# EMERGENCY ASSIST ALARM

#### Models covered:

Single Zone Plastic Control Unit Single Zone Stainless Steel Control Unit Plastic Reset Unit Stainless Steel Reset Unit Plastic Over-Door Unit Stainless Steel Over-Door Unit Pull Cord Unit Four Zone Plastic Control Unit Four Zone Stainless Steel Control Unit Single Zone Plastic System Kit



# 1. Models Covered

#### Components

Single Zone Plastic Control Unit **EACP1** (with battery back up **EACP1PR**)

Single Zone Stainless Steel Control Unit EASSCP1 (with battery back up EASSCP1PR)

Plastic Reset Unit EARB1

Stainless Steel Reset Unit EASSRB1

Plastic Over-Door Unit EADF1

Stainless Steel Over-Door Unit EASSDF1

Pull Cord Unit EAPC1

Four Zone Plastic Control Unit EACP4 (with battery back up EACP4PR)

Four Zone Stainless Steel Control Unit **EASSCP4** (with battery back up **EASSCP4PR**)

#### Kits

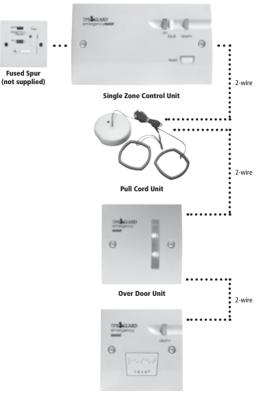
Single Zone Plastic System Kit **EASZK** (with battery back up **EASZPRK**)

Single Zone Stainless Steel System Kit **EASSSZK** (with battery back up **EASSSZPRK**)

Both of which comprise of components from the above list

#### **Typical Single Zone System**

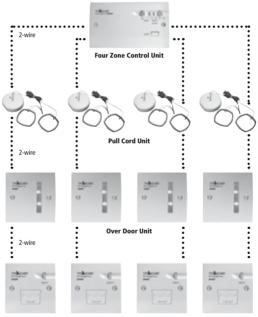
(Available as EASZK)



**Reset Unit** 

#### **Typical Four Zone System**

There are no four zone kits, but two to four zones can be accommodated by using any of the four zone Control Units in combination with the appropriate number of Reset Units, Over-Door Units and Pull Cord Units. There are no adverse effects if any of the four zone control units input connections are left open.



Reset Unit

# 4

# 2. Introduction

The basic system consists of a Control Unit (which is powered by AC mains supply) connected by an extra low voltage 2wire link to a Pull Cord Unit which is in turn connected to an Over-Door Unit by another extra low voltage 2-wire link. The Over-Door Unit is then connected to a Reset Unit by a further extra low voltage 2-wire link.

When the pull cord, mounted adjacent to the W.C., is pulled, the red L.E.D. on the Pull Cord Unit is activated until the system is reset, assuring the disabled person in distress that the system has been activated. The sounder and the light on the Over-Door Unit outside the cubicle, are activated intermittently. At the Reset Unit inside the cubicle, the light and sounder are activated intermittently and will both be further reassuring the person in distress. At the Control Unit the alarm light and the sounder are activated continuously.

Either the Over-Door Unit or the Control Unit will attract the attention of an appropriate person either directly or indirectly and that person will note the zone in alarm, press the reset button at the Control Unit clearing the alarm and then investigate the toilet cubicle in question.

Note: Reset button at the Control Unit can be disabled by moving the reset selection switch to the OFF position.

At any time if the difficulty is resolved the person in distress can clear the alarm by pressing the reset button in the cubicle.

# 3. Installation

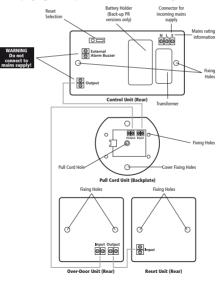
 Important: This system must be installed and maintained by a suitably qualified person. Connect the Extra Low Voltage wiring first. Connect Mains wiring last. See mains ratings in diagram. Mains supply must come from a fused spur and MUST be switched off at all times while installation is in progress

- The installation shall be carried out in accordance with all applicable installation rules.
- None of the units in the system should be subject to dripping or splashing liquids.
- When using the Control Unit with a 25mm deep box choose the fixing holes to ensure clearance between the screw heads and the rear of the control unit.

#### Wiring and Fixing Holes

5

Final page gives expanded view of this diagram.



