

# Channel Orbital Refuge



**Refuge Alarm Systems**  
from Channel Safety Systems

# Disability and the Equality Act 2010

From 1 October 2010, the Equality Act has combined all previous acts relating to discrimination, into one, more encompassing legal area. This means that although the Disability Discrimination Act (DDA) has been superseded by the Equality Act, the Disability Equality Duty in the DDA continues to apply.

## Equality Act 2010

The Equality Act 2010 aims to protect disabled people and prevent disability discrimination. It provides legal rights for disabled people in the areas of:

- Employment
- Education
- Access to goods, services and facilities including larger private clubs and land based transport services buying and renting land or property
- Functions of public bodies, for example the issuing of licences

The Equality Act also provides rights for people not to be directly discriminated against or harassed because they have an association with a disabled person. This can apply to a carer or parent of a disabled person. In addition, people must not be directly discriminated against or harassed because they are wrongly perceived to be disabled.

# Channel Orbital Refuge Systems

## What is a Refuge Alarm System?

A refuge system provides a means of calling for assistance in the event of an emergency. A designated “safe area” isolates exiting occupants from the effects of smoke and heat during a fire or emergency situation. The communication system allows the person in need to inform security of their location in the building and provides an area that are relatively safe places where people who cannot easily use fire escapes.

Most risk assessments show the need for a Refuge System, giving reassurance that the building management know of the occupants whereabouts during an emergency.

The primary function of the Refuge Communication System is to provide a voice link between two points in a building.

When a call is generated at the refuge area, the central control panel will sound and display the location of the incoming call.

Lifting the handset and pressing the appropriate zone button at the central station will open the speech channel (loudspeaker) allowing a ‘full duplex’ conversation to take place. The disabled refuge outstation can be used to call for assistance and reassure the person until help arrives.

## The definition of ‘disability’ under the Equality Act 2010

In the Act, a person has a disability if:

- They have a physical or mental impairment
- The impairment has a substantial and long-term adverse effect on their ability to perform normal day-to-day activities

For the purposes of the Act, these words have the following meanings:

- ‘substantial’ means more than minor or trivial
- ‘long-term’ means that the effect of the impairment has lasted or is likely to last for at least twelve months (there are special rules covering recurring or fluctuating conditions)
- ‘normal day-to-day activities’ include everyday things like eating, washing, walking and going shopping
- People who have had a disability in the past that meets this definition are also protected by the Act.

## Progressive conditions considered to be a disability

There are additional provisions relating to people with progressive conditions. People with HIV, cancer or multiple sclerosis are protected by the Act from the point of diagnosis. People with some visual impairments are automatically deemed to be disabled.

## Conditions that are specifically excluded

Some conditions are specifically excluded from being covered by the disability definition, such as a tendency to set fires or addictions to non-prescribed substances.

## Safety Regulations and the Disability Discrimination Act

Part M of the UK government’s building regulations insists that all new non-domestic buildings with more than one-storey must provide refuge areas for public safety purposes.

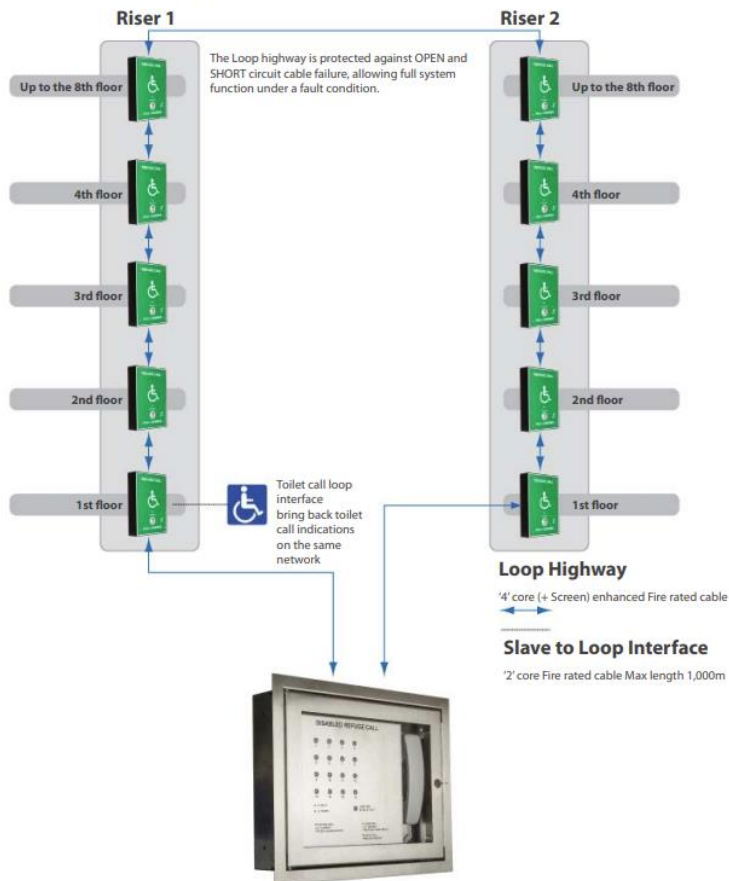
The Disability Discrimination Act (DDA) consists of several pieces of civil law that enable disabled people who feel they have been discriminated against to take action for damages against organisations or individuals should these considerations not be implemented to support their personal safety in the event of an emergency.

