

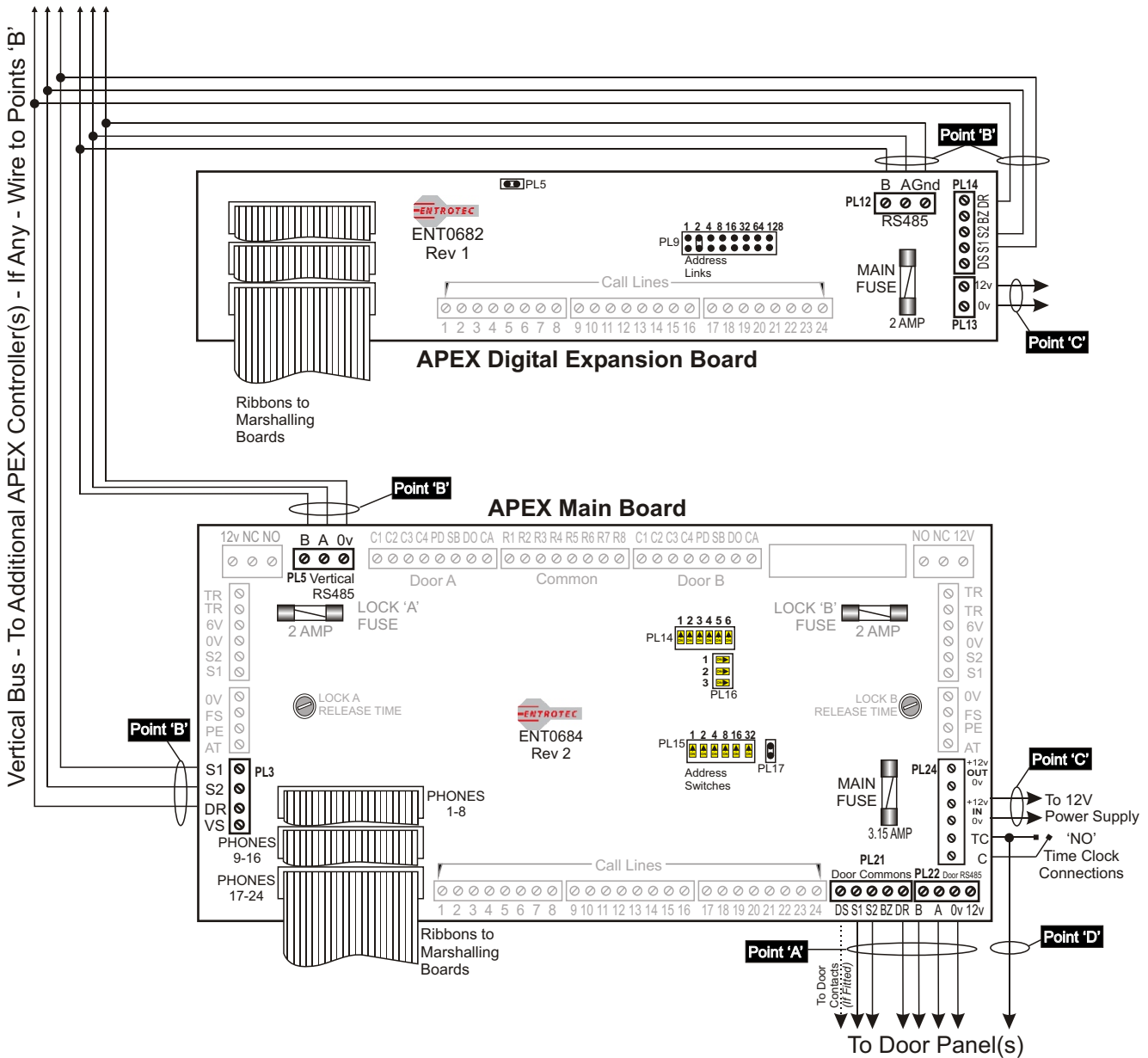
# APEX Schematics - Terminations

## APEX Controller Wiring

Version 8  
J.R. Grieve  
05 / 02 / 2010

To Additional Main /  
Expansion Controller(s)  
- If Any

For Boards:  
ENT0684 Rev 2 (Firmware v1.018 and above)  
ENT0682 Rev 1 (Firmware v1.001 and above)



### Wiring

#### Point 'A' : Door Data / Speech / Door Release

6 Pair CW1308 - Any unused cores to be tied to system ground

#### Point 'B' : Vertical Data / Speech / Door Release

6 Pair CW1308 - Any unused cores to be tied to system ground

#### Point 'C' : +12v / 0v Supply

2 Cores 2.5mm (+ Earth)

#### Point 'D' : 'Normally Open' Trades Time Clock Signal

1 Core of CW1308 (Use Point 'A' 6 Pair)

### Address Switch / Link Settings

Each APEX control board on a system should be uniquely addressed. These are factory set where possible.

