

IN5141 20080331

## Audio door entry (5141) Installation instructions

### What kind of door entry system

#### Basic systems

In this system the cables usually run from the entrance panel to each successive phone in a building. If a fault develops in any phone or in the cable, the entire system may be affected. It is not usually possible to isolate a faulty phone from the system. This is because each phone has two cables attached to it, one in from the previous phone and one out to the next. When a fault develops, the entire system may go out of action. This kind of system does not normally use the 5141 power supply.

#### Standard functional telephone entry system

In the SRS EntrypointT standard functional door entry system cables are run from the power supply to each individual phone. Whilst the entire system may be affected if a fault develops in an individual phone, the faulty phone - or cable linked to it - can be disconnected by unplugging it at the power supply. There is a potential wait for an engineer, but the problem is restricted.

With each telephone having only one cable, installation is far neater and easier to manage than for the basic system. The system can be upgraded to an isolated system by changing the telephone control board.

#### Isolated telephone entry system

A telephone on an SRS EntrypointT isolated system works totally independently of all others. Cables are laid in exactly the same way as in the SRS EntrypointT standard functional door entry system. The phones are connected into the system only when called. Only one telephone can be "live" on the system at any time. If a fault develops in any phone, the system is not affected. The faulty phone or cable is automatically isolated by the system control board (5115).

### Wiring recommendations

We recommend that all equipment is installed according to the relevant British Standards. Attention is drawn to the Regulations for Electrical Installation (16th Edition) and MP 1337 and MPT 1339 (DTI Radio communications division). We recommend the use of twisted paired solid core cable - British Telecom specification - Type CW1308. All tests on SRS equipment rely on this type of cable. Interference may be caused if other cable types are used.

#### Getting started

You know what cable to use (CW1308) and the type of system you are installing (isolated or standard functional). Now you can begin to install the equipment. The power supply is the connection point for all cables, it therefore makes sense to mount it first. Do not make any connections yet...

You should use the colour coding suggested in the wiring diagrams. You will have better results if you do. Do not make any connections in the power supply until you have fitted and connected the phones and entrance panel(s). Once everything is in position you will run through some tests and then commission the system.

You should have a telephone pre wired on a short lead with a stocko plug fitted to help with commissioning.

- 1 Phones are connected using either the connector board (5108 or 5116) or with isolated system (5115). In each case the connections can be made by using a pre wired lead which plugs into the power supply and the respective board. No other equipment should be connected into the SYSTEM BUS.
- 2 Only SRS telephones should be used on the system.
- 3 Each telephone must have a separate cable to the power supply unit.
- 4 All spare cables must be connected to terminal 6 (ie. -ve).

#### Using the stocko connector

All connections to the telephone control boards are made with "stocko" connectors. They offer reliable connection and can be unplugged easily for testing. The stocko plug will only fit into the socket in one position and therefore the wires can approach from only one direction.

- 1 Strip the outer cable sleeve back by 40mm.
- 2 Insert the individual wires into the plug so that they come all the way through the connector
- 3 Using a large pair of pliers evenly compress the plug so that the wires are trapped.
- 4 Trim back the protruding ends

### EntrypointT power supply

The 5141 power supply is the heart of EntrypointT. The 5141 is supplied as standard in a lockable box which accepts one additional control board (5141LE accepts two). All control boards are the same size. If more control boards are required add 5133 which accepts 2 control boards (same lockable box as 5141) or 5133LE which accepts 3 control boards (same lockable box as 5141LE)

5141 can be supplied complete with telephone control boards. For example 514108 is a 5141 with a built in 5108 board for 8 telephones, 514116 is the same except for 16 telephones and 514115 is assembled with a 5115 isolated telephone control board for 8 telephones.

NOTE: Systems requiring more boards can be supplied. Please specify 5141LE and the boards required, and we will provide a box to suit. All SRS EntrypointT control boards (i.e. 5108, 5116 and 5137) are an identical size.

#### Standby battery

This output is for a rechargeable battery - NOT a dry cell. A 12 v battery can be charged if the battery leads are fitted into the battery charger connector on the right hand side of the power board 'BATT'.

## The System BUSS (RIBBON CABLE)

The system buss allows quicker connection of the wires common to the system. All SRS control boards are connected using the system buss ribbon cable. The common wires are:

- DM** switched +ve for door monitoring LED. This terminal is ultimately connecting the red LED in the telephone (terminal 8) to 12V dc via the microswitch in the lock release.
- 2** This terminal is ultimately connecting the microphone in the telephone (terminal 2) to the audio amplifier (terminal 2).
- 1** This terminal is ultimately connecting the speaker in the telephone (terminal 1) to the audio amplifier (terminal 1).
- 6** Common negative. This terminal is connected to common terminal 6 on telephone via permanent connection through the telephone control board.
- 9** This terminal is ultimately connecting the lock release button (terminal 9) in the telephone to the lock release relay timer in the power supply.
- 12** Fused 12V dc 2 ampere. This can be used to provide power to 5115 and telephone accessories (eg 5127 timed strobe). Do not use inductive load (ie. telephone buzzers) on this power rail. Green LED (LED2) indicates power is OK.
- R** Only used on isolated systems. System wide reset connection is automatic to all boards requiring the facility. This connection is a termination allowing the reset signal from one part of a system to pass to other parts of the same system.

## Entrance Panel

The stainless steel entrance panel is available flush mounting. It can be supplied with a mitred bezel frame for added protection. If you require to surface mount add a frame.

The back box should be embedded so that the amplifier sits at a height of approximately 1500 mm from the ground level. It is important that the front edge of the box is flush with the face of the wall. A number of problems may arise if the back box is incorrectly fitted.

## Call Button Connections

- SIG** Connection to common of call buttons ISOLATED SYSTEMS ONLY
- C** Connection to common of call buttons NON ISOLATED SYSTEMS ONLY.

