

Horn/Strobe LP7 Instruction Manual

Part numbers:

42002

42003

42004

42005

42010

42011



INSTALLATION AND SERVICE INSTRUCTIONS FOR LP7 HORN/ STROBE



SAFETY MESSAGE TO INSTALLERS

It is important to read, understand, and follow all instructions shipped with this product. Selection of mounting location for this device, its controls and routing of wiring should be made by the Facilities Engineer and the Safety Engineer. Listed below are other important safety instructions and precautions you should follow.

- This unit must be installed and maintained by a qualified electrician in accordance with National and local Electrical Codes, under the direction of the authority having jurisdiction.
- Do not connect this unit to system wiring when circuits are energized.
- For optimum sound distribution do not install this device where objects would block the front of the sounder.
- All effective warning horns produce loud sounds which, in certain circumstances, may cause permanent hearing loss. Take appropriate precautions such as wearing hearing protection. Recommendations in OSHA Sound Level Standard (29 CFR 1910) should not be exceeded.
- After installation, be sure that all threaded joints are securely tightened.
- After installation and completion of initial systems test, a program for periodic testing of this device must be established.
- After installation and completion of initial system test, provide a copy of this instruction booklet to all personnel responsible for the operation, periodic testing, and maintenance of this equipment.

I. GENERAL

The PureAire Horn/Strobe provides an audible and visual signal when activated remotely. The sounder is a polarized device rated at 18–28 Vdc. The Horn/Strobe can provide 32 different tones with an adjustable volume located on the inside of the unit. For a list of tones, see Table 1.

Electrical Details:

Termination:	Screw terminals for 24 AWG to 14 AWG conductors.
Voltage Range:	18 Vdc to 28 Vdc
Starting Current:	1.1 A for 1 ms
Running Current:	68 mA average
Monitoring:	Polarizing diode

Mechanical Details:

Diameter:	3.66 in (93 mm)
Overall Depth:	Shallow Base: 3.6 in (91 mm) Deep Base: 4.72 in (120 mm)
IP Rating:	IP54 (Shallow Base), IP65 (Deep Base)
Temp. range:	–10 °C to +55 °C (14 °F to +131 °F)
Material:	ABS plastic body with polycarbonate lens

II. INSTALLATION

A. Unpacking

After unpacking the horn/strobe, examine it for damage that may have occurred in transit. If equipment has been damaged, do not attempt to install or operate it. File a claim immediately with the carrier stating the extent of the damage. Carefully check all envelopes, shipping labels and tags before removing or destroying them.

B. Mounting Arrangements

To access mounting holes and electrical connections turn over the Horn/Strobe so the Strobe lens is facing down. Twist the base counter-clockwise to remove.

The base of the Horn/Strobe provides six (6) slotted recesses for mounting, and one 15/32 inch cable access hole.

C. Electrical Connections

DANGER



To avoid electrical shock, do not attempt to connect wires when power is on.

A terminal block is supplied on the Horn/Strobe for field wiring. Strip 1/2 inch of insulation from the wiring leads. Attach the appropriate wires to the corresponding terminals. Tighten the screws to insure that the wires are firmly held in place. The terminals will accept conductor sizes 24 AWG to 14 AWG.

III. TESTING/OPERATING



WARNING

Under certain conditions these devices are capable of producing sound loud enough to cause hearing damage. Adequate hearing protection should be worn if standing within close proximity to the device while testing. Recommendations in OSHA Sound Level Standard (29CFR 1910) should not be exceeded.

After completion of installation be sure to test the system to verify that each sounder unit operates satisfactory.

After completion of initial system test, a program for periodic testing of this device should be established.

Provide a copy of these instructions for the Safety Engineer(s), System Operators(s) and Maintenance personnel.

SAFETY MESSAGE TO OPERATORS

Although your warning system is operating properly it may not be completely effective. People may not hear or heed your warning signal. You must recognize this fact and ensure that your warning signal achieves its intended effect through proper test/training sequences suitable for your specific application(s).

IV. MAINTENANCE

SAFETY MESSAGES TO MAINTENANCE PERSONNEL

Failure to follow all the safety precautions and instructions may result in property damage, serious injury, or death to you or others.

- Read and understand all instructions before performing maintenance on this unit.
- Do not perform maintenance on this unit when the circuit is energized.
- Periodic checks should be made to ensure that effectiveness of this device has not been reduced because objects have been placed in front of the unit.
- Any maintenance to this unit **MUST** be performed by a trained electrician in accordance with NEC guidelines and local codes.
- Never alter this unit in any manner. Safety may be jeopardized if alterations are made to this device.
- The nameplates, which contain cautionary or other information of importance to maintenance personnel, should not be obscured if the exterior of the horn is painted.



