVEN LEVELS OF SENSITIVITY FROM 0.2% TO 3.7%
- IONIZATION SMOKE SENSOR 4098-9713; SEVEN LEVELS OF SENSITIVITY FROM 0.2% TO 1.7%
- HEAT SENSOR 4098-9733:
  - "SET-OF-RISE" TEMPERATURE DETECTION IS SELECTABLE AT THE CONTROL PANEL FOR EITHER 15°F OR 20°F PER MINUTE
  - "FIXED" TEMPERATURE SENSING IS INDEPENDENT OF RATE-OF-RISE AND PROGRAMMABLE TO OPERATE AT 135°F OR 155°F
  - THE HEAT SENSORS CAN BE PROGRAMMED AS A STYLE Z DEVICE TO MONITOR TEMPERATURE CHANGES IN THE RANGE FROM 32° F TO 120° F.
- UL STANDARD SPACING
  - 50 FT SPACING FOR 120° F
  - 40 FT SPACING FOR 155° F
- INTEGRAL RED LED FOR POWER-ON (PULSING), OR ALARM OR TROUBLE (STEADY ON)
- BASE MOUNTED ADDRESS SELECTION:
  - ADDRESS SETTING BY DIP SWITCH UNDER SENSOR)
  - ADDRESS SETTING BY KEYPAD COMMAND LOCATION
- FOR USE WITH SIMPLEX 4010, 4100, 4020, AND 4120 SERIES CONTROL PANELS.
- MAXIMUM QUANTITY OF DEVICES:
  - 127 FOR 4020, 4100, 4120
  - 250 FOR 4010, 4100H
- MOUNTING CEILING OR WALL
- BASE COLOR: WHITE
- BASE DIMENSIONS: 15/16" X 4-7/8"

SPECIFICATIONS:
- UL LISTED TEMPERATURE RANGE: 32°F TO 120°F
- UL LISTED TEMPERATURE RANGE 32°F TO 120°F
- HUMIDITY RANGE: 10% TO 93% RH
- PHOTOELECTRIC SENSOR AIR VELOCITY RANGE: 0-2000 FT/MIN
- IONIZATION SENSOR AIR VELOCITY RANGE: 0-300 FT/MIN
- WIRING CONNECTIONS: SCREW TERMINALS FOR IN/OUT WIRING, #18 TO #14 AWG
- COMMUNICATIONS: MAPNET/IDNet: 1 ADDRESS PER BASE.
  VOLTAGE (MAPNET/IDNet): 24-40VDC
  CURRENT: 400uA TYPICAL

DESCRIPTION:
TRUEALARM SENSOR BASES CONTAIN INTEGRAL ADDRESSABLE ELECTRONICS THAT CONSTANTLY MONITOR THE STATUS OF THE DETACHABLE PHOTOELECTRIC, IONIZATION, OR HEAT SENSORS. EACH SENSOR'S OUTPUT IS DIGITIZED AND TRANSMITTED TO THE SYSTEM FIRE ALARM CONTROL PANEL EVERY FOUR SECONDS. SINCE TRUEALARM SENSORS USE THE SAME BASE, DIFFERENT SENSOR TYPES CAN BE MIXED ON THE SAME CIRCUIT TO MATCH THE HAZARD PECULIAR TO EACH AREA. THIS FEATURE ALLOWS INTENTIONAL SENSOR SUBSTITUTION DURING BUILDING CONSTRUCTION. WHEN CONDITIONS ARE TEMPORARILY DUSTY, INSTEAD OF COVERING THE SMOKE SENSORS. HEAT SENSORS MAY BE INSTALLED WITHOUT REPROGRAMMING THE CONTROL PANEL. ALTHOUGH THE CONTROL PANEL WILL INDICATE AN INCORRECT SENSOR TYPE, THE HEAT SENSOR WILL OPERATE AS A DEFAULT SENSITIVITY PROVIDING HEAT DETECTION FOR BUILDING PROTECTION AT THAT LOCATION.

