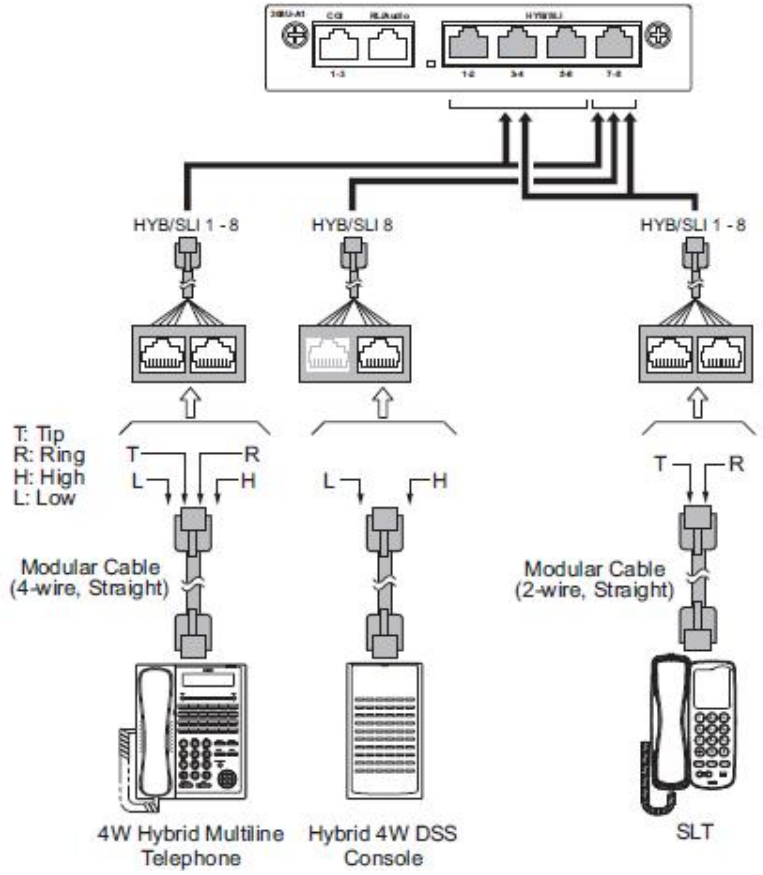
3- Connect the Telephones

The connectors of the IP7WW-308U-A1 and IP7WW-008U-C1 cards have multiple extension ports per RJ45 connector using the RJ61 pin-out format.



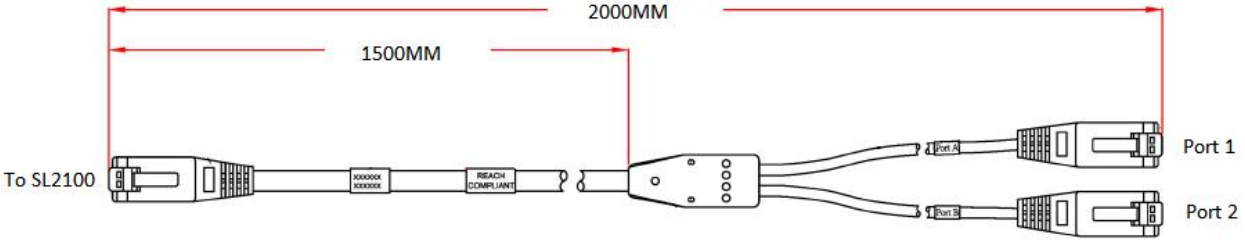
The SL2100 will automatically detected the terminal type when the device is connected.

Connecting to the RJ45 sockets of the IP7WW-308U-A1 & IP7WW-008U-C1 card

The are several methods available to connect these interfaces into the customer's building infrastructure.

1. Use the cable assembly or adapter available from NEC

Cable LPNEC2 – 2m length, converts a two port RJ45 socket to two RJ45 plugs, one port per plug.

