



EMERGENCY VOICE COMMUNICATION SYSTEMS  
SYSTEM BROCHURE



## SMS

SMS is a Honeywell Life Safety Systems business, based in the UK offering a wide range of market leading fire detection and alarm products.

Operating for over 25 years, SMS works in partnership with selected fire alarm installers across the length and breadth of the United Kingdom. The Emergency Voice Communication System products are available to 150 approved, trained and certified companies, providing choice and expertise in all manner of services required. A full list of SMS approved partners are available on request.

Honeywell is proud of its innovation in technology delivering leading and dependable fire detection and alarm equipment across the globe. Aside from providing fire detection and alarm systems, Honeywell also offers expertise in security products, building control management products as well as wiring and electrical devices.

# Disabled refuge systems

Disabled refuge systems are designed for use in buildings that contain refuge areas. This type of intercom system allows emergency services to be in constant contact with the people in the refuge areas who seek assistance. The Equality Act (formerly The Disability Discrimination Act) made it the responsibility of all companies, nationwide, to ensure that access to buildings and services is available to everyone - there must be no discrimination.

With access provided for all, provision must be made for safe evacuation in the event of an emergency. In some circumstances, those with physical impairments can be assisted by others - but in many situations this is not suitable or safe.

A solution comes in the form of temporary areas of safety - 'refuge areas'. The person in need of assistance is helped to the closest refuge area and awaits safe evacuation. Refuge areas must meet certain criteria, these are covered in BS9999:2008. As well as describing suitable areas for refuge and the type of construction, the Standard specifies the need for two way communication.

An EVCS (emergency voice communication system) or Disabled Refuge System allows firefighters and others to communicate with one another during emergency situations. The system also allows communication with disabled persons. It is a "system that allows voice communication in either direction between a central control point and a number of other points throughout a building or building complex, particularly under the direction of management of firefighters." (BS5839-9:2003 3.3).

Please find below an extract from the British Standard for your reference

## **BS 5839-9:2003**

*Fire detection and alarm systems for buildings. Code of practice for the design, installation, commissioning and maintenance of emergency voice communication systems*

### **Executive summary**

Recommendations for the planning, design, installation, commissioning and maintenance of emergency voice communication systems in buildings.

### **Abstract**

This British Standard, a part of the BS 5839 series, provides recommendations for the planning, design, installation, commissioning and maintenance of emergency voice communication (EVC) systems in and around buildings and at sports, entertainment and similar venues. It ensures that high standards of reliability, safety and security are achieved, together with acceptable standards of performance.

This code of practice primarily relates to the use of EVC in assisting both firefighters and those responsible for evacuating buildings or sports stadia in fire emergency situations, including evacuation of disabled persons. Use, other than in fire emergency situations, by disabled persons and others, although not precluded, is not addressed in detail.

In the context of this code of practice, an EVC system contains no portable parts. Mobile telephones and two-way radio sets are therefore not within its scope. Voice alarm systems are primarily intended for the automatic broadcasting of evacuation messages are excluded from this code of practice. This British Standard does not recommend whether or not an emergency voice communication system should be installed in a given premises. This part of BS 5839 does not cover systems combining electrically the functions of EVC systems with functions of other fire-related or non-fire-related systems.

This part of BS 5839 applies only to emergency voice communication systems for use in a temperate climate such as that of the United Kingdom.





# The Overview

The Gent EVCS offers choice of 3 systems for small, medium and large buildings. Each offering the combined function of Fire Telephones, Disabled Refuge and Emergency Assist Alarm.

## Fire Telephones

Fire telephones are hardwired full duplex communications systems with monitoring and battery backup, and are required in buildings over 4 stories in many countries in the world (in the UK this is governed by BS 9999). These are provided as a backup to traditional fireman's radio systems, which can fail to operate in many high rise environments due to the large amount of steel in the building, and the "corona" effect of fire on radio broadcasts.

Fire telephones are also required in fire fighting lift lobbies when these lifts are provided within a building. Fire telephones can also be used for fire wardens to call the control point during fire drills and primary evacuation phases before the fire services arrive and assume control.



## Disabled Refuge Systems

Disabled Refuge Systems are required in the UK in all non domestic premises over 1 story or where an emergency exit is by stairs (for a full description see building regulations approved document B).

A Disabled Refuge is a relatively safe area within a building or exit staircase where mobility impaired occupants can be placed (not just wheelchair users) while the main building occupancy is evacuated, allowing building management and emergency services to safely assist these people from the building when stairwell crowding has eased.

EVCS in Disabled Refuge areas allows emergency services to communicate with people requiring assistance.

### Emergency Assist Alarm

An Emergency Assist Alarm is defined in Building Regulations Approved Document M, and must be provided at all disabled toilets within non domestic premises, if the toilet is in a non permanently occupied space, remote indication must be provided at a central control or monitoring point.



An Emergency Assist Alarm can only be reset by attending the location of the call, so the reset point is within the cubical, also allowing accidental calls to be cancelled by the toilet occupier.

The Emergency Assist Alarm System is powered from the local exchange or compact unit, and is fully monitored over and above the specification described in BS 8300.





# The Compact 5 system

Compact 5 is ideal for the smaller installations which require a limited number of Outstations and Emergency Assist Alarms.

The system comprises of the 5 Line Exchange Unit can manage up to 5 Outstations (Type A, type B, or Emergency Assist Alarms). It requires no programming and is simple to install. It is designed to comply with BS 5839 9 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.

Compact 5 is a self contained system, which requires no external power supply and is easily commissioned requiring no site configuration.



## Key features:

- BS 5839-9: compliant
- Monitored handset
- Monitored supply and charger
- Up to 5 Outstations
- 5 line keys, 1 fault accept
- 15 status LED's
- Full duplex system
- Wall mount case

## Benefits:

- Simple cabling, Outstations connect directly into the master using 2 core radial fire rated cables
- In addition to Type A and Type B Outstation the Compact 5 Line Exchange Unit can also monitor Emergency Assist Alarms
- No programming required, simply connect the Outstations and the system is ready to work

## Control and Design

The Compact 5 Line Exchange Unit is a self contained enclosure housing a master handset, 5 Line Exchange, power supply, and battery charger. It can be surface or semi-flush mounted as standard.

The case is made from powder coated zintec, with a smoked perspex door covering the handset.

20mm cable knockouts are provided for all necessary cables as well as space for the backup 12V SLA battery.

The unit is microprocessor controlled, but requires no programming on site; the panel is fitted with end of line resistors which are simply discarded when an Outstation is connected.





Full System Architecture



Mechanical Specification	
<b>Dimensions:</b>	
Height	300 mm
Width	350 mm
Depth	120 mm
Weight	6.5Kg
Inputs	
Number of Lines	5
Remote Enabler	Short to Use
End of Line	10K
Outputs	
Number	2, Fault & In Use
Type	Volt Free Relay
Contact	30V DC 1A
Controls	
Buttons	6, 5 Lines, 1 Fault acknowledgement
Zone LEDs	5 Status, 5 Fault Status
Fault LEDs	3, AC, DC, General
Outstation Cables	
Type	Enhanced*
Cores	2 Core 1mm or 1.5mm
Distance	500m
Electrical Specification	
AC Input	230V AC +/- 10% 50/60Hz
Internal Power Supply	14V DC
Supply & Battery	Monitored, Open, Short, Fuses
Protection	Deep discharge, Short, Thermal
Temperature Compensation	Yes
Battery Size and Type	1 x 12V 4.2Ahr
Mains Fuse	240V 2A HRC
Battery Fuse	1A PTC
Max Charge Current	250mA

ORDER CODES	
Compact 5 Master Handset Wall Mount	EVCS-CMPT
SYSTEM COMPONENTS	
Flush Outstation Push Door, Type A	EVCS-HFP
Surface Station Push Door, Type A	EVCS-HSP
Surface Outstation Type B, Red	EVCS-HSB
Surface Outstation Type B, Green	EVCS-HSBG
Surface Outstation Type B, Stainless Steel	EVCS-HSFS
Flush Mounting Bezel Type B, Stainless Steel	VCFHB
Loose Handset With Jack Lead	EVCS-HUJ
Wall Jack Outlet Point	EVCS-WJP
Emergency Assist Alarm Network Version – PSU not included	EVCS-TA



# The Compact 9 System

The Compact 9 System is ideal for small to medium sized installations which don't require the complexity of a full network solution.