WIRING:
1. ALL WIRING TO COMPLY WITH LOCAL CODE.
2. CONDUCTORS MUST TEST FREE OF ALL GROUNDS.
3. MAINTAIN CORRECT POLARITY.
4. MAPNET/IDNet WIRING TO BE #18 AWG TWISTED SHIELDED PAIR.
5. IF SHIELD IS USED, TWIST SHIELD WIRES TOGETHER AND CAP WITH WIRE NUT. SHIELD SHOULD BE INSULATED FROM ELECTRICAL BOX.
6. REFER TO INSTALLATION INSTRUCTIONS 574-707
7. REFER TO APPLICATION MANUAL (574-708)



TrueAlert™ NON-ADDRESSABLE MULTI-CANDELA VISIBLE NOTIFICATION APPLIANCE (WALL MOUNT)

PRODUCT INFORMATION

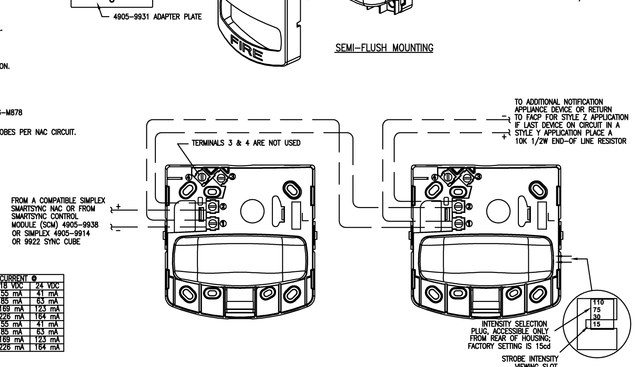
FEATURES:
- UL LISTED TO STANDARD 1971
- ADA COMPATIBLE

SYNCHRONIZATION FLASH RATE MODE FOR USE WITH:
- SEPARATE STROBE SYNCHRONIZATION MODULES THAT ARE AVAILABLE FOR CLASS B OR CLASS A OPERATION
- SEPARATE SMARTSYNC CONTROL MODULES (SCMs) THAT PROVIDE CLASS B OR CLASS A OUTPUT FROM CONVENTIONAL NAC INPUTS

SPECIFICATIONS:
- HOUSING DIMENSIONS: 5-1/8" H X 5" W X 2-3/4" D (130mm X 127mm X 70mm)
- TEMPERATURE RANGE: 32°F TO 120°F (0 TO 32°C)
- HUMIDITY RANGE: 10% TO 93% NON-CONDENSING AT 100°F (38°C)
- TERMINAL BLOCKS FOR USING TO 12AWG TWO WIRES PER TERMINAL FOR IN/OUT WIRING.

WIRING:
1. NOTIFICATION APPLIANCES ARE RATED PER INDIVIDUAL NAMEPLATE LABEL.
2. MARK/N CORRECT POLARITY ON TERMINAL CONNECTIONS. DO NOT LOOP WIRES UNDER TERMINALS.
3. ALL NAC WIRING CONNECTIONS ARE SUPERVISED AND POWER-LIMITED.
4. SEE INSTALLATION INSTRUCTIONS (574-546) FOR ADDITIONAL INFORMATION.

STROBE:
- RATED VOLTAGE RANGE: UL LISTED: 16 VDC TO 33 VDC PER UL 1971
  ULC LISTED: 20 VDC TO 30 VDC PER ULC S526-M878
- FLASH RATE: 1Hz
- SYNCHRONIZED MODE NAC LOADING: MAXIMUM OF 35 SYNCHRONIZED STROBES PER NAC CIRCUIT.