All of Channel’s disabled refuge systems are BS9999 & BS5839 Pt9. 2010 compliant, and we offer our consultants assistance for BS5839, BS9999, as well as providing relevant specification templates.

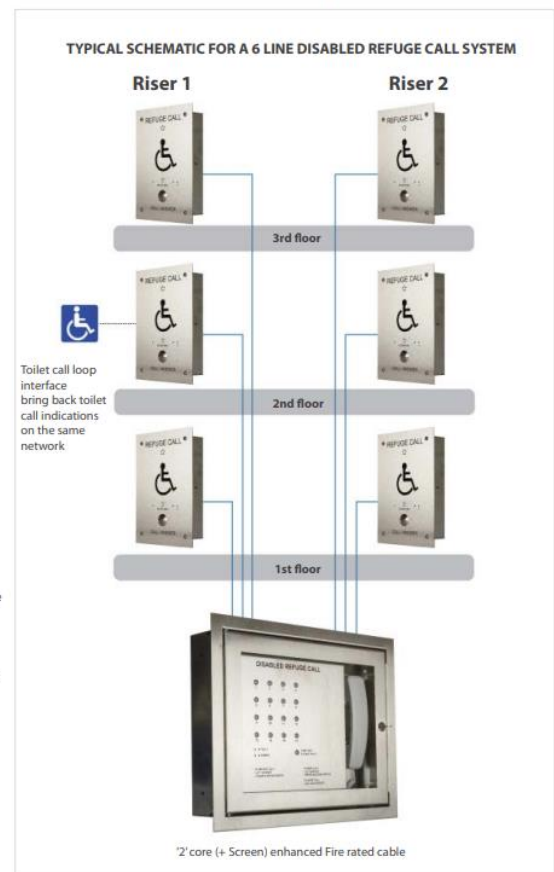
## Simple and Effective

Simple and effective ‘full duplex’ two-way communication in these areas is essential, firstly to assist rescue teams in determining where assistance is required and secondly to reassure people help is on the way.

## Loop Wiring Diagram



## Radial Diagram



## 2 Way Refuge Panel

The Orbital R/CH/ORB/R/RS1 is a 2 way system supplied with 1 outstation allowing the 1 way option and the R/CH/ORB/R/RS2 is a simple 2 way system ready to be installed. The combined master panel has a call indication for the disabled refuge.

The master panel can answer or call out automatically to the disabled refuge location by lifting the master handset.

Once connected a clear full duplex audio conversation can take place. The call is ended by replacing the master handset. The system outstation is radially wired in '2' core '1.5' mm enhanced fire rated cable.

### Features

- Battery support 24 hours (3 hours emergency)
- Fully compliant to BS5839 Pt9
- CE 2012 certified
- Available with flush or surface mounting back box.



The image above shows from left to right R/CH/ORB/R/RS2/F & R/CH/ORB/R/RS2/S

### Dimensions

Surface	Height 312mm x Width 229mm x Depth 229mm
Flush Front Panel	Height 307mm x Width 224mm x Depth 83mm
Back Box	Height 287mm x Width 204mm x Depth 83mm

PRODUCT CODE	DESCRIPTION
R/CH/ORB/R/RS1/F	2 way orbital flush refuge panel complete with 1x flush stainless steel outstation
F/CHAS/4	2 way orbital surface refuge panel complete with 1x surface stainless steel outstation
F/CHAS/8	2 way orbital flush refuge panel complete with 2x flush outstation (Specify S/Steel or Green finish)
F/CH24/2.1	2 way orbital surface refuge panel complete with 2x surface outstation (Specify S/Steel or Green finish)

## 4 Way Refuge Panels

The Orbital R/CH/ORB/R/RS4 is a four way disabled refuge call system. Finished in stainless steel, and can be surface mounted or provided with a flush enclosure with black screen print. The master panel can answer or call out by pressing the separate call switches and indications for each disabled refuge location.

Group call can also be selected. Once connected a clear full duplex audio conversation can take place. The call is ended by replacing the master handset. The disabled refuge outstations are radially wired in '2' core '1.5' mm enhanced fire rated cable or as a loop wired '4' core '1.5' mm enhanced fire rated cable. A volt free changeover contact is provided for remote call in and fault reporting. A fire panel inhibit input is also fitted as standard.

### Features

- Battery support 24 + 3 hours (emergency)
- Fully compliant to BS5839 Pt9 and CE 2012 certified



### Dimensions

Panel	Height 308mm x Width 308mm x Depth 1.5mm
Surface Sleeve Panel	Height 403mm x Width 403mm x Depth 83mm
Flush Back Box	Height 360mm x Width 360mm x Depth 75mm

PRODUCT CODE	DESCRIPTION
R/CH/ORB/R/RS4/F	4 way flush orbital refuge panel, stainless steel - outstations purchased separately (radial)
R/CH/ORB/R/RS4/S	4 way orbital surface refuge panel, stainless steel - outstations purchased separately (radial)

## 8 Way Refuge Panel

The Orbital R/CH/ORB/R/RS8 is a simple eight way disabled refuge alarm panel.

