DCS Compact II

INSTALLATION MANUAL

SAMSUNG TELECOMS

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Chapter 1
Site Requirements

Chapter 1. Site Requirements

When planning the installation of the DCS Compact II, choose a site that meets the following requirements:

- Select a location for the key service unit (KSU) that has enough space for easy installation and adequate lighting.
- Select a location that minimises cable lengths. See the Cable Requirements table below.
- The equipment should not be exposed to direct sunlight, corrosive fumes, dust, constant vibration or strong magnetic fields such as those generated by motors and copy machines.
- A direct commercial AC power outlet is required. Do not use extension cords. Preferably, a dedicated circuit should be used to minimise the risk of other electrical equipment being connected that could adversely affect system operation.
- Ensure that all wires and cables going to and coming from the KSU are properly routed. Do not cross fluorescent lights or run parallel with AC wires.
- Allow at least 150mm clearance on both sides and 150mm clearance on top of the KSU to ensure proper ventilation.
- Do not install within a 2-mile radius of broadcasting antenna or in close proximity to a fire sprinkler head or other sources of water.

Meeting these requirements will help to ensure proper performance and greater life expectancy of the system.

CABLE REQUIREMENTS

EQUIPMENT	CABLE	AWG	MAX FEET	MAX METRES
DIGITAL KEYSETS	1PR. TWISTED	24	1300	400
ADD-ON MODULES	1PR. TWISTED	24	1300	400
SINGLE LINE STATION	1PR. TWISTED	24	3000	1 KM
DOOR PHONE	2PR. TWISTED	24	330*	100

* This is the maximum distance a door phone can be from the door phone interface module (DPIM). The DPIM can be a maximum of 274 cable metres from the KSU.

ELECTRICAL SPECIFICATIONS

AC INPUT	220VAC +/- 20%, 48~60Hz
	or Free Input Voltage for some countries.
POWER CONSUMPTION(MAX)	100 WATTS MAX
DC OUTPUT	FUSE RATING 2.0 AMP
	+5 VOLTS 2.5 AMPS MAX
	-5 VOLTS 0.5 AMPS MAX
	(on the Motherboard)
	-55 VOLTS 1.2 AMPS MAX
	-54 VOLTS 0.4 AMPS MAX

DIMENSIONS AND WEIGHTS

	Height(mm)	Width(mm)	Depth(mm)	Weight(kg)
SINGLE CABINET	464	365	148	7.5
TWO CABINETS	464	467	418	12.5
DIGITAL KEYSET	108	216	229	1.2
ADD-ON MODULE	108	108	229	0.5
DOOR PHONE	127	99	32	0.2

ENVIRONMENTAL LIMITS

OPERATING TEMPERATURE	0ºC - 40ºC
STORAGE TEMPERATURE	-10.5ºC - 70ºC

Chapter 2
Installing Basic KSU and Expansion Cabinet

Chapter 2. Installing Basic KSU and Expansion Cabinet

2.1 System Capacity

The DCS Compact II system can have up to 40 stations. There is no limit to the number of analogue C.O. lines, single line telephones(SLTs) and ISDN C.O. lines if enough slots are available. A PRI card is inserted into the PRI slot in the Expansion Cabinet. Some configuration examples are shown in the table below.

Combination of Boards	Loop Start Trunk(BRI I/F)	Key sets	KDB-D /KDB-S	SLI	Max Capacity (Including KDB line)
Basic	0	8	8		0 * 8 (16)
Basic+3TRK	3	8	8		3 * 8 (16)
Basic+4BRI(4S0T0)	4(8CH)	8	8		8 * 8 (16)
Basic +4BRI(4S0T0)+8DLI * 2	4(8CH)	24	8		8 * 24 (32)
Basic +3TRK * 2 + 8DLI	6	16	8		6 * 16 (24)
Basic(4BRI (4S0T0) + 8DLI * 2) +EXP(4BRI (4S0T0)+8DLI * 2)	8(16CH)	40	8		16 * 40(48)
Basic(6TRK+8DLI* 2) +EXP(3TRK *2 +8DLI)	12	32	8		12 * 32(40)

► Basic KSU

Basic KSU Plus Expansion Cabinet ◄

- In this table, 4BRI (4S0T0) is used as digital trunk.
- 4BRI (4S0T0) card can be used as ISDN NT. Each port can have up to eight ISDN TEs(see Chapter 5 for details), but the power consumption of each port is limited to 4 watts.

2.2 Unpacking and Inspection

After unpacking the KSU, inspect for signs of physical damage. If any damage is detected, do not attempt to install. Contact your dealer for advice.

Check to see that Basic KSU carton includes the following items.

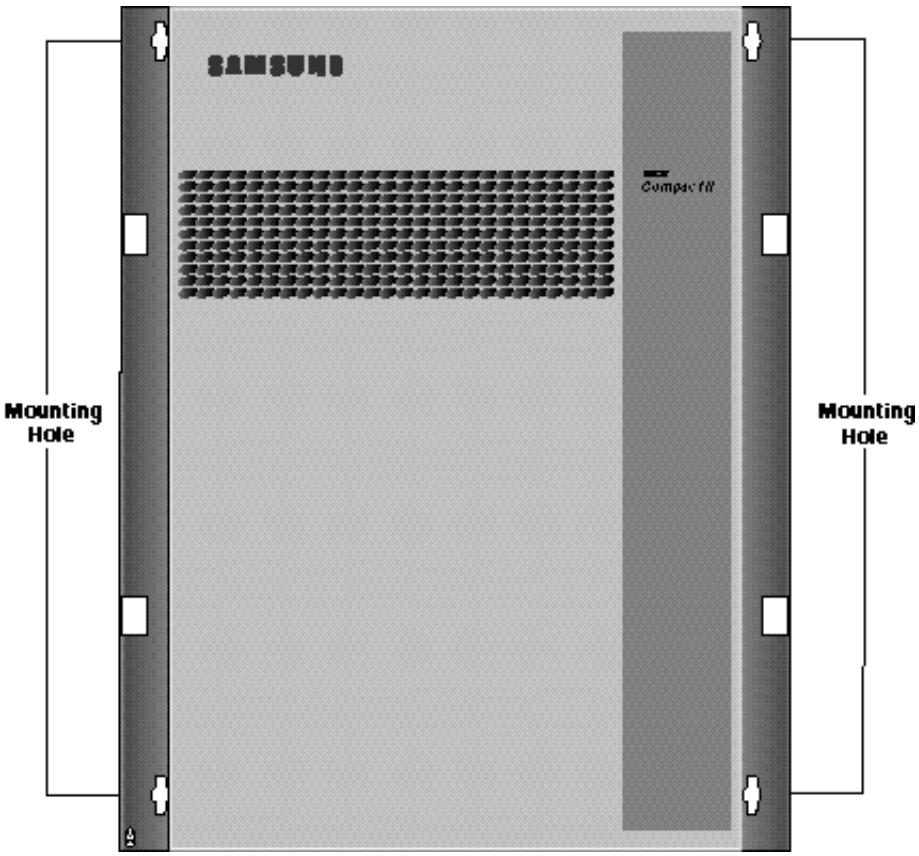
- Basic Key Service Unit (KSU)
- PWR input cable
- Wall-mount kit
- Spare Fuse
- MEM Card
- Cores (for EMI Suppression)
- Battery connection cable
- Cable tie and Screws

Check to see that Expansion Cabinet carton includes the following items.

- Expansion Cabinet
- Wall-mount kit
- Flat connection cable
- F-GND connection cable
- Ring connection cable
- Core(for EMI Suppression)
- Screws

2.3 Basic KSU Installation

The Basic KSU, which is to be accommodated in the metal cabinet, can be wall mounted or floor mounted. If wall mounted, the KSU should be mounted on a plywood backboard at least 15mm thick. Attach the two mounting screws to the backboard. Hang the KSU on the two screws by its mounting holes and secure it to the backboard with the remaining two screws. (See Figure 2–1)



<FIGURE 2-1> BASIC KSU(KEY SERVICE UNIT)

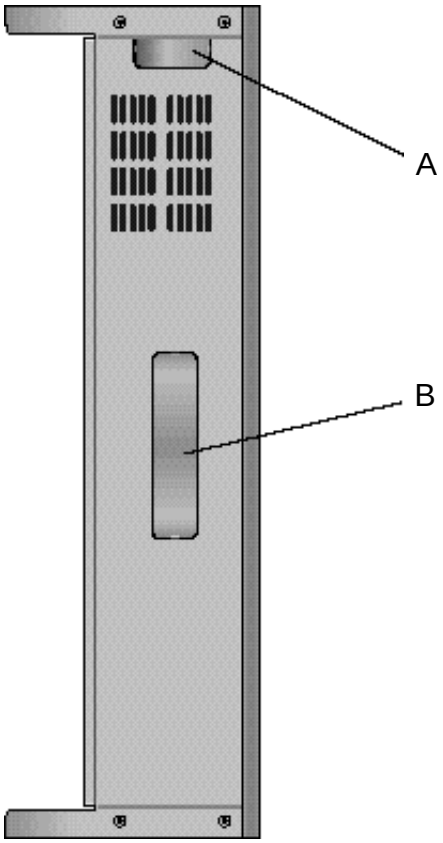
2.4 Expansion Cabinet Installation

Expansion Cabinet is attached to Basic KSU using the following procedure.

a) Switch OFF the power and remove the covers of both Basic KSU and Expansion Cabinet.

