

Model: DCA1 Single Channel DCA2 Twin Channel









DCA1



### 1. Introduction

The DCA1/DCA2 Door Entry System enhances entry security by enabling the user to recognise the potential entrant by audible means before opening the door.

An electric door catch (not supplied) is available as an optional extra for the DCA1/DCA2 to make the door opening automatic.

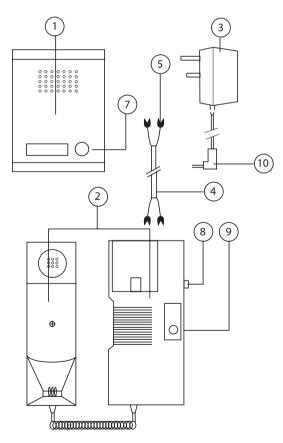
The DCA2 external intercom has the ability to call separately located internal intercoms for two individual dwellings with a common entrance.

The DCA1 calls one

Connecting cables between component parts are all 2 core, so existing bell flex can be used to connect the internal and external units if desired.

### 2. Overview

If operation with an electric door catch is required then part DCLR is a fail (power off) secure catch available from Timeguard.



### Fig 1 Component parts of Single Channel system.

- External intercom (1 channel shown)
- 2. Internal intercom
- 3. Mains adaptor
- 4. 15m of 2 core connecting cable
- Cable terminals
- 7. Ring button
- 8. Ringtone volume adjust (2 position switch)
- 9. Door open button
- 10. Mains adaptor low voltage plug

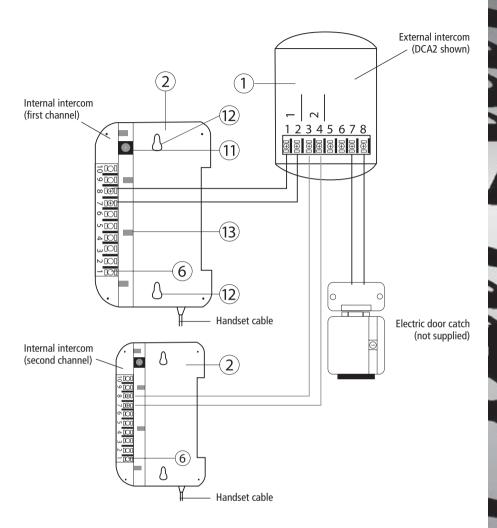


Fig 2 Wiring diagram for Two Channel system.

- 6. Terminal strip
- 11. Mains adaptor socket
- 12. Internal intercom mounting hole
- 13. Cable channel

**Note:** For single channel operation ignore second channel internal intercom and its 2 core connecting cable to terminals 3 and 4 on the external intercom.

# 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.

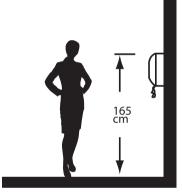


Fig 3a Internal intercom mounting height

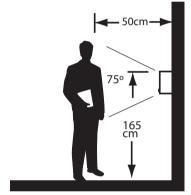


Fig 3b External intercom mounting height and coverage

### 3.2 Cabling

Connection between the internal and external intercoms is by 2 core cable and must be no more than 70 m long. Two core  $(13 \times 0.2)$  bell flex is suitable.

A 15m length (2 lengths for DCA2) of 2 core cable is supplied with the kit and 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 (13/0.2 bell flex) will be required between the external intercom and the door catch (if used).

A further 2 core cable (13/0.2 bell flex) will be required (if extension beyond 15m is necessary) between the external intercom and the second internal intercom for the DCA2.

# 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 behind the external intercom so that the cabling will feed directly through the back box wiring slot. 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 back box to prevent its distortion and loss of waterproofing.



- Remove the back box from the external intercom in the following way. Insert a small screwdriver blade in the end cap screwdriver notch (fig 4, i) and lever end cap so that it slides outwards from the main case (in opposite directions to those shown in fig 4, iv). Remove the two fixing screws (as shown in fig 4, iii) and remove the back box from the rear of the external intercom.
- ii This is a convenient time to mark the nameplate(s).

