

# APPLICATION NOTE

Document Title CHQ-BS Technical Bulletin

Date August 2000

Version Ap017/ISS 1

# APPLICATION NOTE

## CHQ-BS APPLICATION GUIDE - Technical Bulletin

### **TYPICAL CHQ-BS APPLICATION**

Hochiki's CHQ-BS (Loop Powered Base Sounder) has been designed with the intention of making vast savings in labour and wiring costs in certain types of installations. However, careful consideration should be made as to the site requirements for Alarm coverage prior to installation, as the sound level output of the CHQ-BS may not be sufficient to satisfy all types of applications.

With a default Sounder output of 85 dB @ 1 metre, the CHQ-BS is ideally suited for installations such as hotel bedrooms, where in order to comply with BS 5839 Parts 1 and 6, a sound level of 75 dB at the bedhead is required.

It is possible for the volume of the CHQ-BS to be increased by the user via the Control Panel to 95 dB @ 1 metre, lending itself particularly well to Installations such as Hotel corridors, where in order to comply with BS 5839 Parts 1 and 6, a sound level of 85 dB at the doorway to each bedroom is required.

### **CHQ-BS Loop Loading**

The CHQ-BS can be directly fitted to the detection Loops either in Base Sounder mode (where the CHQ-BS is Auto addressed by the panel to an address between 128 and 254) or Wall Sounder mode (where the CHQ-BS is addressed manually with the TCH-B100 Hand Held Programmer to an address between 1 and 127).

The maximum loop loading of CHQ-BS Base Sounders (in either mode of operation) will be dependant on the Loop drive capability of compatible Control Panels and the required dB output of the CHQ-BS.

The following table lists the range of dB levels that the CHQ-BS can support and the current consumption at each setting when the device is sounding.

CHQ-BS dB Level	Loop Current Consumption
70 dB	0.8 mA
78 dB	1.5 mA
80 dB	2.0 mA
85 dB*	3.0 mA
88 dB	4.5 mA
90 dB	6.5 mA
93 dB	8.0 mA
94 dB	10 mA
95 dB	11 mA
98 dB	16 mA

Note:- \* Denotes default CHQ-BS setting.

When configured as either a Base Sounder or a Wall Sounder and set to 85 dB, most CHQ-BS compatible control panels will typically support between 30 to 60 CHQ-BS's on each Loop.

Note:- When used as a Base Sounder, the address of the CHQ-BS will be set between 128 to 254, thus allowing the potential of fitting a full compliment of ESP devices (i.e. addressed between 1 and 127) to a detection loop.

**Individual Control Panel manufacturers should be contacted for precise details on CHQ-BS functionality and Loop Loading capabilities on their panels.**

### **CHQ-BS as a Conventional Sounder**

It is also possible to configure the CHQ-BS as a conventional sounder. In this configuration the CHQ-BS can be used directly on Control Panel sounder circuits, providing they supply 17 - 28 Vdc in an alarm condition.

This mode of operation is achieved by fitting a 4K7 $\Omega$  resistor between the "S" and the "C" terminals and then connecting the +ve leg of the Sounder circuit to the "L" terminal and the -ve leg of the Sounder circuit to the "C" terminal .

### **Roshni Tone comparisons**

The table below shows the tones used by Hochiki's CHQ-BS and indicates the equivalent tones available on Fulleon Synchrobell's Roshni conventional sounder.

CHQ-BS Tone	Tone & Frequency	Roshni Tone
1	925 Hz / 628 Hz @ 2 Hz	1
2	925 Hz continuous	14
3	628 Hz continuous	19



**Hochiki Europe (UK) Ltd**  
**Grosvenor Road, Gillingham Business Park,**  
**Gillingham, Kent, ME8 0SA, England**  
**Telephone: +44(0)1634 260133 Facsimile: +44(0)1634 260132**  
**Email: [sales@hochikieurope.com](mailto:sales@hochikieurope.com)**  
**Web: [www.hochikieurope.com](http://www.hochikieurope.com)**

Hochiki Europe (UK) Ltd. reserves the right to alter the specification of its products from time to time without notice. Although every effort has been made to ensure the accuracy of the information contained within this document it is not warranted or represented by Hochiki Europe (UK) Ltd. to be a complete and up-to-date description. Please check our web site for the latest version of this document.