CHQ-WSB2/SIL

Analogue Wall Sounder Beacon

SIL CAPABLE

Features

▸ SIL Level 2 approved
▸ Ideal for use in oil and gas environments
▸ Single Loop Address - addressed via the TCH-B200 Hand Held Programmer
▸ Variable Sound Output 90 ~ 102 dB(A) (±2 dB(A)) output at 1 metre
▸ 0.5 or 1Hz flash frequency*[1]
▸ High Intensity LED technology
▸ Isolator base available
▸ 51 User-Selectable Tones (all tones EN54-3 approved)
▸ 'O' Rated Beacon to EN54-23
▸ Available with Red or White LEDs
▸ Weatherproof Kit available
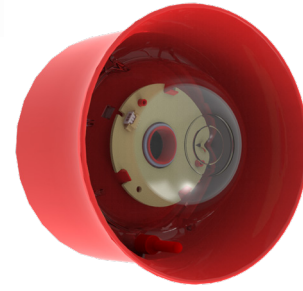
Description

Model CHQ-WSB2/SIL is an addressable loop powered Wall Sounder Beacon innovatively designed to provide a range of tones and volumes with a maximum output of up to 102dB(A) (±2dB(A)) with low current consumption. The unit features an integral beacon within the horn utilising high intensity LED technology and is designed to fit to the Standard Wall Sounder Base (YBO-R/3(RED)) & YBO-R/3(WHT)). The sounder is IP rated to IP21 for internal use but it can be made weatherproof (IP65) by utilising the CHQ-WPK Weatherproof Kit, which consists of a specialised back box and gasket set.

Specification

Operating Voltage	17 ~ 41 VDC
Quiescent Current (typ)	150 µA (with YBO-R/3(RED) & YBO-R/3(WHT))
Sounding Current (typ)	2 mA (90 dB(A) (±2 dB(A)) @ 1 m) ~ 8 mA (102 dB(A) (±2 dB(A)) @ 1 m)
Additional Current when Beacon active	+ 7 mA
Sound Output (at 1 metre)	90 ~ 102 dB(A) (±2 dB(A)) @ 24 VDC or above
Number of Tones	51
Tone Frequency Range	300 Hz ~ 2850 Hz
Operating Temperature Range	-10 ℃ to +50 ℃
Storage Temperature Range	-30 ℃ to +70 ℃
Maximum Humidity	95% RH - Non Condensing (at 40 ℃)
Colour/Case Material	Red or White / PC ABS
Lens Material	Translucent PC
Ingress Protection Rating	IP21 (IP65 with WS2-WPK)
Base Fixing Centres (mm)	48 ~ 74
Weight (g)/Dimensions (mm)	164 / H112 x W112 x D67

*[1] Panel compatibility dependant

Note: Although the TCH-B200 Hand Held Programmer will allow addresses between 128 and 255 to be programmed into the YBO-BSB2, addresses 1 to 127 ONLY should be used.

HOCHIKI

How to choose your Hochiki VAD

Our VAD ratings comprise three parts, **X-Y-Z**

▶ Where X denotes the category, either "O" for Open, "W" for Wall or "C" for ceiling
▶ Where Y denotes the maximum mounting height (m)
▶ Where Z is the width and length (m) of the coverage floor area

For example **C-3-5** means the VAD is in the Ceiling category, can be mounted at a maximum ceiling height of 3 metres and produces a 5 metre diameter coverage.

What type of VAD?	Which case colour?	Which LED colour?	Product	EN54-23 Ratings[3]		
Base Sounder Beacon	Ivory case	White LEDs	YBO-BSB2/WL	'O' Rated		
		Red LEDs	YBO-BSB2/RL			
	White case	White LEDs	YBO-BSB2(WHT)/WL			
		Red LEDs	YBO-BSB2(WHT)/RL			
Wall Sounder Beacon	Red case	White LEDs	CHQ-WSB2/WL			
		Red LEDs	CHQ-WSB2/RL			
	White case	White LEDs	CHQ-WSB2(WHT)/WL			
		Red LEDs	CHQ-WSB2(WHT)/RL			
				0	**1**	**2**
Ceiling Beacon	Ivory Case	Red LEDs	CHQ-CB/RL	C-3-1.5	C-3-8.6	C-3-10
		White LEDs	CHQ-CB/WL	C-3-6.5	C-3-7.9	C-3-10
			CHQ-CB/WL-15	'O'	C-3-11.4	C-3-15.1
	White Case	Red LEDs	CHQ-CB(WHT)/RL	C-3-1.5	C-3-8.6	C-3-10
		White LEDs	CHQ-CB(WHT)/WL	C-3-6.5	C-3-7.9	C-3-10
			CHQ-CB(WHT)/WL-15	'O'	C-3-11.4	C-3-15.1
	Red Case	Red LEDs	CHQ-CB(RED)/RL	C-3-1.5	C-3-8.6	C-3-10
		White LEDs	CHQ-CB(RED)/WL	C-3-6.5	C-3-7.9	C-3-10
			CHQ-CB(RED)/WL-15	'O'	C-3-11.4	C-3-15.1
Wall Beacon	Ivory Case	Red LEDs	CHQ-WB/RL	'O'	W-2.4-5	W-2.4-5.5
		White LEDs	CHQ-WB/WL	W-2.4-5	W-2.4-5.5	W-2.4-7
	White Case	Red LEDs	CHQ-WB(WHT)/RL	'O'	W-2.4-5	W-2.4-5.5
		White LEDs	CHQ-WB(WHT)/WL	W-2.4-5	W-2.4-5.5	W-2.4-7
	Red Case	Red LEDs	CHQ-WB(RED)/RL	'O'	W-2.4-5	W-2.4-5.5
		White LEDs	CHQ-WB(RED)/WL	W-2.4-5	W-2.4-5.5	W-2.4-7

For CHQ-CB/WL & RL Default setting is C-3-7.5, for CHQ-CB/WL-15 Default setting is C-3-15

[3] All ratings are all based on 0.5Hz frequency.

[4] Full 'O' rating data available in our Application Notes (see below).

Current when Beacon Active

CHQ-CB/WL&RL & CHQ-WB/WL & RL	mA	6	12	17
CHQ-CB/WL-15	mA	6	17	38
CHQ-WSB2/WL&RL	mA (Beacon Only)		7 (one setting only)	
YBO-BSB2/WL&RL	mA (Beacon Only)		7 (one setting only)	

Note: Our VAD product codes feature "WL" which means white LEDs and "RL" which means red LEDs.

For details of 'O' Rating data for	Ceiling Beacon and Wall Beacon	See	Application Note **AP131**
	Wall Sounder Beacon		Application Note **AP132**
	Base Sounder Beacon		Application Note AP133

All Application Notes are available to download from our web site.