This system comprises of the 9 Line Master Exchange Unit and up to 9 Outstations (Type A, Type B, or Emergency Assist Alarms). Using the 10 line Slave Exchange Unit this system can be easily expanded to 19 lines.



This Compact 9 Emergency Voice Communication System (EVCS) is designed to fully comply with BS 5839-9 -2011 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. This is important as the standard states that where both systems are fitted to a building these should form a single system.

## Key features:

- BBS 5839-9 compliant
- Built in power supply to EN54 part 4
- 4 navigation keys
- 6 status LED's
- 4 line, 20 character LCD
- Full duplex communications
- Simple menu programming
- Contact outputs to interface with Fire Detection or Voice Alarm Systems

## Benefits:

- Up to 19 Outstations - using 10 Line Slave Exchange unit and the 9 Line Master Exchange Unit can be expanded up to 19 lines
- In addition to Type A and Type B Outstation can also monitor Emergency Assist Alarms (using a 2 core radial)
- 4 core is fire rated cable used to connect exchange unit to the slave

The Compact 9 is modular in design and the controller manages all functions for the first 9 zones. There is no need for additional equipment such as power supplies.

## Control and Design

The Compact 9 Line Master Exchange Unit is a self contained enclosure housing a Master Handset, 9 Line Exchange, power supply, and battery charger. It can be surface or semi-flush mounted as standard.

The case is made from powder coated zintec, with a smoked perspex door covering the handset.

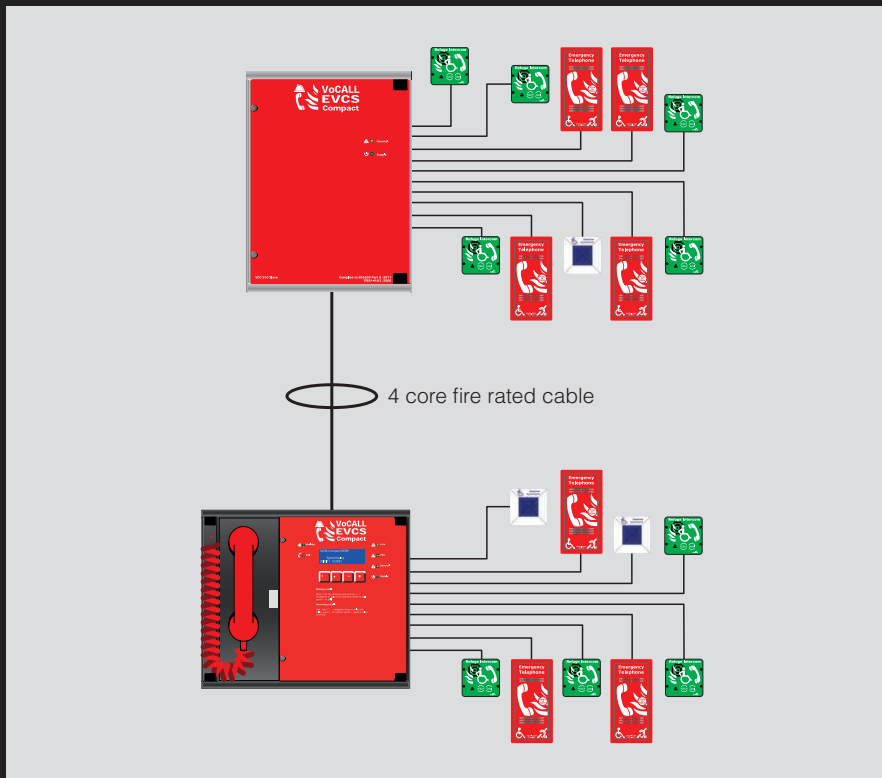
20mm cable knockouts are provided for all necessary cables as well as space for the backup 12V SLA battery.

The unit is microprocessor controlled, with simple menus, including a call log, fault log and change log, all accessible from the front panel navigation keys.





## Full System Architecture



### MECHANICAL SPECIFICATION

#### Dimensions:

Height	300 mm
Width	350 mm
Depth	95 mm
Weight	6.5Kg

#### INPUTS

Number of Outstation Lines	9 or 19 (with Exchange Unit)
Remote Enabler	Short to Use

#### OUTPUTS

Number	2, Fault & In Use
Type	Volt Free Relay
Contact	30V DC 1A

#### CONTROLS

Buttons	4 navigation keys
Zone LEDs	3 (in-use, healthy, energised)
Fault LEDs	3 (Line, PSU And General)

#### OUTSTATION CABLES

Cores	2 core (1mm or 1.5mm)
Distance	500m
EMC	EN 55103-1 & EN 55103-2
Standards	BS 5839- part 9 2011 & BS 9999

#### ELECTRICAL SPECIFICATION

AC Input	230V AC +/- 10% 50/60Hz
Internal Power Supply	14V DC
Supply & Battery	Monitored, Open, Short, Fuses
Protection	Deep discharge, Short, Thermal
Battery Type	1 x 12V VRSLA (5Ah Required)
Mains Fuse	240V 1A HRC
Battery Fuse	250mA PTC
Charge Current	250mA

### ORDER CODES

Compact 9 Line Master Exchange Unit	EVCS-CMPT9
10 Line Slave Exchange	EVCS-XC10

### SYSTEM COMPONENTS

Flush Outstation Push Door, Type A	EVCS-HFP
Surface Station Push Door, Type A	EVCS-HSP
Surface Outstation Type B, Red	EVCS-HSB
Surface Outstation Type B, Green	EVCS-HSBG
Surface Outstation Type B, Stainless Steel	EVCS-HSFSS
Flush Mounting Bezel Type B, Stainless Steel	VCFHB
Emergency Assist Alarm Network Version – PSU not included	EVCS-TA



# EVCS Network 8

The Network 8 EVCS modular architecture is ideal for use in larger buildings with up to 256 communications zones.

Using this system greatly reduces the cabling requirement and equipment 'on view' in such key places as reception areas, making the system much more aesthetically pleasing to the customer as well reducing the cost of installation.

This Emergency Voice Communication System (EVCS) is designed to fully comply with BS 5839-9:2003 (abb. Part 9) 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. The standard states that where both systems are fitted to a building these should form a single system.



EVCS Network 8 is a modular network system. Suitable for use in high rise buildings as well as large complexes such as schools and universities.

The system is controlled by the Network Master Handset. Up to 7 additional Masters can be added allowing the Network 8 to deliver a highly flexible emergency management strategy. Larger systems are built using a series of Exchange Units connected to a loop network providing cost effective and secure installations.

## Control and Design

Each network 8 Line Exchange Unit sits on a data highway and is locally powered, with internal battery backup from a monitored, maintained sealed lead acid battery. Up to 8 Lines can be connected to each distributed exchange, and each line is fully monitored for open, short or earth faults.

Up to 32 exchange units can be attached to a EVCS system giving a maximum system size of 256 independent lines. The Compact case is made from powder coated zintec and is fitted with 20mm cable knockouts for all cables needed, and also provides space for the system backup 12V SLA battery.

