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Thank you for using our products.

**INSTALLATION INSTRUCTIONS
 SERIES NS TWO WIRE APPLIANCES
 (WALL MOUNT VERSIONS)**

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

GENERAL:

Wheelock’s Series NS Horn Strobe Appliances require only 2-wires for operation of the horn and strobe appliance and provide a selectable continuous or Code 3 Horn tone and continuous strobe when connected directly to the Fire Alarm Control Panel (FACP). They can also provide a synchronized Code 3 horn tone and synchronized strobe when used in conjunction with a Sync Module (SM), Dual Sync Module (DSM) or Power Supply (PS-12/24-8). They are the ideal choice for applications where the audible silence feature is required. The NS Appliances are UL Listed under Standard 1971 for Signaling Devices for the Hearing Impaired and UL Standard 464 for Audible Signal Appliances. They are listed for **indoor use only** and equipped with a NS Mounting Plate (NSMP) that can be mounted to single-gang, double-gang, 4” backbox, 100mm European backbox or SHBB surface backbox (See Mounting Options). These strobe models are Listed for **wall mounting only**. The NS Appliances use a Xenon flashtube with solid state circuitry enclosed in a rugged Lexan® lens to provide maximum visibility and reliability for effective visible signaling.

Series NS Appliances can be field set for High (HI) or Low (LO) dBA sound output.

These strobe models are designed for use with either filtered DC (VDC) or unfiltered Full-Wave-Rectified (FWR) input voltage. All inputs are polarized for compatibility with standard reverse polarity supervision of circuit wiring by a FACP.

NOTE: All **CAUTIONS** and **WARNINGS** are identified by the symbol . All warnings are printed in bold capital letters

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:

<i>Table 1: UL Ratings</i>			
Models	Regulated Voltage (VDC/VRMS)	Voltage Range (VDC/VRMS)	Strobe Candela (cd)
NS-2415W	24	16.0-33.0	15
NS-2430W	24	16.0-33.0	30
NS-2475W	24	16.0-33.0	75
NS-24110W	24	16.0-33.0	110
NS-1215W	12	8.0-17.5	15

WARNING: THESE APPLIANCES WERE TESTED TO THE OPERATING VOLTAGE LIMITS OF 16-33 VOLTS FOR 24V MODELS AND 8-17.5 VOLTS FOR 12V MODELS USING FILTERED (DC) OR UNFILTERED FULL-WAVE-RECTIFIED (FWR). DO NOT APPLY 80% AND 110% OF THESE VOLTAGE VALUES FOR SYSTEM OPERATION.

NOTE: THE MAXIMUM WIRE IMPEDENCE BETWEEN STROBES SHALL NOT EXCEED 35 OHMS. THE MAXIMUM NUMBER OF STROBES ON A SINGLE NAC CIRCUIT SHALL NOT EXCEED 47.

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⚠ 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.

⚠ 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. INCORRECT SETTINGS WILL RESULT IN IMPROPER PERFORMANCE, WHICH COULD RESULT IN PROPERTY DAMAGE AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.

Table 2: dBA Sound Output for 24VDC

Description	Volume	Reverberant Per UL 464			Anechoic dBA		
		16.0VDC	24.0VDC	33.0VDC	16.0VDC	24.0VDC	33.0VDC
Continuous Horn	Low	77	81	83	86	90	92
	High	83	87	90	92	95	97
Code 3 Horn	Low	72*	76	79	86	90	92
	High	79	82	86	92	95	97

Table 2A: dBA Sound Output for 12VDC

Description	Volume	Reverberant Per UL 464			Anechoic dBA		
		8.0VDC	12VDC	17.5VDC	8.0VDC	12.0VDC	17.5VDC
Continuous Horn	Low	72*	76	80	82	84	86
	High	78	83	86	87	89	91
Code 3 Horn	Low	67*	72*	74*	82	84	86
	High	75	79	82	87	89	91