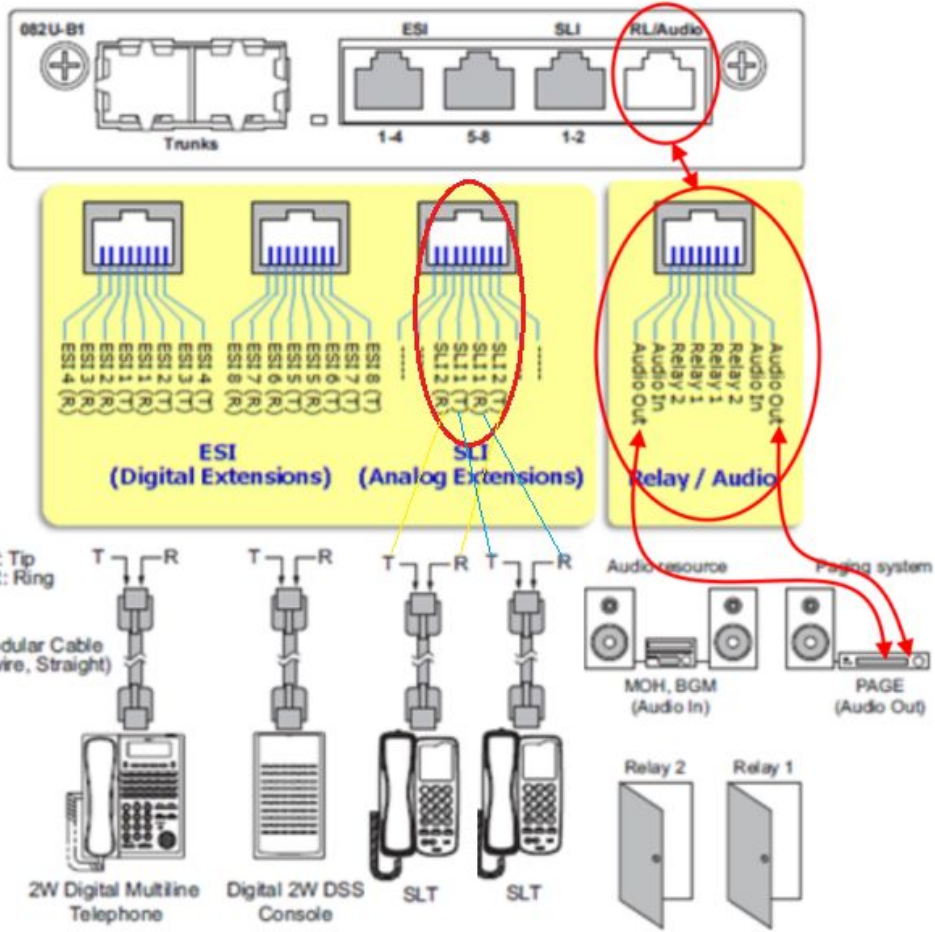


Can be used to connect into an RJ45 through coupler panel or directly into the customer's panels.
Can also be used to plug into RJ45 face plates if IDC termination is required.
Cable colour: black

One cable is required for each HYB/SLI socket of the IP7WW-308U-A1 or IP7WW-008U-C1 card.