# 3.1. Control Unit

This should be sited (following the recommendations of BS8300) where it can best attract the attention of an appropriate person/member of staff. An example of this is near a reception desk in view of a receptionist.

Having located the site, install a flush or surface mount double gang wall box at least 25mm deep.

Bring the mains supply cable  $(1mm^2 \text{ twin and earth})$  into the box and connect to the terminals on the Control Unit marked 'L' and 'N' (see diagram). Connect the incoming wiring as instructed below.

#### **Mains Wiring**

Important: All mains wiring should be provided in accordance with the relevant national wiring rules Bring the mains supply cable (1mm<sup>2</sup> TFE) into the box and connect the Live and Neutral wires to the terminals on the Control Unit marked 'L' and 'N' respectively.(see diagram) Ensure the lengths of wires inside the connectors are prepared correctly. Connection should be made firmly after all strands are entered into the terminals.). Connect the incoming earth

wire as instructed below



NOTE: This is a class 1 apparatus if a metal box is used and therefore the earth wire MUST be connected to the earth terminal of the metal box itself. If a plastic box is used, connect the earth wire to the Earth connector marked (=) on the Control board.

On the stainless steel version, connect the earth wire to the Earth connector (=) on the Control board. The metal box will be earthed via the stainless steel screws provided.

#### **Extra Low Voltage Wiring**

Important: Ensure that low voltage wiring are kept well away from mains wiring. The low voltage wiring must be tied to each other using the tie wrap provided to overcome clearances and creepage distances if any wire becomes detached.

Bring the extra low voltage two core cable into the wall box and connect to the terminals marked output (see diagram). The system is not polarity conscious. Fix the Control Unit to the wall box using the screws provided. Insert battery into battery holder

Connections are as above diagram for a single zone system. The four zone system is similar except that the four zone Control Unit has 4 outputs, each one being used will have a Pull Cord Unit, an Over-Door Unit and a Reset Unit connected in the same way as the single zone system. Any unused outputs should be left unconnected. The interconnections should be made with two core cable of at least 7/0.2mm copper conductors (bell flex is suitable).

Finally, if reset capability is not required at the Control Unit, move the reset selection switch to the OFF position.

# 3.2. Pull Cord Unit

8

BS8300 (code of practice for the design of buildings and their approaches to meet the needs of disabled people) recommends that this should be sited on the ceiling such that for a toilet it can be operated from the W.C. and an adjacent floor area. The lower handle should be set 100mm above the floor (knot and trim off any excess cord) and the upper handle should be set between 800 and 1000mm above the floor (knot the cord at required height).

Hold the unit backplate in position on the ceiling and mark through the fixing holes on the unit backplate and drill and plug (if necessary) holes suitable for four No 6 screws.

Bring the extra low voltage two core cable from the Control Unit through the backplate and connect to the terminals marked input (see diagram).

Bring a further extra low voltage two core cable through the backplate and connect to the terminals marked output.

Fit the cover to the backplate and fix with the two screws provided. Attach the two handles to the pull cord as described at the beginning of this section.

# 3.3. Over-Door Unit

This should be sited to attract appropriate personnel to the area where assistance is required. An example of this is above the toilet cubicle door.

Having located the site, install a flush or surface mount single gang wall box at least 25mm deep.

Bring the extra low voltage two core cable from the Pull Cord Unit into the wall box and connect to the terminals marked input (see diagram).

Bring a further extra low voltage two core cable into the wall box and connect to the terminals marked output.

Fix the Over-Door Unit to the wall box using the screws provided.

Fix the W.C sticker to the cubicle door.

# 3.4. Reset Unit

9

BS8300 recommends that this should be sited on a wall such that for a toilet it can be reached from the W.C. and a wheelchair. The recommended height is between 750 and 1200mm above the floor and horizontally it must not be mounted closer than 350mm to any corner.

Having located the site, install a flush or surface mount single gang wall box at least 25mm deep.

Bring the extra low voltage two core cable from the Over-Door Unit into the wall box and connect it to the terminals marked input (see diagram).

Fix the Reset Unit to the wall box using the screws provided.

### 4. Battery

A battery is provided with the following control units and kits - EACP1PR, EASSCP1PR, EACP4PR or EASSCP4PR and cannot be fitted to other types.

To fit the battery remove it from the holder and turn it round and offer it up to the connector and after correct polarity is ensured press the battery into the connector.

