Entryphone®
DOOR ENTRY SYSTEMS

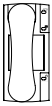
500 Series Video

Schematics, connection diagrams and installer's notes

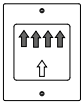
For the system installed at:

By:

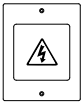
Contents



Telephones

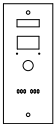


4 Way Splitter

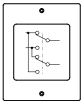


Power Supply

Multi-button Entrance Unit.



Single button Entrance Unit



Relay Unit

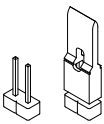
Door Release.

Timeswitch
see pages 6/7

Remote Camera
see pages 4/5 and 12/13

DIP Switch Setting

Extension Sounder
see pages 4/5



Jumper Setting

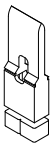
Important

Entryphone 500 Series equipment is designed to enable video systems to be installed on standard audio wiring. The video, speech, signalling and power are on five common conductors to every part of the system.

There are two very important things that must be done to ensure a system works well.

1. The video signal is balanced and therefore termination jumpers must be inserted at line ends or removed from mid-line equipment.

   Schematics and wiring diagrams show when jumpers should be fitted.



Jumper (J1) on

Jumper (J1) off

   NOTE: If, on test, a video screen seems over bright or washed out it is likely that the line has not been terminated properly, either a jumper is inserted mid-line or missing at the end of the line.

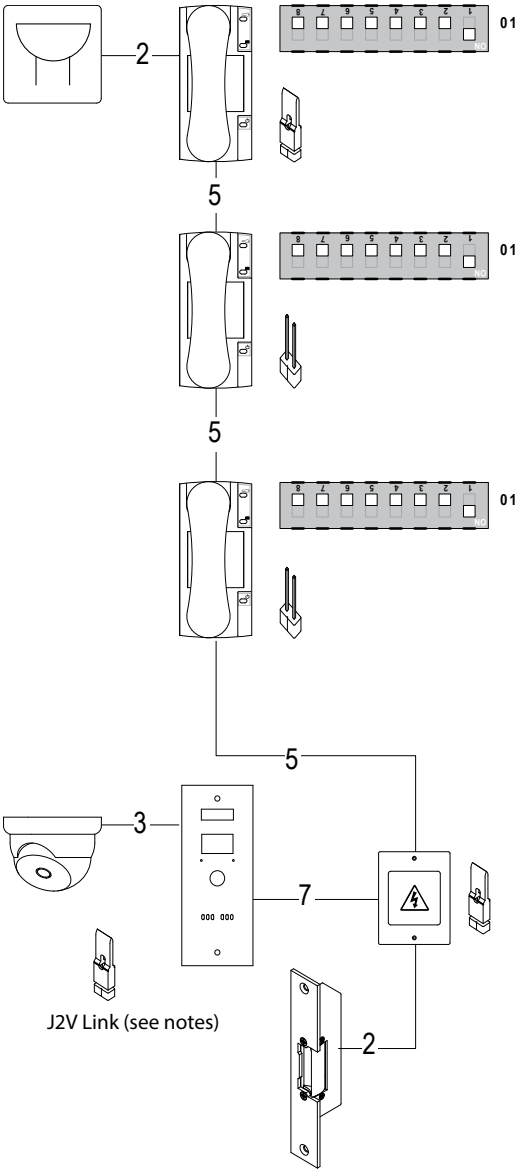
2. There are no individual call lines for the 500 series systems, instead each phone has a switch setting that should be set when the telephone is installed.
   The phone's address is set as a binary number on an eight way DIL (dual in-line) switch (up to 255 addresses available) fitted in each phone. When planning a system it is good practice to determine which address is to be assigned to which phone and noted on the numbering sheet on page 14 of these instructions.

DIP Switch set to address no.6

System Layout
Whether installing a system on existing or new wiring it is best to determine the layout of the cabling and positions of the apparatus before starting the installation. There are a number of layout examples and their corresponding connection diagrams in this booklet.

Please make a note of the phone codes and sketch the layout of the system on pages 14 and 15 of this booklet. Leave this booklet with the installed system.