Ports 1~2 RJ45 plug	
Pin	
1	-
2	-
3	H
4	R
5	T
6	L
7	-
8	-

IP7WW-082U-B1



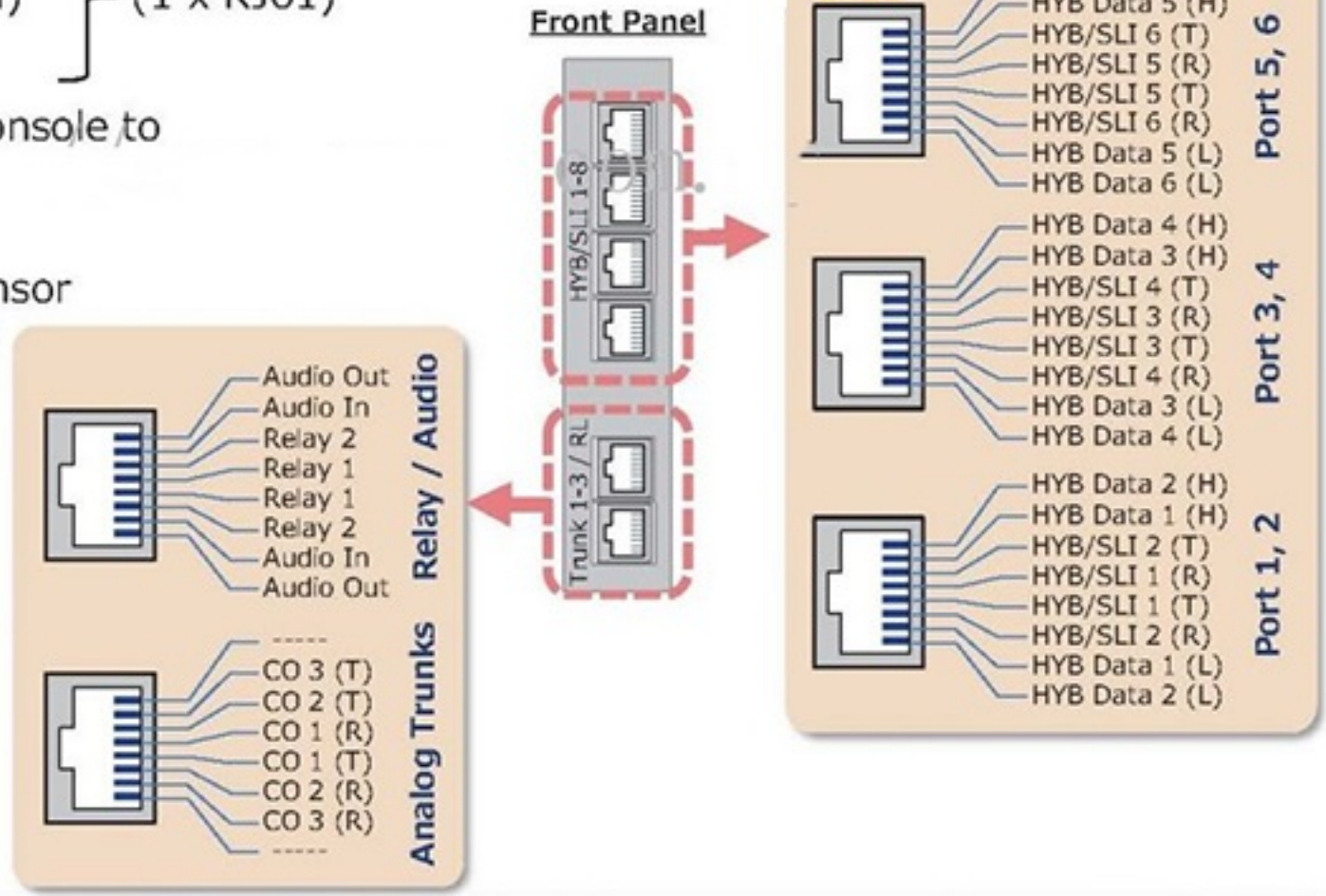
External Paging Output Specification	
Item	**Specification**
Output Impedance	600 ohms @ 1kHz
Output Level	Nominal 250 mV (-10dBm)
Maximum Output	400mV RMS

BGM/External MOH Input Specification	
Item	**Specification**
Input Impedance	600 ohms @ 1kHz
Input Level	Nominal 250 mV (-10dBm)
Maximum Input	1 V RMS

General Purpose/Door Relay Specification	
Item	**Specification**
Rated Voltage	DC 48 V Maximum
Rated Current	DC 320 mA Maximum
Contact	Normally open

IP7WW-308U-A1

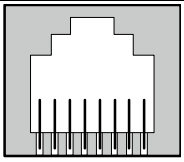
- Install to the Universal Slot
- 3 x Analog Trunk Ports (1 x RJ61)
- 8 x Hybrid/Analog Extension Ports (4 x RJ61)
- 2 x Relays (Door/Audio Control)
- 1 x Audio Input (ExMOH/BGM) — (1 x RJ61)
- 1 x Audio Output (Paging)
- Enable to connect the DSS Console to Port No.8
- Enable to connect up to 2 Doorphones or External Sensor Device to Port No.6 and No.7 (by Hard-Switch and PRG setting) (Improve the voice quality of Doorphones)



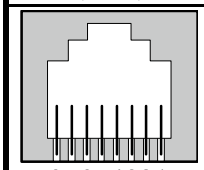
Adapter ADNEC24 – Converts 2 x two port RJ45 sockets to four RJ45 sockets, one port per socket.
Requires six patch cables of the desired length and colour.
Can be used to connect into an RJ45 through coupler panel or directly into the customer's panels.
Can also be used to plug into RJ45 face plates if IDC termination is required.
Colour: black.
Supplied with an adhesive pad.
One adapter will convert two RJ45 sockets of the IP7WW-308U-A1 or IP7WW-008U-C1 card.