It is often the case that the large number of wires from the push buttons lead to confusion, broken wires and short circuits. To avoid these problems the EntrypointT panels are pre wired.

## Trade Button Connection

### refer to the 5200M installation instructions

The trade button is used to allow access to the building between certain pre-defined hours. This is achieved by using a time clock (5200M) which enables / disables the button on the entry panel. Sometimes the panel is fitted with a keypad to achieve the same result (ie enter a code during certain hours to gain access).

## 5152 Speaker / amplifier

Inside the entrance panel is the combined speaker / amplifier unit which provides audio communication with the telephones. The speaker / amplifier unit is constructed with stainless steel for greater resistance to vandalism.

<b>5152</b>	<b>5141</b>	
+~	<b>DC</b>	12V dc supply.
~	<b>0</b>	Amplifier -ve
<b>1</b>	<b>1</b>	Connection to microphone of 5152
<b>2</b>	<b>2</b>	Connection to speaker of 5152

## Telephone handset

The EntrypointT system offers a choice of 5 telephones. From a simple phone (AN0002) to a sophisticated telephone offering timed nuisance switch, door monitoring LED's and nuisance On / Off LED indication.

No limit to the number of phones on system, simply add telephone control boards for the required number of telephones. You should use the colour coding suggested below and in the wiring diagrams. You will have better results if you do.

See the chart below to decide on the telephone which best suits your needs.

## Notes for connection to an isolated system

Each phone is separately connected back to its respective termination plug on the telephone control board (5115). Only one phone is connected at a time and therefore secrecy of conversation is maintained. Lifting a handset (without having been called) will not allow connection to the system. The lock release can only be operated from a called phone and only by first lifting the handset.

## Connecting a strobe

refer to the 5126 installation instructions

## Telephone control boards

### 5108 standard functional telephone control board

The SRS EntrypointT connection system improves efficiency and reduces the risk of mistakes. Each telephone, is wired back to the telephone control board. Connection is simple, primarily via the system buss (ribbon cable). As many boards as required for the number of flats in the system may be connected.

Once connected, calls are automatically routed to the correct phone. Damaged or vandalised phones can be removed from service by unplugging them.

You should use the colour coding suggested in the wiring diagrams. You will have better results if you do. Also see page 3 for "Using the stocko connector"

## 5115 Isolated telephone control board

The 5115 is supplied for connection as a junction board for up to eight telephones per board. As many 5115's as required for the installation may be connected in parallel (using the system buss). The 5115 enables any called telephone to be connected and provides a timed tone call (0-30 seconds). Only the last telephone to be called will be connected to the system. Should a phone be left off the hook (or damaged in any way) it will not interfere with the system. LED indicators show the status of functions at a glance.

SRS 5115 control board electronically isolates the phones and connects only the called phone into the system. All connections are crimped and unpluggable, making servicing simple and removing the likelihood of connection errors. Connection to the 5141 is via the system buss (ribbon cable) saving time and preventing errors. Various alternative modes of operation can be selected.

- Full isolation and secrecy of conversation
- System BUSS connection
- Reset system upon operation of lock release (SW1 = On)
- Adjustable call time (which resets when call is answered)
- LED indication as to connection made to flat.
- Reassurance tone (when pressing a button on the entrance panel)
- Busy indication at entrance panel (multi entrance systems)
- The board will automatically reset the system in the event that a call is unanswered after a predetermined and adjustable time up to two minutes.
- Full LED indication as to status of system.
- Plug-in test points.
- Unpluggable telephone terminations

Please ensure that SW2 is always set to the off position.

### Call time adjustment

The duration of the tone generated by the 5115 can be varied between 0 seconds and 30 seconds. Set the time to give approximately 20 seconds by adjusting variable resistor VR2. If the call is not answered within the set time the 5115 will reset the system.

### Connection time adjustment

Adjustable 0 - 120 seconds (approximately). This sets the maximum amount of time that a telephone can be connected to the system. Normally you would leave VR1 set to maximum. The connection can be cancelled early by setting either or both switches :-

- SW1** set to ON if you require phone connection to be terminated and the system to reset upon operation of lock release button
- SW2** set to ON if you require system to reset upon hanging up of telephone.

You should use the colour coding suggested in the wiring diagrams. You will have better results if you do. Also see page 3 for "Using the stocko connector"

### Special outputs

The 5115 has two special output terminals:-

- A** Reassurance tone output (+12V dc). This a short 12V dc pulse which is present each time the 5115 receives a signal from a call button on the entrance panel.
- B** Busy signal output (+12V dc). This 12V dc signal lights up a busy LED fitted in the entrance panel. The LED will remain lit whilst the 5115 allows connection to a telephone.

## Lock Release

The timer circuit on the 5141 power supply board triggers a relay. The output from this relay switches a negative through to the lock release.

- 1 Maximum current drawn by the lock release must not exceed 1A (fail locked) or 500 mA (fail unlocked). For releases requiring larger current, an additional power supply should be used.
- 2 The connection and operation of any locks by other means than those described above may damage the power supply and must therefore be avoided.
- 3 Connection for door monitoring should be to the Normally Open terminals of a monitored electric release which must be capable of handling 2A across the relay contacts.
- 4 Cables to any lock releases on the system must be run independently of cables to the entrance panels (or any cables which carry call wires)

### Opening Time

Setting of the opening time between 1 and 60 seconds is carried out by means of a potentiometer 'LOCK TIME'. Recommended time is 6 - 8 seconds.

### Test Button

Pressing the 'LOCK RELEASE TEST' button mimicks the action of the button on the telephone handset for releasing the lock. The 'LOCK ON ' LED will illuminate.

### Door Monitoring

SW1 feeds 12V dc to the microswitch in the lock releases which is returned to SW2. The 5141 routes this signal to DM on the SYSTEM BUSS and Phone terminal 8. The cable to the lock should be run independently of any other cables to reduce noise.