The master panel can answer or call out by pressing the separate call switches and indications for each disabled refuge location.

Once connected a clear full duplex audio conversation can take place. The call is ended by replacing the master handset. The disabled refuge outstations are radially wired in '2' core '1.5' mm enhanced fire rated cable or as a loop wired '4' core '1.5' mm enhanced fire rated cable. A volt free changeover contact is provided for remote call in and fault reporting. A fire panel inhibit input is also fitted as standard.

### Features

- Group call can also be selected
- Glazed lockable door
- Battery support 24 + 3 hours (emergency)
- Fully compliant to BS5839 Pt9 and CE 2012 certified



### Dimensions

Surface	Height 400mm x Width 500mm x Depth 100mm
Flushing Flange	Height 410mm x Width 510mm x Depth 1.0mm
Flush Back Box	Height 360mm x Width 460mm x Depth 98mm

PRODUCT CODE	DESCRIPTION
R/CH/ORB/R/RS8/F	8 way flush orbital refuge panel, stainless steel - outstations purchased separately (radial)
R/CH/ORB/R/RS8/S	8 way orbital surface refuge panel, stainless steel - outstations purchased separately (radial)
R/CH/ORB/L/RS8/F	8 way flush orbital refuge panel, stainless steel - outstations purchased separately (loop)
R/CH/ORB/L/RS8/S	8 way orbital surface refuge panel, stainless steel - outstations purchased separately (loop)

# 16 Way Refuge Panel

The Orbital R/CH/ORB/R/RS16 is a sixteen way disabled refuge system. Stainless steel surface or flush enclosure with glazed lockable door. The master panel can answer or call out by pressing the separate call switches and indications for each disabled refuge location. Group calls can also be selected. Once connected a clear full duplex audio conversation can take place. The call is ended by replacing the master handset. The system outstations are loop wired '4' core '1.5' mm enhanced fire rated cable. A volt free changeover contact is provided for remote call in and fault reporting. A fire panel inhibit input is also fitted as standard. A radially wired system can also be provided if required. This utilises a '2' core '1.5' mm enhanced fire rated cable to each outstation. A separate junction box is provided for these terminations to be fitted at a convenient location. The master control panel is wired to this junction box using 2 x '4' core 1.5' mm enhanced fire rated cables.



## Features

- Battery support 24 + 3 hours (emergency)
- Fully compliant to BS5839 Pt9 and CE 2012 certified

## Dimensions

Flushing Flange	Height 410mm x Width 510mm x Depth 1.0mm
Flush Back Box	Height 360mm x Width 460mm x Depth 98mm
Surface Back Box	Height 400mm x Width 500mm x Depth 100mm

PRODUCT CODE	DESCRIPTION
R/CH/ORB/R/RS16/F	16 way flush orbital refuge panel, stainless steel - outstations purchased separately (radial)
R/CH/ORB/R/RS16/S	16 way orbital surface refuge panel, stainless steel - outstations purchased separately (radial)
R/CH/ORB/L/RS16/F	16 way flush orbital refuge panel, stainless steel - outstations purchased separately (loop)
R/CH/ORB/L/RS16/S	16 way orbital surface refuge panel, stainless steel - outstations purchased separately (loop)

# Outstations & Back Boxes

The Disabled outstations and back boxes are available in two finishes and can be surface or flush mounted.

## Outstations Faceplates

- The green outstation faceplate is a photo luminescent front panel complete with braille identification and tactile text. This unit has induction loop built in as standard
- The stainless steel faceplate unit has a black screen print

## Mounting options

- Flush units are completed with a galvanised steel back box
- Surface units are completed with a black leatherette finish back box and mild steel faceplate painted to RAL9001

A call is made by pressing the large momentary push button. This will illuminate the panel mounted 'call registered' red led, and initiate a conventional telephone call tone from the panel loudspeaker.

## Features

- Vandal resistant
- Induction loop in green station only
- For duplex audio



Images shows from left to right R/CH/RCO/H/GB & - R/CH/RCO/H/SS/1

Dimensions	
RCO/H/GB	Height 260mm x Width 185mm x Depth 1.5mm
RCO/H/SS/1	Height 260mm x Width 185mm x Depth 1.5mm
Flush Back Box	Height 230mm x Width 155mm x Depth 55mm
Surface Back Box	Height 264mm x Width 189mm x Depth 50mm

PRODUCT CODE	DESCRIPTION
R/CH/RCO/H/GB	16 way flush orbital refuge panel, stainless steel - outstations purchased separately (radial)
R/CH/RCO/H/SS/1	Stainless steel outstation faceplate (requires back box)
R/CH/RCO/S/BB/1	Refuge Call Back Box – surface mounting (radial)
R/CH/RCO/F/BB/1	Refuge Call Back Box – flush mounting (radial)
R/CH/RCO/S/L/BB	Refuge Call Back Box – surface mounting (loop)
R/CH/RCO/F/L/BB	Refuge Call Back Box – flush mounting (loop)