## Wiring

Using network communications combined with subscriber line telephone techniques, an EVCS provides large scale cable savings, while not requiring a dedicated rack room to house a central exchange.

The network comprises a line or ring of 8 cores, each leg can be up to 500M depending on cable type. Line cables consist of a single 2 core cable, either soft skin types or MICC and only 1mm CSA is required.

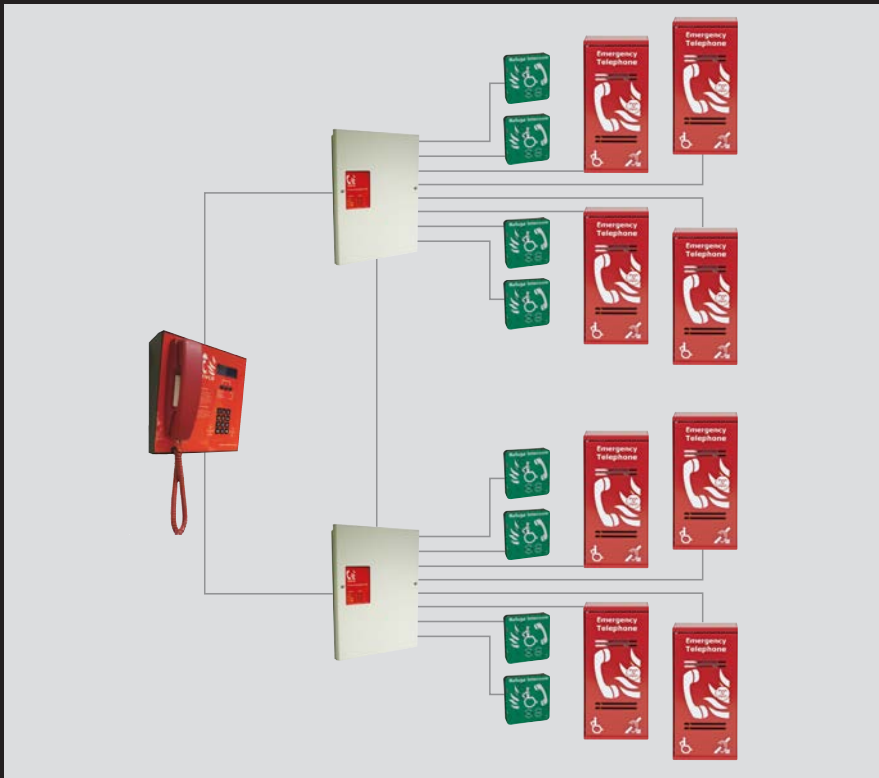
## Key features:

- Each Exchange can control up to 8 independent monitored lines
- Built in monitored 1A battery charger
- 12 status LEDs
- Dry contact for fault or "in-use" indication
- Serial port for configuration or updates
- Dual network ports which provide power for the master handsets
- Full duplex system
- Compact design

## Benefits:

- LED indication, for effective & easy fault finding
- Fault or 'in-use' relay, can be connected to a fire panel or BMS
- Global configuration, upload information quickly via a PC using the serial port
- Up to 32 distributed units on any network, no central exchange rack required unit to the slave

## Full System Architecture



### MECHANICAL SPECIFICATION

#### Dimensions:

Height	296 mm
Width	210 mm
Depth	82 mm
Weight	1.6 Kg

#### INDICATION AND CONTROLS

Fault LEDs	10 off yellow (General, PSU, 8 lines)
Status LEDs	2 off green (AC & DC)
Settings	8 way DIP switch

#### OUTSTATION CABLES

Grade	Enhanced
Cable (per line)	1 off 2 core (twisted for MICC)
Distance (per leg)	500M soft Skin types, 300M MICC
Monitoring	DC open, short & earth

#### NETWORK CABLES

Type	Enhanced
Cores	1 off four Pair or 2 off four core 1mm CSA Soft Skin or 4 off 1 Pair MICC Twisted
Distance	500M soft Skin, 300M MICC

#### STANDARDS COMPLIANCE

EMC	EN55103-1, EN55103-2
LVD	EN61000-3-2, EN61000-3-3, EN60950
Standards	BS5839-pt9, BS9999

#### ELECTRICAL SPECIFICATION

##### Power Supply:

Voltage	230V AC $\pm$ 20%
Current	11mA
Battery	12V SLA 7AH
Charger	1A Controlled Impedance
Monitoring	Open, short & High impedance cell

### ORDER CODES

8 Way Exchange Unit – Charger	EVCS-XC
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#### System Components

Master Handset (Desk)	EVCS-MS
Flush Outstation Push Door, Type A	EVCS-HFP
Surface Station Push Door, Type A	EVCS-HSP
Surface Outstation Type B, Red	EVCS-HSB
Surface Outstation Type B, Green	EVCS-HSBG
Surface Outstation Type B, Stainless Steel	EVCS-HSFSS
Flush Mounting Bezel Type B, Stainless Steel	VCFHB
Loose Handset With Jack Lead	EVCS-HUJ
Wall Jack Outlet Point	EVCS-WJP
Emergency Assist Alarm Network Version – PSU not included	EVCS-TA



# Network 8 Master Handset

The Network Master Handset is desk mounted.

Each system can have up to 8 Master Handsets which gives great flexibility to the larger installations allowing all calls to be monitored from various control points. As an example, an installation may have security offices requiring a master handset, reception and numerous entrances that need to be monitored.

## Control and Design

The Network Master Handset has a clear 4 line backlit display which shows the calling Outstation name in plain text, and calls can be made to Outstations by either dialling the number of the unit, or choosing the name from a text dialling directory.



## Key features:

- Up to 8 masters per system
- Controls up to 256 Lines (32 exchanges)
- Monitored handset
- Large high contrast display (4 x 20 character)
- 12 key quick dial keypad
- Full duplex system
- Directory dial function
- Full system event log (fault & configuration)
- 16 character unique name per line
- Dual network ports
- Remote powered

## Benefits:

- Flexibility can be used as a Fire Telephone System, Disabled Refuge Call System or as a combined system
- Global configuration, whole site can be configured from the master handset
- Directory dialling, speed dial and conference calling
- All hail function makes testing the system simple

## Wiring

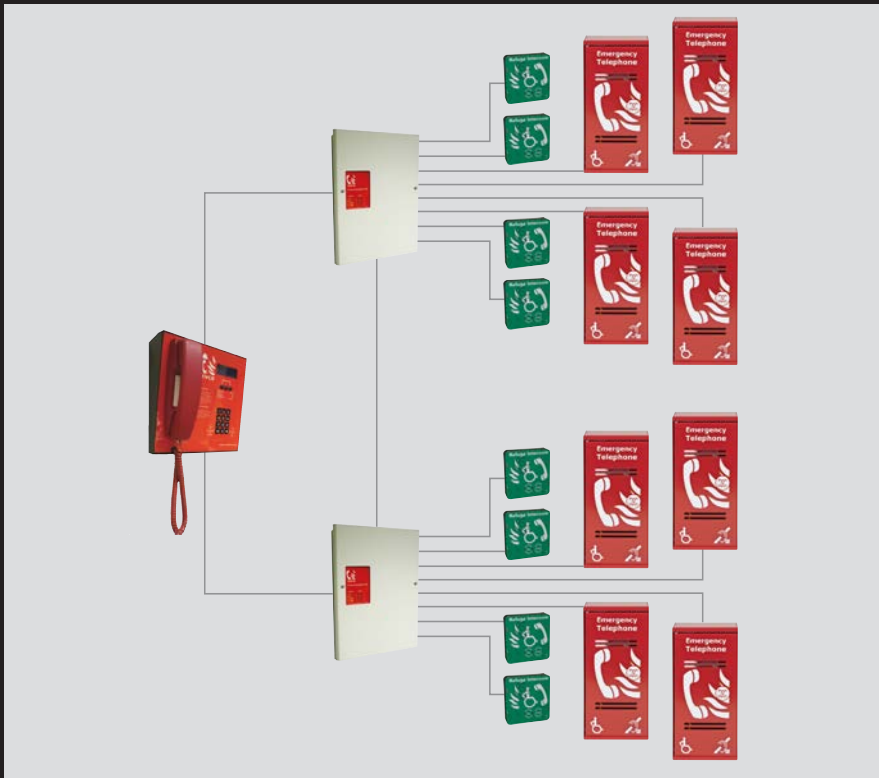
Using network communications combined with subscriber line telephone techniques, a network provides large scale cable savings, while not requiring a dedicated rack room to house a central exchange.