### Connecting a fire override switch

When fire override switch is requested the lock release specified should be fail safe. In this case you connect a N/C (normally closed) switch in series with the circuit to the lock release. When the switch is operated the circuit breaks and the fail unlocked device will unlock.

### Connecting an egress switch

Closing a switch across 6 & 9 triggers the timer circuit. If the lock is required to be operated by another means other than trades button (as discussed below) then a normally open switch can be connected in the diagram below. The 'LOCK ON ' LED will illuminate when pressed.

### Connecting to DC30 keypad

refer to DC30M installation instructions

### Connecting to access control

Connecting a third party keypad, proximity system (eg PAC) or card reader controller to the Entrypoint power supply is done in the same way as connecting an egress button. Use the closing relay output of your keypad (or whatever you are connecting) to terminals 6 and 9 of the 5141. Set the lock time of your access control unit to 1 second.

# Fault Finding

## SPEECH SYSTEM

### Testing circuits through 5115

(Isolated systems only)

#### I no speech from the telephone to the external panel

test continuity through the 5115. Test for zero resistance from terminal 2 on the 5141 board to terminal 2 on the affected telephone (Note you must call the telephone in order for this connection to be made.)

#### II no speech from the external panel to the telephone

test continuity through the 5115. Test for zero resistance from terminal 1 on the 5141 board to terminal 1 on the affected telephone (Note you must call the telephone in order for this connection to be made.)

#### III no speech in either direction

test continuity through the 5115. Test for zero resistance from terminal 6 on the 5141 board to terminal 6 on the affected telephone.

test for a combination of faults as in 1 & 11 above

### A Lack of speech on one telephone

(Isolated systems only - also check 5115)

#### I If speech into the telephone cannot be heard at the entrance panel the fault is:

in the microphone in the telephone. Check continuity of microphone replace handset if necessary [resistance across terminal 2 and 6 with handset off should be approximately 100  $\Omega$ ] and / or

in the cable from the telephone to the speaker unit. Check continuity of cables and replace cables if necessary [terminal 2 on the telephone to its junction with the common wires from terminal 2 on the audio amplifier]

#### II if speech into the entrance panel cannot be heard at the telephone the fault is:

in the speaker in the telephone (Check continuity of speaker [across terminal 1 and 6 with handset off should read approximately 40  $\Omega$ ] replace handset if necessary) and / or

in the cable from the telephone (Check continuity of cables and replace cable if necessary [terminal 1 on the telephone to its junction with the common wires from terminal 1 on the amplifier]) \*\*

#### III if speech not functioning in either direction the fault is;

a combination of the above faults and / or

in the cable from the telephone (Check continuity of cables [terminal 6 on the telephone to its junction with the common wires from terminal 6 on the audio amplifier] and replace cable if necessary). Terminal 6 on the telephone is the common negative return for all telephone functions including lock release and sounder, therefore if these functions are working then chances are that the negative return is OK and / or

wires to terminal 1 & 2 are reversed or shorted to another conductor.

### B Problem with speech on more than one telephone but not all

#### I if the speech fault is not the same for all (affected) phones then the fault

should be treated as in A above but several times over and / or

any phones with common faults can be treated as C below

#### II if the speech fault is the same for all (affected) phones then the fault is:

a connection fault where several phones are junctioned together incorrectly and / or

a continuity fault where several phones are junctioned together and have either a short circuit, incorrect connection or a cable break.

### C Lack of speech on all telephones

#### I If speech into the telephone cannot be heard at the entrance panel the fault is:

in the cable between the junction of the cables from the telephones and the audio amplifier (Check continuity and insulation from other conductors of cables [check between the junction of the wires from terminal 2 on the telephone and terminal 2 on the audio amplifier] and replace cable if necessary.) \*\* and / or

in the audio amplifier circuit between terminal 2 and the amplifier. (It is not possible to test the amplifier other than by exchanging it for one which is known to work) replace amplifier if necessary.

#### II if speech at the entrance panel cannot be heard at the telephone the fault is:

in the cable between the junction of the cables from the telephones and the audio amplifier (Check continuity and insulation from other conductors of cables [check between the junction of the wires from terminal 1 on the telephones and the terminal 1 on the audio amplifier] and replace cable if necessary.) \*\* and / or

in the audio amplifier circuit between terminal 1 and the microphone. (It is not possible to test the amplifier other than by exchanging it for one which is known to work (replace amplifier if necessary)

#### III If speech not functioning in either direction the fault is:

a combination of the above faults CI & CII and / or

in the cable between the junction of the cables from the telephones and the audio amplifier (Check continuity and insulation from other conductors of cables [check between the junction of the wires from terminal 6 on the telephones and terminal 6 on the audio amplifier] and replace cable if necessary.) Terminal 6 on the telephone is the common negative return for all telephone functions including lock release and sounder, therefore if these functions are working then the chances are that the negative return is OK and / or

wires to terminals 1 & 2 are reversed or shorted to another conductor and / or

no power to the amplifier (test for 12 volts whilst phone off hook across +~ & -ve at the amplifier. \*\*

## D Poor quality speech on system (whole or part)

### I whistle or larsen effect - High pitched screech upon lifting handset is a sign of either:

excessive internal amplification (adjust volume) and / or excessive external amplification (adjust volume) and / or power supply too high (Check for 12volts) and / or poor alignment of microphone to small hole in entrance panel plate and / or

incorrect cable used (telephone cable - solid core twisted pairs should be used for all installations)

### II poor volume at entrance panel speaker

too little external amplification (adjust volume) and / or short circuit on wires 1 & 2 (Repair short circuit)  
low voltage at amplifier (Test for 12volts across +~ & -ve)

### III poor volume at telephone earpiece

too little internal amplification (adjust volume)  
short circuit on wires 1 & 2 (Repair short circuit) and / or low voltage at amplifier (Test for 12 volts across +~ & -ve)

## LOCK RELEASE

### A Lock release won't operate

#### I low voltage at lock

lock release coil short circuit (resistance approx. 20-50  $\square$ )  
wrong voltage at lock release (ie. ac instead of dc)  
test for 12V ac or 12V dc at lock release terminals while energised and connected. A voltage reading may appear when no load is there but disappear when you connect the lock. If this happens carry out the same test with the lock release at the power supply to tell you whether the voltage is dropping away along the cable run or inside the power supply circuit board (assuming the lock release has tested OK). \*\*

in the case of fail unlocked electric lock not opening remove time clock, System BUSS & terminal 9 and operate the LOCK RELEASE TEST button. If the LOCK ON LED lights and you hear the lock release click then test for negative voltage being removed on NC (lock release relay) when the button is pressed. If the negative remains constant even when the LOCK ON LED lights then the power supply board is at fault.