Schematic



System Description

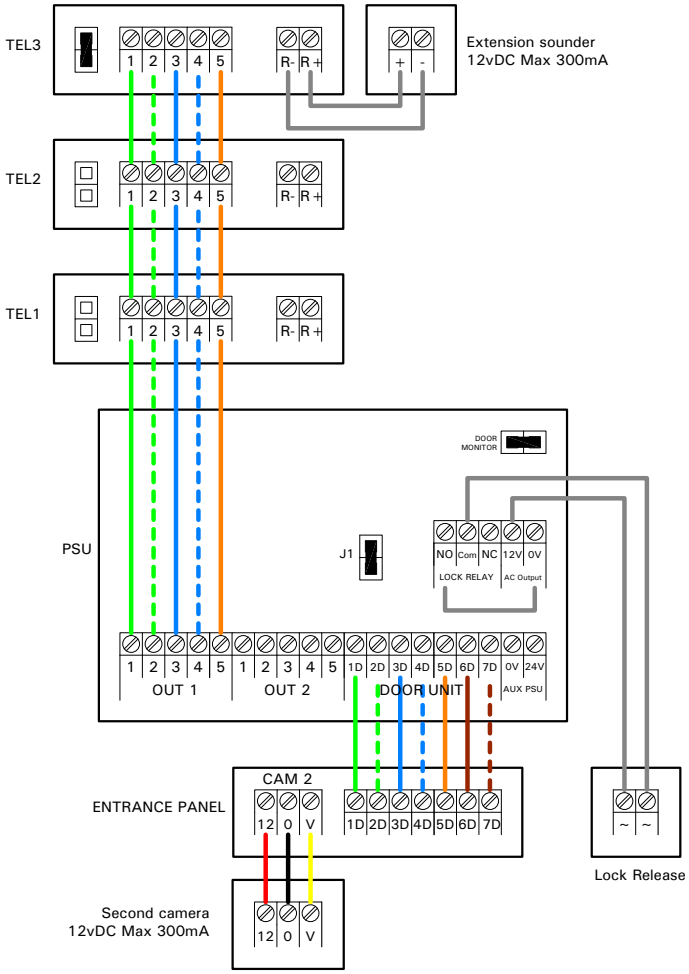
One line system - looped wiring

A one-way system with two parallel phones with wiring looped from phone to phone.

Second camera: There is an option to fit a second camera to the system. The camera should be connected to the 2nd camera terminals on the door amplifier printed circuit board (see page 12/13) and link J2V should be inserted. When the J2V link is inserted the cameras switch over every two seconds. The camera button on the phone will switch between cameras or lock view to one camera.

Single button panel's call address is set to 01.

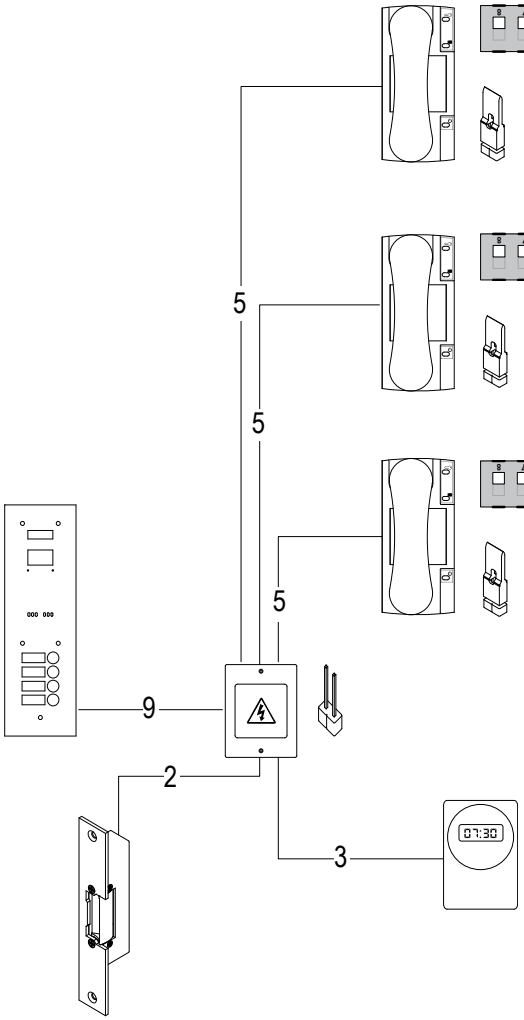
Connections



Key: line function

1 Video -	2 Video +	3 Data	4 24V-	5 24V+	6 Lock Data +	7 Lock Data -
GRN/ WHT	WHT/ GRN	BLU/ WHT	WHT/ BLU	ORG/ WHI	BRN/ WHT	WHT/ BRN