APEX Main Board Address Switches: PL15.  
APEX Digital Expansion Board Address Links: PL19.

To set as: Controller 1 = Switch 1 On, Controller 2 = Switch 2 On, Controller 3 = Switches 1&2 On etc. All Switches off = Controller 0.

**Note:** The Digital Expansion board has additional links for address values 64 and 128.

### Jumper Switch Settings

#### Call Tone Time Adjust

Length of time the handset rings for:

PL14:		
Switch 1	Switch 2	
0	0	= 20 Secs
1	0	= 30 Secs
0	1	= 40 Secs
1	1	= 60 Secs

#### Call Up Time Adjust

Length of time the handset is live for:

PL14:		
Switch 3	Switch 4	
0	0	= 20 Secs
1	0	= 30 Secs
0	1	= 40 Secs
1	1	= 60 Secs

#### Speech Time Adjust

Length of time caller can speak for:

PL14:		
Switch 5	Switch 6	
0	0	= 45 Secs
1	0	= 60 Secs
0	1	= 90 Secs
1	1	= 120 Secs

Page 1 of 3



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**IMPORTANT.**

ALL CABLES TO BE KEPT WELL AWAY FROM HIGH VOLTAGE CABLES.

PLEASE CONSULT OUR FULL INSTALLATION MANUAL OR CONTACT OUR TECHNICAL DEPT. FOR ADVICE ON 01506 886235.

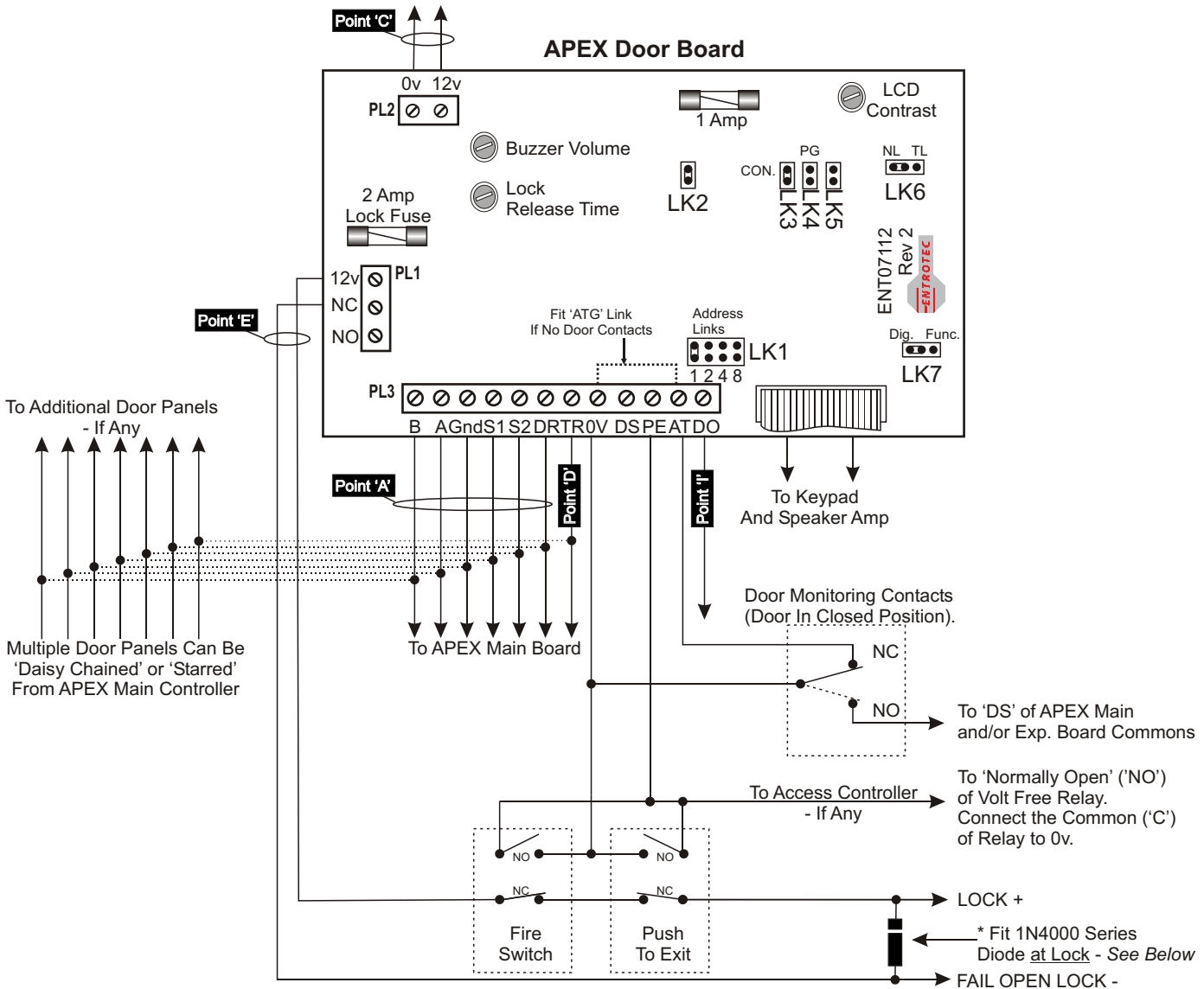
Download the most up to date manuals from the technical page on our website.  
<http://www.entrotec.com/technical/downloads/>