Ports 1~4 RJ45 sockets	
Pin	
1	-
2	-
3	H
4	R
5	T
6	L
7	-
8	-

2. Terminate cables on site with RJ45 plugs and connect directly to the RJ45 sockets of the card.
Use the following pin-out to terminate each RJ45 plug.

HYB/SLI 1~2, 3~4, 5~6, 7~8	Pin No.	Port
 87654321	**1**	2H
	2	1H
	3	2T
	4	1R
	5	1T
	6	2R
	7	1L
	8	2L

3. Use pre-terminated RJ45 patch cables and connect directly to the RJ45 sockets of the card.
Use the following cable colours when using a straight through RJ45 patch cable directly into the RJ61 sockets of the card.

			Using an RJ45 patch cable into the RJ45 connectors
HYB/SLI 1~2, 3~4, 5~6, 7~8	**Pin No.**	**Port**	**RJ45 Colour code**
 87654321	**1**	2H	White/Orange
	2	1H	Orange/White
	3	2T	White/Green
	4	1R	Blue/White
	5	1T	White/Blue
	6	2R	Green/White
	7	1L	White/Brown
	8	2L	Brown/White

Terminating extensions at RJ11 or RJ45 face plates at the user's desk.

Each port connects to

RJ11 = Connections 3/4 2/5

RJ11 Face plate	
Pin	Connection
1	-
2	H
3	R
4	T
5	L
6	-

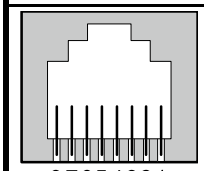
RJ45 = Blue/White & Green/White connections

RJ45 Face plate	
Pin	Connection
1	-
2	-
3	H
4	R
5	T
6	L
7	-
8	-

4- Connect DSS Consoles

One DSS consoles can be connected to hybrid extension port 8 of the IP7WW-308U-A1 or IP7WW-008U-C1 card.
The maximum system capacity is 9 consoles, each chassis can have 3 consoles maximum.
Each DSS console is assigned to a digital extension with PCPro, up to 4 consoles can be assigned to the same extension.

DSS consoles use only 2 wires when connecting to the SL2100.
Connect to pins H & L.

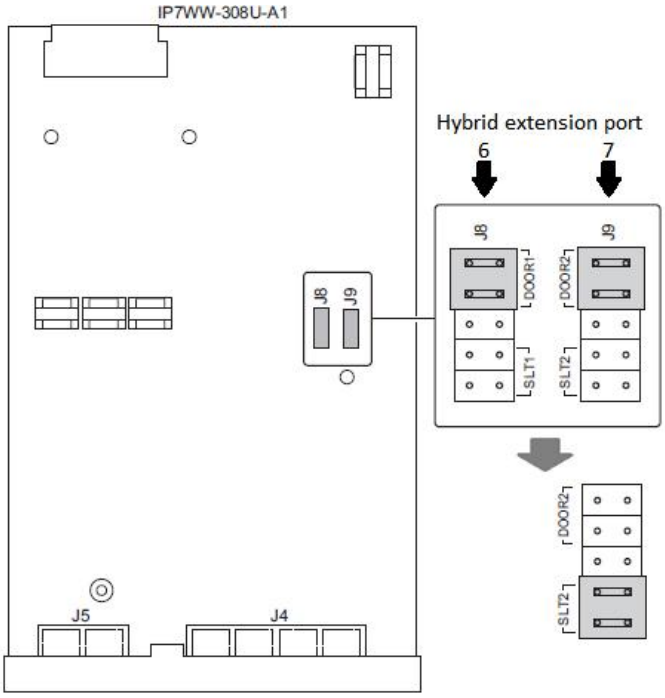
HYB/SLI 7~8	Pin No.	Port
 87654321	1	2H
	2	
	3	
	4	
	5	
	6	
	7	
	8	2L