#### II no voltage at lock

lock release coil short circuit (check resistance is approximately 20 - 50  $\square$ )  
cable short circuit or break (check continuity of cable)  
no voltage at power supply (check fuse LED is lit - if not then check fuse. If LED OK, check mains power and fuse are OK. If mains OK replace power supply pcb)

### B Lock release won't switch off

#### I power at lock constant

lock release negative terminal (NC or NO) connected to negative permanently - check that NC or NO terminals switch a negative through to the lock.  
check that no other wires are connected to the lock release apart from power to on terminal and -ve from either NC or NO.

LOCK ON LED remains lit permanently. To test remove TR1, TR2, System BUSS and terminal 9 from power supply pcb. Turn the LOCK RELEASE TIME ADJUST to zero if the LOCK ON LED stays on then the power supply is at fault.

## TRADE CLOCK

Note: The relay in the 5200M will change state when the program gets to its first On or Off. If the current time is in the On period, press the Manual button to make the clock display On.

### A Time clock display does not operate

Check 5200M has power  
check wiring to 5200M  
reset 5200M - see installation instructions

### B clock display operates correctly

Press the LOCK TEST button, if lock release LED lights (and relay operates OK - see Lock release testing above), then the fault either lies in the wiring or the relay on the 5200M.

remove wires from NO & C from 5200M and connect together (bypassing the relay). If the TRADE button works the fault lies with the relay or the clock setting.

## POWER FAILURES

### A Power output LED'S off

#### I LED2 off

If no power is reaching the terminals at all then the fault is either at the mains fuse, mains power or the transformer. Test the above and remedy taking care to check that the mains to the transformer and the secondary from the transformer are making good contact.

To test the low voltage power coming onto the power supply board, test for approx. 15v ac across both Tx terminals.

## CALL TONE GENERATOR

(Isolated systems only)

### A No call on telephone

#### I no call tone on one telephone

test terminal 1 output with a speaker or a telephone that you know to be working by plugging it in to the suspect socket.

#### II no call tone on all telephones on one 5115

test for 12V dc across terminals 6 (-ve) and 12 (+ve)  
connect a short length of wire to SIG. Touch the free end on any call input (Numbered 1 to 8) to test a call. Test as described in (1) above test the call signal. If test fails, exchange the 5115 board, if OK check the wiring connections to the entrance panel.

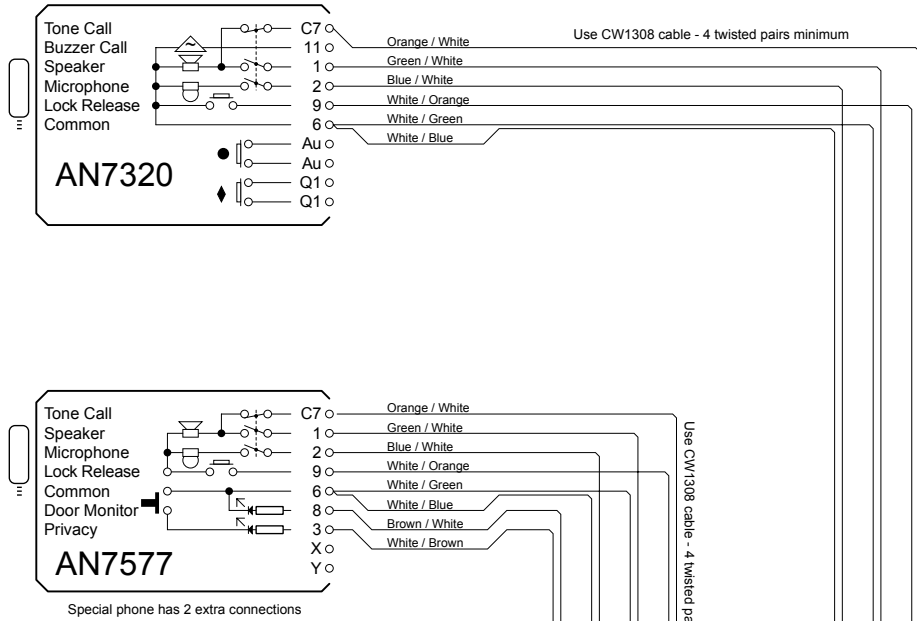
### B Incorrect telephones are called

#### I call one telephone and they all ring

test as for "No call on telephone" with call wires disconnected. This will establish whether the fault is with the 5115 board or the wiring.

#### II call one telephone and another telephone rings (always the same one)

the call button at the entrance panel of the telephone which always rings is permanently depressed or a short circuit is occurring on that call wire and / or short circuit or interference from inductive load adjacent to call wires (check installation cables have been installed in accordance with the instructions (ie.. call wires run separately from any inductive loads etc.)



### Cable requirements :

Make connections as per diagram in order to avoid interference.