# APEX Schematics - Terminations

## APEX Door Panel Wiring

Version 8  
J.R. Grieve  
05 / 02 / 2010

For Boards:  
ENT07112 Rev 2 (Firmware v1.18 and above)



### Wiring

**Point 'A' : Door Data / Speech / Door Release**  
6 Pair CW1308 - Any unused cores to be tied to system ground

**Point 'C' : +12v / 0v Supply**  
2 Cores 2.5mm (+ Earth)

**Point 'D' : 'Normally Open' Trades Time Clock Signal**  
1 Core of CW1308 (Use Point 'A' 6 Pair) - Can Be Wired Straight From Time Clock

**Point 'E' : +12v / 0v Supply for Locks**  
2 Cores 2.5mm

**Point 'I' : 'Door On' Signal (Lo When Door Panel Calls)**  
1 Core of CW1308 - Use if Required To Switch Video

### Multiple Doors / Address Links

APEX systems can have up to 16 Digital / Functional (with LCD) doors per APEX main board. Each door board connected to a main board should be uniquely addressed -

**Address Links - 'LK1'.** These are factory set where possible.

To set as:

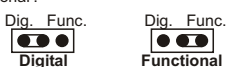
- Door 1 = Link 1 in,
- Door 2 = Link 2 in,
- Door 3 = Links 1 & 2 in etc.

On large systems, digital door panels can be connected to any APEX main board on the system, functional panels (with LCD) must be connected to the Apex main board it is to call.

### Jumper Link Settings

#### Digital / Functional Select Link

LK7 Selects if door panel is 'Digital' or 'Functional'.



This is factory set depending on panel type and should not normally be changed.

#### Concierge Link

LK3 enables the Concierge button.



With a link in place, the Concierge button is enabled. With no link, button functions as 'K' (Digital) / '24' (Functional).

#### Coded Access Program Link

LK5 Allows the 'Master Code' to be re-programmed.



Refer to installation manual for full coded access instructions.

#### Test Link

LK6 Selects if door panel is 'Test' or 'Normal' Mode.



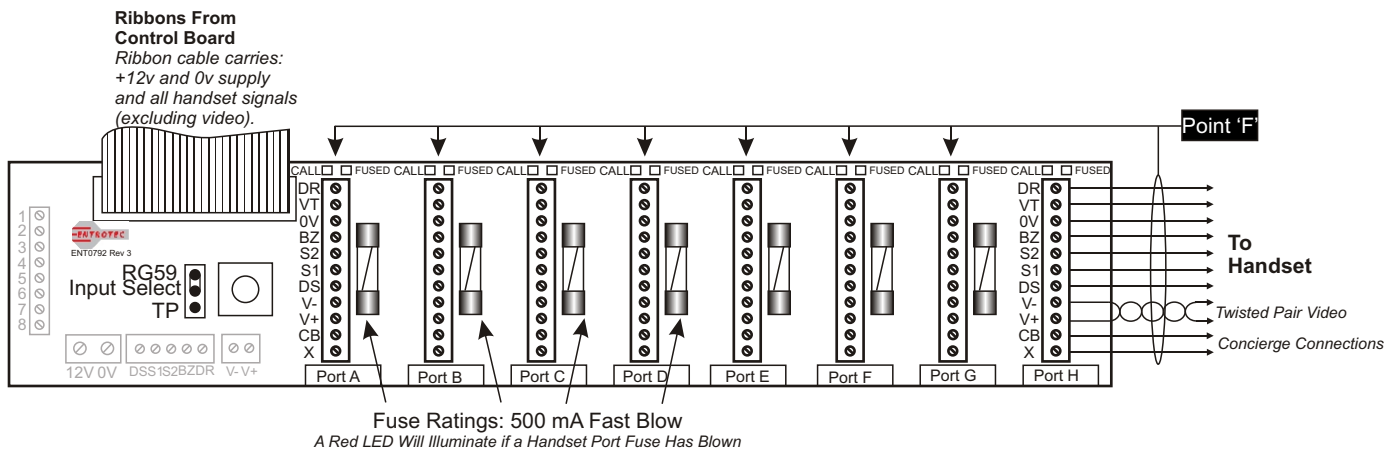
In test mode, speech and door release isolation is disabled. A link should be present at the NL for normal use.