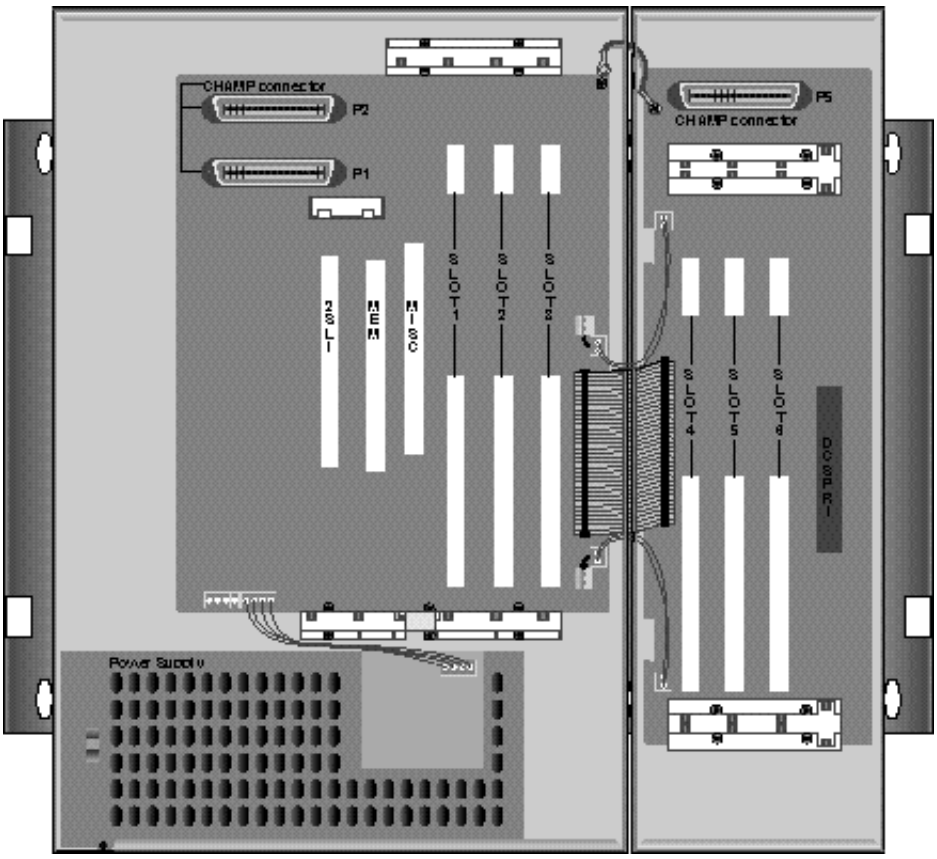
b) Using an appropriate tool, carefully remove the two blanking plates on the right side of Basic KSU for connection route.

A is for MDF cable and B is for signal and power cable. (See Figure 2-2)



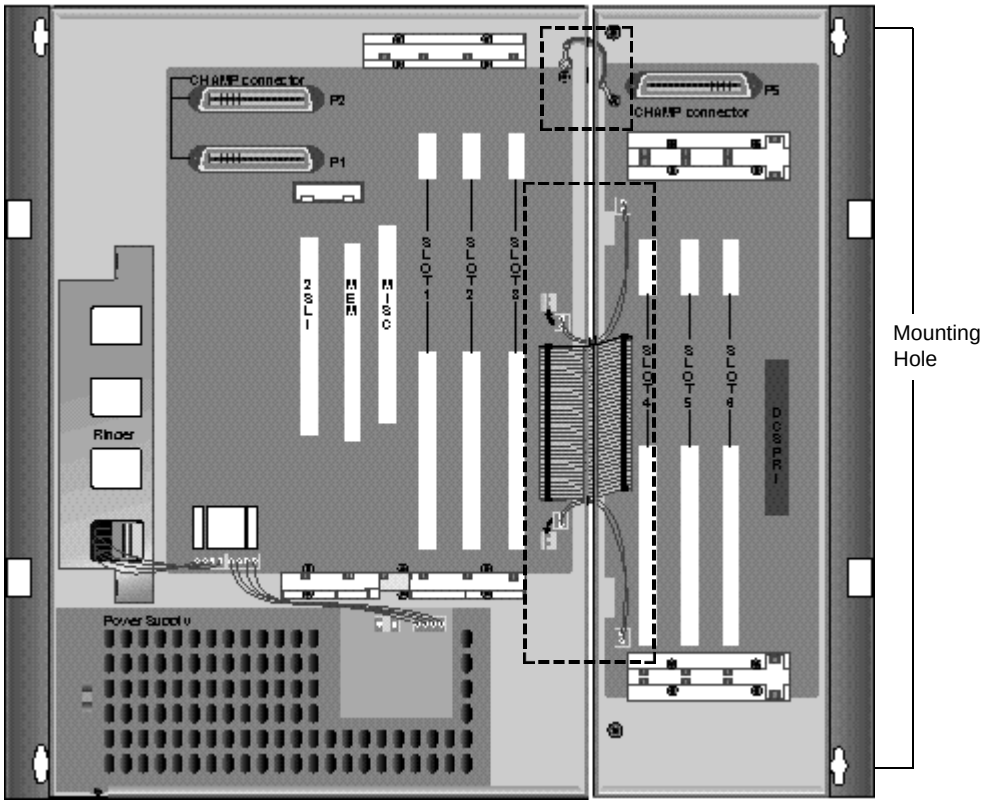
<FIGURE 2-2> RIGHT SIDE VIEW OF BASIC KSU

c) Move Expansion Cabinet to Basic KSU and attach it via groove.
(See Figure 2-3)



<FIGURE 2-3> CONNECTING BASIC KSU AND EXPANSION CABINET

d) Attach Expansion Cabinet to the backboard using the screws provided. (See Figure 2-4)



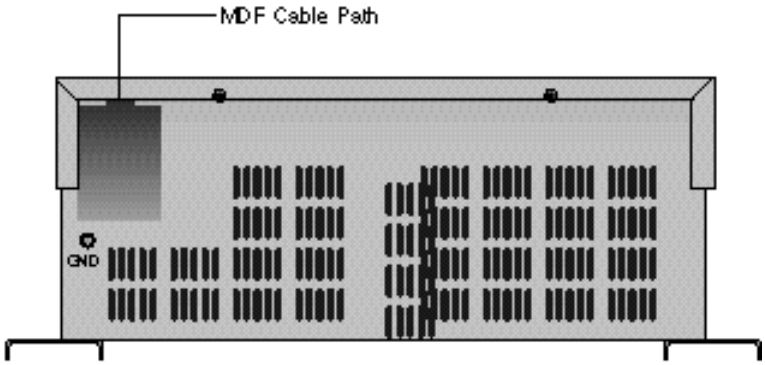
<FIGURE 2-4> MOUNTING EXPANSION CABINET ON BACKBOARD

e) Join Expansion Cabinet to Basic KSU with the provided screws.

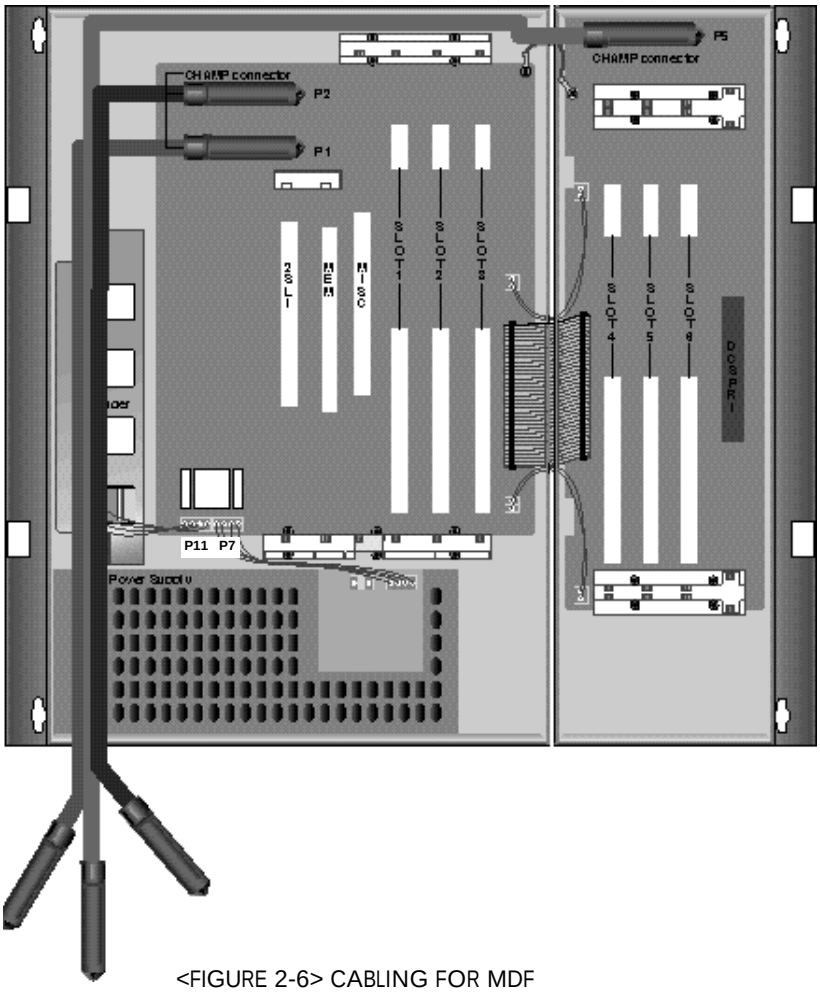
f) Connect Expansion Cabinet to the Basic KSU via a 64-pin flat cable, two 2-wire power connections and a F-GND connection.(See Figure 2-4)

g) Insert new optional card.

h) Connect MDF cable through appropriate path. (See Figure 2-5 & 2-6)



