

Model: DCEX1 Single Channel DCEX2 Twin Channel



DCEX1/2



DCEX1



DCEX2





## 1. Introduction

The DCEX1/DCEX2 Door Entry System enhances entry security by enabling the user to recognise the visitor by audible means before opening the door.

An electric door catch (not supplied) is available as an optional extra for the DCEX1/DCEX2 to make the door opening automatic.

The external and internal intercoms are connected by a two core cable. With the cable supplied the distance between these units is limited to 15m. By using 13/0.2 bell cable this distance can be increased to a maximum of 70m.

## 2. Product Overview

If operation with an electric door catch is required then part DCLR is a fail (power off) secure catch available from Timeguard. See fig 2 for wiring of these parts. An additional two core cable run (using 13/0.2 bell flex) will be required between internal intercom and door catch via the additional mains adaptor.

Fig 1a - External Intercom (front view) DCEX1 shown

Fig 1b - Internal Intercom (front view)

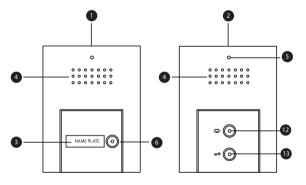
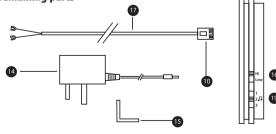


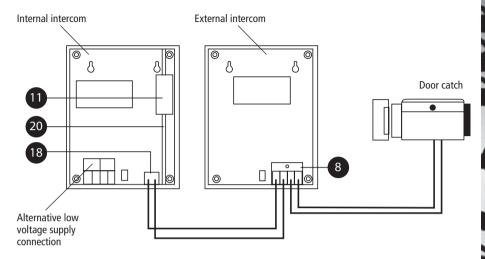
Fig 1c - Internal Intercom (side view) and remaining parts



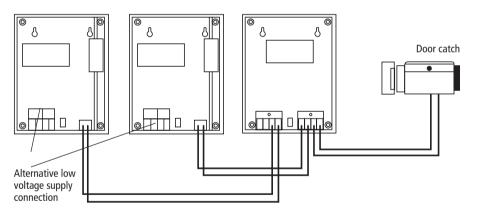
- 1. External intercom.
- 2. Internal intercom.
- Name plate.
- 4. Loudspeaker.
- 5. Power on indicator.
- 6. Ring button.
- 7. Kevhole fixing.
- 8. Screw terminals.
- 9. Slot for angle bracket (15).
- 10. RJ-11 plug.
- 11. Socket for low voltage plug from mains adaptor.
- 12. Talk button.
- 13. Door open button.
- 14. Mains adaptor.
- 15. Angle bracket.
- 16. Two position volume select switch (loud/quiet).
- 17. Connecting cable.
- 18. RJ-45 socket.
- 19. Three position chime select.
- 20. Cable channel.

Fig 2 - Wiring diagram

## **DCEX1** (single channel)



## **DCEX2** (twin channel)



# 3. Selecting intercom sites and cabling

### 3.1 Intercom sites

The internal intercom should be located at a convenient position for all potential users at the height indicated in fig 3a and at a maximum distance of 70m from the external intercom. If all the users are significantly above or below average height then a different mounting height may be considered appropriate.

The external intercom should be sited in an area away from driving rain and surface water, out of direct sunlight as far as possible and protected by the minimum of an open porch in a position readily accessible to potential entrants. It should be mounted at the height indicated in fig 3b.

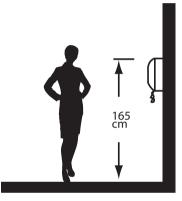


Fig 3a Internal intercom mounting height

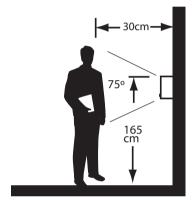


Fig 3b
External intercom mounting
height and coverage

## 3.2 Cabling

Connection between the internal and external intercoms is by 2 core cable and must be not more than 70m long. Two core  $(13 \times 0.2)$  bell flex is suitable.

A 15m length of 2 core cable is supplied (two with DCEX2) with the kit terminated at one end with an RJ-11 plug which connects to the RJ-45 socket on the internal intercom. Existing bell cable runs can be made use of.

The cable run should be kept at least 100mm away from mains cables to avoid interference.

A second relatively short 2 core cable will be required between the external intercom and the door catch (if used).

A further 2 core cable may be required as an extension between the external intercom and the second internal intercom for the DCEX2.

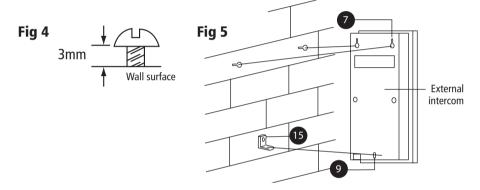
## 4. Fixing Intercoms

### 4.1 External intercom

Important: To give the best possible waterproofing and appearance we recommend taking the wiring through the exterior wall directly over the wiring terminals of the intercom. If the surface to be fixed to is not even (e.g. pebbledash or brickwork with raised pointing) we recommend the use of at least 10mm (3/8") thick marine ply as a mounting plate between the wall and the intercom to give a flat surface for its 3 point fixing.

Use the template provided to mark the positions of the three fixing holes. Drill and, if necessary, plug these holes for No. 8 roundhead screws.

Drive the top two No. 8 roundhead screws in leaving 3mm of the shank exposed (see fig 4).



The third screw is used to secure the angle bracket (15) to the wall (see fig 5).