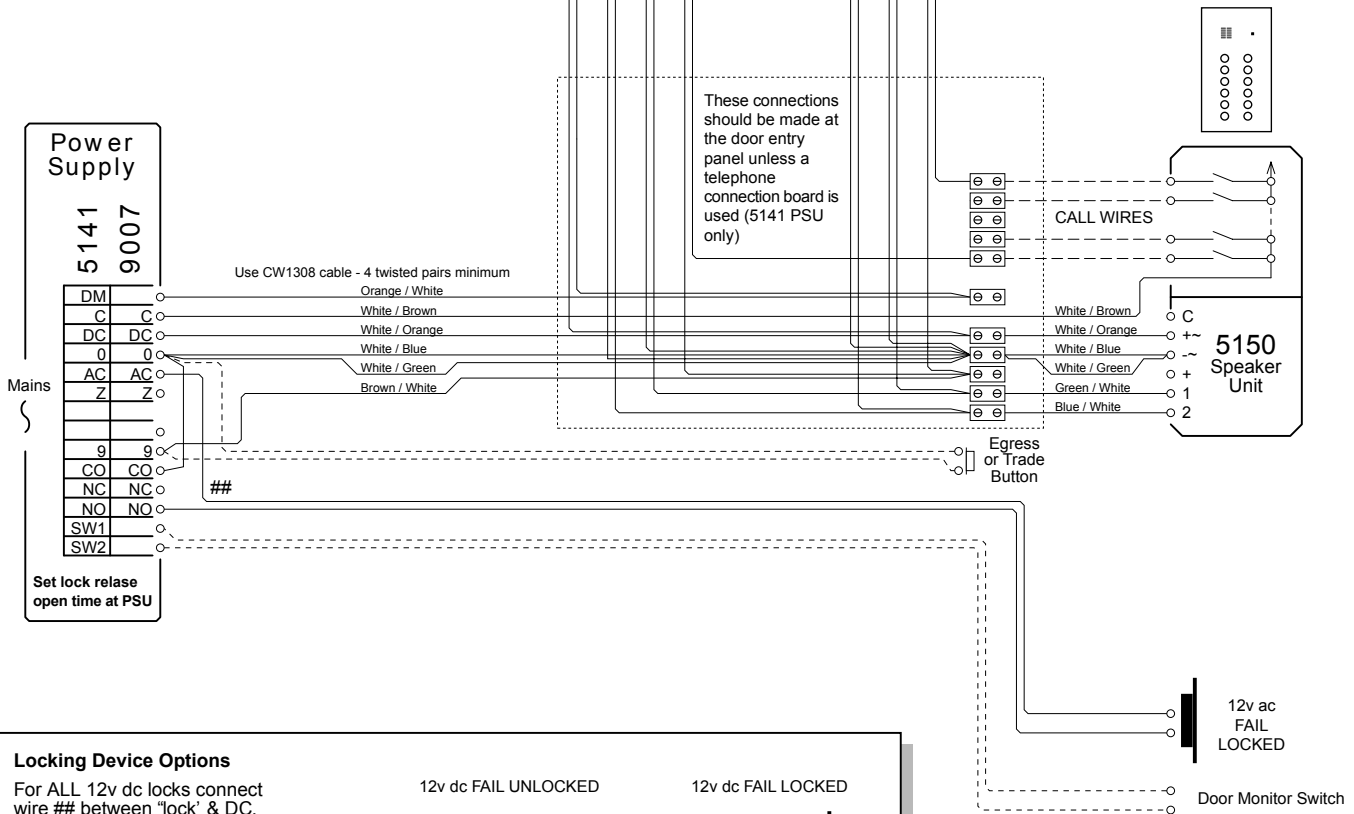
If the length of the cable from the 9007 terminal C (the call common) is to exceed 10m then this wire should not be run in the same sheath as any audio wires (connections 1 & 2). This is to avoid a low audio tone being heard at the handset.

Wire Ref	Function	Distance (m)			
		50	100	200	300
1	Loudspeaker	0.3	0.5	0.8	1.6
2	Microphone	0.3	0.5	0.8	1.6
6	Common -ve	0.5	0.8	1.0	1.6
9	Lock release	0.5	0.8	1.0	1.6
11	Call buzzer	0.3	0.5	0.8	1.6

Cross sectional area of conductors mm<sup>2</sup>

### Telephone Cross Reference

Function	AN0002	AN7320	AN1000	AN7577	70051	70055
Tone Call	C7	C7	C7	C7	11	11
Buzzer Call	11	11	11			
Speaker	1	1	1	1	1	1
Microphone	2	2	2	2	2	2
Lock Release	9	9	9	9	9	9
Common	6	6	6	6	6	6
Privacy LED	3	3	3	3	3	3
Door Monitor	8	8	8	8	8	8
Switch 1	Au	Au	Au			
Switch 1	Au	Au	Au			
Switch 2		Q1				
Switch 2		Q1				



### Locking Device Options

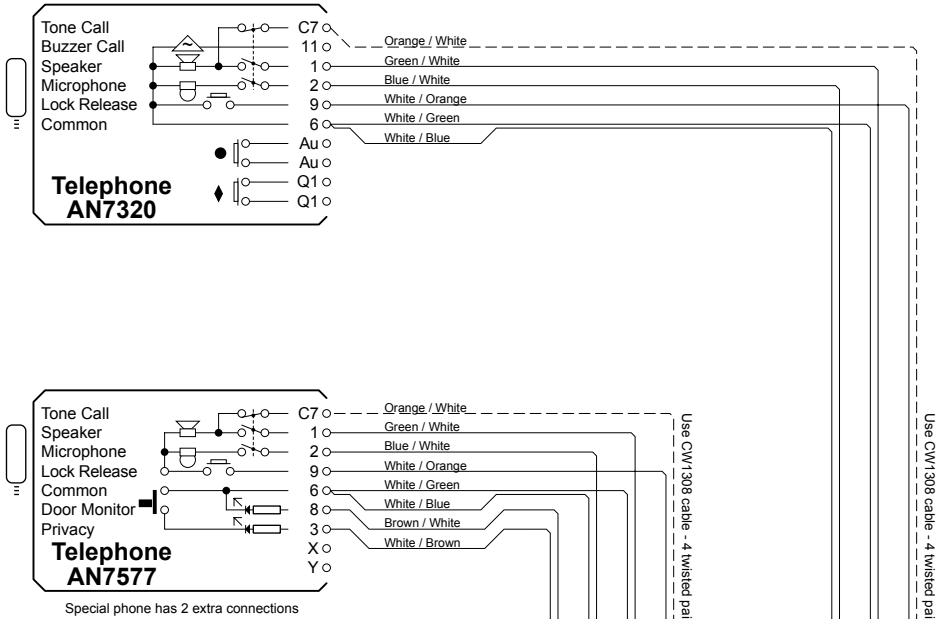
For ALL 12v dc locks connect wire ## between "lock" & DC.