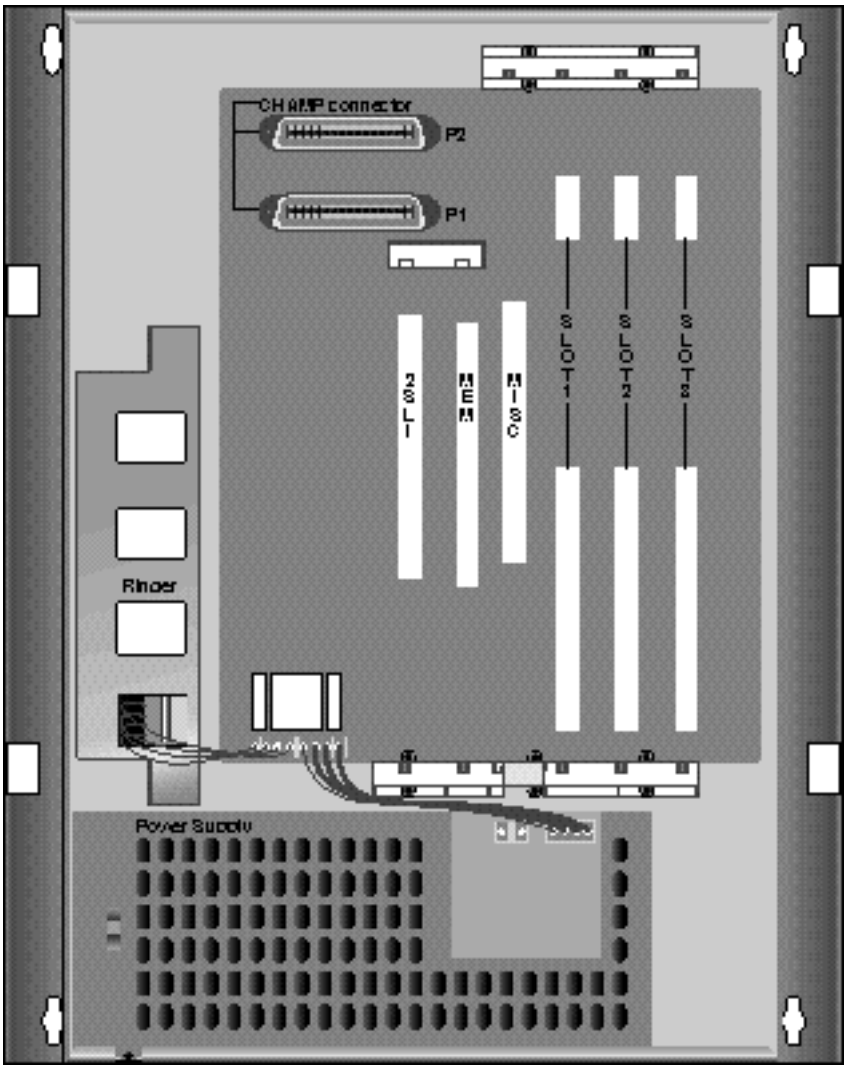
<FIGURE 2-5> BOTTOM OF BASIC KSU



<FIGURE 2-6> CABLING FOR MDF

2.5 RGU(Ring Generator Unit) Installation

Secure the RGU in the Basic KSU with the screws supplied. Connect the RGU cable assembly (4 pin) to connector P11 on the motherboard. (See Figure 2-7)



<FIGURE 2-7> INSTALLING RGU

2.6 Grounding

DCS Compact II comes equipped ready to use with a third wire AC ground provided through the power cord. This third ground will be adequate for most applications. However, if it is suspected that there is a problem with the ground provided at AC outlet or local codes require a solid earth ground to be connected to the KSU, the existing third wire ground must be disconnected before power is applied. The existing third wire ground is disconnected by removing the holding screw and tapping and storing the wire. After this wire has been disconnected, the grounding lug on the PSU(Power Supply Unit) must be connected to a ground rod or metal cold water pipe using #10 AWG solid copper wire.

Failure to provide an adequate ground may cause unpredictable operation or even circuit card failure.

WARNING
Unplug the power cord from the AC outlet before attempting to connect the ground. Hazardous voltage may cause death or injury. Observe extreme caution when working with AC power.

2.7 MDF Cabling

All connections to the DCS Compact II system are made by way of a customer-provided main distribution frame (MDF). The KSU and expansion kit are each connected to the MDF using a 25 pair female amphenol-type cable . These cables can be routed into the KSU cabinet from below. (See Figure 2-5 & 2-6)

Label each cable to correspond with the connector number. Label each 66 terminating block with the same connector number with which the cable is labelled.

Use one pair twisted wire to cross-connect stations or lines to their associated port.

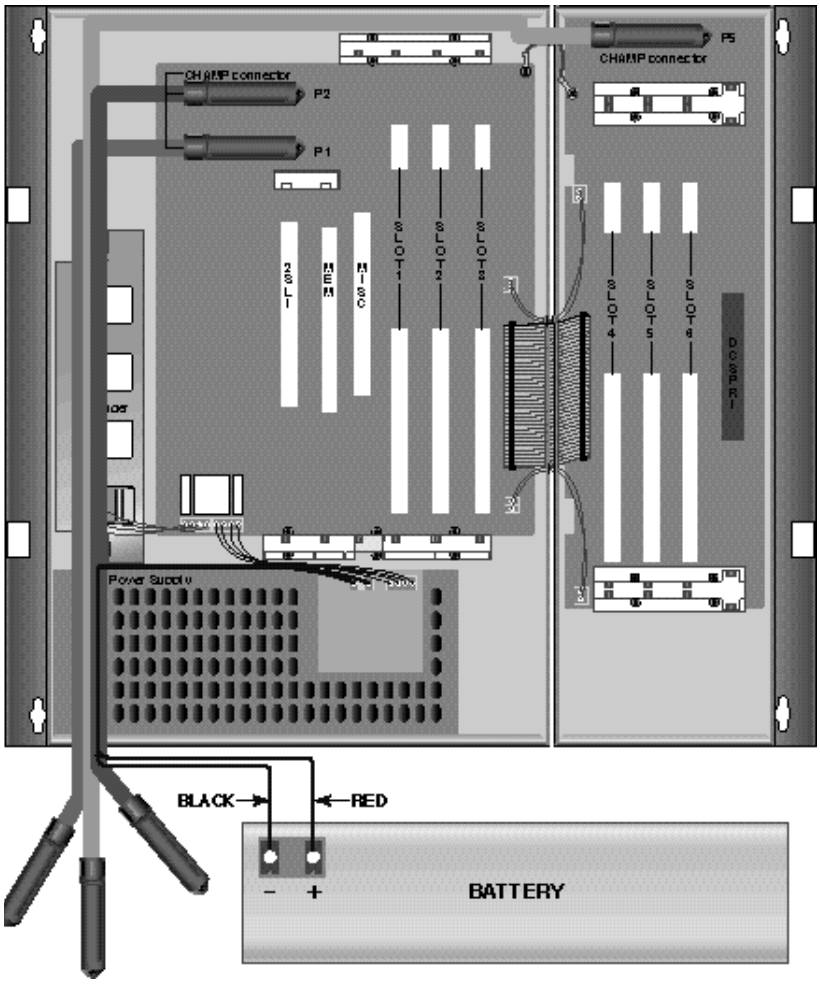
2.8 Battery for Power Failure

Battery Selection

You can continue to use the DCS Compact II system during a power failure if you have installed an appropriate battery. If you use a battery whose capacity is too large or too small, however, the system may not operate correctly (see specification below). Use the battery connection cable supplied with the system.

Install Procedure

First, pick out the cable through the MDF cable path. Then connect the cable to the battery–RED to positive(+) and BLACK to negative(-). Next, connect the housing connector to the head pin in the power supply. (See Figure 2-8)



<FIGURE 2-8> CABLING FOR BATTERY CONNECTION

Recommended Battery Specification

	Charge	Discharge
Minimum Load Current (A)	0	0.05
Maximum Load Current (A)	0.4	1.2
Nominal Load Current (A)	0.1	0.6
Nominal Output Voltage (V)	-54	-49

- Over discharge protection voltage: -42 +/- 1V
- Maximum Keyset current consumption : 30mA

CAUTION

Switch off the power before connecting the power supply to the battery.

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Chapter 3
Installing Printed Circuit Cards

Chapter 3. Installing Printed Circuit Cards

Unpack and inspect each card before installing. Check for signs of physical damage. If any damage is detected, do not attempt to install. Contact your dealer for advice immediately.

3.1 MEM Card

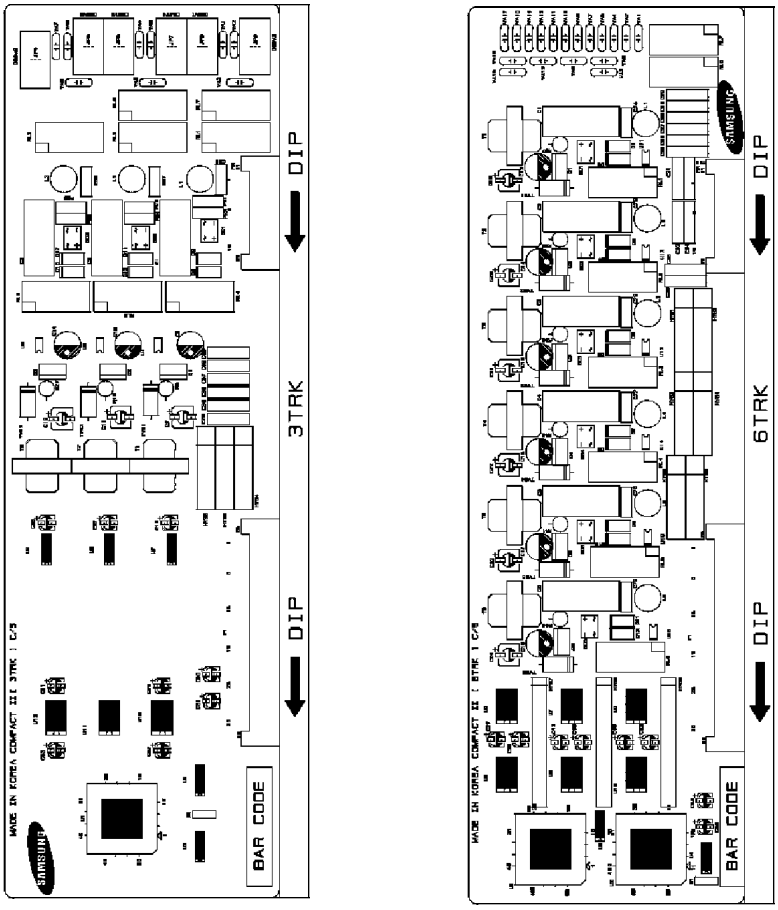
Locate the MEM card for the system. Make sure that the BACK UP switch is in the OFF position. Insert the MEM card in the Basic KSU slot labelled MEM. Push firmly in the middle of the MEM card to ensure that it is fully inserted into the back plane connector.