The network comprises a line or ring of 8 cores, each leg can be up to 500M depending on cable type.

A ring topology is recommended by BS 5839-9. In line with the recommendations of BS 5839-9 multiple master handsets can be fitted to a network (up to 8) with lockouts operating when a multiple consoles are in use.



## Full System Architecture



### MECHANICAL SPECIFICATION

#### Dimensions:

Height	268 mm
Width	275 mm
Depth	85 mm
Weight	1.490 Kg

#### INDICATION AND CONTROLS

Fault LEDs	4 off yellow (General, Panel, Supply & Exchange)
Status LEDs	4 off green (Healthy, AC, DC & Network)
LCD High Contrast	Blue/White LCD, four line twenty-character 5x8 pixel format
Keyboard	12 Key Telephone Style
Navigation	3 Keys (left, Accept, right)

#### NETWORK CABLES

Type	Enhanced
Cores	1 off four Pair or 2 off four core 1mm CSA Soft Skin or 4 off 1 Pair MICC Twisted
Distance	500M soft Skin, 300M MICC

#### STANDARDS COMPLIANCE

EMC	EN55103-1, EN55103-2
Standards	BS5839-pt9, BS9999

#### ELECTRICAL SPECIFICATION

#### Power Supply:

Source	Network Port x2
Voltage	11V to 18V DC
Current	88mA @ 12V

#### PROCESSING

Clock	16MHz
Memory	4K Ram 20K EEPROM 20K EEPROM 128K Flash
Monitoring	Asynchronous Watchdog
Checksum	EEPROM & Flash

### ORDER CODES

Master Handset (Desk)	EVCS-MS
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#### System Components

8 Way Exchange Unit – Charger	EVCS-XC
Flush Outstation Push Door, Type A	EVCS-HFP
Surface Station Push Door, Type A	EVCS-HSP
Surface Outstation Type B, Red	EVCS-HSB
Surface Outstation Type B, Green	EVCS-HSBG
Surface Outstation Type B, Stainless Steel	EVCS-HSFSS
Flush Mounting Bezel Type B, Stainless Steel	VCFHB
Loose Handset With Jack Lead	EVCS-HLJ
Wall Jack Outlet Point	EVCS-WJP
Emergency Assist Alarm Network Version – PSU not included	EVCS-TA





# EVCS Type A Outstation

The Type A Outstation is compatible with all EVCS systems for use as a standard Fire Telephone or Disabled Refuge call point.

The Type A Outstation is a compact unit which offers easy access via a magnetic push catch door. The flush mountable unit offers a unique front levelling system allowing the back box to be mounted at a slight angle whilst still retaining a true front face and door. A surface mountable unit is also available.

This Emergency Voice Communication System (EVCS) is designed to fully comply with BS 5839-9 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. The standard states that where both systems are fitted to a building these should form a single system.



## Key features:

- Compact design
- High volume ringer
- Status LED
- Telecoil for hearing impaired users
- Full duplex operation
- Magnetic push catch
- Stainless steel option

## Benefits:

- Versatility, the unit can be used on all EVCS systems
- Dual use, the type A Outstations can be used as a fire telephone or a disabled refuge call point
- Magnetic push catch, for quick and easy access

An EVCS is a fixed, monitored and maintained, bi-directional, full duplex voice communication system to assist the orderly evacuation of disabled or mobility impaired people and enhance fire fighters communication during emergencies.

## Wiring

All type A handsets are defined in BS 5839-9, and can be used as a Fire Telephone or Disabled Refuge call point. When choosing the Outstation Type for use with an EVCS we recommend reading section 11 of BS 5839-9 2011 which deals with Outstation Types, and states as follows:

### 11.1.a

Type A handsets should be used for evacuation or fire fighting use, and a Type B Outstations should only be used where a Type A Outstations are impractical.

### 11.1.b

For Disabled Refuges Type A or type B Outstations can be used, however in locations (section 11.6.k) Type B Outstations can only be used where the background noise is below 40dBA (therefore there can be no sounder or voice alarm coverage in the area).

(EVCS) handsets are designed for use by multidisability users, having high contrast signage in line with RNIB guidelines and an induction loop coil (to BS EN 60118-4) in the handset.

It is recommend that a type A handset is used in most locations, otherwise you may have to consider acoustic hoods or 2 Outstations in each location for compliance with the other associated standards and laws, including BS 8300 and the Equality Act 2010.

## Mounting The Unit

All type A handsets should be mounted at a height of either 1200mm from the floor, or on a 1400mm centre line to comply with the requirements of Building Regulations Document M (Access for the Disabled).

### Surface mounted

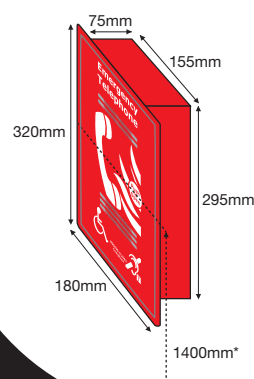
The back box has 4 indented feet to allow mounting on uneven walls.

### Flush mounted

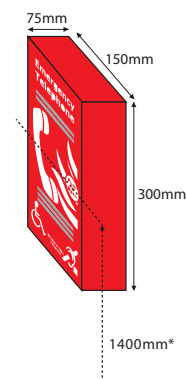
A cut out of 300mm x 160mm is recommended, the front bezel has adjustments to level the back box on the wall.

If the units are to be used as a refuge point suitable space must be allowed to the side of the unit to allow a wheelchair to be parked for using the system.

Surface mounted



Flush mounted



## Full System Architecture

MECHANICAL SPECIFICATION EVCS-HSP (SURFACE MOUNTED)	
<b>Dimensions:</b>	
Height	300mm
Width	150mm
Depth	75mm
Weight	1.4Kg (no batteries)
MECHANICAL SPECIFICATION EVCS-HFP (FLUSH MOUNTING)	
<b>Dimensions (with bezel):</b>	
Height	320mm
Width	150mm
<b>Dimensions (backbox hole):</b>	
Height	295mm
Width	155mm
Depth	75mm
Weight	1.4Kg (no batteries)
It is recommended to cut hole 300mm x 160mm	
STATUS LED	
Flashing when ringing	
Dimly lit to indicate surveillance	
Telephone type handset	
Automatic dialling to EVCS-CMPT when 'off hook'	
Telecoil for hearing impaired users	
Magnetic push catch door	

### ORDER CODES

Surface Outstation Push Door, Type A	EVCS-HSP
Flush Outstation Push Door, Type A	EVCS-HFP



# EVCS Type B Outstation

The Type B Outstations is designed to be versatile, compact and easy to use refuge call point.

This unit can either be surface or flush mounted using a simple to install bezel.

This Emergency Voice Communication System (EVCS) is designed to fully comply with BS 5839-9 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. The standard states that where both systems are fitted to a building these should form a single system.