For FAIL LOCKED use NO  
For FAIL UNLOCKED use NC

12v dc FAIL UNLOCKED	12v dc FAIL LOCKED
9007 DC ————	9007 DC ————
9007 NC ————	9007 NO ————

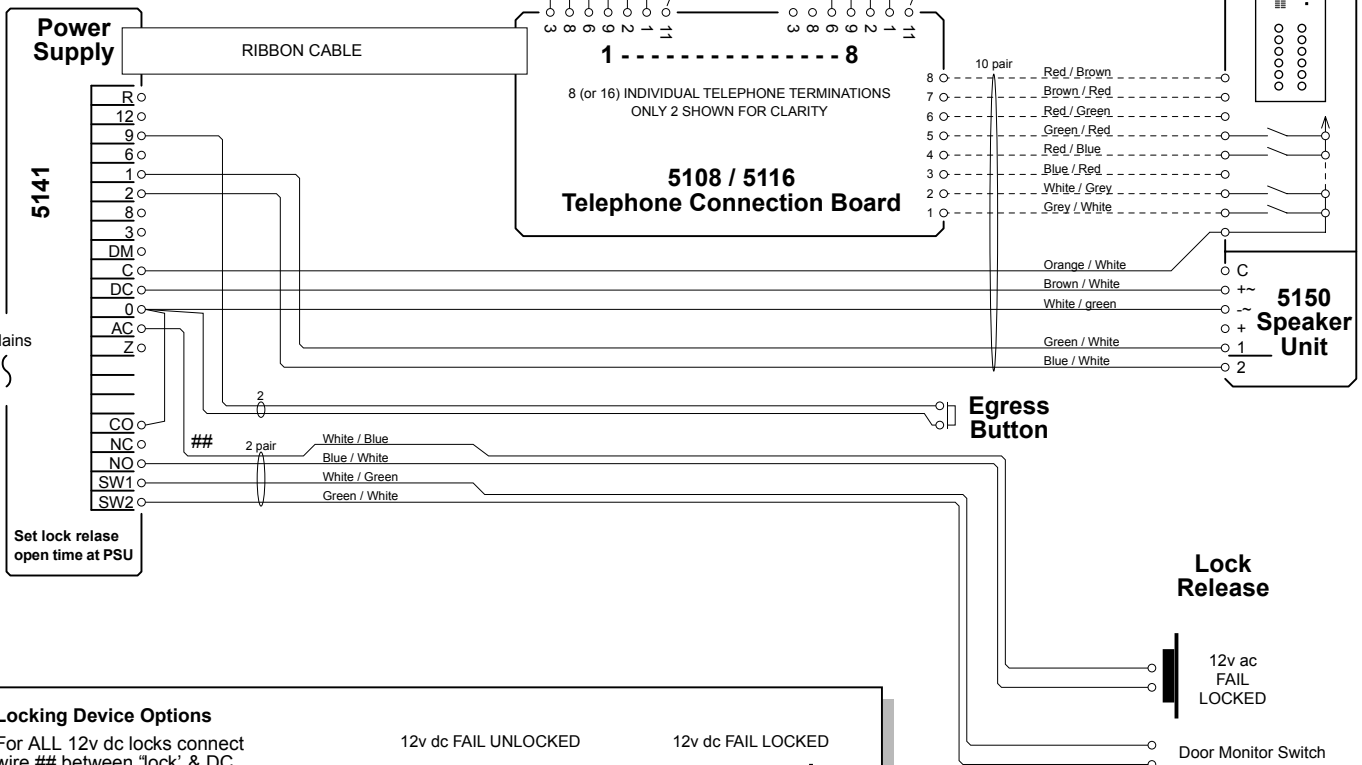
**ALWAYS FIT A LOCK SUPPRESSOR**

Make connections as per diagram in order to avoid interference.



**Telephone Cross Reference**

Function	AN0002	AN7320	AN1000	AN7577	70051	70055
Tone Call	C7	C7	C7	C7	11	11
Buzzer Call	11	11	11	11		
Speaker	1	1	1	1	1	1
Microphone	2	2	2	2	2	2
Lock Release	9	9	9	9	9	9
Common	6	6	6	6	6	6
Privacy LED	3	3	3	3	3	3
Door Monitor	8	8	8	8	8	8
Switch 1	Au	Au	Au			
Switch 1	Au	Au	Au			
Switch 2		Q1				
Switch 2		Q1				