# APEX Schematics - Terminations

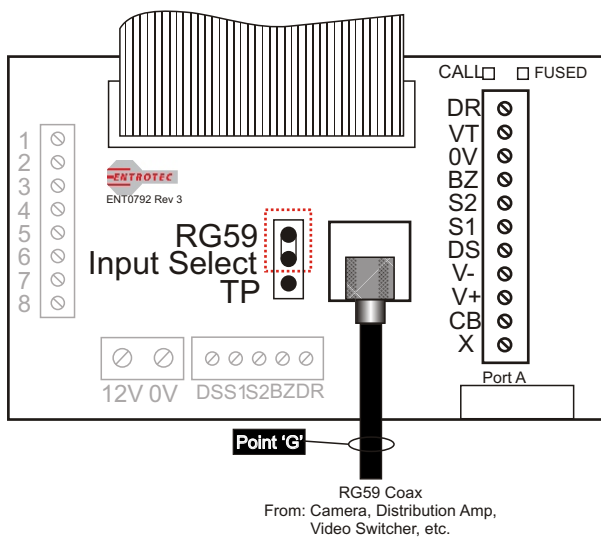
## APEX Marshalling Board / Handset Wiring

Version 8  
J.R. Grieve  
05 / 02 / 2010

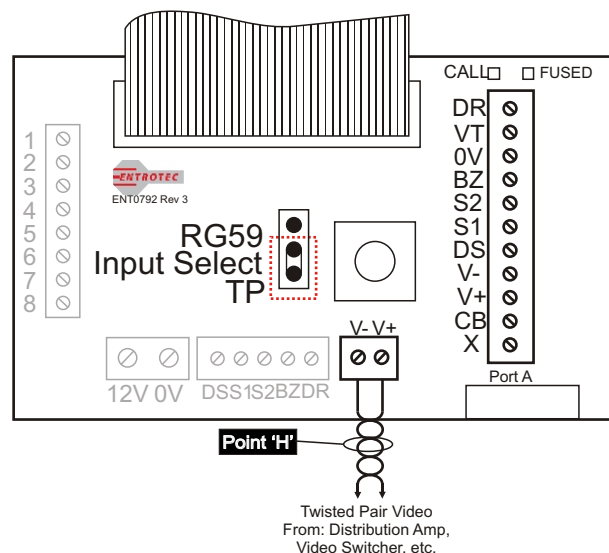
For Boards:  
ENT0792 Rev 3



### RG59 Coax Video Input



### Twisted Pair Video Input



### Wiring

#### Point 'F' : Output To 'ED' or 'Entroview' Series Handset

6 Pair CW1308 Minimum  
(10 Pair Recommended for Concierge Systems or for Cable Runs Exceeding 50 metres)  
- Any unused cores to be tied to system ground

#### Point 'G' : Coaxial Video Input

RG59 Coax

#### Point 'H' : Twisted Pair Video Input

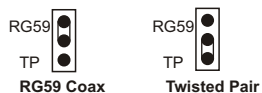
1 Pair of a CW1308

### Standard Handset Connections

- DR** - 'Door Release' a low going signal triggers the lock release circuit.
- VT** - 12v supply to the handset.
- 0v** - 0v supply to the handset.
- BZ** - Call tone to handset (DC call tone generated by the controller).
- S2** - Speech from the handset microphone to the door.
- S1** - Speech from the door to the handset speaker.
- DS** - 'Door Status' controls the handsets door status LED, requires a negative going trigger.

### Video Input Link

On video ready systems, LK1 selects the input type.



Marshalling boards can have a video input from either RG59 Coaxial or Twisted Pair.

### Video Handset Connections

On video ready systems, the video signal is sent from the marshalling board to each handset over a balanced pair 'V-' and 'V+'.

Signal adjustments can be made on the handset.

See handset fitting instructions for further information.

### Concierge Connections

On concierge ready systems 'CB' and 'X' connections should be made to each handset if required.

**CB** - 'Call Back' or 'Concierge Button' triggers a call to the concierge when the 'CB' button is pressed on the handset.

**X** - This is an auxiliary input and can be used to interface smoke alarms, intruder alarms, etc.

Page 3 of 3

**IMPORTANT.**

Whilst every effort has been made to ensure the accuracy of the information supplied herein, Entrotec cannot be held responsible for any errors or omissions.

It is the responsibility of the customer / installer to follow any relevant wiring regulations.

Any damage to equipment caused by mis-wiring may invalidate any warranty. If you are in any doubt, please contact our technical department for advice on 01506 886235.