⚠ WARNING: OPERATING THE 24 VOLT NS AUDIBLE APPLIANCES, SET ON “CODE 3 HORN” WITH LOW dBA AT MINIMUM VOLTAGE DOES NOT MEET THE 75dBA MINIMUM UL REVERBERANT SOUND LEVEL REQUIRED FOR PUBLIC MODE FIRE PROTECTION SERVICE (NOTED BY * IN TABLE 2). OPERATING THE 12 VOLT NS AUDIBLE APPLIANCES, SET ON “CODE 3 HORN” WITH LOW dBA OR CONTINUOUS HORN WITH LOW dBA AT MINIMUM VOLTAGE (8VDC/VRMS) DOES NOT MEET 75dBA MINIMUM UL REVERBERANT SOUND LEVEL REQUIRED FOR PUBLIC MODE FIRE PROTECTION SERVICE (NOTED BY * IN TABLE 2A). THESE SETTINGS ARE ACCEPTABLE ONLY FOR GENERAL SIGNALING (NON-FIRE ALARM) USE. USE THE “HIGH” dBA SETTING WITH “CODE 3 HORN” FOR PUBLIC MODE SERVICE.

NOTES:

1. Strobes will produce 1 flash per second over the "Regulated Voltage" range.
2. Anechoic dBA is measured on axis in a non-reflective (free field) test room using fast meter response. For peak dBA (measured with peak meter response), add 5dBA to anechoic values as shown in Table 2. Reverberant dBA is a minimum UL rating based on sound pressure measurements in a reverberant test room.
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 85% RH.

Table 3: Current Ratings (AMPS) with Hi dBA Setting								
Rated Average Current *								
Voltage	NS-2415W		NS-2430W		NS-2475W		NS-24110W	
	MEAN	RMS	MEAN	RMS	MEAN	RMS	MEAN	RMS
16.0VDC	0.102	0.102	0.140	0.140	0.230	0.235	0.340	0.358
24.0VDC	0.076	0.081	0.102	0.115	0.163	0.195	0.216	0.276
33.0VDC	0.073	0.076	0.093	0.110	0.136	0.176	0.169	0.259
16.0VRMS	-----	0.132	-----	0.175	-----	0.290	-----	0.420
24.0VRMS	-----	0.118	-----	0.156	-----	0.254	-----	0.340
33.0VRMS	-----	0.125	-----	0.147	-----	0.230	-----	0.319
Voltage	NS-1215W		-----		-----		-----	
	MEAN	RMS	-----	-----	-----	-----	-----	-----
8.0VDC	0.237	0.317	-----	-----	-----	-----	-----	-----
12.0VDC	0.138	0.236	-----	-----	-----	-----	-----	-----
17.5VDC	0.101	0.168	-----	-----	-----	-----	-----	-----
8.0VRMS	-----	0.284	-----	-----	-----	-----	-----	-----
12.0VRMS	-----	0.229	-----	-----	-----	-----	-----	-----
17.5VRMS	-----	0.194	-----	-----	-----	-----	-----	-----
Rated Peak Current **								
Voltage	NS-2415W		NS-2430W		NS-2475W		NS-24110W	
16.0VDC	0.181		0.265		0.482		0.675	
24.0VDC	0.183		0.270		0.485		0.680	
33.0VDC	0.188		0.275		0.489		0.685	
16.0VRMS	0.183		0.270		0.485		0.680	
24.0VRMS	0.188		0.275		0.489		0.685	
33.0VRMS	0.430		0.480		0.520		0.690	
Voltage	NS-1215W		-----		-----		-----	
8.0VDC	0.460		-----		-----		-----	
12.0VDC	0.465		-----		-----		-----	
17.5VDC	0.470		-----		-----		-----	
8.0VRMS	0.465		-----		-----		-----	
12.0VRMS	0.470		-----		-----		-----	
17.5VRMS	0.475		-----		-----		-----	
Rated Inrush Current ***								
Voltage	NS-2415W		NS-2430W		NS-2475W		NS-24110W	
16.0VDC	0.110		0.110		0.110		0.110	
24.0VDC	0.165		0.165		0.165		0.165	
33.0VDC	0.230		0.230		0.230		0.230	
16.0VRMS	0.155		0.155		0.155		0.155	
24.0VRMS	0.235		0.235		0.235		0.235	
33.0VRMS	0.325		0.325		0.325		0.325	
Voltage	NS-1215W		-----		-----		-----	
8.0VDC	0.075		-----		-----		-----	
12.0VDC	0.103		-----		-----		-----	
17.5VDC	0.149		-----		-----		-----	
8.0VRMS	0.100		-----		-----		-----	
12.0VRMS	0.139		-----		-----		-----	
17.5VRMS	0.189		-----		-----		-----	