Schematic



System Description

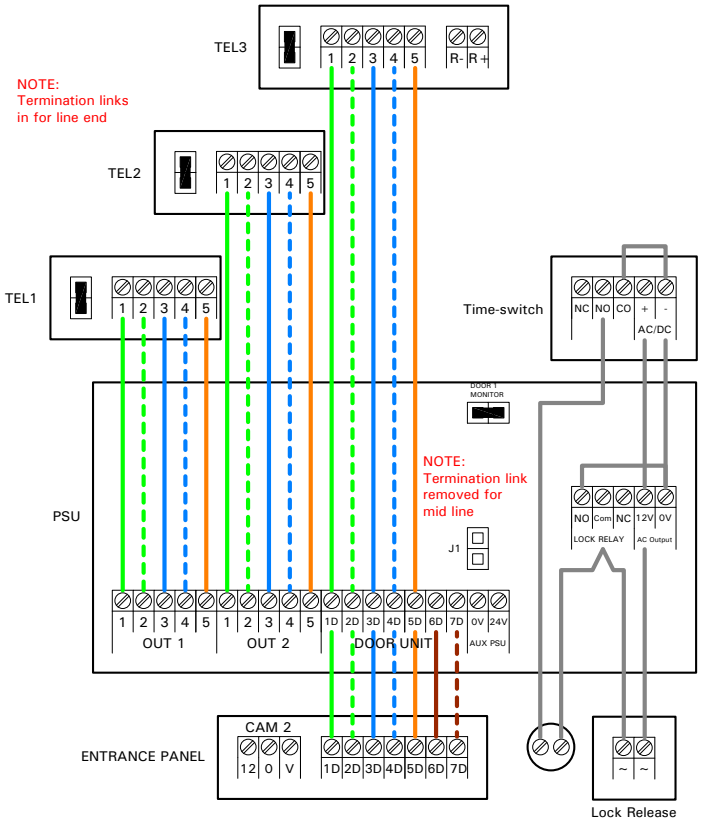
Three way system - single run wiring

A three-way system with wiring in single runs from the power supply to each phone.

Trades time-switch allows access at preselected times via a button on the entrance panel.

Note: In this example the link in the power supply is removed as the input terminals are mid-line.