An EVCS is a fixed, monitored and maintained, bi-directional, full duplex voice communication system to assist the orderly evacuation of disabled or mobility impaired people and enhance fire fighters communication during emergencies.

## Key features:

- Compact design
- High volume ringer
- Status LED
- 20mm cable glands
- Loop output for hearing impaired users
- Tactile braille signage
- Full duplex operation
- Flush bezel available
- Stainless steel option

## Benefits:

- Versatility, the unit can be used on all the EVCS systems
- Full duplex operation, allowing 2 way voice communication
- Tactile braille signage to assist partially sighted people to easily operate refuge point

## Suitability

All Type B Handsets are defined in BS 5839-9, and can be used as a Fire Telephone or Disabled Refuge call point.

When choosing the Outstation type for use with an EVCS we recommend reading section 11 of BS 5839-9:2011 which deals with Outstation Types, and states as follows:

### 11.1.a

Type A handsets should be used for evacuation or fire fighting use, and Type B Handsets should only be used where Type A Handsets are impractical.

### 11.1.b

For Disabled Refuges Type A or Type B Outstations can be used, however in locations (section 11.6.k) Type B Handsets can only be used where the background noise is below 40dBA (therefore there can be no sounder or voice alarm coverage in the area).

EVCS Type B Outstations are designed for use by multi-disability users, having high contrast signage in line with RNIB guidelines and a socket for an external induction loop amplifier if required.

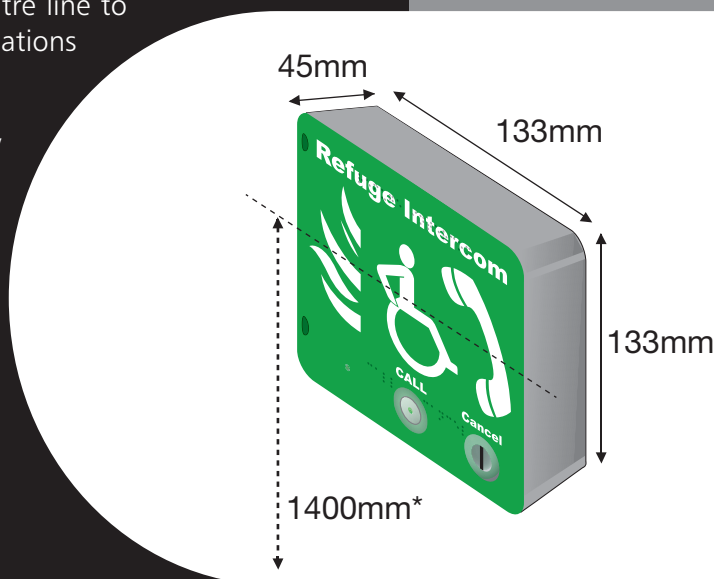


## Mounting The Unit

All Type B Outstations should be mounted at a height of either 1200mm from the floor, or on a 1400mm centre line to comply with the requirements of Building Regulations Document M (access for the disabled).

The back box has 4 indented feet to allow mounting on uneven walls.

Type B Outstations can be flush mounted by cutting a hole 133mm x 133mm and 45mm deep, and using the stainless steel bezel to finish the surround.



## Full System Architecture

TECHNICAL SPECIFICATION			
Code:	EVCS-HSBG	EVCS-HSB	EVCS-HSFSS
Description	Surface Outstation Type B	Surface Outstation Type B	Surface Outstation Type B
Standards	EMC: EN55103-1 & EN55103-2 LVD: EN60950 BS5839 Part 9 & BS9999 & EN60118-4		
<b>Outstation Cables:</b>			
Glands	20 mm	20 mm	20 mm
Cores	2 core 1 mm or 1.5 mm	2 core 1 mm or 1.5 mm	2 core 1 mm or 1.5 mm
Distance	500 m	500 m	500 m
<b>Indications &amp; Controls:</b>			
Status LEDs	2 off red (flashes location lights, solid in use)		
Call	Press to call button	Press to call button	Press to call button
Cancel	Press to cancel button	Press to cancel button	Press to cancel button
<b>Physical:</b>			
Construction	Zintec, Powder Coated	Zintec, Powder Coated	Zintec, Powder Coated
Colour Option	Green	Red	Stainless Steel
Dimensions (H x W x D)	133 mm x 133 mm x 45 mm	133 mm x 133 mm x 45 mm	133 mm x 133 mm x 45 mm
Flushing Plate Dimensions (Fits all) (H x W)	155mm x 155mm		
Weight	1105g	1105g	1105g
<b>HANDS FREE COMMUNICATIONS</b>			
Push button dialling to Compact-5 , Compact-9 and Network 8 system			
Echo cancellation			
Noise reduction			
Induction loop output for hearing impaired users			
Push button cancel			
Braille Signage			
<b>ELECTRICAL SPECIFICATION</b>			
Fully monitored connections	DC open, DC Short and Earth Fault		
<b>STATUS LED</b>			
Flashing for line location			
Continuously lit to indicate call confirmation active			

ORDER CODES	
Surface Outstation, Type B Red	EVCS-HSB
Surface Outstation Type B, Green	EVCS-HSBG
Surface Outstation Type B, Stainless Steel	EVCS-HSFSS
Flush Mounting Bezel Type B, Stainless Steel	VCFHB



# Roaming Handset & Jack Plate

The Roaming Handset is used along with the Jack Plate for Emergency Voice Communication System installations in countries whose fire codes allow for Roaming Handsets (these units are not suitable for installation in the UK under BS 5839-9).

When used together the Roaming Handset and Jack Plate form a Type A Outstation which is compatible with all EVCS systems.

This Emergency Voice Communication System (EVCS) is designed to fully comply with BS 5839-9 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. The standard states that where both systems are fitted to a building these should form a single system.

An EVCS is a fixed, monitored and maintained, bi-directional, full duplex voice communication system to assist the orderly evacuation of disabled or mobility impaired people and enhance fire fighters communication during emergencies.

## Key features:

- Flexible roaming phone
- Low noise high quality telephone jack
- Telecoil for hearing impaired users
- Full duplex operation
- Stainless steel jack plate

## Benefits:

- The jack plate can be surface or flush mounted
- Full duplex operation, allowing 2 way voice communication

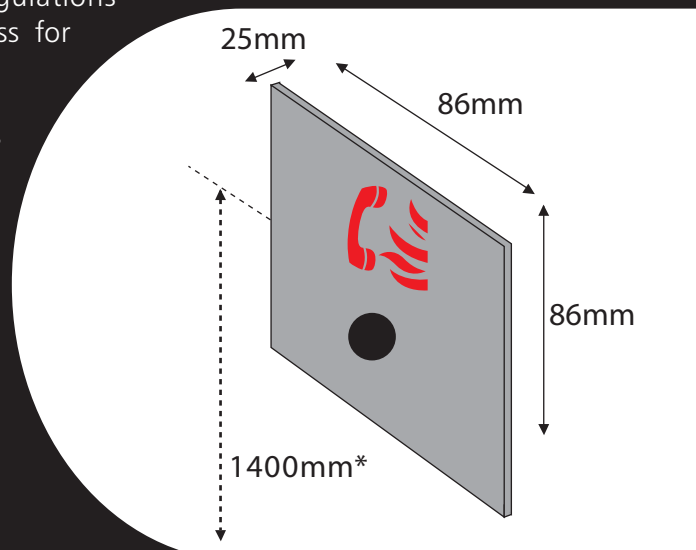
## Suitability

The Roaming Handset and Jack Plate are suitable for EVCS installations in countries whose fire codes allow for Roaming Handsets, this is not suitable for installation in the UK under BS 5839-9.

## Mounting The Unit

The Jack Plate should be mounted at a height of either 1200mm from the floor, or on a 1400mm centre line to comply with the requirements of Building Regulations Document M (access for the disabled).