* Rated average current is measured using mean value.
** The time duration for the peak current is 100 microseconds.
*** The time duration for the inrush current is 4 milliseconds.

Table 3A: Rated Average Current (AMPS) with Low dBA Setting								
Rated Average Current (Low) *								
Voltage	NS-2415W		NS-2430W		NS-2475W		NS-24110W	
	MEAN	RMS	MEAN	RMS	MEAN	RMS	MEAN	RMS
16.0VDC	0.098	0.098	0.136	0.136	0.226	0.226	0.336	0.345
24.0VDC	0.072	0.072	0.095	0.097	0.156	0.176	0.209	0.282
33.0VDC	0.069	0.070	0.086	0.086	0.129	0.149	0.162	0.239
16.0VRMS	-----	0.126	-----	0.169	-----	0.284	-----	0.414
24.0VRMS	-----	0.110	-----	0.148	-----	0.246	-----	0.332
33.0VRMS	-----	0.113	-----	0.135	-----	0.218	-----	0.307
Voltage	NS-1215W		-----	-----	-----	-----	-----	-----
	MEAN	RMS	-----	-----	-----	-----	-----	-----
8.0VDC	0.233	0.304	-----	-----	-----	-----	-----	-----
12.0VDC	0.132	0.224	-----	-----	-----	-----	-----	-----
17.5VDC	0.097	0.166	-----	-----	-----	-----	-----	-----
8.0VRMS	-----	0.280	-----	-----	-----	-----	-----	-----
12.0VRMS	-----	0.225	-----	-----	-----	-----	-----	-----
17.5VRMS	-----	0.190	-----	-----	-----	-----	-----	-----

* Rated average current is measured using mean value.

⚠ WARNING: MAKE SURE THAT THE TOTAL AVERAGE CURRENT, TOTAL PEAK CURRENT AND TOTAL INRUSH CURRENT REQUIRED BY ALL APPLIANCES THAT ARE CONNECTED TO THE SYSTEM'S PRIMARY AND SECONDARY POWER SOURCES, NAC CIRCUITS, SM, DSM SYNC MODULES OR PS-12/24-8 POWER SUPPLY 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 average, peak or inrush currents: Use Table 3 and 3A to determine the highest value of "Rated Average Current" for an individual strobe (across the expected operating voltage range of the strobe), and use Table 3 to determine the highest value of "Rated Inrush Current" or "Rated Peak Current" (whichever is higher) of an individual strobe (across the expected voltage range of the strobe), then multiply these values 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.

If the inrush current or peak current exceeds the power supplies' inrush capacity, the output voltage provided by the power supplies may drop below the listed voltage range of the appliances connected to the supply and the voltage may not recover in some types of power supplies. For example, an auxiliary power supply that lacks filtering at its output stage (either via lack of capacitance and/or lack of battery backup across the output) may exhibit this characteristic.

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

LIGHT DISTRIBUTION PER UL 1971:

<i>Table 4: Horizontal Plane</i>								
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	24	30.0	46	75.0	103	110.0	149
5	13.5	24	27.0	46	67.5	103	99.0	152
10	13.5	24	27.0	45	67.5	104	99.0	151
15	13.5	24	27.0	46	67.5	100	99.0	151
20	13.5	23	27.0	43	67.5	101	99.0	148
25	13.5	23	27.0	43	67.5	98	99.0	140
30	11.3	21	22.5	41	56.3	94	82.5	135
35	11.3	20	22.5	40	56.3	89	82.5	129
40	11.3	14	22.5	39	56.3	83	82.5	124
45	11.3	18	22.5	41	56.3	81	82.5	133
50	8.3	18	16.5	36	41.3	77	60.5	121
55	6.8	12	13.5	27	33.8	60	49.5	85
60	6.0	11	12.0	30	30.0	59	44.0	95
65	5.3	13	10.5	35	26.3	71	38.5	113
70	5.3	17	10.5	29	26.3	73	38.5	81
75	4.5	13	9.0	22	22.5	53	33.0	72
80	4.5	8	9.0	17	22.5	35	33.0	50
85	3.8	7	7.5	15	18.8	30	27.5	38
90	3.8	6	7.5	15	18.8	30	27.5	43