Pass the cable(s) through the wall hole and terminate the cable from the internal intercom ensuring that the brown and red wires are connected to the terminals of the same colour on the external intercom (particularly important if an extension cable is used).

If a DCEX2 is being installed then a second cable will be required to connect to the additional internal intercom maintaining polarity as before.

If a door catch is to be used connect an additional two core cable to the terminals on the external intercom marked door opener (not polarity conscious).

Offer up the external intercom to the fixing points feeding the cable(s) back through the wall as necessary. Locate the larger part of the keyhole fixings on the heads of the two fixing screws (see fig 5) and, keeping the rear of the case clear of the angle bracket (15), push the external intercom downwards to locate the screws on the narrower part of the keyhole fixing.

Push the lower part of the external intercom towards the wall taking care to locate the angle bracket (15) in the slot (9). Insert the screw supplied through the countersunk hole in the lower edge of the external intercom and screw home. If the fixing surface is uneven it may be necessary to increase the exposed shank of one or

If the fixing surface is uneven it may be necessary to increase the exposed shank of one or both of the top fixing screws to get a satisfactory fit.

#### 4.2 Internal intercom

Choose a position which can be reached easily by all potential users. If one person usually in one location will be the main user it may be considered appropriate to locate the internal intercom within reach of that person.

Use the template provided to mark the positions of the three fixing holes.

Drill and, if necessary, plug these holes for No 8 roundhead screws.

Drive the top two No. 8 roundhead screws in leaving 3mm of the shank exposed (see fig 4).

The third screw is used to secure the angle bracket (15) to the wall (see fig 5).

Plug the low voltage cable from the mains adaptor into the socket on the reverse of the internal intercom and feed the cable into the channel (20). Insert the RJ-11 (10) plug on the connecting cable into the RJ-45 socket (18) on the lower edge of the internal intercom.

Offer up the internal intercom to the fixing points.

Locate the larger part of the keyhole fixing on the heads of the two fixing screws (see fig 5) and, keeping the rear of the case clear of the angle bracket (15), push the internal intercom downwards to locate the screws on the narrower part of the keyhole fixing.

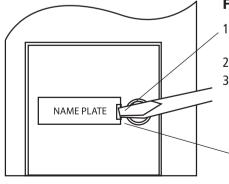
Push the lower part of the internal intercom towards the wall taking care to locate the angle bracket (15) in the slot (9) and the connecting cable in the cable channel (20). Insert the screw supplied through the countersunk hole in the lower edge of the external intercom and screw home.

If the fixing surface is uneven it may be necessary to increase the exposed shank of the top fixing screws to get a satisfactory fit.

Finally tidy and clip the connecting cable and the mains adaptor low voltage cable as appropriate.

### 4.3 Name Plates

Remove the transparent cover(s) using a small flat bladed screwdriver as shown in fig 6. Lever out the plastic name plate(s) and mark as appropriate with a fibre tipped pen marked permanent.



## Fig 6

- Engage the screwdriver (flat) blade in cover recess.
- 2. Push blade firmly into recess wall.
- 3. Maintaining pressure on recess lever cover outwards against case.

Protect case under blade with card or folded paper.

# 5. Commissioning/Use

Press the ring button (6) at the external intercom — a buzz will be heard locally and a ring tone will be heard at the internal intercom unit for two or three rings. Once the talk button is pressed two way communication is possible via the microphone and speaker at each intercom. Finally, if a door catch is fitted, the door open button (13) should be pressed and the door can be opened. It is not necessary for the talk button to be pressed to use the door open facility. It is possible to adjust the ringtone volume with the two position slide switch (16) on the side of the internal intercom.

## 6. Do's and Dont's

- 1. Never use the product if it shows any signs of damage.
- In case of damage to the product unplug the mains adaptor from the mains supply to avoid any possibility of electric shock and have the damage examined by a competent person.
- 3. When laying cabling ensure that no cables (particularly mains cables) are damaged.
- 4. Never try to operate the mains adaptor at a voltage other than 230V 50Hz.
- 5. The installation should only be carried out by a competent person.
- 6. The internal intercom should be kept out of reach of children and unauthorised persons.
- 7. Keep low voltage cabling at least 100mm away from any mains cabling.
- 8. Ensure that all electrical connections are made and wires are arranged according to the instructions.

# 7. Troubleshooting

No Audio Check cable between internal and external intercoms

is connected correctly.

Check that there are no breaks or damage to the

interconnecting two core cable.

Check that the mains adaptor is plugged in and

switched on.

**Door catch not working** (if fitted)

Check cable between external intercom and door catch

for breaks or damage.

Check that terminations are correctly made at each

end of the above cable.

Check that the mains adaptor is plugged in and

switched on.

# 8. Cleaning

Unplug mains adaptor before cleaning product.

Clean internal and external intercoms with a damp cloth only – no cleaning agents. Remove dust deposits from the louvres on the internal intercom with a soft brush or vacuum cleaner.





# 9. Specifications

Mains adaptor: 230V 50Hz/15V, 1A

Maximum interconnect length between

internal and external intercoms: 70m (13/0.2 bell flex)

Power consuption Standby: 1W

In operation: 4.5W

Operating ambient temperature range: -10°C to +50°C (external intercom)

+35°C max (mains adaptor and

internal intercom)

Ringtone volume: 80dBA at 0.3m maximum

(adjustable by slide switch)

Door catch: Max 12V DC / 1A

### 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 years 2 and 3 or any difficulty in the first year telephone the helpline on **020 8450 0515**.



## Recycling

When service life is over please consult your local authority regarding method of disposal.



HELPLINE **020-8450-0515** 



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