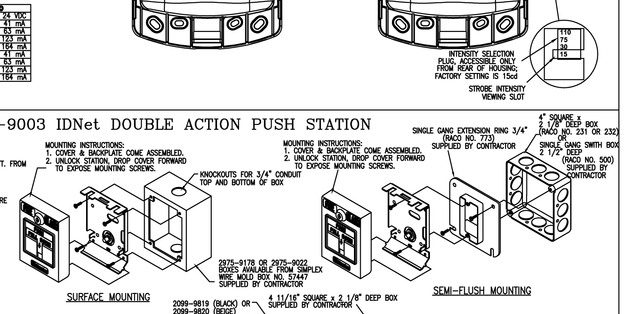
*CURRENT DRAWS REFLECT STROBE FLASHING

MODEL NUMBER	HOUSING COLOR	LETTERING COLOR	STROBE RATING	SYNC CURRENT @ 16 VDC	SYNC CURRENT @ 24 VDC
4906-9101	RED	WHITE	15CD	89 mA	55 mA	41 mA
			30CD	94 mA	60 mA	63 mA
			75CD	159 mA	109 mA	103 mA
			110CD	205 mA	150 mA	133 mA
4906-9100	WHITE	RED	15CD	89 mA	55 mA	41 mA
			30CD	94 mA	60 mA	63 mA
			75CD	159 mA	109 mA	103 mA
			110CD	205 mA	226 mA	184 mA

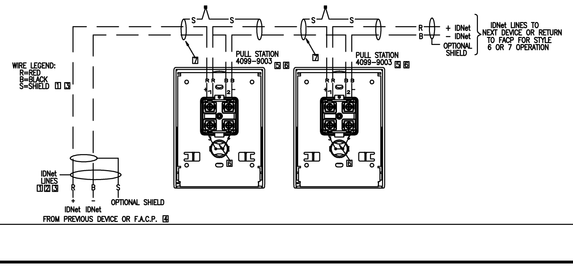
4099-9003 IDNet DOUBLE ACTION PUSH STATION

PRODUCT INFORMATION

SPECIFICATIONS:
- POWER & COMMUNICATIONS: IDNet/MAPNET, 1 ADDRESS PER STATION, UP TO 2500 FT. FROM FIRE ALARM CONTROL PANEL, UP TO 10,000 FT. TOTAL WIRING DISTANCE (INCLUDING T-TAPS)
- ADDRESS MEANS: DIP SWITCH, 8 POSITION
- WIRE CONNECTIONS: SCREW TERMINAL FOR IN/OUT WIRING, FOR #18 TO #14 AWG WIRE
- UL LISTED TEMP. RANGE: 32° F TO 120° F (0° C TO 49° C) INTENDED FOR INDOOR OPERATION
- HUMIDITY RANGE: UP TO 93% RH AT 100° F (38° F)
- HOUSING COLOR: RED WITH WHITE RAISED LETTERING
- MATERIAL: HOUSING AND PULL LEVER ARE LEXAN POLYCARBONATE
- PULL LEVER COLOR: WHITE WITH RED RAISED LETTERING
- HOUSING DIMENSIONS: 5" H X 3-3/4" W X 1" D



WIRE NOTES:
1. IDNet LINES ARE TO BE #18 AWG TWISTED PAIR (CONSULT YOUR SIMPLEX BRANCH FOR EXCEPTIONS) SHIELD RECOMMENDED.
2. MAXIMUM ALLOWABLE LINE RUN, FROM F.A.C.P. TO FARTHEST DEVICE, NOT TO EXCEED 2500 FEET.
3. MAXIMUM TOTAL WIRE (INCLUDING ALL T-TAPS) ON CIRCUIT FROM F.A.C.P. NOT TO EXCEED 10,000 FEET.
4. MAXIMUM QUANTITY OF DEVICES PER CIRCUIT: 250.
5. SEE INSTALLATION INSTRUCTIONS 574-332.
6. TERMINALS 1 AND 2 FOR FIELD WIRING. TERMINALS 3 AND 4 ARE FACTORY WIRING.
7. IF SHIELD IS PRESENT, IT SHOULD BE CONNECTED TO THE OUTGOING IDNet SHIELD TO PROVIDE A CONTINUOUS SHIELD OVER THE LENGTH OF THE CIRCUIT. SHIELD SHOULD BE INSULATED FROM ELECTRICAL BOX.