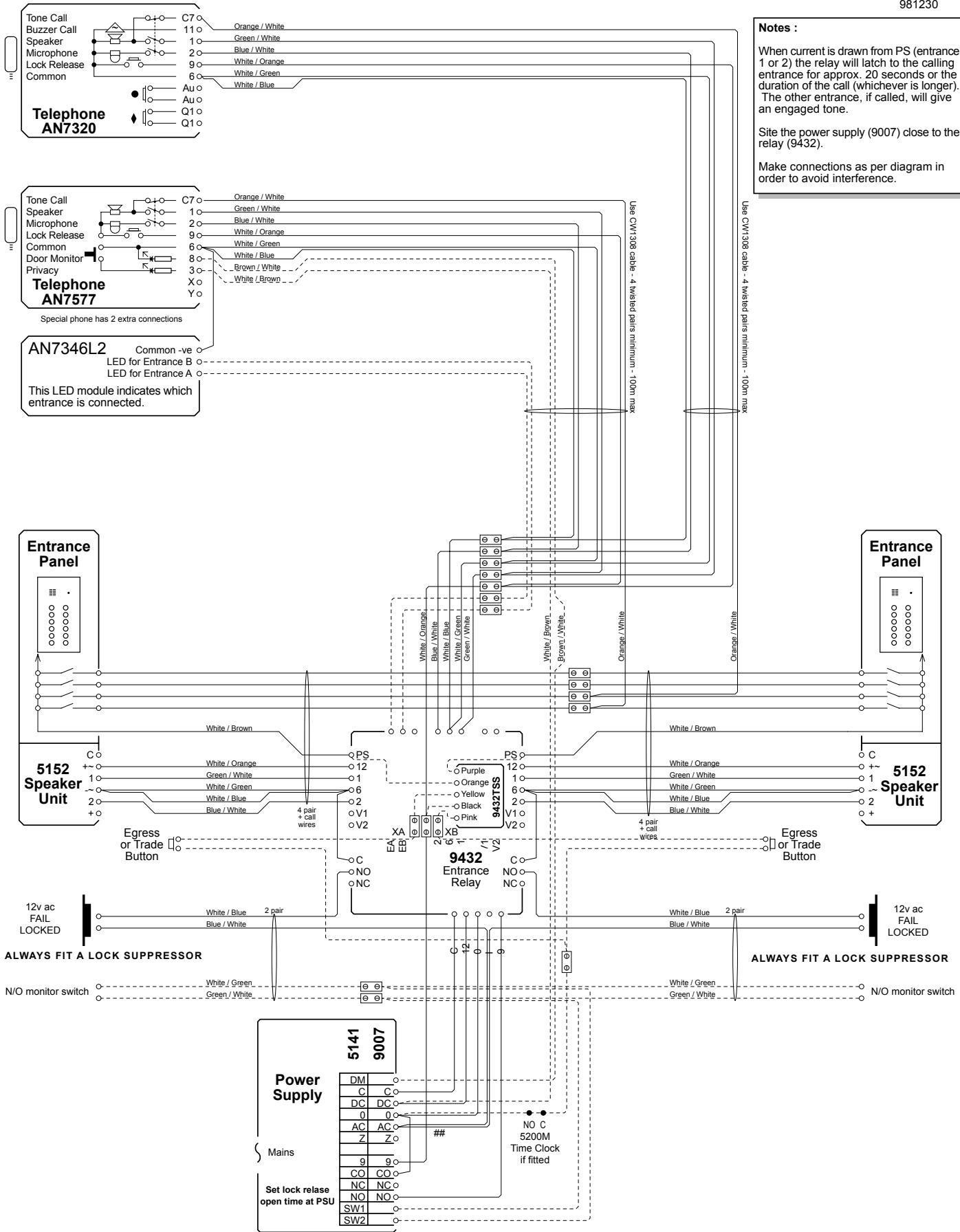
**Locking Device Options**

For ALL 12v dc locks connect wire ## between 'lock' & DC.

For FAIL LOCKED use NO

For FAIL UNLOCKED use NC

12v dc FAIL UNLOCKED	9007 DC		12v dc FAIL LOCKED	9007 DC	
	9007 NC			9007 NO	



**Notes :**

When current is drawn from PS (entrance 1 or 2) the relay will latch to the calling entrance for approx. 20 seconds or the duration of the call (whichever is longer). The other entrance, if called, will give an engaged tone.

Site the power supply (9007) close to the relay (9432).

Make connections as per diagram in order to avoid interference.