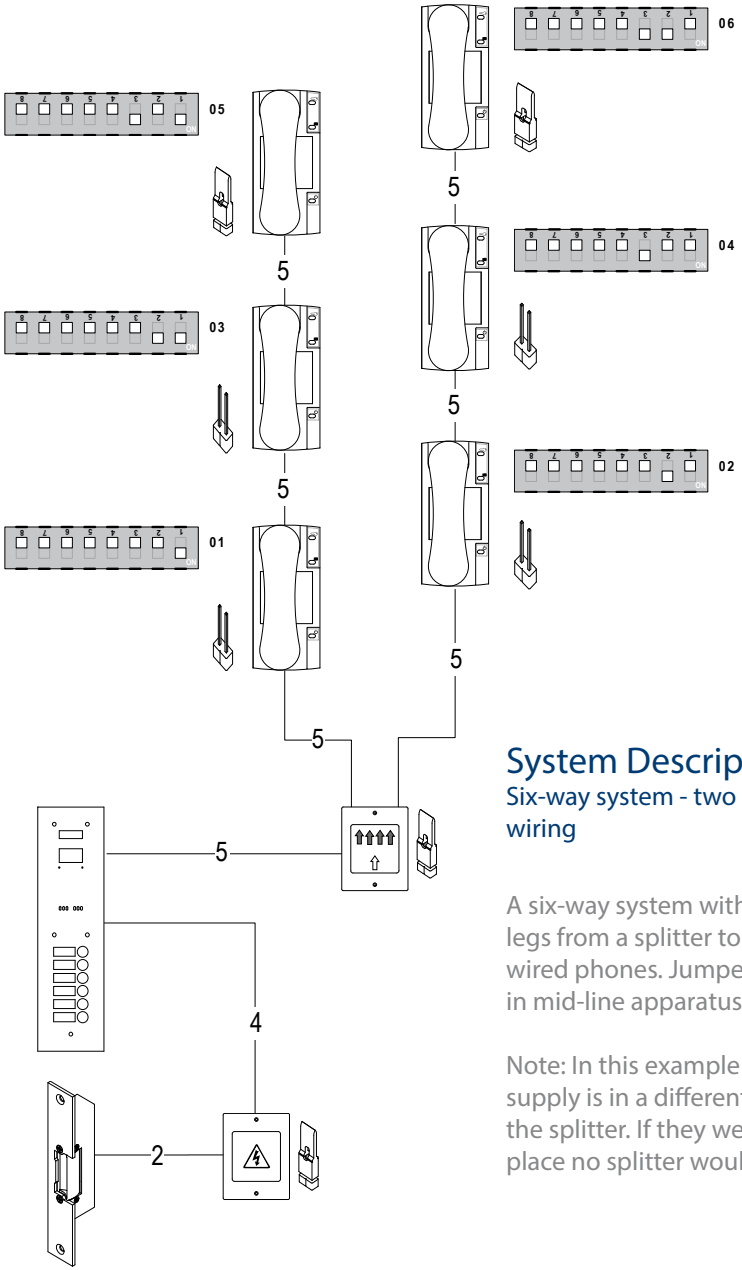
Connections



Key: line function

1 Video -	2 Video +	3 Data	4 24V-	5 24V+	6 Lock Data +	7 Lock Data -
GRN/ WHT	WHT/ GRN	BLU/ WHT	WHT/ BLU	ORG/ WHI	BRN/ WHT	WHT/ BRN