4098-9756 ADDRESSABLE 4-WIRE DUCT SENSOR MAPNET II/IDNet WITH 24VDC RELAY

PRODUCT INFORMATION

FEATURES:
- COMPACT AIR DUCT SENSOR HOUSING WITH CLEAR COVER
- TWO LED'S PROVIDE LOCAL ALARM AND TROUBLE INDICATION
- INCLUDES TRUEALARM ANALOG PHOTOELECTRIC SMOKE DETECTOR AND FEATURES:
  - PROVISIONAL SENSITIVITY INFORMATION PROGRAMMED BY THE HOST FIRE ALARM CONTROL PANEL
  - DIGITAL TRANSMISSION OF ANALOG SENSOR VALUES VIA MAPNET II OR FOUR WIRE IDNet COMMUNICATIONS
  - PROGRAMMABLE ALGORITHMS FOR DRIFT COMPENSATION, MULTISENSE ALARM OPERATION, AND MONITORING OF SENSOR DIRT ACCUMULATION

MODEL 4098-9756 SENSOR HOUSING WITH CLEAR COVER, BUILT-IN RELAY, AND TWO LED'S PROVIDE LOCAL ALARM AND TROUBLE INDICATION (CONNECTS TO MODEL 2098-9808 OR TO A SEPARATE ALARM INPUT)

GENERAL FEATURES:
- UL LISTED TO STANDARD 268A
- EASY ACCESS FOR CLEANING AND INSPECTION
- DUST COVER PROVIDES PROTECTION DURING BUILDING CONSTRUCTION
- MOUNTS TO RECTANGULAR DUCTS OR ROUND DUCTS (WITH MOUNTING ADAPTER, SOLD SEPARATELY)
- MAGNETIC TEST FEATURE FOR ALARM INITIATION AT HOUSING
- TWO SETS OF ALARM CONTACTS (ONE SET IS SPDT, SEPARATELY WIRED TO 2098-9808 MODULE)

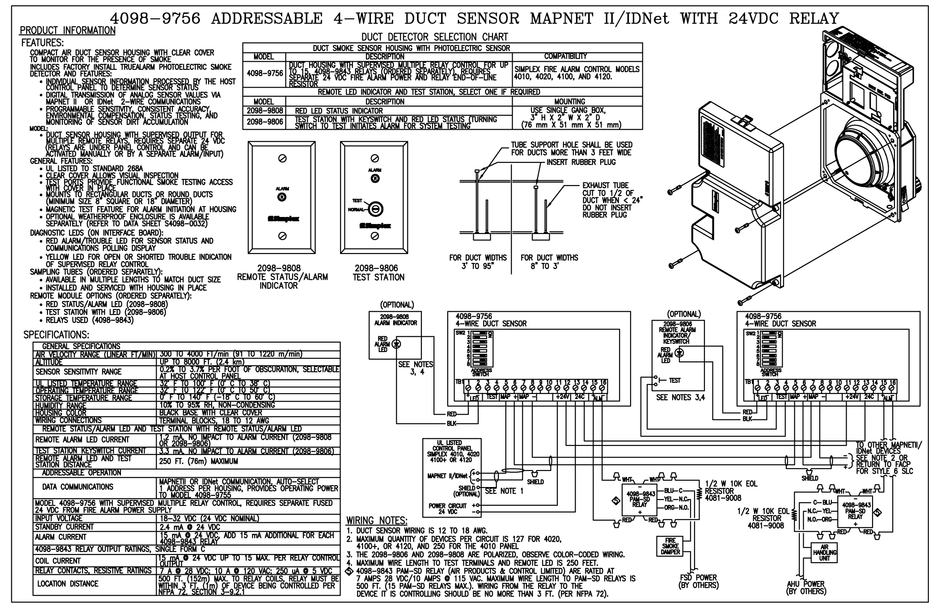
DIAGNOSTIC LEDS (ON INTERFACE BOARD):
- RED ALARM/AMBER LED FOR SENSOR STATUS AND COMMUNICATIONS POLLING DISPLAY
- YELLOW LED FOR OPEN OR SHORTED TROUBLE INDICATION
- GREEN LED FOR POWER ON INDICATION

