VoCALL - EVCS-CMPT

Compact 5 Line Exchange Unit

User Manual & Log Book

Honeywell

Introduction

A VoCALL Emergency Voice Communications System (EVCS) is a fixed, secure, bi-directional, full duplex voice communication system to assist fire fighters in an emergency in high rise buildings or large sites where Radio communication may not work, and covers the operation of both fire telephones and disabled refuge systems.

The VoCALL EVCS is designed to fully comply with BS5839-Part 9 (abb. Pt9) for use as a fire telephone system, disabled refuge call system or as a combined system when both fire telephones and disabled refuge points are required.

Suitability

Fire telephone systems are recommended for all public buildings and multi story buildings over four floors by BS9999.

Disabled refuge systems are required in buildings where public or disabled staff gain access to any floor other than the ground floor using lifts.

Product Overview

A VoCALL EVCS compact 5 line exchange unit comprises of 2 functional blocks, the compact 5 line exchange unit and outstations, (Type A, Type B, Jack Points and Emergency Assist Alarm), with the quantities of these basic units being adjusted to suit the application.

The VoCALL EVCS compact has been designed on a star topology; in the most cases this will reduce the cable requirements from all ring-based systems. The topology consists of spurs formed from 1 off two core core 1mm CSA cables (soft skin enhanced up to 500m per leg, MICC 200m per leg) to each outstation.

Important Safety Information

This equipment must only be installed and maintained by suitably skilled and competent person. This equipment is defined as Class 1 in EN60065 (Low Voltage Directive) and must be EARTHED.

CAUTION	INDOOR USE ONLY
WARNING	SHOCK HAZARD- ISOLATE BEFORE OPENING
WARNING	TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT IN RAIN OR MOISTURE
WARNING	THIS UNIT MUST BE EARTHED
WARNING	NO USER SERVICABLE PARTS

Each compact unit requires a 3A spur, returning to a breaker clearly marked EVCS DO NOT TURN OFF. If the units are distributed around a site it is essential all units are on the same mains phase, as they are classified TEN 230V, powering from different phases can mean a 440V potential can be present in a unit during a major fault incident.

ANTI-STATIC HANDLING GUIDELINES

Make sure that electro-static handling precautions are taken immediately before handling PCBs and other static sensitive components.

Before handling any static-sensitive items, operators should get rid of any electrostatic charge by touching a sound safety earth, such as a radiator. Always handle PCBs by their sides and avoid touching any components. PCBs should be stored in a clean, dry place that is free from vibration, dust and excessive heat.

Storing the PCBs in a suitable cardboard box will also guard them against mechanical damage.

Batteries

The VoCALL compact requires one number 12V 4.5AH sealed lead acid batteries to provide backup power in the event of mains failure as defined in BS5839pt9 for 24 hours standby and 3 hours operation when powered by normal mains supply.

For 72hour standby and 1 hour operation one number 12V 17AH battery is required, this will need to be fitted in an external battery enclosure, the monitored charger in the VoCALL compact is capable of charging and monitoring these batteries.

Safety Information:
Sealed Lead acid batteries contain sulphuric acid which can cause burns if exposed to the skin, the low internal resistance of these batteries means large currents will flow if they are accidentally short circuited, causing burns and a risk of fire- exercise caution when handling batteries.

Power Up Procedure:
Always apply mains power before connecting batteries, do not commission VoCALL Compact on batteries, as the high inrush current required by the power supply may rupture the battery fuse. Always connect the Positive (Red +) terminal first.

Power Down Procedure:
Disconnect the batteries before removing the mains power; always remove the negative (Black – terminal) first.

Operation

All conversations on the VoCALL compact system are under the command of the control handset, Pt9 envisages the majority of calls to be made by lifting the handset of an outstation (Type A) or pressing the call button (Type B).

Receiving a Call

Lift the receiver; press the zone key where the Green LED is flashing. When connected the Green LED will go steady and the outstation will be connected to the handset.

To end hang-up receiver or press the zone key again to place the outstation on HOLD (the zone led will flash slowly when held).

