COOL AIR INCORPORATED
Ammonia Leak Detection Systems

HO-REM-HU-ST-24 – High Output Remote Horn and Strobe, 24VDC version

Operating and installation instruction

Tone	Tone Type	Tone Description / Application	Dip Switch (S1/S2)	3rd Stage Tone	Peak Sound Level (dBA@1m)	Sounder Current (A Avg)
1.		970Hz (BS5839-1:2002)	O-O-O-O-O-O	18	118	0.55
2.		800Hz/970Hz @ 2Hz (BS5839-1:2002)	O-O-O-O-O-I	1	120	0.50
3.		800Hz – 970Hz @ 1Hz (BS5839-1:2002)	O-O-O-O-I-O	1	120	0.50
4.		970Hz 1s OFF/1s ON (Apollo Fire Systems Alert Tone, BS5839-1:2002)	O-O-O-O-I-I	1	118	0.27
5.		970Hz, 0.5s/ 630Hz, 0.5s (Apollo Fire Systems Evacuate Tone, BS5839-1:2002)	O-O-O-I-O-O	1	118	0.51
6.		554Hz, 0.1s/ 440Hz, 0.4s (France – AFNOR NF S 32 001)	O-O-O-I-O-I	1	118	0.33
7.		500 – 1200Hz, 3.5s/ 0.5s OFF (Netherlands – NEN 2575:2000)	O-O-O-I-I-O	1	120	0.45
8.		420Hz 0.625s ON/0.625s OFF (Australia AS1670 Alert tone)	O-O-O-I-I-I	1	115	0.17
9.		500 – 1200Hz, 0.5s/ 0.5s OFF x 3/1.5s OFF (Australia AS1670 Evacuation tone)	O-O-I-O-O-O	1	119	0.22
10.		550Hz/440Hz @ 0.5Hz	O-O-I-O-O-I	19	118	0.34
11.		970Hz, 0.5s ON/0.5s OFF x 3/ 1.5s OFF (ISO 8201 Low tone)	O-O-I-O-I-O	1	118	0.21
12.		2850Hz, 0.5s ON/0.5s OFF x 3/1.5s OFF (ISO 8201 High tone)	O-O-I-O-I-I	1	110	0.19
13.		1200Hz – 500Hz @ 1Hz (DIN 33 404)	O-O-I-I-O-O	1	119	0.50
14.		400Hz	O-O-I-I-O-I	18	114	0.36
15.		550Hz, 0.7s/1000Hz, 0.33s	O-O-I-I-I-O	1	120	0.39
16.		1500Hz – 2700Hz @ 3Hz (Vandal Alarm)	O-O-I-I-I-I	1	118	0.47
17.		Simulated Bell	O-I-O-O-O-O	1	115	0.32
18.		840Hz	O-I-O-O-O-I	1	119	0.51
19.		660Hz	O-I-O-O-I-O	10	114	0.51
20.		660Hz 1.8s ON/1.8s OFF	O-I-O-O-I-I	19	114	0.26
21.		660Hz 0.15s ON/0.15s OFF	O-I-O-I-O-O	19	113	0.27
22.		510Hz, 0.25s/ 610Hz, 0.25s	O-I-O-I-O-I	1	115	0.44
23.		800/1000Hz 0.5s each (1Hz)	O-I-O-I-I-O	1	120	0.51
24.		250Hz – 1200Hz @ 12Hz	O-I-O-I-I-I	1	114	0.52
25.		500Hz – 1200Hz @ 0.33Hz.	O-I-I-O-O-O	1	119	0.51
26.		2400Hz – 2900Hz @ 9Hz	O-I-I-O-O-I	1	113	0.45
27.		2400Hz – 2900Hz @ 3Hz	O-I-I-O-I-O	1	113	0.45
28.		800Hz – 970Hz @ 100Hz	O-I-I-O-I-I	1	120	0.50
29.		800Hz – 970Hz @ 9Hz	O-I-I-I-O-O	1	120	0.50