SAMPLING TUBES (ORDERED SEPARATELY)
- AVAILABLE IN MULTIPLE LENGTHS TO MATCH DUCT SIZE
- INSTALLED AND SERVICED WITH HOUSING IN PLACE

REMOTE MODULE OPTIONS (ORDERED SEPARATELY):
- RED STATUS/ALARM LED (2098-9808)
- KEY-OPERATED TEST/RESET (2098-9806)
- RELAYS USED (4098-9943)

SPECIFICATIONS:

GENERAL SPECIFICATIONS	
AIR VELOCITY RANGE (LISTED) (TRUEALARM SAID TO 4000 FT/MIN (91 TO 1220 M/Min))	
DUCT SIZE	12" W X 36"H (305 X 914 MM)
SENSOR SENSITIVITY RANGE	0.2% TO 3.7% PER FOOT OF OBSCURATION, SELECTABLE
UL SENSOR TEMPERATURE RANGE	32°F TO 120°F (0°C TO 49°C)
UL HOUSING TEMPERATURE RANGE	32°F TO 100°F (0°C TO 38°C)
HUMIDITY RANGE	10% TO 93% NON-CONDENSING
ENCLOSURE RATING	NEMA 1 (IP30) FOR INDOOR USE
WIRING CONNECTIONS	SCREW TERMINALS #14 AWG MAXIMUM
REMOTE STATUS/ALARM LED AND TEST STATION WITH REMOTE STATUS/ALARM LED	
REMOTE ALARM LED CURRENT	4 mA (2098-9808 IS CURRENT TO ALARM CURRENT (2098-9808 AT 20K OHMS)
TEST STATION INTERNOCH CURRENT	4 mA (2098-9808 IS CURRENT TO ALARM CURRENT (2098-9808)
TEST STATION RESET AND TEST STATION DISTANCE	250 FT. (76m) MAXIMUM
ADDRESSABLE OPERATION	
DATA COMMUNICATIONS	MAPNET II OR IDNet COMMUNICATIONS, MULTI-WIRE MODE, OR FOUR WIRE IDNet. PROVIDES OPERATING POWER
MODEL 4098-9756 WITH SUPERVISED MULTIPLE RELAY CONTROL, REQUIRES SEPARATE FUSED 24 VDC FROM FIRE ALARM POWER SUPPLY	
24 VDC POWER	24 VDC NOMINAL
STANDBY CURRENT	1.4 mA @ 24 VDC
ALARM CURRENT	19 mA @ 24 VDC ADD 15 mA ADDITIONAL FOR EACH 4098-9943 RELAY OUTPUT ENERGIZED
4098-9943 RELAY OUTPUT RATINGS	SPDT, 10 AMP
COIL CURRENT	91mA
RELAY CONTACTS, RESISTIVE RATING	10 AMPS @ 30VDC, 10 A @ 120 VAC, 20A @ 8 VDC
LOCATION DISTANCE	4 WIRE MAPNET II OR IDNet DEVICES CONTROLLED PER NFPA 72, SECTION 2-6.1



WIRING NOTES:
1. DUCT SENSOR WIRING IS 12 TO 18 AWG.
2. MAXIMUM WIRE RUN FROM POWER SUPPLY TO LAST DEVICE IS 177 FOR 4020, 4100, 4120, AND 200 FOR THE 4010 PANEL.
3. THE 2098-9808 AND 2098-9806 ARE POLARIZED, OBSERVE COLOR-CODED WIRING.
4. MAXIMUM WIRE LENGTH TO TEST TERMINALS AND REMOTE LED IS 250 FEET.
5. 4098-9943 FAIL-SAFE RELAY (ARI PRODUCTS & CONTROL LIMITED) ARE RATED AT 10 AMPS. USE #12 AWG WIRE FOR MAXIMUM WIRE LENGTH TO 4098-9943 RELAYS IS 100 FT. USE #14 AWG WIRE FOR MAXIMUM WIRE LENGTH TO 4098-9943 RELAYS IS 150 FT. THE DEVICE IT IS CONTROLLING SHOULD BE NO MORE THAN 3 FT. (PER NFPA 72).