Schematic



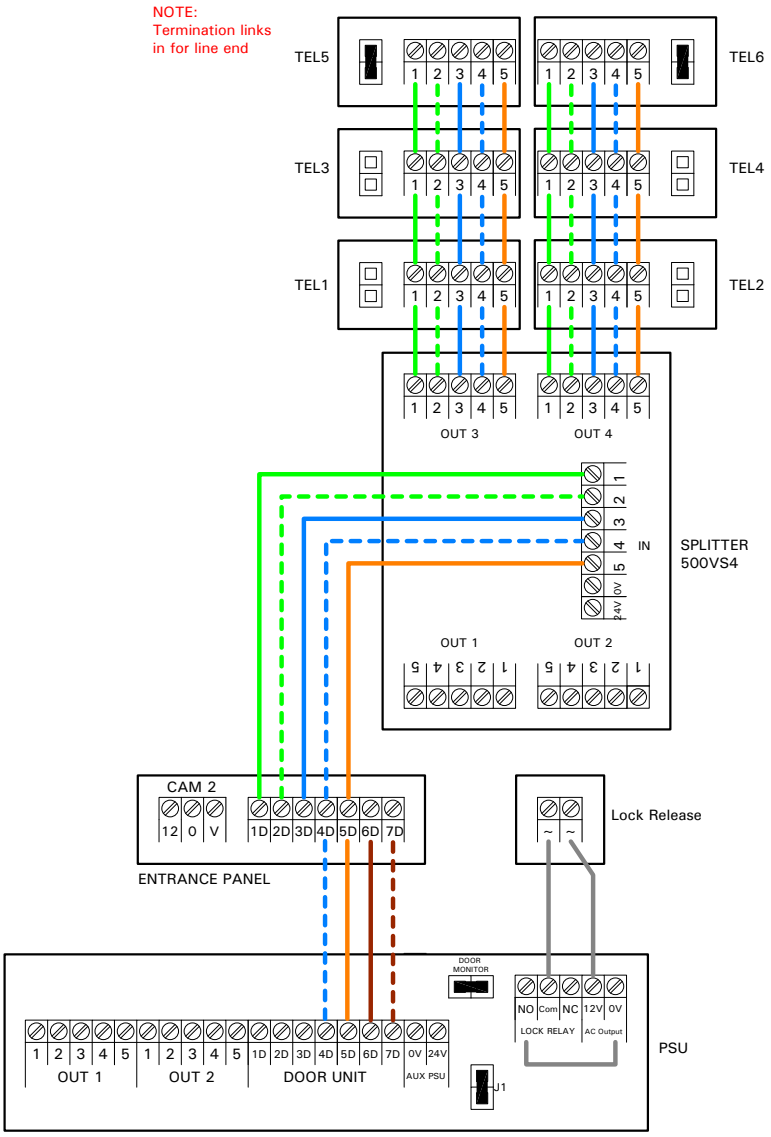
System Description

Six-way system - two riser looped wiring

A six-way system with wiring in two legs from a splitter to three loop wired phones. Jumpers are removed in mid-line apparatus.

Note: In this example the power supply is in a different location to the splitter. If they were in the same place no splitter would be required.

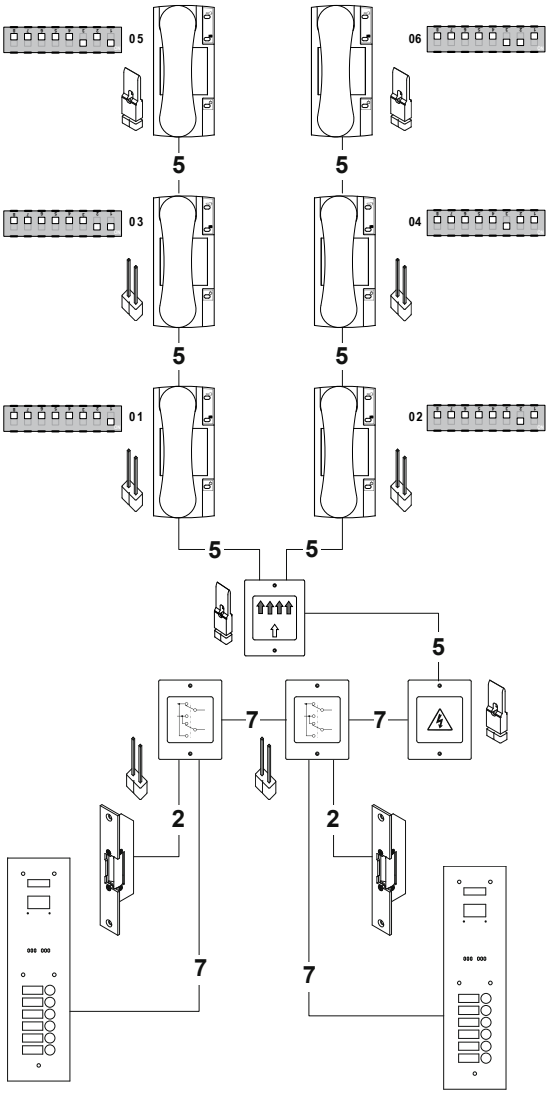
Connections



Key: line function

1 Video -	2 Video +	3 Data	4 24V-	5 24V+	6 Lock Data +	7 Lock Data -
GRN/ WHT	WHT/ GRN	BLU/ WHT	WHT/ BLU	ORG/ WHI	BRN/ WHT	WHT/ BRN