To prevent accidental damage to the MEM card , the connector on the back plane is positioned to mate only with the MEM card. Other interface cards will not mate with this connector and MEM card will not mate with any other connector.

3.2 3TRK Card

3 loop start trunk ports and 2 PFT ports for power failure transfer. (See Figure 3-1)

There are no options on this card. Insert as many 3TRK cards as are needed into any universal slots 1 to 6. Push firmly in the middle of both card ejectors on each card to ensure that it is fully inserted into the back plane connector.



<FIGURE 3-1> 3TRK CARD AND 6TRK CARD

3.3 6TRK Card

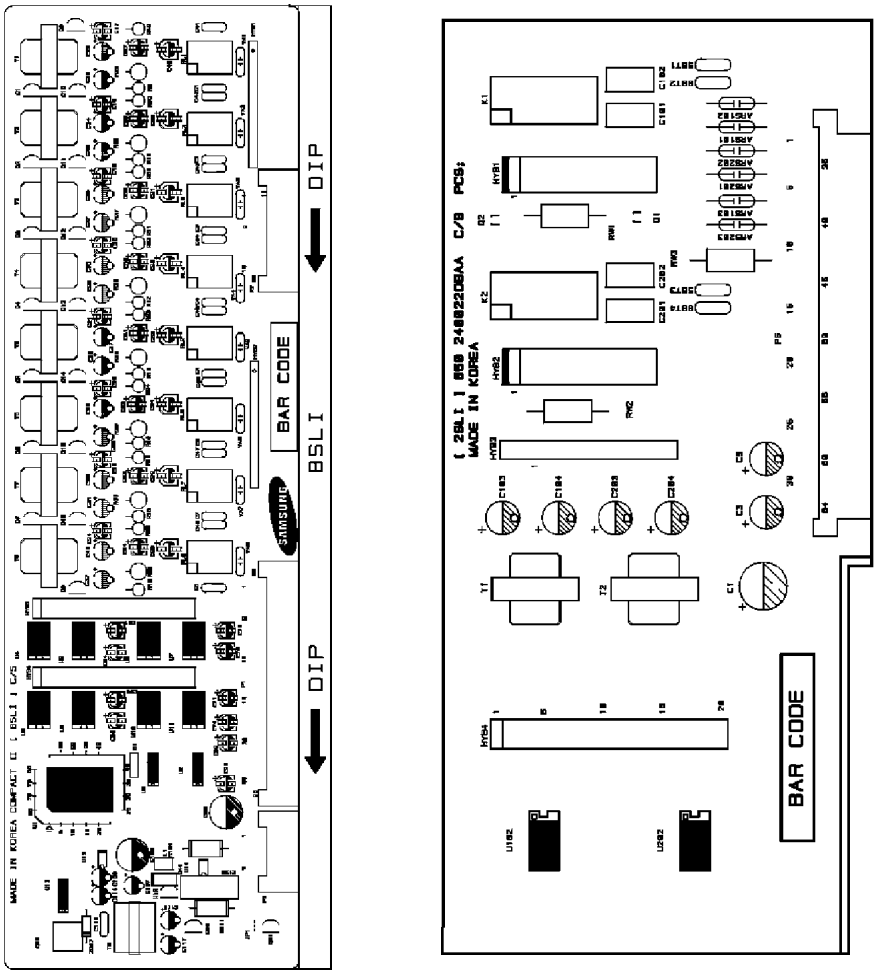
6 loop start trunk ports and 2 PFT ports for power failure transfer. (See Figure 3-1)

There are no options on this card. Insert as many 6TRK cards as are needed into any universal slots 1 to 6. Push firmly in the middle of both card ejectors on each card to ensure that it is fully inserted into the back plane connector.

3.4 8SLI Card

which has 8 subscribe line ports (See Figure 3-2)

There are no options on this card. Insert as many 8SLI cards as are needed into any universal slots 1 to 6. Push firmly in the middle of both card ejectors on each card to ensure that it is fully inserted into the back plane connector.



<FIGURE 3-2> 8SLI CARD AND 2SLI CARD1

3.5 2SLI Card

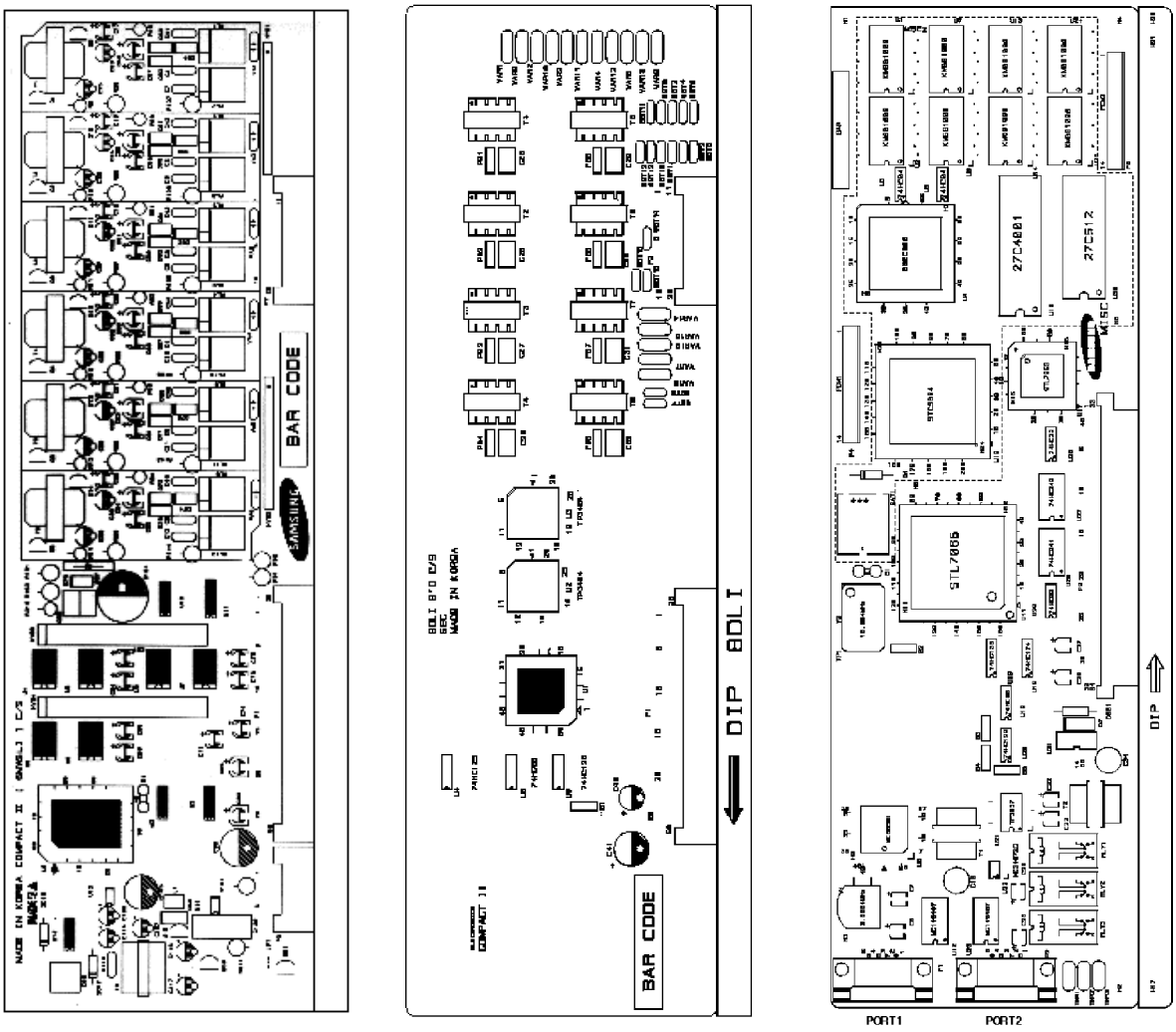
which has 2 subscribe line ports (See Figure 3-2)

There are no options on this card. Insert the card into the Basic KSU slot labelled 2SLI. Push firmly in the middle of both card ejectors to ensure that it is fully inserted into the back plane connector.

3.6 6MWSLI Card

which has 6 subscribe line ports for message waiting telephones (See Figure 3-3)

There are no options on this card. Insert as many 6MWSLI cards as are needed into any universal slots 1 to 6. Push firmly in the middle of both card ejectors to ensure that it is fully inserted into the back plane connector.



<FIGURE 3-3> 6MWSLI CARD, 8DLI CARD AND MISC 1/2 CARD

3.7 8DLI Card

which has 8 digital phone ports. (See Figure 3-3)

There are no options on this card. Insert as many 8DLI cards as are needed into any universal slots 1 to 6. Push firmly in the middle of both card ejectors on each card to ensure that it is fully inserted into the back plane connector. Optional Keyset daughter boards cannot be used for Keysets connected to this card.