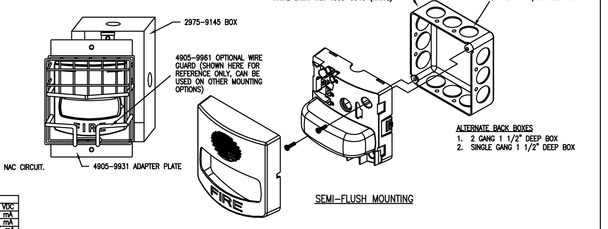
TrueAlert™ NON-ADDRESSABLE MULTI-CANDELA AUDIO/VISIBLE NOTIFICATION APPLIANCE (ELECTRONIC HORN W/STROBE)

PRODUCT INFORMATION

FEATURES:
- CLASS B (STYLE Y) OPERATION REQUIRES CONNECTION TO A COMPATIBLE SMARTSYNC NAC OR TO SMARTSYNC CONTROL MODULE (SCM) 4905-9938
- CLASS A (STYLE Z) OPERATION WHEN CONNECTED TO THE 4905-9938 SCM OR 41000 SERIES FIRE ALARM CONTROL PANEL NAC'S

SPECIFICATIONS:
- HOUSING DIMENSIONS (INCLUDING LENS) : 5 1/8"H X 5" W X 2 3/4"D
- TEMPERATURE RANGE: 0° F TO 120° F (0° TO 49° C)
- HUMIDITY RANGE: 10% TO 93% NON-CONDENSING AT 100° F (38° C)
- TERMINAL BLOCKS FOR 18 AWG TO 12 AWG TWO WIRES PER TERMINAL FOR IN/OUT WIRING.

STROBE
- RATED VOLTAGE RANGE: UL: REGULATED 24VDC PER UL 1971
  ULC: 20VDC TO 32VDC PER ULC S526-M878
- FLASH RATE: 1Hz
- SYNCHRONIZED MODE NAC LOADING: MAXIMUM OF 35 SYNCHRONIZED STROBES PER NAC CIRCUIT.



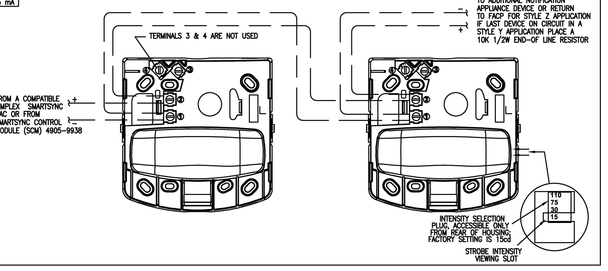
*CURRENT DRAWS REFLECT STROBE FLASHING AND HORN ON.

MODEL NUMBER	HOUSING COLOR	LETTERING COLOR	STROBE RATING	SYNC CURRENT @ 16 VDC	SYNC CURRENT @ 24 VDC
4906-9117	RED	WHITE	15CD	89 mA	55 mA	41 mA
			30CD	94 mA	60 mA	63 mA
			75CD	159 mA	109 mA	103 mA
			110CD	205 mA	150 mA	133 mA
4906-9120	WHITE	RED	15CD	89 mA	55 mA	41 mA
			30CD	94 mA	60 mA	63 mA
			75CD	159 mA	109 mA	103 mA
			110CD	205 mA	226 mA	184 mA