<i>Table 4A: Vertical Plane</i>								
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	24	30.0	46	75.0	103	110.0	149
5	13.5	24	27.0	46	67.5	103	99.0	149
10	13.5	24	27.0	46	67.5	103	99.0	137
15	13.5	24	27.0	45	67.5	102	99.0	120
20	13.5	24	27.0	41	67.5	104	99.0	110
25	13.5	21	27.0	48	67.5	89	99.0	129
30	13.5	23	27.0	40	67.5	96	99.0	114
35	9.8	22	19.5	45	48.8	91	71.5	119
40	6.9	13	13.8	39	34.3	57	50.6	109
45	5.1	9	10.2	24	25.5	36	37.4	66
50	4.0	9	8.1	16	20.0	33	29.7	45
55	3.3	8	6.6	15	16.3	31	24.2	43
60	2.7	8	5.4	15	13.5	31	19.8	40
65	2.4	8	4.8	14	12.0	31	17.6	40
70	2.3	8	4.5	15	11.3	31	16.5	39
75	2.0	8	4.0	14	10.0	31	14.3	39
80	1.8	8	3.6	13	9.0	27	13.2	36
85	1.8	7	3.6	13	9.0	27	13.2	37
90	1.8	3	3.6	9	9.0	12	13.2	28

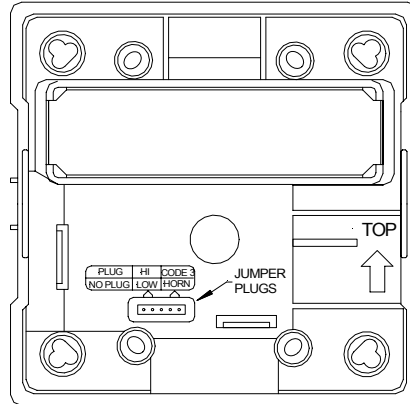
⚠ WARNING: WHEN INSTALLING STROBES IN AN OPEN OFFICE OR OTHER AREAS CONTAINING PARTITIONS OR OTHER VIEWING OBSTRUCTIONS, SPECIAL ATTENTION SHOULD BE GIVEN TO THE LOCATION OF THE STROBES SO THAT THEIR OPERATING EFFECT CAN BE SEEN BY ALL INTENDED VIEWERS, WITH THE INTENSITY, NUMBER, AND TYPE OF STROBES 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: THE NS 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. INCORRECT SETTINGS WILL RESULT IN IMPROPER PERFORMANCE, WHICH COULD RESULT IN PROPERTY DAMAGE AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.

SOUND OUTPUT (SPL) SETTINGS:

NOTE: The Code 3 Horn incorporates the 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) specified by ANSI/NFPA for standard emergency evacuation signaling. **The Code 3 Horn should be used only for fire evacuation signaling and not for any other purpose.**

Figure 1: Showing Location of Jumper Plug



Factory setting is on High dB and Code 3.

Figure 2: Jumper plug settings for High dB and Code 3.

Figure 3: Jumper plug settings for Low dB and Continuous Horn.