3.8 MISC Cards

which has many miscellaneous functions: DTMF receiver(4ch), RS232C, BGM, PAGE, COMMON PURPOSE RELAY(3ports), AA, MODEM(option) (See Figure 3-3)

Two types of MISC card are available. Select the appropriate type for the system and insert it into the dedicated MISC slot in the Basic KSU.

3.8.1 MISC 1 Card (Without AA)

Insert the MISC 1 card into the Basic KSU slot labelled MISC and push firmly in the middle of both card ejectors to ensure that it is fully inserted into the back plane connector.

3.8.2 MISC 2 Card (With AA)

Insert the MISC 2 card into the Basic KSU slot labelled MISC and push firmly in the middle of both card ejectors to ensure that it is fully inserted into the back plane connector.

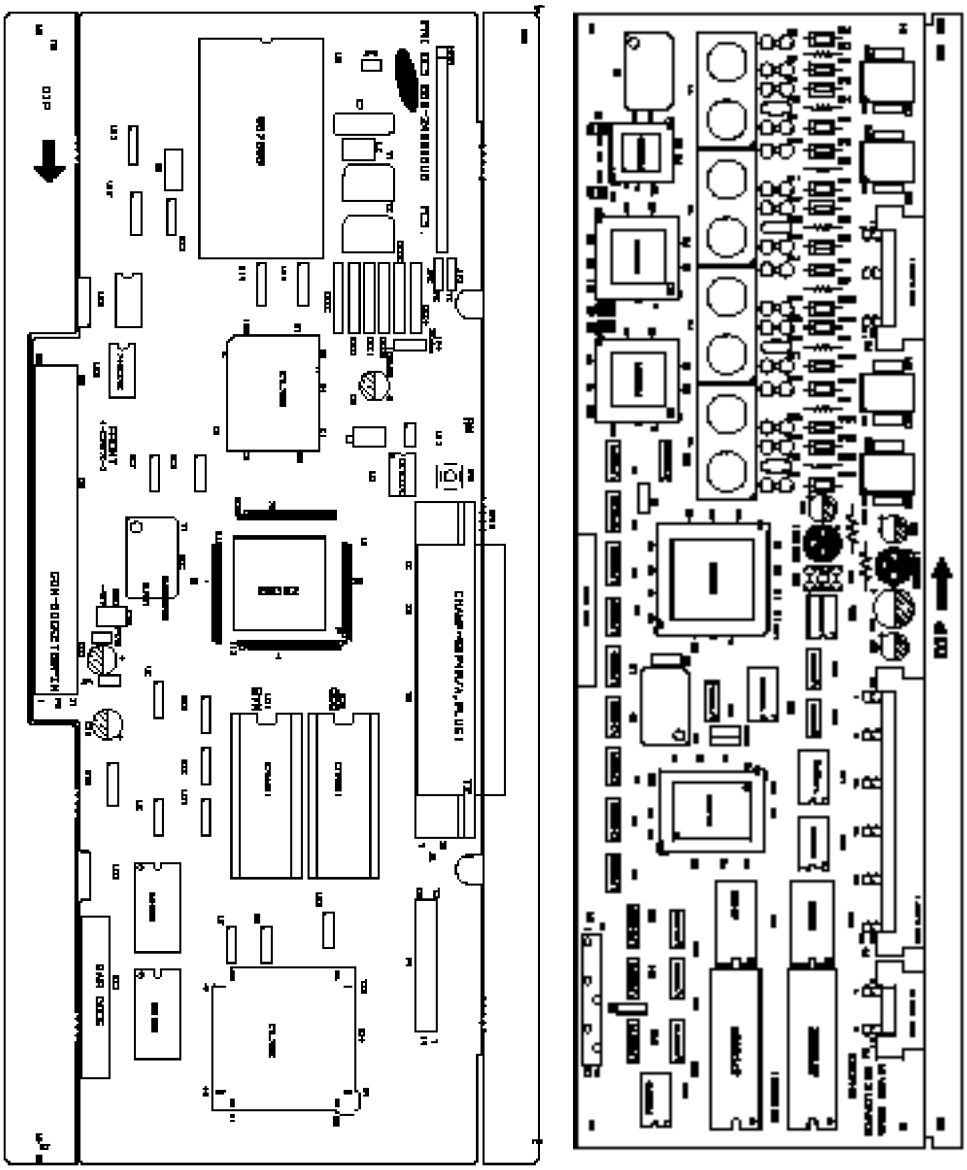
NOTE
After installation, make sure the back-up Switch(SW1) for AA is in the ON position. To clear the AA message, use MMC 731 (see DCS Programming Manual).

3.9 PRI Card

which has 30 channel U-interface ports. (See Figure 3-4)

There are no options on the PRI card. It can be inserted into the PRI slot of the Expansion Cabinet only. Push firmly in the middle of the card to ensure that it is fully inserted into the back plane connector.

If a PRI card is installed, the adjacent slot 6 must be left empty. You must also install a PLL card (see section 3.12).



<FIGURE 3-4> PRI CARD AND 4BRI/2BRI CARD

3.10 4BRI (4S0T0) Card

This card supports both S and T reference points defined by ITU-T. You can select the S/T mode of each port respectively by MMC. Insert the 4BRI (4S0T0) card into any universal slot 1 to 6 and push firmly in the middle of both card ejectors to ensure that it is fully inserted into the back plane connector. (See Figure 3-4)

If a 4BRI card is installed, you must also install a PLL card (see section 3.12).

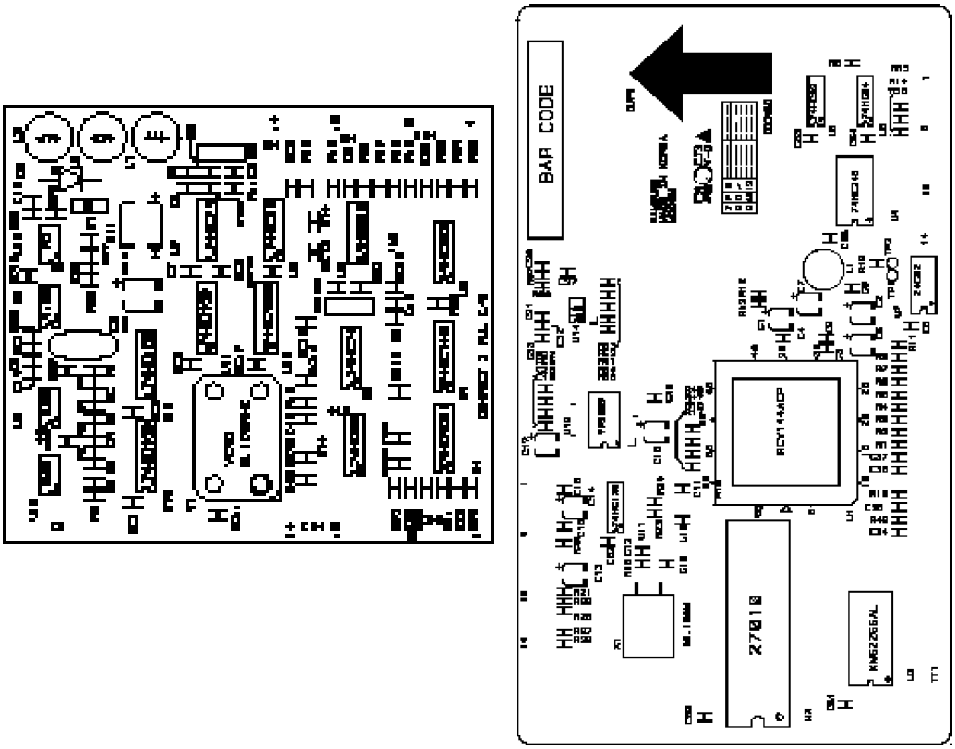
3.11 2BRI (2S0T0) Card

This card supports both S and T reference points defined by ITU-T. You can select the S/T mode of each port respectively by MMC. Insert the 2BRI (2S0T0) card into any universal slot 1 to 6 and push firmly in the middle of both card ejectors to ensure that it is fully inserted into the back plane connector. (See Figure 3-4)

If a 2BRI card is installed, you must also install a PLL card (see section 3.12).

3.12 PLL Card

This card (See Figure 3-5) is only required if a PRI or BRI card is used. There are no options to select on the PLL card. The PLL card is fitted to the two 14 Pin connectors in the corner of the motherboard adjacent to the Power connectors. Push firmly in the middle of the connectors.



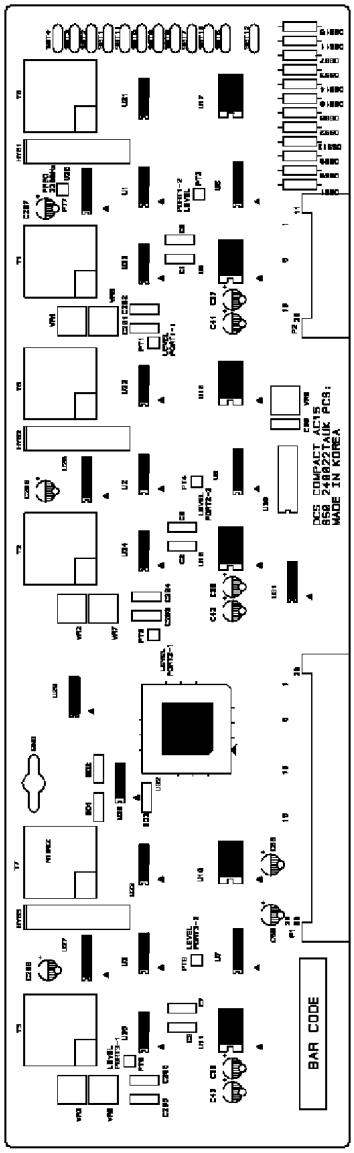
<FIGURE 3-5> PLL CARD AND MODEM CARD

3.13 MODEM Card

This internal modem card (Figure 3-5) is an option card for the MISC 1 or MISC 2 card. Check orientation of modem card (arrow) and push firmly in the middle of the 14 pin female connectors marked PCM1 and PCM2 on the MISC card. (See Figure 3-3)

3.14 AC 15 Card (U.K. Only)

This card is used only in the UK and has no selectable options. Insert the AC 15 card into any universal slot 1 to 6 and push firmly in the middle of both card connectors to ensure that it is fully inserted into the back plane connector. (See Figure 3-6)



<FIGURE 3-6> AC 15 CARD

Chapter 4
Power Up Procedures

Chapter 4. Power Up Procedures

4.1 Connect Power to The System

During the initial installation, it is best to verify proper system operation before plugging in any amphenol-type cables to the MDF.