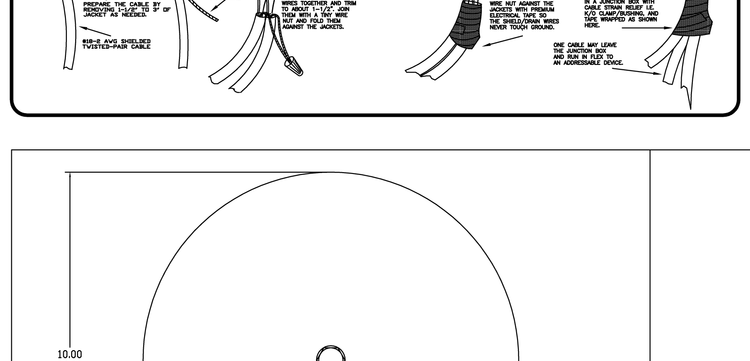
HORN
- SOUND OUTPUT CHARACTERISTICS: 2400 TO 3700 Hz SWEEP, MODULATED AT 120 Hz RATE

HORN SOUND OUTPUT RATINGS @ 10 FT. (3m)				
VOLTAGE	16 VDC		24 VDC	33 VDC
SOUND TYPE *	STEADY	CODED	STEADY	CODED	STEADY	CODED
REVERBERANT CHAMBER UL 464 TEST	82 dBA	82 dBA	85 dBA	84 dBA	90 dBA	89 dBA
ANECHOIC CHAMBER	82 dBA	91 dBA	94 dBA	95 dBA	96 dBA	96 dBA

* CODED VALUES ARE TYPICAL OF THE OUTPUT MEASURED WITH A TEMPORAL CODED ON A WHISPER TONE CODES PLATE AND WITH A SOUND LEVEL METER READING ON A "FAST" SETTING. UNDER THE SAME TEST CONDITIONS, CODED HORN OUTPUT "PEAK" SOUND LEVEL READINGS ARE TYPICALLY 4 dBA HIGHER.