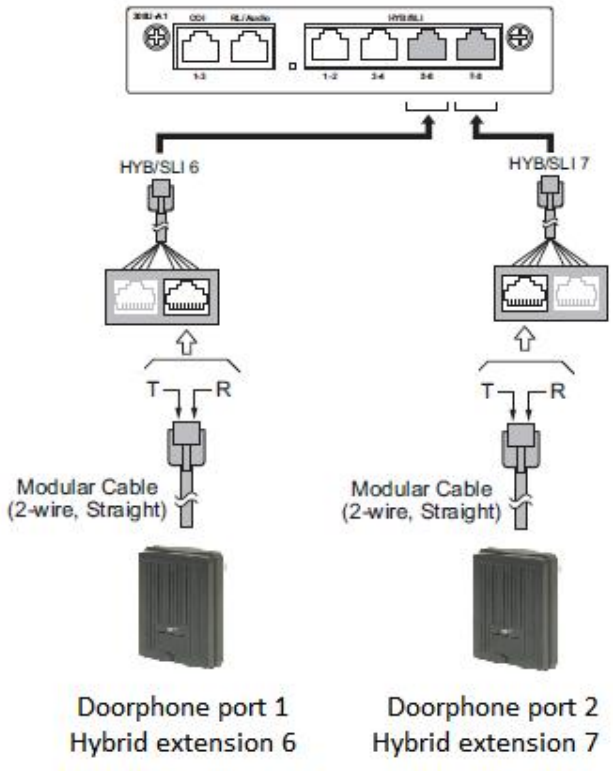
5- Connect Doorphones

Up to two doorphones (BE109741 – DX7NA) can be connected to hybrid extension ports 6 & 7 of the IP7WW-308U-A1 card.
The maximum system capacity is 6 doorphones.

Hybrid extension ports 6 & 7 of the IP7WW-308U-A1 card has hardware links to select SLT/doorphone operation.
The factory setting is SLT operation.
Ensure you set the hardware links as shown.

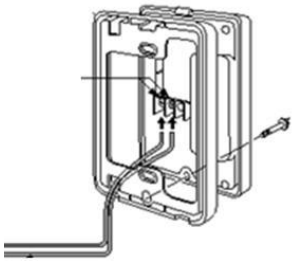
The hardware links set the mode, there is no additional system configuration required to select SLT/doorphone operation



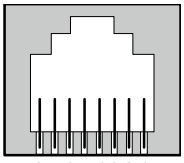


Terminating at the **doorphone**

Each port connects to: ⊖ & Ⓘ at the doorphone.
The connections to the doorphone are none polarity.



Rear of doorphone

HYB/SLI 5~6, 7~8	Pin	**HYB/SLI 5~6** Port 6	**HYB/SLI 7~8** Port 7
 87654321	1	-	-
	2	-	-
	3	Door 1 T	-
	4	-	Door 2 R
	5	-	Door 2 T
	6	Door 1 R	-
	7	-	-
	8	-	-