The Jack Plate fits on to a standard MK style back box (not supplied) and can be flush or surface mounted.







## Full System Architecture

JACK PLATE SPECIFICATION	
<b>Cables:</b>	
Cores	2 core 1 mm or 1.5 mm
Distance	500 m
Monitoring	dc open, short and earth
End Of Line	10K 1/4 W
<b>Physical:</b>	
Construction	Brushed Stainless Steel
<b>Dimensions:</b>	
Height	86 mm
Width	86 mm
Depth	25 mm
Weight	140 g

ROAMING HANDSET SPECIFICATION	
Standards EMC:	EN55103-1 & EN55103-2 LVD: EN60950
<b>Controls:</b>	
Call	Automatic "Off Hook" dialing
<b>Connection:</b>	
Jack	1/4" mono neutrik heavy duty
<b>Physical:</b>	
Construction	ABS UL90V1
<b>Dimensions:</b>	
Height	210 mm
Width	66 mm
Depth	45 mm
Weight	700 g

ORDER CODES	
Loose Handset With Jack Lead	EVCS-HLJ
Wall Jack Outlet Point	EVCS-WJP



# Emergency Assist Alarm Kit

The Emergency Assist Alarm Kit has been specifically designed to integrate disabled call functions into the EVCS network or EVCS compact ranges providing the perfect solution for conformity with the Building Regulations Document M and Equality Act 2010.

It has now become very common for the disabled toilet to be specified as part of the refuge system. Disabled toilet alarms are required by Building Regulation Document M, and by integrating it with the Emergency Voice Communication System all calls relating to disabled communications can be displayed in a single point.

The Emergency Assist Alarm Kit solution is fully monitored and battery backed by the EVCS system, saving local power supplies and giving confidence in the system integrity.

The Emergency Assist Alarm Kit shows up as a call on the EVCS system, but has no speech path so a conversation cannot be had with the occupant, use of the Type B Outstations would

allow this.

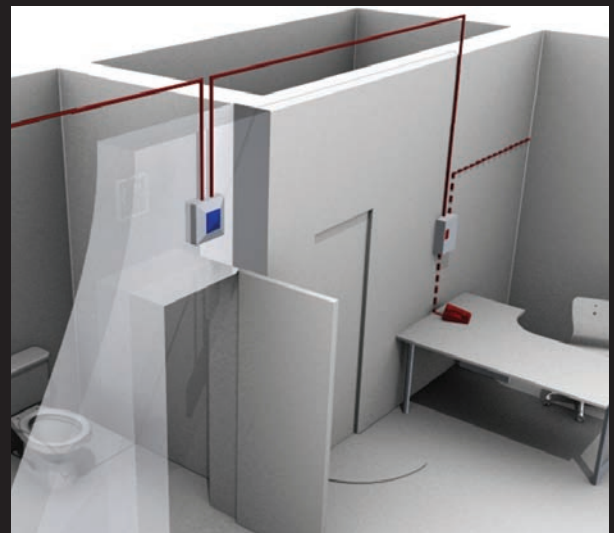
## Suitability

The Roaming Handset and Jack Plate are suitable for EVCS installations in countries whose fire codes allow for Roaming Handsets, this is not suitable for installation in the UK under BS 5839-9.

## Mounting The Unit

The Jack Plate should be mounted at a height of either 1200mm from the floor, or on a 1400mm centre line to comply with the requirements of Building Regulations Document M (access for the disabled).

The Jack Plate fits on to a standard MK style back box (not supplied) and can be flush or surface mounted.



## Key features:

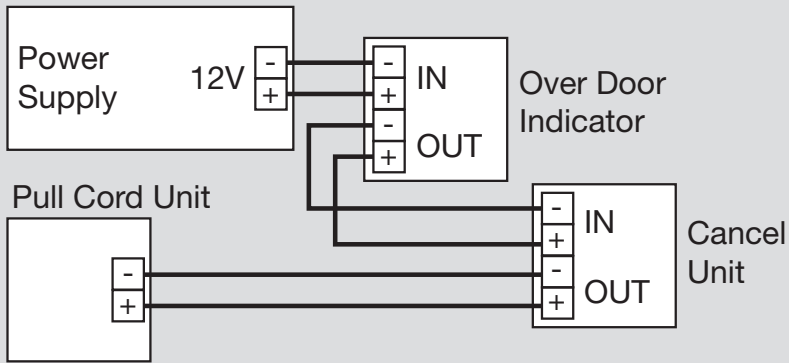
- Monitored to BS 5839-9
- Remote powered from EVCS exchange
- Dual loop pull cord
- High contrast labels
- Braille on cancel plate
- Blue indication

## Benefits:

- Saving power, no PSU is required remote powered by EVCS system
- One install saves running 2 separate systems
- One location all calls from disabled toilets and refuge points monitored from one location
- Tactile braille signage to assist partially sighted people to easily operate the cancel plate



## Wiring Guide Using 2 Core Cable



OUT	IN
EVCS Exchange	Over Door Indicator
Over Door Indicator	Cancel Unit
Cancel Unit	Pull Cord Unit

## Full System Architecture

### OVER DOOR INDICATOR SPECIFICATION

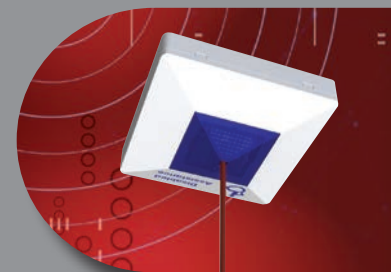
Operating Voltage	12V dc (nominal)
<b>Physical</b>	
Construction	PC
Dimensions (H x W x D)	87mm x 87mm x 31.5mm

### CANCEL BUTTON SPECIFICATION

Operating Voltage	12V dc (nominal)
<b>Physical</b>	
Construction	PC
Dimensions (H x W x D)	87mm x 87mm x 25mm

### PULL CORD UNIT SPECIFICATION

Operating Voltage	12V dc (nominal)
<b>Physical</b>	
Construction	PC
Dimensions (H x W x D)	87mm x 87mm x 30.5mm (+cord)



### ORDER CODES

Emergency Assist Alarm Stand Alone Kit  
 – Supplied with PSU (1x Power Supply Unit,  
 1x Over Door Indicator, 1x Cancel Button,  
 1x Pull Cord Unit, 1x Disabled Sticker)  
 EVCS-TAP

Emergency Assist Alarm Network Version  
 – PSU not included (1x Over Door Indicator,  
 1x Cancel Button, 1x Pull Cord Unit,  
 1x Disabled Sticker)  
 EVCS-TA



# Emergency Assist Alarm, Stand Alone Kit

The Emergency Assist Alarm, Stand Alone Kit provides the perfect solution for conformity with the Building Regulations Document M and Equality Act 2010.

This is a simple 2 wire system that has been specifically designed to meet the needs of disabled service users and conforms to all the relevant requirements; Disability Rights Commission code of practice, English Tourism Council Recommendations and RNIB signage guidelines.

The use of combined high output blue LED indication and buzzer ensures a response to the call.

The Emergency Assist Alarm, Stand Alone Kit comprises of all the components needed to install a fully compliant system, with additional parts available separately.