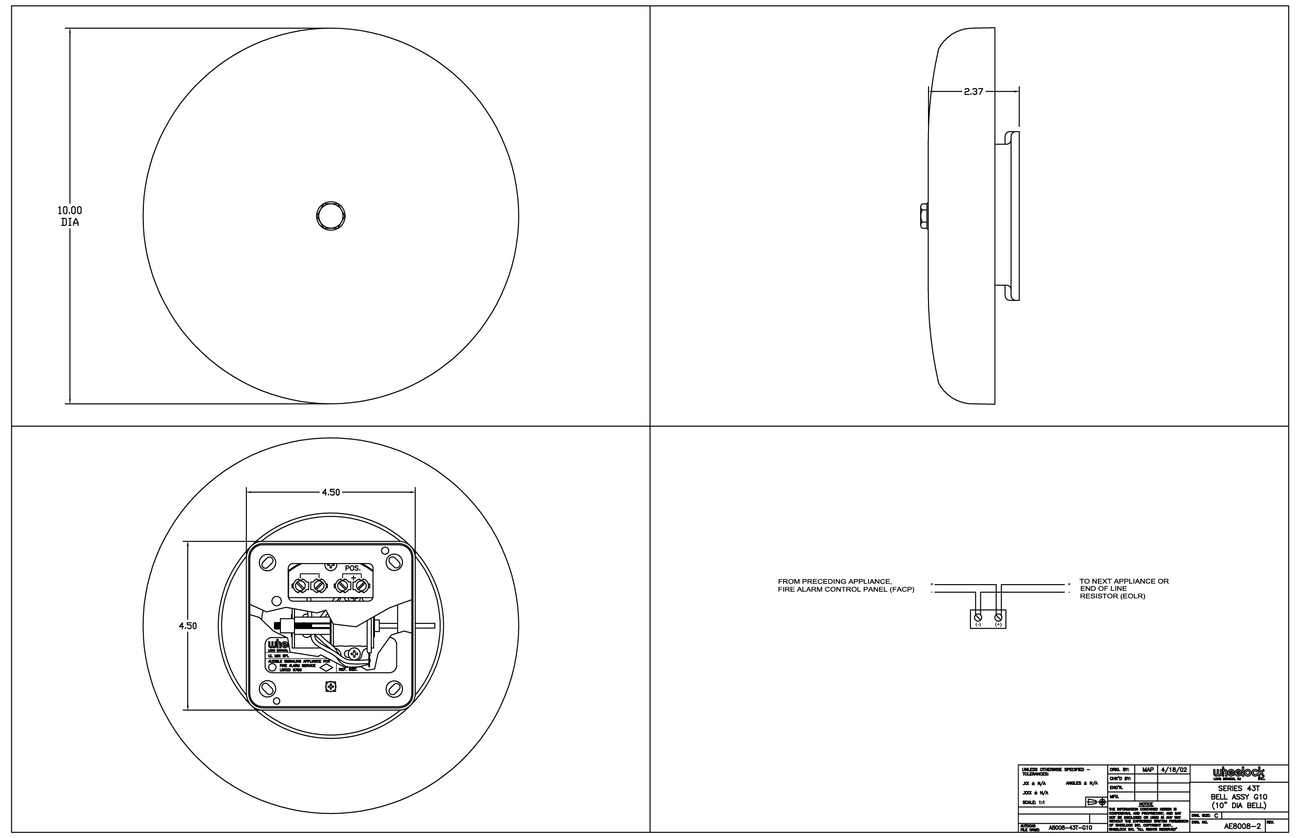


WIRING TECHNIQUES FOR SHIELDED CABLE



RESISTOR LEGEND

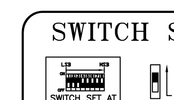
VALUE	COLOR CODE
100KΩ	BROWN BLACK YELLOW
47K Ω	YELLOW VIOLET ORANGE
10K Ω	BROWN BLACK ORANGE
6.8KΩ	BLUE GRAY RED
5.0KΩ	GREEN BLACK RED
4.9KΩ	YELLOW WHITE RED
4.7KΩ	YELLOW VIOLET RED
3.3KΩ	ORANGE ORANGE RED
2.2KΩ	RED RED RED
1.8KΩ	BROWN GRAY RED



UNLESS OTHERWISE SPECIFIED: DIM. IN INCHES ANGLES ± N/A .XX ± N/A .XXX ± N/A ROUND TO	MFG. APP.	DATE 4/16/03	Wheelock 273 Branch Avenue South Plainview, NY 11803
	ENGR.		SERIES AST BELL ASSY G10 (10" DIA BELL)
	QUAL.		
	MATL.		
DO NOT SCALE DRAWING. ALL DIMENSIONS ARE IN INCHES. TOLERANCES ARE ± UNLESS OTHERWISE SPECIFIED.			SIZE DWG. NO. REV. C AE8008-2
MATERIAL: N/A FINISH: N/A			

IDNET ADDRESS CHART

SWITCH SETTINGS



DIP SWITCHES 5 THRU 8 / DIP SWITCHES 1 THRU 4

RESERVED FOR FUTURE USE	0000	1000	0100	1100	0010	1010	0110	1110	0001	1001	0101	1101	0011	1011	0111	1111
0000	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224	240
1000	1	17	33	49	65	81	97	113	129	145	161	177	193	209	225	241
0100	2	18	34	50	66	82	98	114	130	146	162	178	194	210	226	242
1100	3	19	35	51	67	83	99	115	131	147	163	179	195	211	227	243
0010	4	20	36	52	68	84	100	116	132	148	164	180	196	212	228	244
1010	5	21	37	53	69	85	101	117	133	149	165	181	197	213	229	245
0110	6	22	38	54	70	86	102	118	134	150	166	182	198	214	230	246
1110	7	23	39	55	71	87	103	119	135	151	167	183	199	215	231	247
0001	8	24	40	56	72	88	104	120	136	152	168	184	200	216	232	248
1001	9	25	41	57	73	89	105	121	137	153	169	185	201	217	233	249
0101	10	26	42	58	74	90	106	122	138	154	170	186	202	218	234	250
1101	11	27	43	59	75	91	107	123	139	155	171	187	203	219	235	251
0011	12	28	44	60	76	92	108	124	140	156	172	188	204	220	236	252
1011	13	29	45	61	77	93	109	125	141	157	173	189	205	221	237	253
0111	14	30	46	62	78	94	110	126	142	158	174	190	206	222	238	254
1111	15	31	47	63	79	95	111	127