1. If you have already plugged the cables in, unplug them.
2. Verify that the AC voltage at the dedicated electric outlet is in the range 180 - 270 VAC
3. Make sure the AC power switch is in the OFF position and that the MEM battery switch is OFF.
4. Plug the KSU power cord into the dedicated polarised AC outlet.
5. Turn the AC power switch to the ON position.
6. The AC and DC LED on the power supply will light steady to confirm the presence of power.

If the PSU AC LED fails to light, unplug the system, remove the power supply and check the AC fuse located on the bottom. If the fuse is good but the AC LED does not light, check the AC outlet. If the AC outlet is also good, you must correct the problem before continuing. To do this:

1. Turn off the power switch.
2. Unplug all cards using the card ejectors.
3. Turn the system on.
4. Check the AC LED again.

If the problem is corrected, you have a defective card. Test the line and option cards one at a time to find the defective card and remove the card before continuing. If the LED still does not light, unplug the KSU and change the power supply. This should solve the problem. If it does not, contact your dealer for advice.

4.2 MEM Card Indications

After verifying proper operation of the power supply, visually check the MEM card indications. Now turn on your system. The LED should flicker rapidly, indicating that the main processor is functioning.

Now turn the battery switch to the ON position.(Failure to do so may result in a loss of programming during a power failure.)

The system is equipped with a halt program. When this program is running, the LED is ON steady. The system must be reset to release the halt program and restore the system to normal operation. See MMC 810 in the DCS Compact-II Programming Manual for operation of the halt program.

4.3 PCB Verification

Before connecting all MDF cabling, plug in a test cable to the first DLI port. Connect a display set and verify that it is working. Use maintenance program MMC 727 to verify the system version and software version and that all cards are recognized by the CPU. Remove the test cable and plug in all amphenol-type cables to the MDF. Proceed with the rest of the installation.

4.4 Default Trunk and Station Numbering

Upon initial power up, the CPU reads each slot for the existence of a card and identifies the type of card. It stores this as the default configuration.

The system assigns trunk numbers from 701 onwards. Stations are assigned numbers 201 onwards. Keyset daughter boards are assigned numbers 301 to 308. Default data assigns the keyset in the lowest port to the operator group and all trunks ring that station until default is changed.

Station and trunk numbers can be changed, rearranged and reassigned as needed using MMC 724.

Chapter 5
Connecting PSTN Circuits

Chapter 5. Connecting PSTN Circuits

5.1 Safety Precautions

To limit the risk of personal injury, always follow these precautions before connecting PSTN circuits.

a. Never install telephone wiring during a lightning storm.

b. Never install telephone jacks in a wet location unless the jack is specially designed for wet locations.

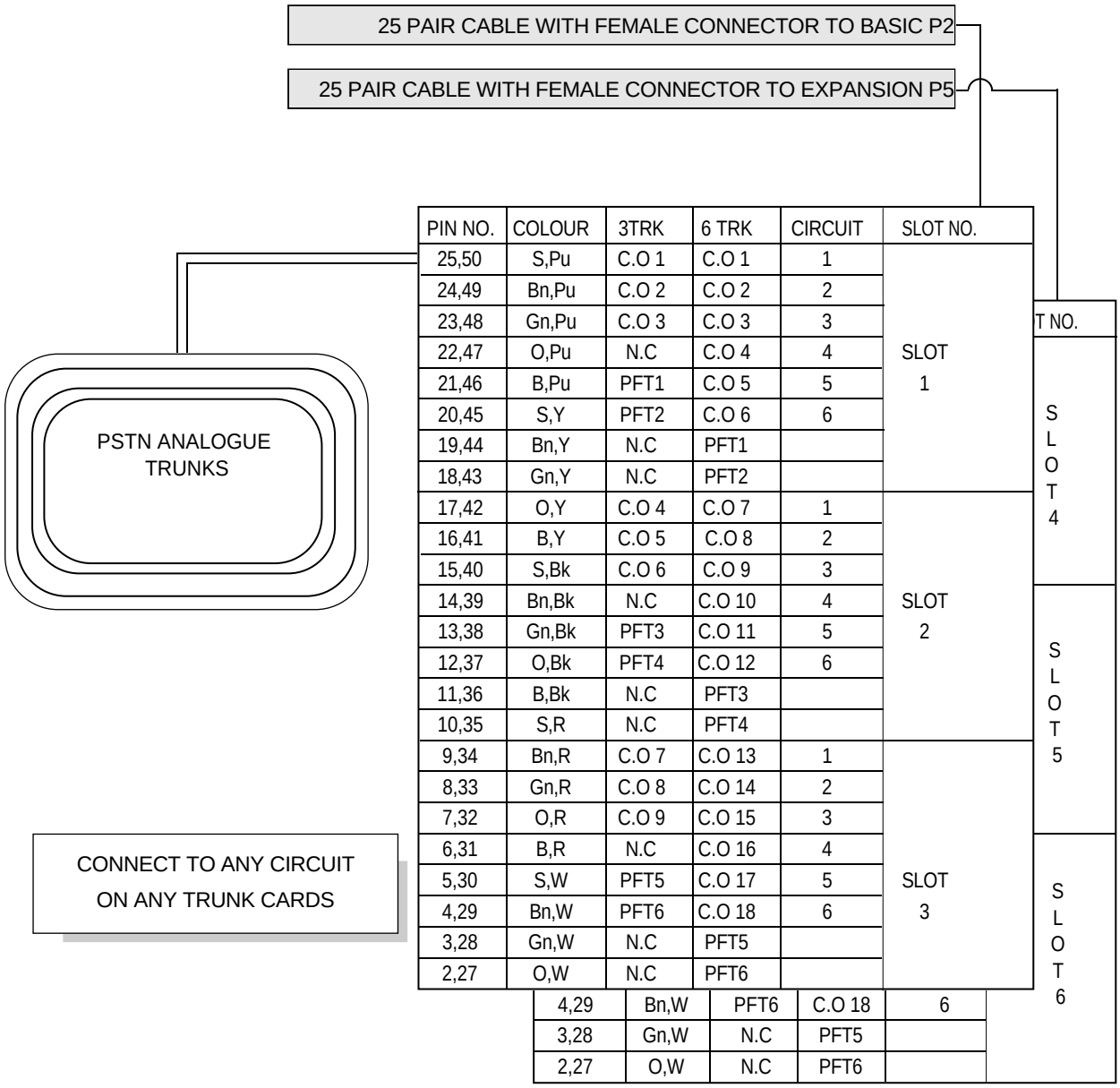
c. Never touch non-insulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.

d. Use caution when installing or modifying telephone lines.

5.2 Loop Start Lines

DCS Compact II system requires MDF connection. All C.O. Lines and Stations are connected to the system with MDF. (See Figure 5-1)

Using one pair twisted #24AWG or #26 AWG jumper wire, cross-connect each loop start C.O. line to the trunk port of your choice.



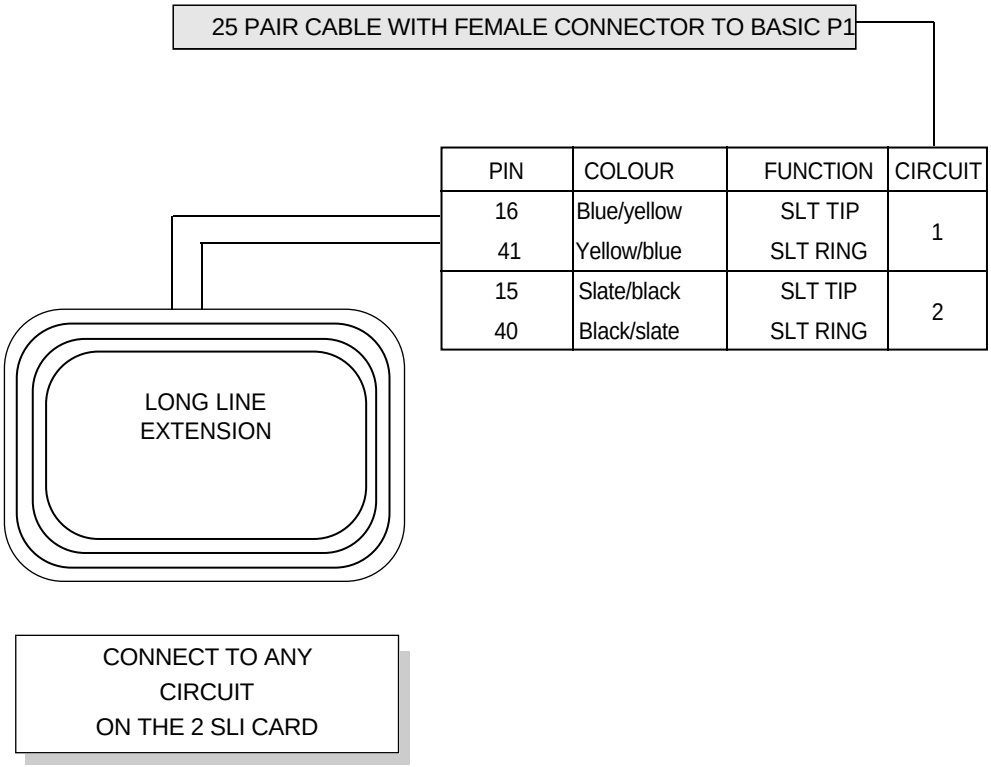
PIN NO.	COLOUR	3TRK	6 TRK	CIRCUIT	SLOT NO.
25,50	S,Pu	C.O 1	C.O 1	1	
24,49	Bn,Pu	C.O 2	C.O 2	2	
23,48	Gn,Pu	C.O 3	C.O 3	3	
22,47	O,Pu	N.C	C.O 4	4	SLOT
21,46	B,Pu	PFT1	C.O 5	5	1
20,45	S,Y	PFT2	C.O 6	6	
19,44	Bn,Y	N.C	PFT1		
18,43	Gn,Y	N.C	PFT2		
17,42	O,Y	C.O 4	C.O 7	1	
16,41	B,Y	C.O 5	C.O 8	2	
15,40	S,Bk	C.O 6	C.O 9	3	
14,39	Bn,Bk	N.C	C.O 10	4	SLOT
13,38	Gn,Bk	PFT3	C.O 11	5	2
12,37	O,Bk	PFT4	C.O 12	6	
11,36	B,Bk	N.C	PFT3		
10,35	S,R	N.C	PFT4		
9,34	Bn,R	C.O 7	C.O 13	1	
8,33	Gn,R	C.O 8	C.O 14	2	
7,32	O,R	C.O 9	C.O 15	3	
6,31	B,R	N.C	C.O 16	4	
5,30	S,W	PFT5	C.O 17	5	SLOT
4,29	Bn,W	PFT6	C.O 18	6	3
3,28	Gn,W	N.C	PFT5		
2,27	O,W	N.C	PFT6		