WARNING

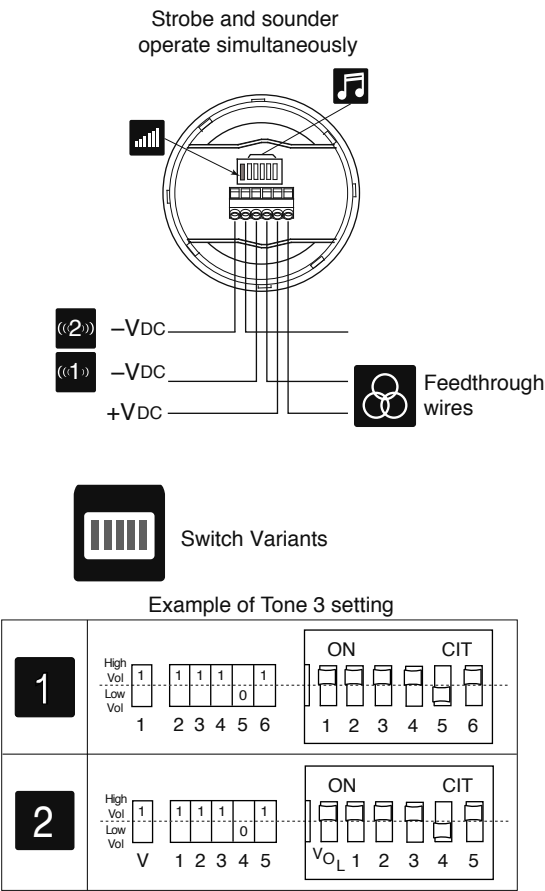
Unauthorized servicing of this unit may result in diminished performance and/or property damage, serious injury, or death to you or others. If a malfunctioning unit is encountered, do not attempt any field repair or retrofit of parts. Refer to paragraph V. SERVICE for instructions regarding return/repair of the unit.

V. SERVICE

The factory will provide technical assistance with any problem that cannot be handled locally with satisfaction. Please contact PureAire Monitoring Systems for assistance.


Toll-Free: 888-788-8050 | pureairemonitoring.com

Figure 1 Wiring options and example of switch settings



290A7060B

Table 1 Siren tones

	«1»	«2»			Main Application	24 V at 20 °C	
						mA	dB(A)
1	14	11111	Alternating	Frequency Hz 800 and 970	Rate 2 Hz (250 ms-250 ms)	68	100
2	14	11110	Sweep	800 to 970	7 Hz (7/s)	68	101
3	14	11101	Sweep	800 to 970	1 Hz (1/s)	68	101
4	14	11100	Continuous	2850	Steady	82	110
5	4	11011	Sweep	2400 to 2850	7 Hz	80	110
6	4	11010	Sweep	2400 to 2850	1 Hz	80	110
7	14	11001	Slow whoop	500 to 1200	3 s sweep, 0.5 s silence, then repeat	70	98
8	14	11000	Sweep (DIN)	1200 to 500	1 Hz	66	98
9	4	10111	Alternating	2400 and 2850	2 Hz (250 ms-250 ms)	80	109
10	14	10110	Intermittent	970	0.5 Hz (1 s On/1 s Off)	62	100
11	14	10101	Alternating	800 and 970	1 Hz (500 ms-500 ms)	68	100
12	4	10100	Intermittent	2850	0.5 Hz (1 s On/1 s Off)	74	109
13	14	10011	Intermittent	970	0.8 Hz (250 ms On/1 s Off)	58	96
14	14	10010	Continuous	970	Steady	70	101
15	14	10001	Alternating	554 and 440	100 ms-400 ms	62	93
16	16	10000	Intermittent	660	3.3 Hz (150 ms On/150 ms Off)	59	86
17	17	01111	Intermittent	660	0.28 Hz (1.8 s On/1.8 s Off)	62	88
18	18	01110	Intermittent	660	0.05 Hz (13 s Off / 6.5 Hz On)	64	88
19	19	01101	Continuous	660	Steady	64	89
20	20	01100	Alternating	554 and 440	0.5 Hz (1 s On/1 s Off)	63	96
21	21	01011	Intermittent	660	1 Hz (500 ms-500 ms)	60	100
22	14	01010	Intermittent	2850	4 Hz (150 ms On/100 ms Off)	72	109
23	14	01001	Sweep	800 to 970	50 Hz	68	101
24	4	01000	Sweep	2400 to 2850	50 Hz	75	110
25	25	00111	Intermittent	970	3 x 500 ms pulses, 1.5 s silence, then repeat	64	99
26	26	00110	Intermittent	800 to 970	3 x 500 ms pulsed sweep, 1.5 s silence, then repeat	70	108
27	27	00101	Intermittent	970 and 800	3 x 500 ms pulsed sweep, 1.5 s silence, then repeat	85	83
28	10	00100	Alternating	800 and 970	2 Hz (250 ms-250 ms)	67	100
29	988 Hz	00011	Alternating	990 and 650	2 Hz (250 ms-250 ms) (Symphoni tones)	71	99
30	510 Hz	00010	Alternating	510 and 610	2 Hz (250 ms-250 ms) (Squashni Micro tones)	65	96
31	14	00001	Sweep	300 to 1200	1 Hz	71	96
32	510 Hz	00000	Alternating	510 and 610	1 Hz (500 ms-500 ms)	85	83