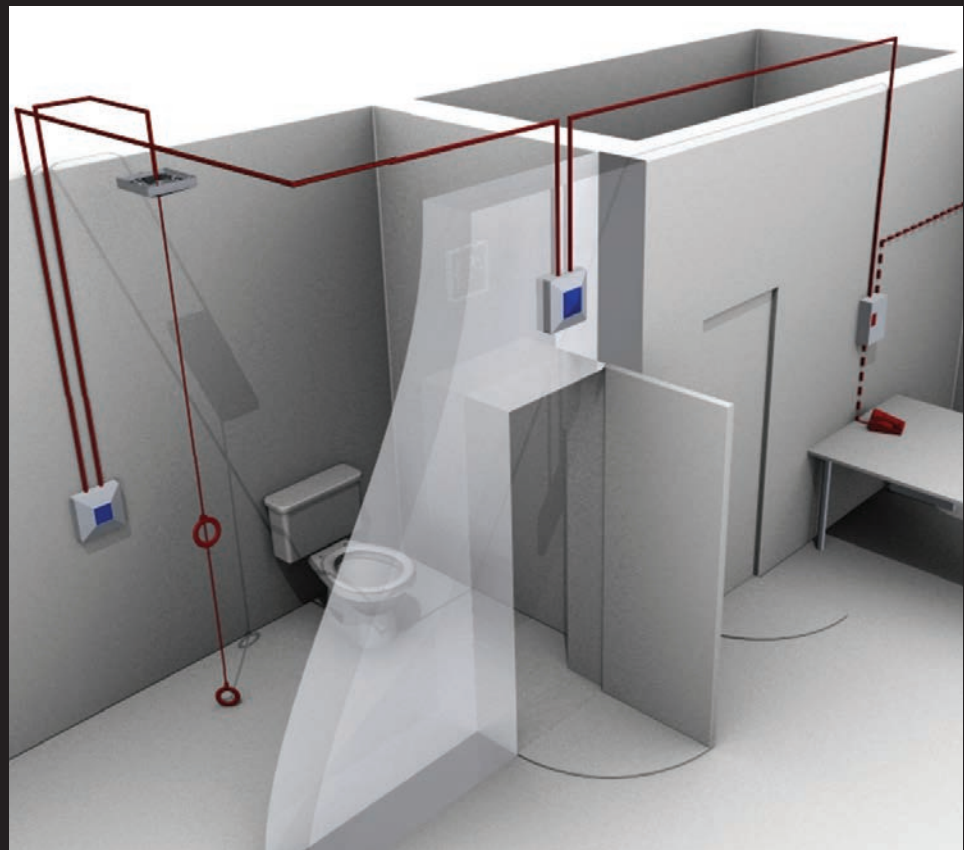


## Key features:

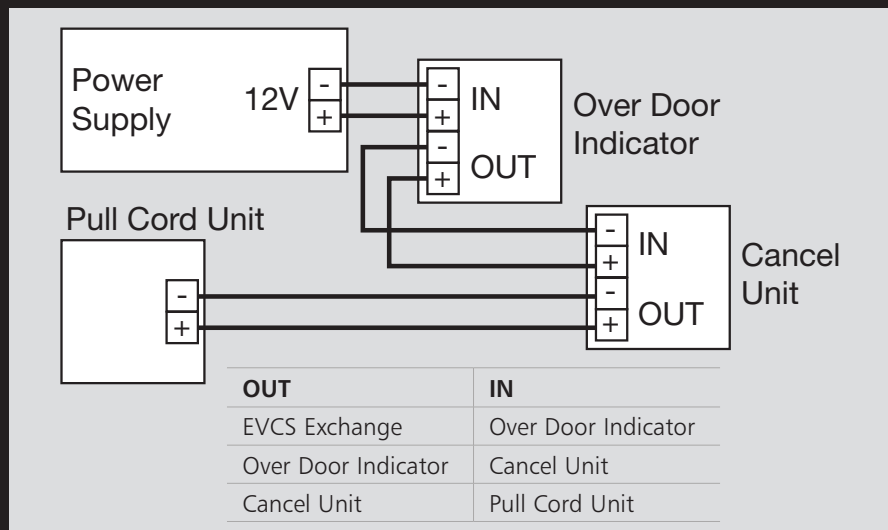
- Complies with regulations & recommendations
- Dual loop pull cord
- High contrast labels
- Blue indication

## Benefits:

- Quick and simple installation, with limited cabling requirements
- High contrast printing for increased visibility
- Tactile braille signage to assist partially sighted people to easily operate the cancel plate



## Wiring Guide Using 2 Core Cable



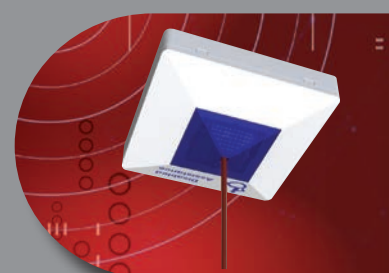
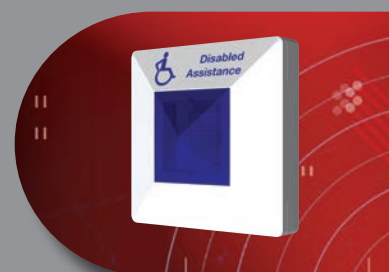
## Full System Architecture

POWER SUPPLY UNIT SPECIFICATION	
<b>Dimensions:</b>	
Width	146 mm
Height	86 mm
Depth	39 mm
<b>Electrical Specification:</b>	
Mains	230V ac +10% -15%
Output	12V dc (nominal)
<b>Physical:</b>	
Material	Flame retardant Poly Carbonate +ABS -Blend

OVER DOOR INDICATOR SPECIFICATION	
<b>Dimensions:</b>	
Width	87 mm
Height	87 mm
Depth	31.5 mm
<b>Electrical Specification:</b>	
Operating Voltage	12V dc (nominal)
<b>Physical:</b>	
Material	Flame retardant Poly Carbonate +ABS -Blend

CANCEL BUTTON SPECIFICATION	
<b>Dimensions:</b>	
Width	87 mm
Height	87 mm
Depth	25 mm
<b>Electrical Specification:</b>	
Operating Voltage	12V dc (nominal)
<b>Physical:</b>	
Material	Flame retardant Poly Carbonate +ABS -Blend

PULL CORD UNIT SPECIFICATION	
<b>Dimensions:</b>	
Width	87 mm
Height	87 mm
Depth	30.5 mm
<b>Electrical Specification:</b>	
Operating Voltage	12V dc (nominal)
<b>Physical:</b>	
Material	Flame retardant Poly Carbonate +ABS -Blend



ORDER CODES	
Emergency Assist Alarm Stand Alone Kit – Supplied with PSU (1x Power Supply Unit, 1x Over Door Indicator, 1x Cancel Button, 1x Pull Cord Unit, 1x Disabled Sticker)	EVCS-TAP
Emergency Assist Alarm Network Version – PSU not included (1x Over Door Indicator, 1x Cancel Button, 1x Pull Cord Unit, 1x Disabled Sticker)	EVCS-TA





# 4 Way Splitter Unit

The 4 Way Splitter Unit allows up to 4 stand alone disabled toilets to be monitored in one specific area.

Staff can then at the designated area such as a reception or security desk react to an alarm swiftly and efficiently.