4,29	Bn,W	PFT6	C.O 18	6
3,28	Gn,W	N.C	PFT5	
2,27	O,W	N.C	PFT6	

<FIGURE 5-1> MDF CONNECTIONS LOOP START LINE TO TRUNK CARDS

5.3 Off Premise Extension (OPX)

Using one pair twisted #24 AWG or #26 AWG jumper wire, cross-connect any 2SLI port to Long Line or Off Premise Extensions (OPX circuits) (See Figure 5-2)



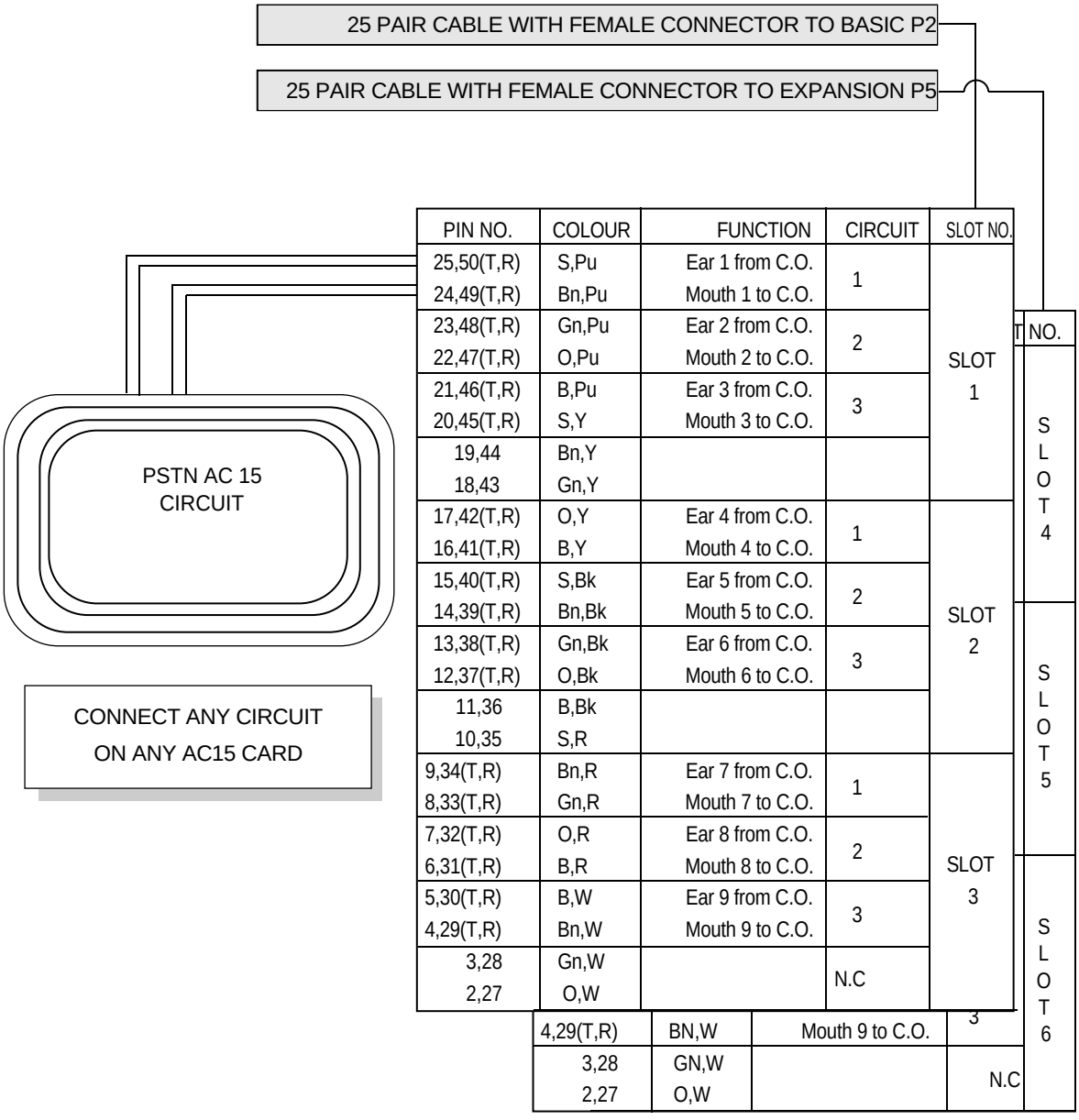
<FIGURE 5-2> MDF CONNECTIONS OFF PREMISE EXTENSION FROM 2 SLI CARD

Circuits on 2SLI card are specially designed to meet PSTN requirements for Long Line or OPX use.
These circuits are provided with the same over-current and over-voltage protection as that of C.O. line circuit.

WARNING
Using Long Line Extensions on a EXP SLI or KDB SLI(8SLI or 6MWSLI) may cause damage to your equipment.

5.4 AC 15 Lines(U.K. Only)

AC 15 line is connected to the MDF like any other C.O. line. It consists of four lines: Ear tip and ring, and Mouth tip and ring. Take care to connect Ear tip and ring to the Ear tip and ring MDF terminal, and Mouth tip and ring to the Mouth tip and ring MDF terminal. Detailed MDF connections are shown in Figure 5-3.



PIN NO.	COLOUR	FUNCTION	CIRCUIT	SLOT NO.
25,50(T,R)	S,Pu	Ear 1 from C.O.	1	SLOT 1
24,49(T,R)	Bn,Pu	Mouth 1 to C.O.		
23,48(T,R)	Gn,Pu	Ear 2 from C.O.	2	
22,47(T,R)	O,Pu	Mouth 2 to C.O.		
21,46(T,R)	B,Pu	Ear 3 from C.O.	3	
20,45(T,R)	S,Y	Mouth 3 to C.O.		
19,44	Bn,Y			
18,43	Gn,Y			
17,42(T,R)	O,Y	Ear 4 from C.O.	1	SLOT 2
16,41(T,R)	B,Y	Mouth 4 to C.O.		
15,40(T,R)	S,Bk	Ear 5 from C.O.	2	
14,39(T,R)	Bn,Bk	Mouth 5 to C.O.		
13,38(T,R)	Gn,Bk	Ear 6 from C.O.	3	
12,37(T,R)	O,Bk	Mouth 6 to C.O.		
11,36	B,Bk			
10,35	S,R			
9,34(T,R)	Bn,R	Ear 7 from C.O.	1	SLOT 3
8,33(T,R)	Gn,R	Mouth 7 to C.O.		
7,32(T,R)	O,R	Ear 8 from C.O.	2	
6,31(T,R)	B,R	Mouth 8 to C.O.		
5,30(T,R)	B,W	Ear 9 from C.O.	3	
4,29(T,R)	Bn,W	Mouth 9 to C.O.		
3,28	Gn,W		N.C	
2,27	O,W			

4,29(T,R)	BN,W	Mouth 9 to C.O.	3
3,28	GN,W		N.C
2,27	O,W		

T NO.