Schematic



System Description

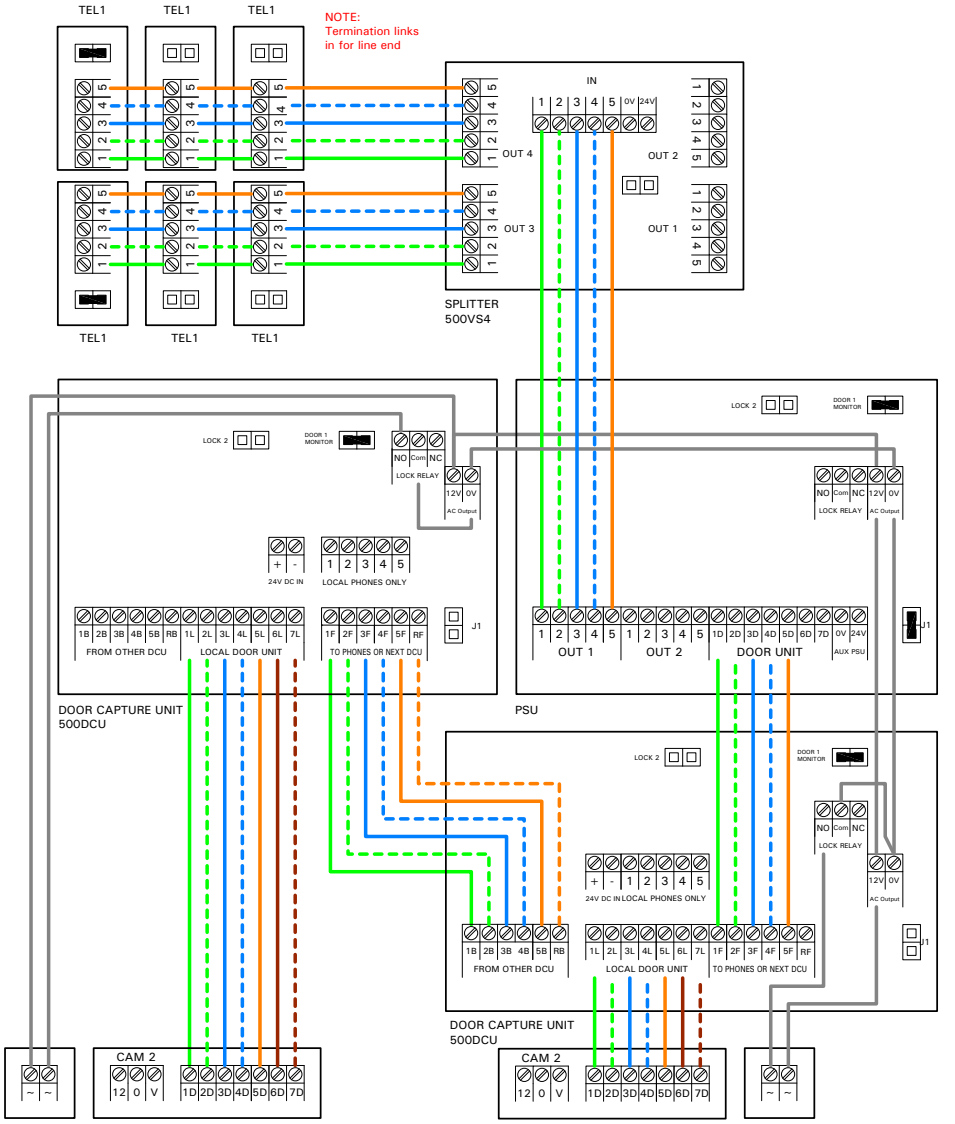
Multi-door panel video system using 500DCU door capture relays.

The 500DCU relay unit enables any number of door panels to be fitted on a system.
When a button is pressed on any door panel the relay switches the circuitry on in that panel and sends a signal to turn off the other panels.

The system shown is a two door six-way system with wiring in two legs from the power supply/ splitter i.e. two runs of three loop wired phones from the two phone outputs in the power supply. The diagrams here show just two doors served but the DCU can be daisy-chained for additional panels.

Termination links (jumpers) must be removed in mid-line apparatus.