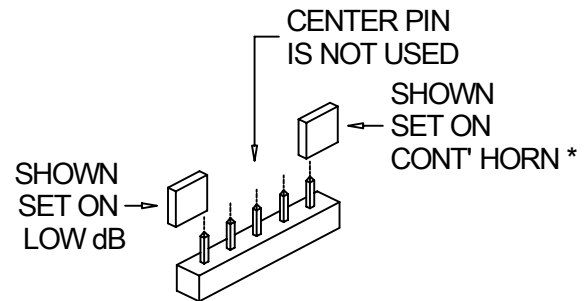
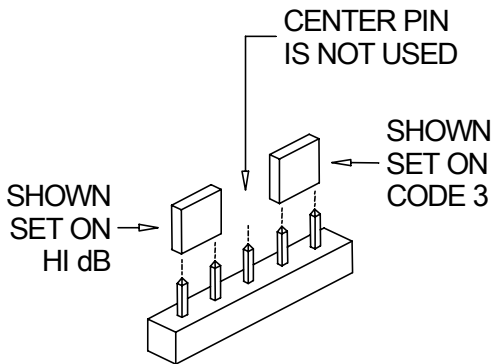
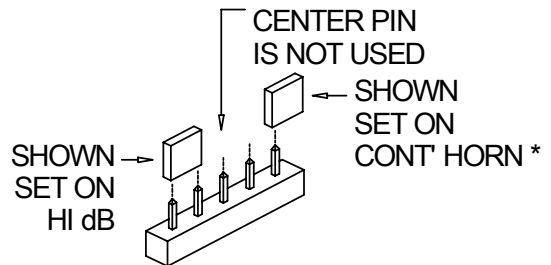
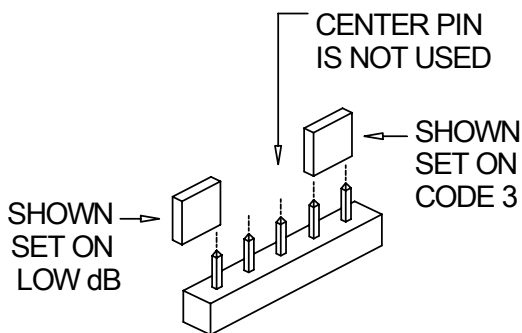


Figure 4: Jumper plug settings for Low dB and Code 3.

Figure 5: Jumper plug settings for High dB and Continuous Horn.



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

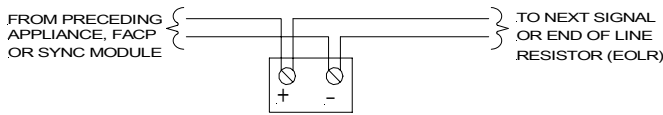
No jumper plugs are needed for Continuous Horn and low dB settings. However, it is recommended that the jumper plug be retained in the unit for future use (if needed) as shown in Figure 3, 4 and 5.

NOTE: The NS must be set for code 3 when used with the sync module.

* Continuous horn operation without sync module.

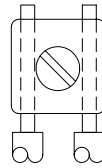
WIRING INFORMATION:

Figure 6.



When the sync module is used, the audible tone will be the **code 3 sound only**. Refer to Sync Module installation instruction sheets SM (P83123), DSM (P83177) or PS-12/24-8 (P83862) for additional information.

Figure 7.