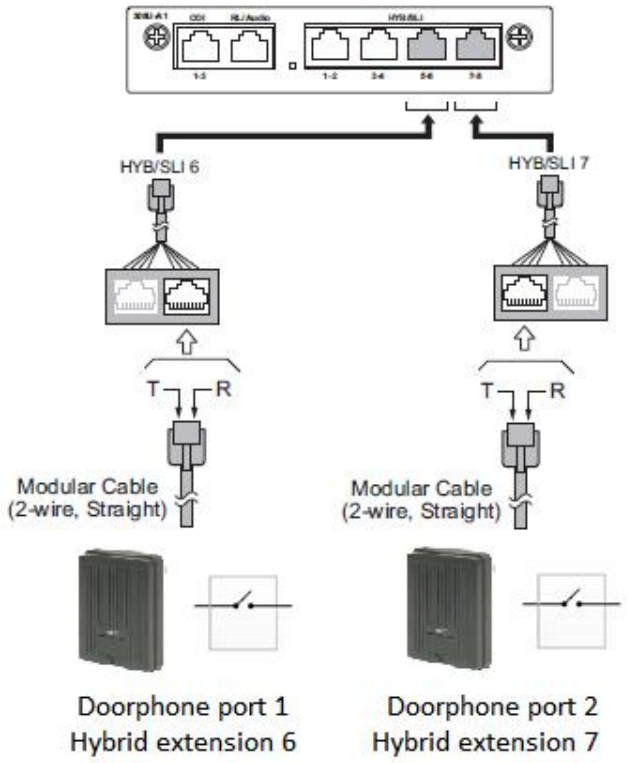
6- Connect External Sensors

The SL2100 can be used to detect the operation of external sensors by connecting to the analogue extension port that is set to doorphone mode.

The external sensor can be any normally open contact (Form A) for example, push button/panic switch or PIR detector with a suitable specification.

When the external sensor is closed/activated the SL2100 system will ring a group of extensions in the same way as the doorphone would.

Pin	**HYB/SLI 5~6** Port 6	**HYB/SLI 7~8** Port 7
1	-	-
2	-	-
3	Door / sensor 1 T	-
4	-	Door / sensor 2 R
5	-	Door / sensor 2 T
6	Door / sensor 1 R	-
7	-	-
8	-	-



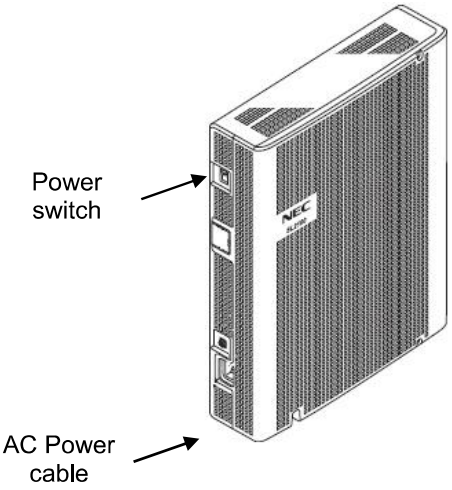
Description	**Specification**
External sensor	Voltage during sensor off (contact open): 25V Loop current during sensor on/activated (contact closed) : 40mA

7- Connect the Power & System Start Up

The power cable is plugged into the left side (wall mounted) or rear (when rack mounted) of the unit via an IEC-C13 connector.

Before connecting the power:

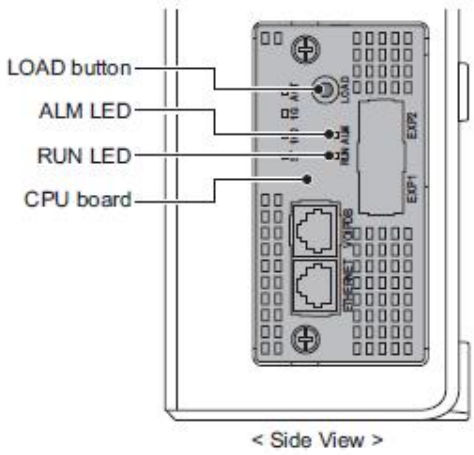
- Ensure the power switch is OFF
- Ensure the power is switched off at the source
- All cards are installed and secured correctly



System Start Up – First Time

! The first time you start up the SL2100 it is important to clear the system memory. This will ensure that the system is set to the default/factory configuration.

1. Push and hold the LOAD Button located on the front of the CPU card.



Also referred to as '**COLD Start**' can also be used at any time to delete the customer's configuration.
Warning – COLD Start should only be used when you want to delete the customer's configuration from the SL2100 CPU card.

2. Turn the power switch on
3. Continue holding the LOAD Button for approximately 10 seconds or until the ALM lamp on the CPU card lights.
4. Release the LOAD Button
5. When the system has completed reloading the system software (about one minute) the RUN LED is flashing green on the CPU card and the system phones will display the Time and Date.

Switching the SL2100 OFF
! Be sure that no calls are in progress otherwise they will be cut off.
Turn the power switch OFF at the SL2100 chassis.

System Start Up – Retain Customer Configuration
This is the normal operation for powering the SL2100 on.
Turn the power switch ON at the SL2100 chassis.
Any new installed cards will be automatically detected.