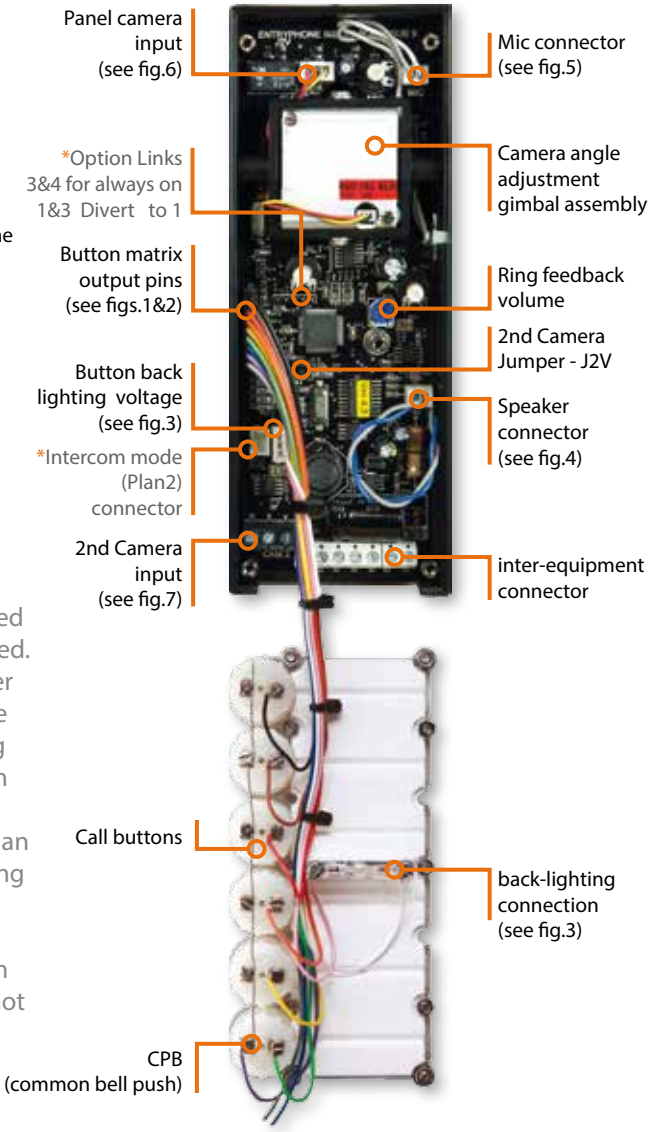
Connections



Key: line function

1 Video -	2 Video +	3 Data	4 24V-	5 24V+	6 Lock Data +	7 Lock Data -
GRN/ WHT	WHT/ GRN	BLU/ WHT	WHT/ BLU	ORG/ WHI	BRN/ WHT	WHT/ BRN

Panel connections



500 series entrance panels are supplied with the 500LSV loud-speaking amplifier assembly fitted and the call buttons are pre-wired. It is not necessary for the installer to change the button wiring. The call buttons are connected using a 7x7 matrix configuration which is detailed here. Rather than change the panel button wiring an installer should consider changing the phone address.

*Note: Option links and intercom mode are reserved for systems not covered by this booklet.