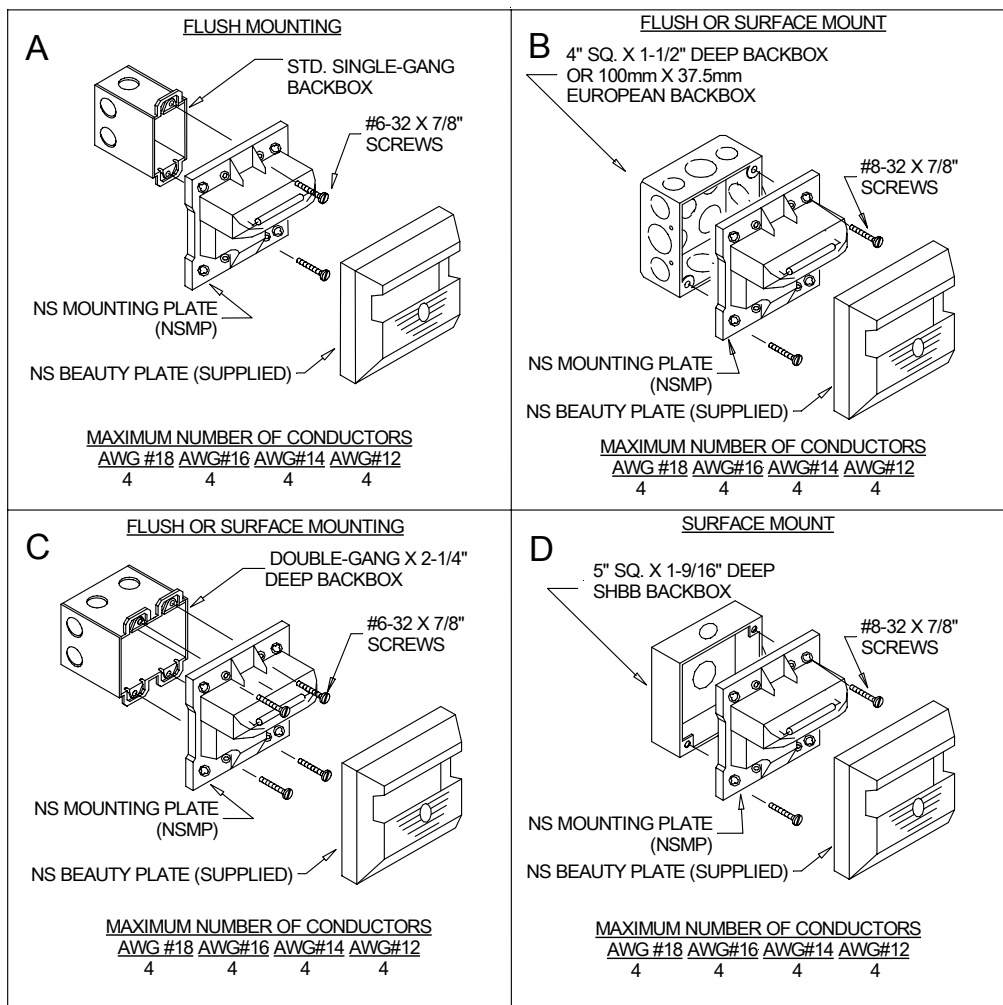


- 1) NS Appliances have in-out wiring terminals that accepts two #12 to 18 American Wire Gauge (AWG) wires at each screw terminal. Strip leads 3/8" inches for connection to screw terminals.
- 2) Break all in-out wire runs on supervised circuit supervision as shown in Figure 7. The polarity shown in the wiring diagrams is for the operation of the appliances. The polarity is reversed by the FACP during supervision.

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), 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.



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. NS models have an integrated NS Mounting Plate (NSMP).
2. The NS Mounting Plate (NSMP) must be oriented correctly when it is mounted to the backbox. Turn the NSMP so that the arrow below the word "Top" points to the top side of the NSMP.
3. NS models can be flush mounted to a standard single-gang backbox (Figure A), 4" or 100mm backbox (Figure B) or double-gang backbox (Figure C). NS models can also be surface mounted to a 4" or 100mm backbox (Figure B), double-gang backbox (Figure C) or the SHBB (Figure D).
4. Mount the NSMP first to the backbox. Next slide the Beauty Plate over the NSMP until the 2 side snaps of the NS Beauty Plate engage with the NSMP.
5. The NS Beauty Plate can be removed from the strobe assembly once engaged. First, gently insert a screwdriver into one of the slots located on the side edges of the NS 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 NSMP.
6. Mounting hardware for each mounting option is supplied.
7. Conduit entrances to the backbox should be selected to provide sufficient wiring clearance for the installed product.
8. 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.
9. 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.
10. 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.

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

NS-24110W strobe models are 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 WHEELLOCK 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, WHEELLOCK 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. WHEELLOCK 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.

NOTE: NFPA 72/ANSI 117.1 conform to ADAAG 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, 1999 Edition.

⚠ 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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IMPORTANT: READ SEPARATE "GENERAL INFORMATION" SHEET FOR INFORMATION ON THE PLACEMENT, LIMITATIONS, INSTALLATION, FINAL CHECKOUT, AND PERIODIC TESTING OF NOTIFICATION APPLIANCES.

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