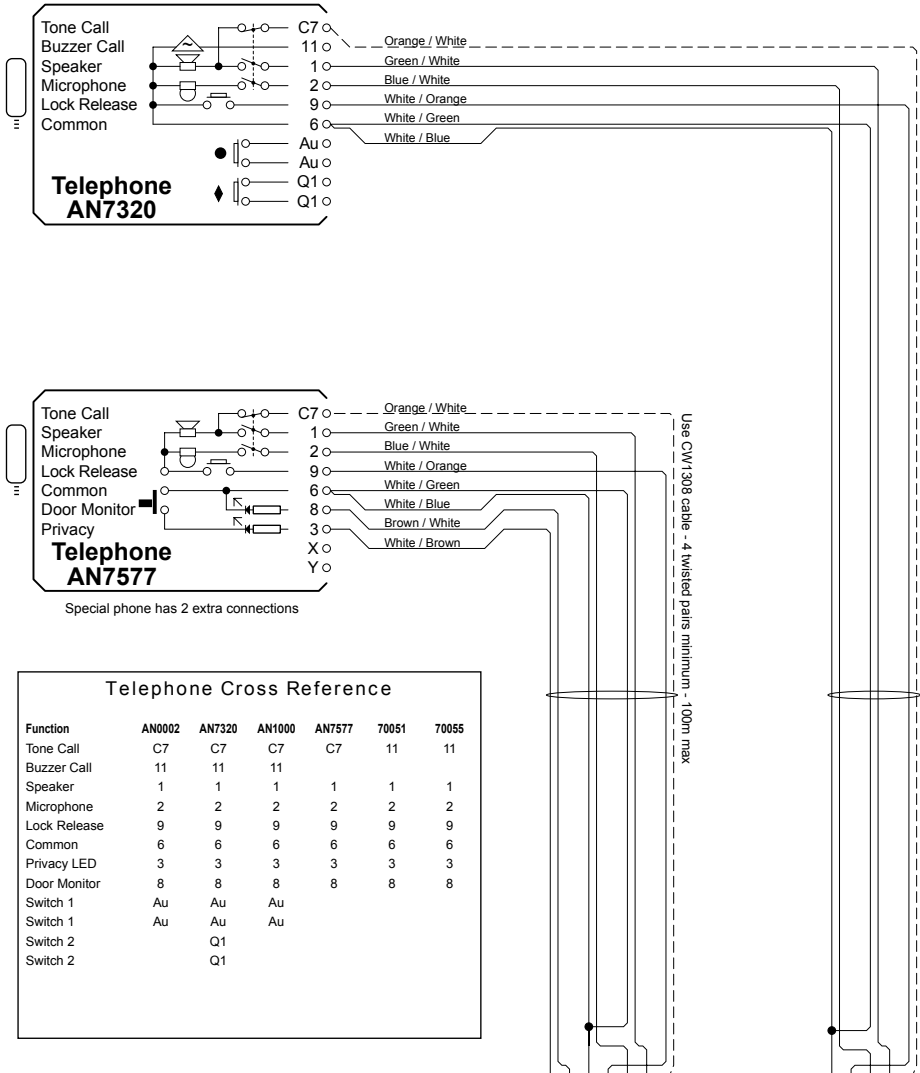
**Locking Device Options**

For ALL 12v dc locks move link ## between 'lock' & DC.

For FAIL LOCKED use NO  
 For FAIL UNLOCKED use NC

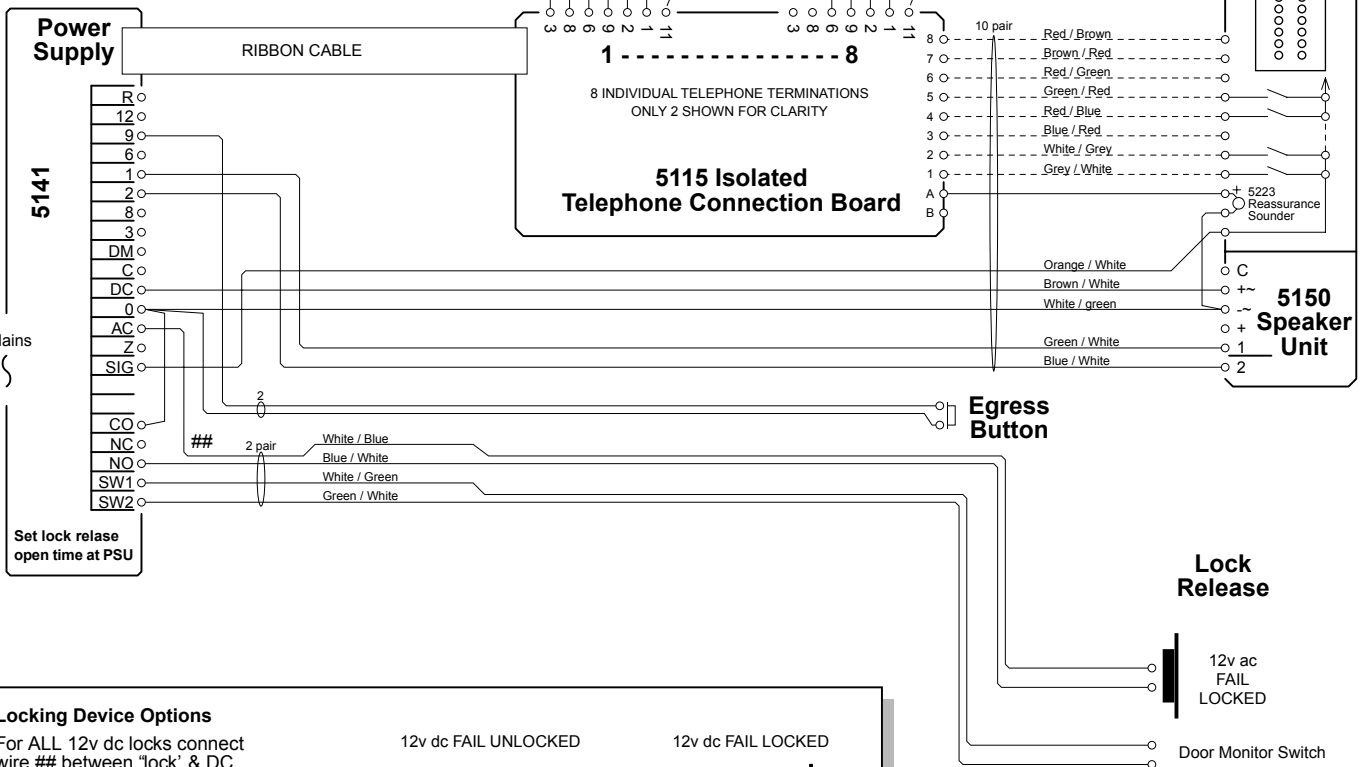
12v dc FAIL UNLOCKED	12v dc FAIL LOCKED
PSU DC ————	PSU DC ————
9432 NC ————	9432 NO ————

Make connections as per diagram in order to avoid interference.



**Telephone Cross Reference**

Function	AN0002	AN7320	AN1000	AN7577	70051	70055
Tone Call	C7	C7	C7	C7	11	11
Buzzer Call	11	11	11	11	11	11
Speaker	1	1	1	1	1	1
Microphone	2	2	2	2	2	2
Lock Release	9	9	9	9	9	9
Common	6	6	6	6	6	6
Privacy LED	3	3	3	3	3	3
Door Monitor	8	8	8	8	8	8
Switch 1	Au	Au	Au			
Switch 1	Au	Au	Au			
Switch 2		Q1				
Switch 2		Q1				



**Locking Device Options**

For ALL 12v dc locks connect wire ## between 'lock' & DC.

For FAIL LOCKED use NO  
For FAIL UNLOCKED use NC

12v dc FAIL UNLOCKED	9007 DC	9007 NC	12v dc FAIL LOCKED	9007 DC	9007 NO
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