Panel connections

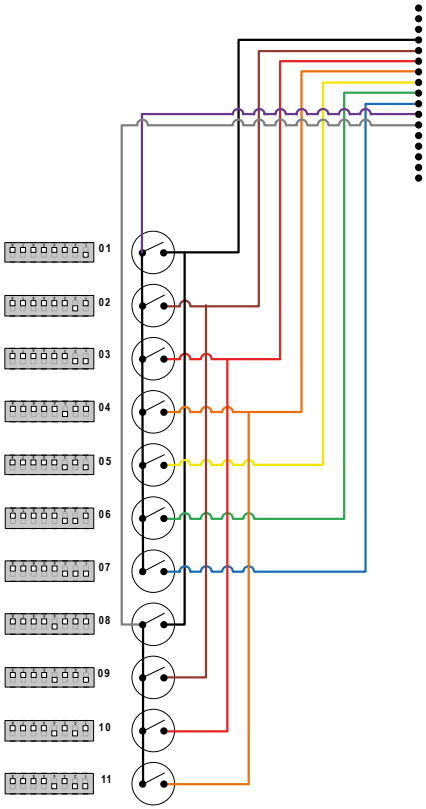


Fig.1
Matrix connection to buttons
1- 11 shown

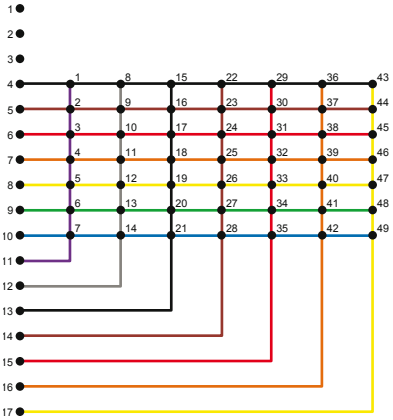


Fig.2
Matrix connection numbers 1-49

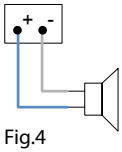


Fig.4
Speaker

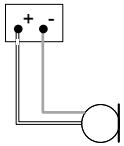


Fig.5
Microphone

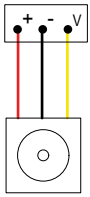


Fig.6
Panel camera

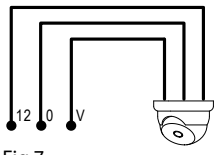


Fig.7
2nd Camera

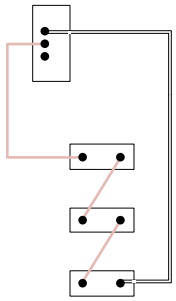
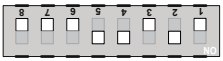


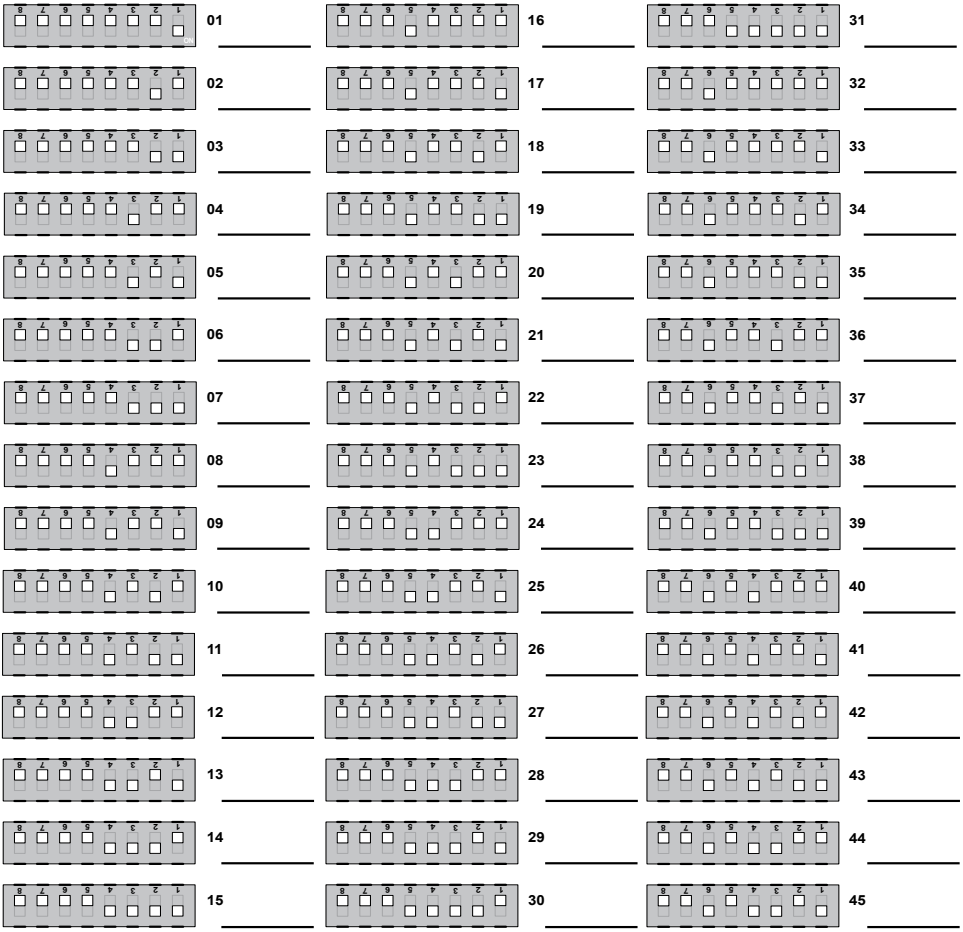
Fig.3
Back-lighting
(note wired in series)

Phone binary codes

It is good practice to decide the layout of the system and the allocation of phone codes before starting an installation. Use the list below to indicate which code is assigned to which phone. Bear in mind the positions of the number or names on the entrance panel.

To work out the decimal value of the binary code add the decimal values of each switch together. This example shows switches 2 (binary value 2), 4 (binary value 8) & 5 (binary value 16) down. Therefore 2+8+16 = 26.





Installer's notes

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