30.		800Hz – 970Hz @ 3Hz	O-I-I-I-O-I	1	120	0.50
31.		800Hz, 0.25s ON/1s OFF	O-I-I-I-I-O	1	119	0.12
32.		500Hz – 1200Hz, 3.75s/0.25s OFF (AS2220)	O-I-I-I-I-I	1	119	0.48
33.		340Hz	I-O-O-O-O-O	1	114	0.33
34.		1000Hz	I-O-O-O-O-I	18	116	0.51
35.		1400Hz – 1600Hz, 1s/1600Hz – 1400Hz, 0.5s (NF 48-265)	I-O-O-O-I-O	1	120	0.50
36.		660Hz 6.5s ON/13s OFF	I-O-O-O-I-I	19	114	0.18
37.		1000Hz/2000Hz, 1s each	I-O-O-I-O-O	1	117	0.49
38.		720Hz, 0.7s ON/0.3s OFF	I-O-O-I-O-I	1	119	0.37
39.		970Hz, 0.25s ON/OFF	I-O-O-I-I-O	1	118	0.27
40.		2800Hz, 1s ON/OFF	I-O-O-I-I-I	1	110	0.24
41.		2800Hz 0.25s ON/OFF	I-O-I-O-O-O	1	110	0.23
42.		2400/2900 @ 2Hz	I-O-I-O-O-I	1	113	0.44
43.		Chime, 554Hz/440Hz Single shot 'ding dong'	I-O-I-O-I-O	1	115	0.28
44.		Chime, 554Hz/440Hz Repeating 'ding dong'	I-O-I-O-I-I	1	118	0.28
45.		Chime, 970Hz/800Hz Single shot 'ding dong'	I-O-I-I-O-O	1	116	0.28
46.		Chime, 970Hz/800Hz Repeating 'ding dong'	I-O-I-I-O-I	1	116	0.28
47.		Hooter, Repeating	I-O-I-I-I-O	1	114	0.22
48.		Gentle alarm - Tone 2, rises slowly to full volume over 30s	I-O-I-I-I-I	1	120	0.50
49.		Time-Out Alarm – As Tone 2, cuts off after 10 mins	I-I-O-O-O-O	1	120	0.50
50.		Time-Out Alarm – As Tone 2, cuts off after 2 mins	I-I-O-O-O-I	1	120	0.50
51.		750Hz 0.33s ON/0.51s OFF	I-I-O-O-I-O	1	119	0.15
52.		750Hz 0.51s ON/0.33s OFF	I-I-O-O-I-I	1	118	0.32
53.		550Hz, 0.33s/1000Hz, 0.7s	I-I-O-I-O-O	1	117	0.46
54.		600Hz – 900Hz/ 0.9s	I-I-O-I-O-I	1	119	0.50
55.		660Hz – 680Hz/ 0.9s	I-I-O-I-I-O	1	116	0.49
56.		670Hz – 725Hz/ 0.9s	I-I-O-I-I-I	1	119	0.50
57.		920Hz – 750Hz/ 0.9s	I-I-I-O-O-O	1	120	0.51
58.		700Hz - 900Hz, 0.3s/0.6s OFF	I-I-I-O-O-I	1	119	0.19
59.		900Hz - 760Hz, 0.6s/0.3s OFF	I-I-I-O-I-O	1	120	0.35
60.		750Hz	I-I-I-O-I-I	18	118	0.49
61.		Power Only – Use with Stage 3 control for manual/intermittent chime triggering	I-I-I-I-O-O	43		
62.		Power Only – Use with Stage 3 control for manual/intermittent chime triggering	I-I-I-I-O-I	43		
63.		Power Only – Use with Stage 3 control for manual/intermittent horn triggering	I-I-I-I-I-O	47		
64.		Reserved for future use	I-I-I-I-I-I			