Referring to figs 5i and 5iii push catches at each end of the transparent housing inwards as shown in fig 5iii and remove ring burtton and nameplate assembly followed by the nameplate transparent cover, finally levering out the nameplate as required.

Mark the nameplate as required with a

permanent fibre-tipped pen. When dry insert the name plate in its transparent cover, ensuring it is the right way up. Snap the transparent cover into the housing bearing in mind it is not symmetrical and the end with the thicker lip goes at the end closest to the ring button switch.

Offer the transparent housing to the external intercom casing ensuring wiring is not trapped and snap the catches into place.

Check the ring button and the nameplate are correctly located.

Repeat for second ring button and nameplate assembly if necessary.

Fig 4 End plate Screwdriver notch ii Wiring slot iii End cover End cover

- (X)= wire to the inside intercom (2 for DCA2)
- (Y)= wire to door catch (if required)

Fig 5i – Rear access to nameplates (DCA2 shown)

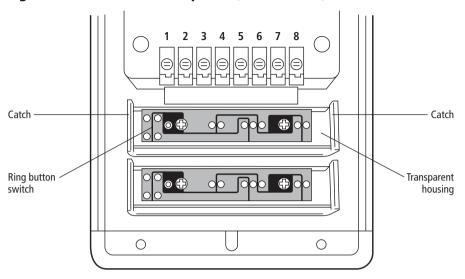
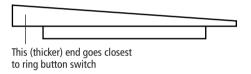
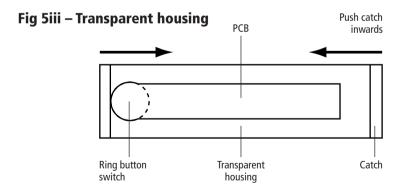


Fig 5ii – Side view of length of nameplate





- iii Offer the back box up to the required position on the wall (refer to section 3.1). Feed the cables through the wiring slot in the back box (see fig 4, ii). Mark the positions of the two fixing screws (No. 8 roundhead) using the back box as a template (see fig 4, ii). Remove the back box, drill and, if necessary plug holes. Feed the cables through the wiring slot. Fix the back box to the wall.
- iv Make the necessary wire terminations (see fig 2) and offer the external intercom up to the back box. Tighten the fixing screws as indicated (fig 4, iii).
- v Slide the two end covers inwards as shown until fully home (see fig 4, iv).

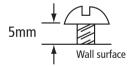
### 4.2 Internal intercom

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.

Mark out two holes suitable for No. 8 roundhead screws 164mm vertically apart at the required location on the wall (refer to section 3.1 and fig 2). Drill and plug the holes if necessary then screw the screws home leaving 5mm of the shank exposed (see fig 6) to enable keyhole fixing points to slide behind the screws.

Connect the two core lead from the external intercom according to fig 2. Plug the mains adaptor low voltage plug (see fig 1) into the mains adaptor socket (see fig 2). Arrange the two cables in the cable channel on the back of the internal intercom. Finally locate the internal intercom mounting holes on the two fixing screws, and slide the intercom downwards.

Fig 6



# 5. Commissioning/Use

Press the ring button (fig 1, 7) at the external intercom – a buzz will be heard locally and a ring tone will be heard at the internal intercom unit for 2 to 3 rings.

Once handset is lifted, two way communication is possible via the microphone and speaker at the external intercom.

Finally, if a door catch is fitted, the door open button (fig 1, 9) should be pressed and the door can be opened.

It is not necessary for the handset to be lifted to use the door open facility. It is possible to adjust the ringtone volume with the slide switch (fig 1, 8) 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.
- 2. 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.
- 9. Do not cover the louvres on the internal intercom.





## 7. Troubleshooting

Check cable between internal and external intercoms No Audio

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.

(if fitted)

Door catch not working 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: 3W

In operation: 10W

Operating temperature: -10°C to +50°C

Ringtone volume: 80dBA at 0.3m maximum

(adjustable by 2 position

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**



For a product brochure please contact:

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