The battery takes 48 hours to get to full charge from when first connected to the control unit and mains voltage applied to the L and N terminals.

#### An illustration of full reserve capability is as follows:

Single zone system	Typically 4 days on standby with 2 hours continuous alarm.
Four zone system	1 day on standby with 30 minutes continuous alarm (1 zone only).

#### **Battery Disposal**

When battery has reached end of useful life insulate terminals and consult your local authority about disposal.

DO NOT DISPOSE OF IN FIRE.



Caution. Danger of explosion if battery is incorrectly connected. Replace only with same type of NIMH rechargeable battery.

**Important.** Ensure battery is inserted with correct polarity. Do not force battery onto contacts.

# 5. Commissioning

Switch on the mains supply to the Control Unit and check the left hand 'Supply On' indicator (green) is illuminated. The 'Fault' (yellow) and 'Alarm' (blue) indicators should be off.

If the Fault indicator is illuminated this almost certainly indicates that there is an open or short circuit in the extra low voltage wiring. Assuming the Fault indicator is off pull the pull cord and the system should behave as described in the second paragraph of section 2.

Having observed this to be the case press the Reset button on the Control Unit to end the alarm. Pull the pull cord again and verify each unit is performing correctly then press the Reset button on the Reset Unit to end the alarm.

# 6. Diagnostics

Warning : Switch off mains supply before removing the front cover or dismantling the control unit. Remove all power source including battery when wiring any part of the system.

The following possible faults and solutions are for guidelines only. If in doubt contact the Timeguard Helpline on **020 8450 0515** 

Symptoms	Possible fault	Possible Solution
Green LED on Control Unit is OFF	Mains supply not connected	Check Mains wiring
	Mains switch is off	Switch on mains supply
Yellow LED on Control Unit is ON	Some units in the system are not properly connected	Checks the 2 wire link in all units are properly secured in the connectors.
	Battery is not fully charged	If system is running on backup battery, check that the battery is fully charged
Blue LED on Control Unit is continuously ON and cannot be reset	2 wire link is shorting	Check there is no short circuit in any unit
	Battery is too low	Check the 2 wires are not touching
		Switch on mains supply to charge battery
Alarm cannot be reset from Control Unit	Reset selector in the OFF position	Move Reset selector to the ON position
Pull Cord does not initiate an alarm	Pull Cord unit is not connected	Check connections to the Pull Cord unit
	Cord is not properly inserted	See description above

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# 7. Specifications

Control Unit Supply voltage: Operating temperature: Reserve battery:

Alarm Output:

Maximum pull force on pull cord: Reset button marking: Intensity of sounders:

230V (+10%, -15%) 50Hz +5 to 40°C

Metal Hydride (rechargeable) PP3, 9Volt

DC voltage through 470 ohm resistor. (Do not connect to mains voltage source)

#### 200N

Visually and with Braille Control Unit and Reset Units 65dB at 30 cm Over-Door Unit 78dB at 30 cm Sound and light are intermittent except Control Unit

Angular coverage of indicator: FC directives:

180°on Over-Door Unit: Conforms to 73/23/FFC and 89/336/FFC

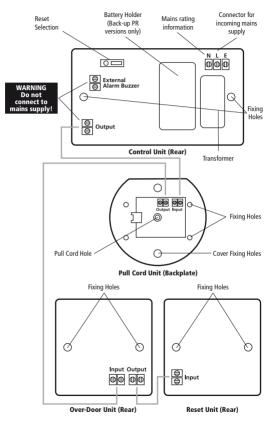
Dimensions: plastic (stainless steel)

Control Unit	145 x 85 x 33, (145 x 85 x 35) mm
Pull cord Unit	82 diameter x 20 mm
Overdoor Unit	85 x 85 x 24, (85 x 85 x 25) mm
Reset Unit	85 x 85 x 12, (85 x 85 x 13) mm

#### 3 Year Guarantee

In the unlikely event of this product becoming faulty due to defective material or manufacture within 3 years of the date of purchase, please return it to your supplier in the first year with proof of purchase and it will be replaced free of charge. For the second and third years or any difficulty in the first year telephone the helpline on 020 8450 0515.

#### Installation Wiring and Fixing Holes



# HELPLINE 020-8450-0515



For a product brochure please contact:

#### **Timeguard Ltd.**

#### Victory Park, 400 Edgware Road, London NW2 6ND 020-8452-1112

or email csc@timeguard.com

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