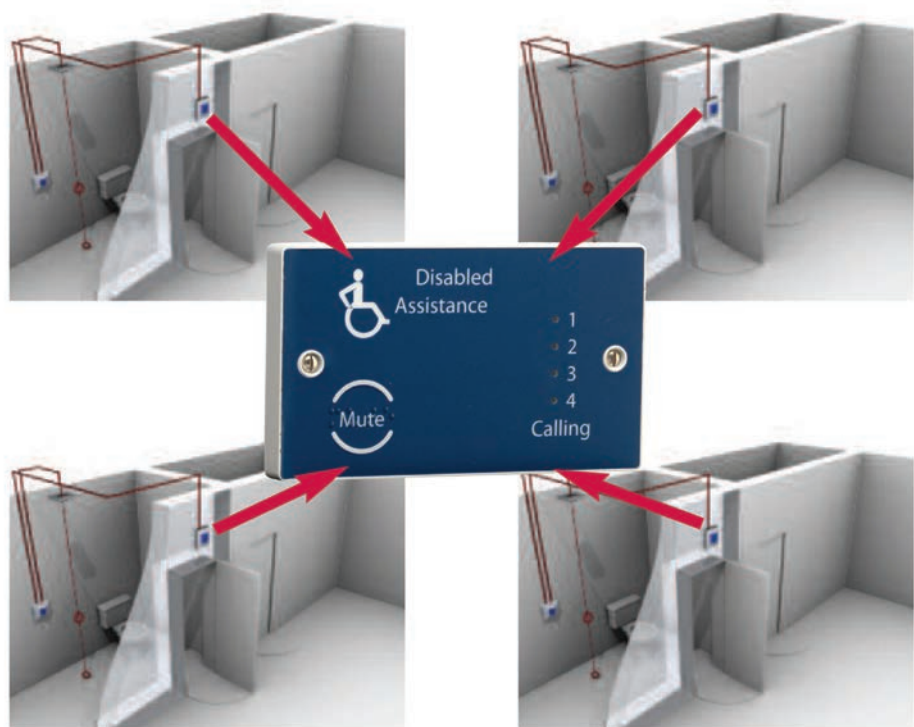
## Key features:

- Designed to comply with all regulations and recommendations
- High visibility
- More than one 4 way splitter can be used
- Small compact design

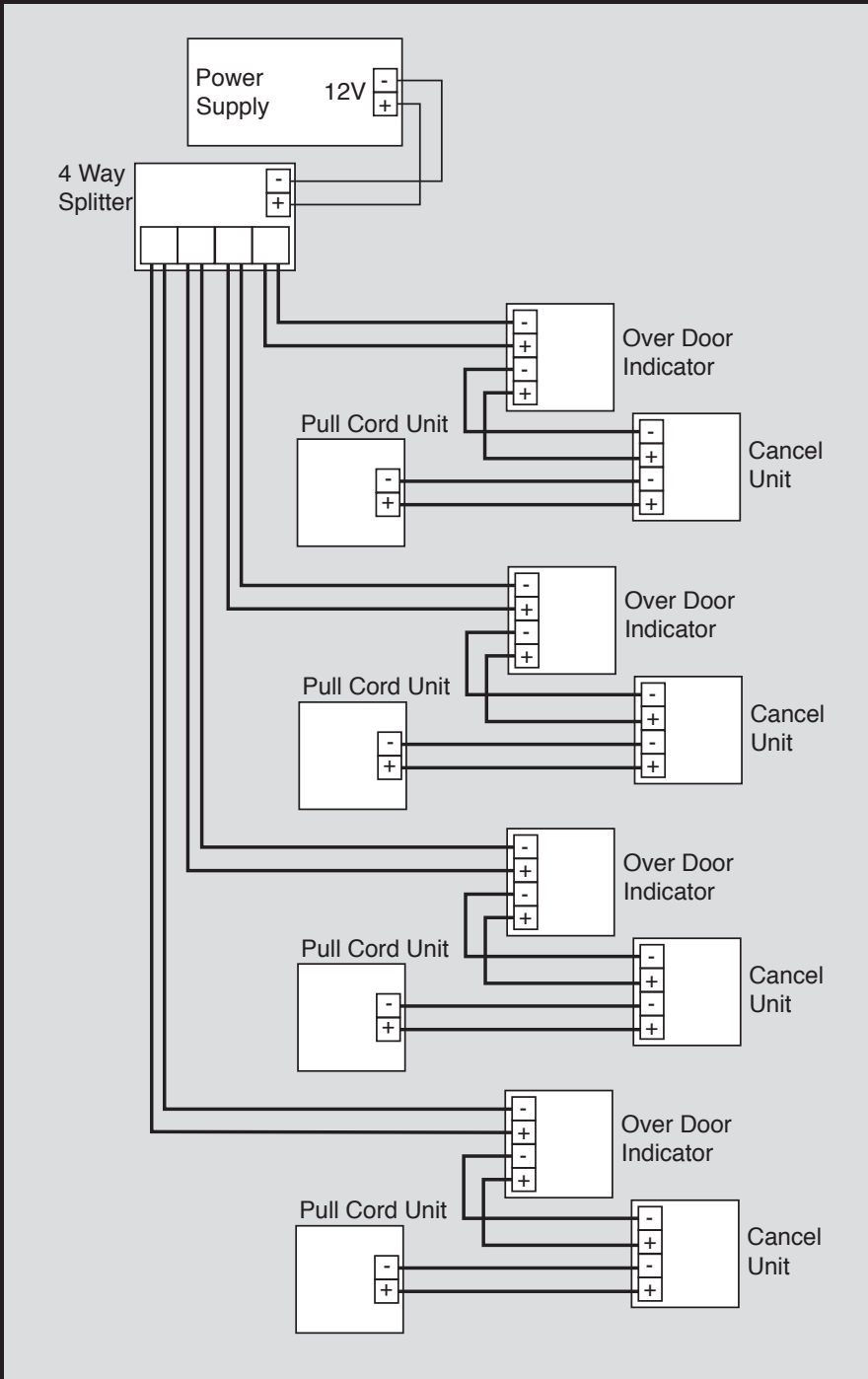
## Benefits:

- Up to 4 disabled toilets monitored in one area
- Uses blue LEDs to avoid confusion
- Visibility to remote staffed areas
- No mains or PSU required at each disabled toilet

## TYPICAL EMERGENCY ALARM ASSIST SYSTEM USING A 4 WAY SPLITTER



## Wiring Guide Using 2 Core Cable



## Full System Architecture

POWER SUPPLY UNIT SPECIFICATION	
<b>Dimensions:</b>	
Width	146 mm
Height	86 mm
Depth	39 mm
<b>Electrical Specification:</b>	
Mains	230V ac +10% -15%
Output	12V dc (nominal)
<b>Physical:</b>	
Material	Flame retardant Poly Carbonate +ABS -Blend

ORDER CODES	
4 Way Splitter Emergency Assist	EVCS-TASP4
PSU for use with 4 Way Splitter Emergency Assist	EVCS-TASP4-P



# EVCS Parts List

MATERIAL	MATERIAL DESCRIPTION
<b>EVCS COMPACT 5</b>	
EVCS-CMPT	Compact Master Handset Wall Mount
<b>EVCS COMPACT 9</b>	
EVCS-CMPT9	Compact 9 Line Master Exchange Unit
EVCS-XC10	10 Line Slave Exchange
<b>EVCS NETWORK 8</b>	
EVCS-XC	8 Way Exchange Unit - Charger
EVCS-MS	Master Handset Desk
EVCS-RM	Rackmount Kit 6U
<b>OUTSTATIONS/HANDSETS</b>	
EVCS-HFP	Flush Outstation Push Door, Type A
EVCS-HSP	Surface Station Push Door, Type A
EVCS-HSB	Surface Outstation Type B, Red
EVCS-HSBG	Surface Outstation Type B, Green
EVCS-HSFSS	Surface Outstation Type B, Stainless Steel
VCFHB	Flush Mounting Bezel Type B, Stainless Steel
EVCS-HLJ	Loose Handset With Jack Lead
EVCS-WJP	Wall Jack Outlet Point
<b>EMERGENCY ASSIST ALARM</b>	
EVCS-TAP	Emergency Assist Alarm Stand Alone Kit- Supplied with PSU
EVCS-TA	Emergency Assist Alarm Network Version- PSU not included
EVCS-TASP4	4 Way Splitter Emergency Assist
EVCS-TASP4-P	PSU for use with 4 Way Splitter Emergency Assist



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**Literature ref:** SMS??