Making a Call

Lift the receiver; press the zone key for the required outstation, the Green LED on the zone key will flash. When the outstation answers the call the Green zone LED will go steady and the handset will connect to the called outstation.

To end the call, hang-up receiver or press the zone key again to place the outstation on HOLD (the zone led will flash slowly when held).

Conference Call

Up-to five calls can be conference called, by answering the calls or dialling the calls as described above the master handset must be involved in the call and only one conference group is allowed.

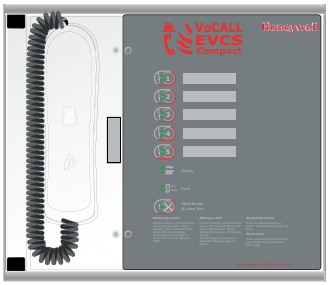
Accepting Faults

Note the fault in the log book, then press the mute buzzer key this will silence the “waterfall” tone, while the fault exists the fault buzzer will “beep” once every 15 seconds until the fault is rectified. The buzzer will resound on each new fault.

Panel Test

Press and hold the mute buzzer key for 5 seconds, the fault buzzer will sound and all status LEDs will Light.

Indications and Controls



Health Indicators (Green)

Healthy	The system is ready for use and fault free.
AC	Indicates healthy AC mains available.
DC	Indicates the battery supply is available.

Fault Indicators (Yellow)

Zone Fault	(Led on each zone key) steady indicated short circuit, flashing indicated open circuit.
General Fault	(on the mute buzzer key) A fault exists on the system.
CPU Fault	The processor, main phone or watchdog timer have tripped, engineer assistance is required.
Supply Fault	Either the AC supply or DC supply is unavailable, or a fuse has ruptured.

Maintenance

It is a requirement of BS5839pt9 that a maintenance agreement be in place for the EVCS, the maintenance schedule should be as follows.

Weekly:	Lift a different handset on the system each week and make a call to the control, repeat each week until all points are tested, record results in the site log.
Monthly:	Test one handset on each exchange by lifting the handset, followed by the master calling the line, record results in the site log.
Quarterly:	Engineer Call to check system operation.
Yearly:	Engineer Call to check system operation and check battery health.
5 Yearly:	Engineer Call to check system operation and replace the batteries.

VoCALL Compact 5 Line Telephone & Disabled Refuge System - Log Book

Site Name:

Address:

Contractor:

Commissioned:

Certificate of Commissioning for an Emergency Voice Communication System (EVCS) to BS5839 pt 9 (2011)

Site Name:

Address:

Customer

Address:

Areas Covered:

System Design:

In accordance with section 1 of BS 5839 : Part 9 : 2011 sub clause 6 the system design is has in accordance with the recommendations of this code except for the following:

Installation:

In accordance with section 3 of BS 5839 : Part 9 : 2011, the wiring has been inspected and tested and been found to be in accordance with the recommendations of this code except for the following:

Commissioning:

In accordance with Section 4 of BS 5839 : Part 9 : 2011: sub clause 21.2C

1. Intelligible conversation is heard at all locations.
2. All controls and indicators operate correctly

The system is accepted in good working order and, in accordance with BS5839: Part 9, 2011, record drawings, operating instructions and a system log book have been supplied and received.

Attention has been drawn to the recommendations concerning user's responsibilities, particularly those concerned with routine attention and test procedures in section 5, and an appointed responsible person should be nominated by the customer in accordance with the recommendations of Section 6 of BS5839 : Part 9 : 2011.

Engineer:

Date:

Position:

Signature:

Site Specific Information

Equipment Locations:

Compact Handset:

Outstation Locations

Cable ID	Line	Area Served
	1	
	2	
	3	
	4	
	5	

Date	Event or Work Done	Engineer	Company	Signature

Date	Event or Work Done	Engineer	Company	Signature

Date	Event or Work Done	Engineer	Company	Signature

Date	Event or Work Done	Engineer	Company	Signature

Date	Event or Work Done	Engineer	Company	Signature

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Trade Descriptions
All descriptions represent only particulars of the goods to which they apply and do not form part of any contract. The company reserves the right to change specification without prior notification or public announcement.

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