EN54-3
Fire Alarm Device – Sounder
Type B: For indoor or outdoor use
18-980545/546/547/667/669/591/635/636/671/672/673
Technical Data: Document 18-186530

CE 0832 07

0832-CPD-0621 (Sounder-LED Beacon)
0832-CPD-0622 (Sounder-Xenon Beacon)
0832-CPD-0623 (Sounder)

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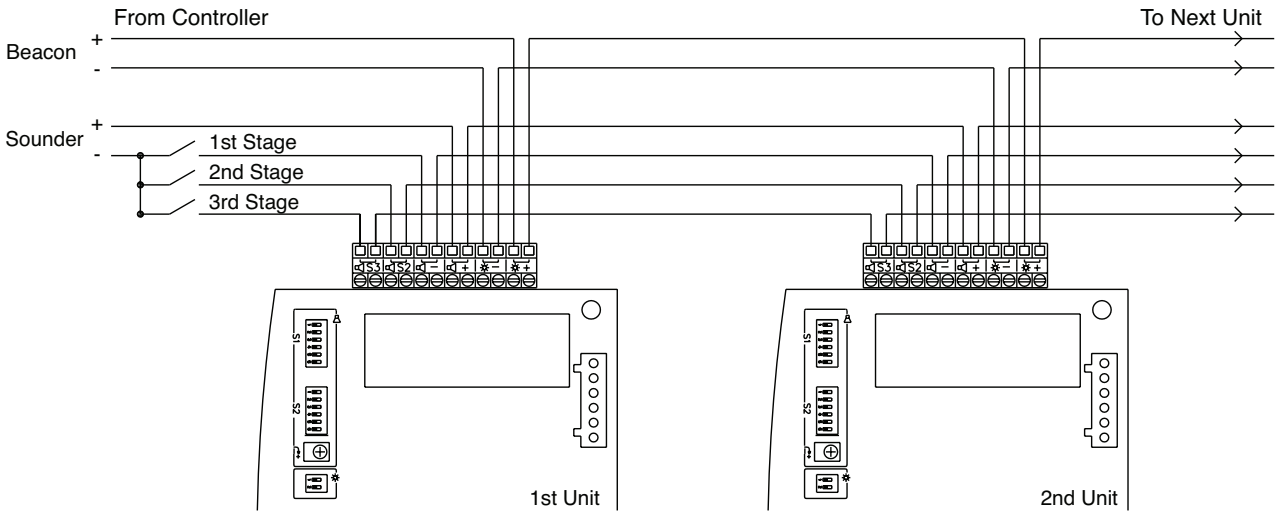

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Installation Manual

Installation

a. The sounder is installed by first mounting the base unit and making the external wring connections to the base. The head unit then automatically connects when it is attached to the base.
b. The sounder head is separated from the base by unlocking the four ¼-turn fasteners in the corners of the sounder.
(Recommended screwdriver: Philips No. 2, min 100mm long).
c. Note that the head only fits onto the base one way around. If a beacon is fitted, care should be taken when mounting the base to ensure that the beacon will be positioned in the desired orientation after the sounder is attached

Wiring

The sounder and beacon have separate wiring terminals. Each terminal is duplicated to enable simple 'daisy-chain' connection of multiple units.

Line	Terminal Marking
Sounder Positive Supply (10 to 60V DC)	+
Sounder Negative Supply (0V)	-
2nd Stage Alarm Control (Connect to 0V to activate)	S2
3rd Stage Alarm Control (Connect to 0V to activate)	S3
Beacon Positive Supply (10 to 60V DC)	+
Beacon Negative Supply (0V)	-

Controls

a. Tone Selection
The first and second stage alarm tones are independently set using 6-way dipswitches S1 and S2 respectively. The required settings are shown in the table overleaf. The third stage alarm tone is pre-set to complement the selected first stage tone as shown in the table.
b. Volume Control
The sound output of the unit can be reduced by up to 20dBA by adjusting the potentiometer.
c. Beacon Flash Controls (If fitted)
The flash mode of the beacon can be altered using the 2-way dipswitch marked ☼

	XENON BEACON		LED BEACON	
Switch	Off	On	Off	On
1	60 flashes per min	30 flashes per min	Single Flash	Double Flash
2	Single Flash	Double Flash	Flashing	Static

Technical Specification:

Supply Voltage Range	10-60V DC
Current – Sounder	0.12-0.55A* (Typ. 0.5A @ 24V, Tone 2)
Current –Beacon	Xenon - 250mA Average, 700mA Peak*,
(Where fitted)	LED - 18mA (Flashing) or 65mA (Static)*
Peak Sound Level	110-120 dBA at 1m*
	(Typ. 120dBA @ 24V, Tone 2)
Number of Tones	64
Volume Control	20dBA typical
Remote Tone Switching	Provision for 3 alarm stages
	(Negative voltage activation)
Operating Temperature	- 25°C to +70°C
Casing	High Impact Polycarbonate/ABS
IP Rating	IP66
Synchronisation	Automatic with Klaxon Nexus and Sonos Sounders

*depends on selected tone and input voltage. See tone table for details.
EN54-3 certified on tones 1,2,3,6,7 & 13 & > 17V DC only.

The European directive "Waste Electrical and Electronic Equipment" (WEEE) aims to minimise the impact of electrical and electronic equipment waste on the environment and human health. To conform with this directive, electrical equipment marked with this symbol must not be disposed of in European public disposal systems. European users of electrical equipment must now return end-of-life equipment for disposal. Further information can be found on the following website: http://www.recyclethis.info/.