SLOT 4

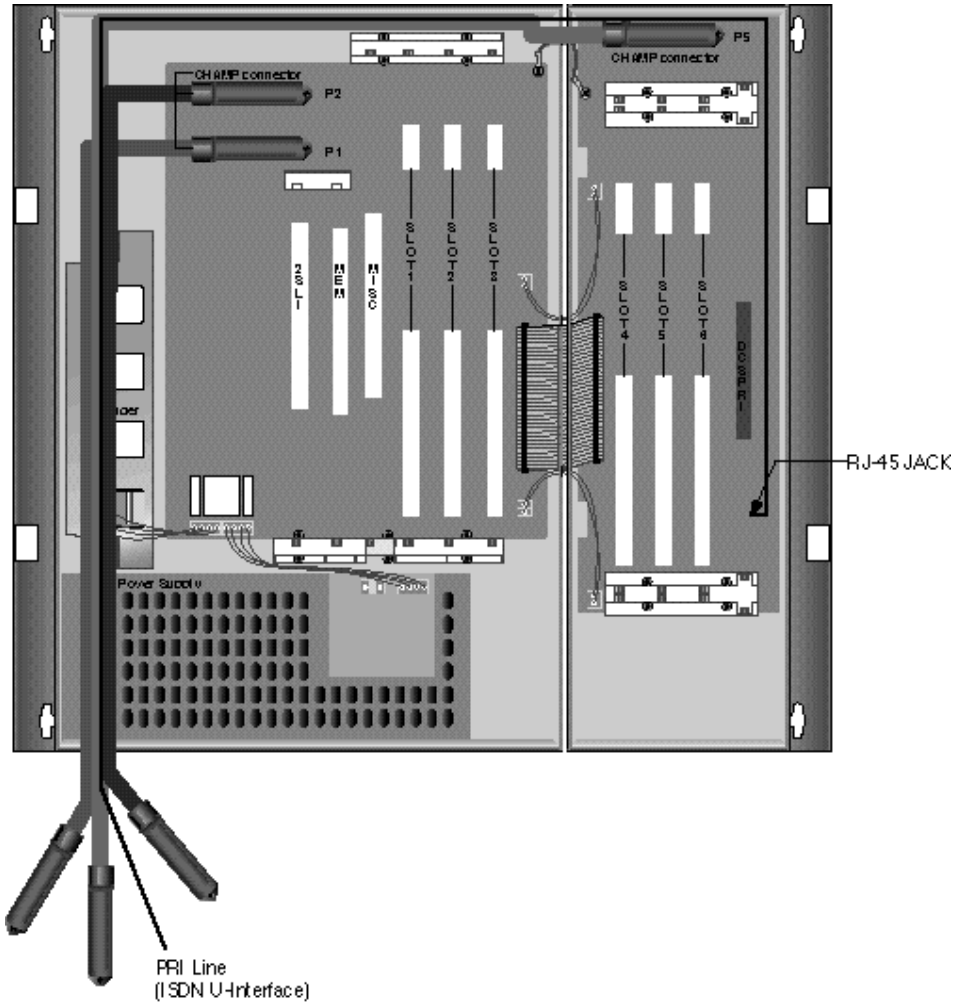
SLOT 5

SLOT 6

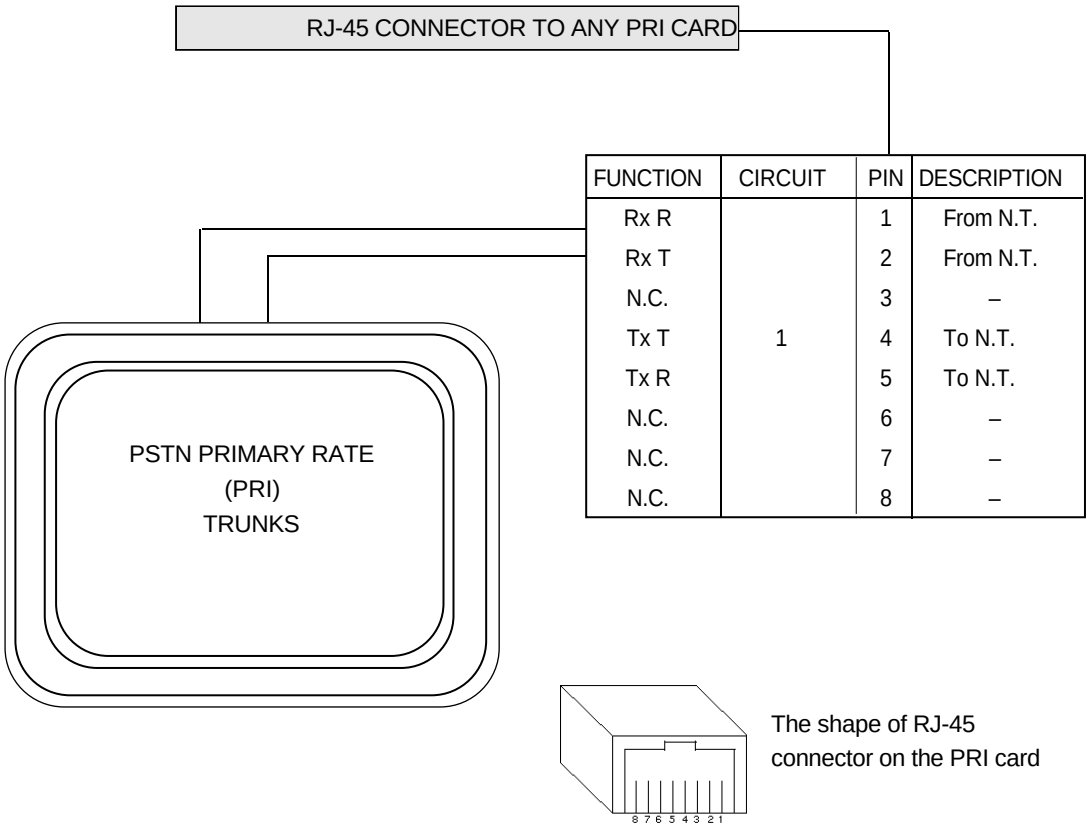
<FIGURE 5-3> MDF CONNECTIONS FOR AC 15 C.O. LINE TO CARD

5.5 ISDN PRI Lines

The DCS Compact II system is fully ISDN compatible. Connect the PRI circuit from the network using the RJ-45 cable supplied with the card. (See Figure 5-4 & 5-5)



<FIGURE 5-4> ISDN U-INTERFACE CONNECTION FOR PRI

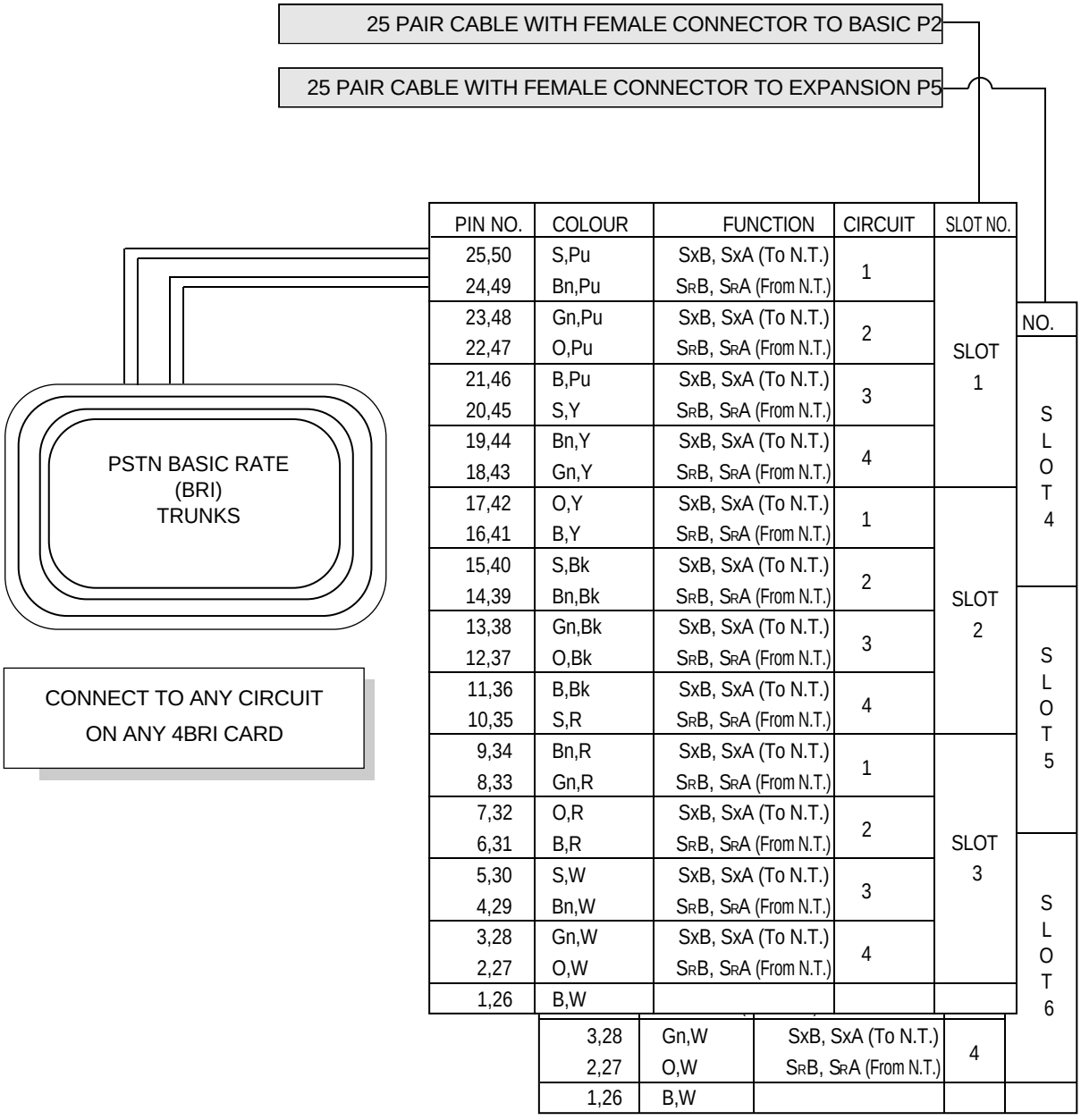


FUNCTION	CIRCUIT	PIN	DESCRIPTION
Rx R		1	From N.T.
Rx T		2	From N.T.
N.C.		3	–
Tx T	1	4	To N.T.
Tx R		5	To N.T.
N.C.		6	–
N.C.		7	–
N.C.		8	–

<FIGURE 5-5> PRI CARD CONNECTIONS FOR REFERENCE ONLY

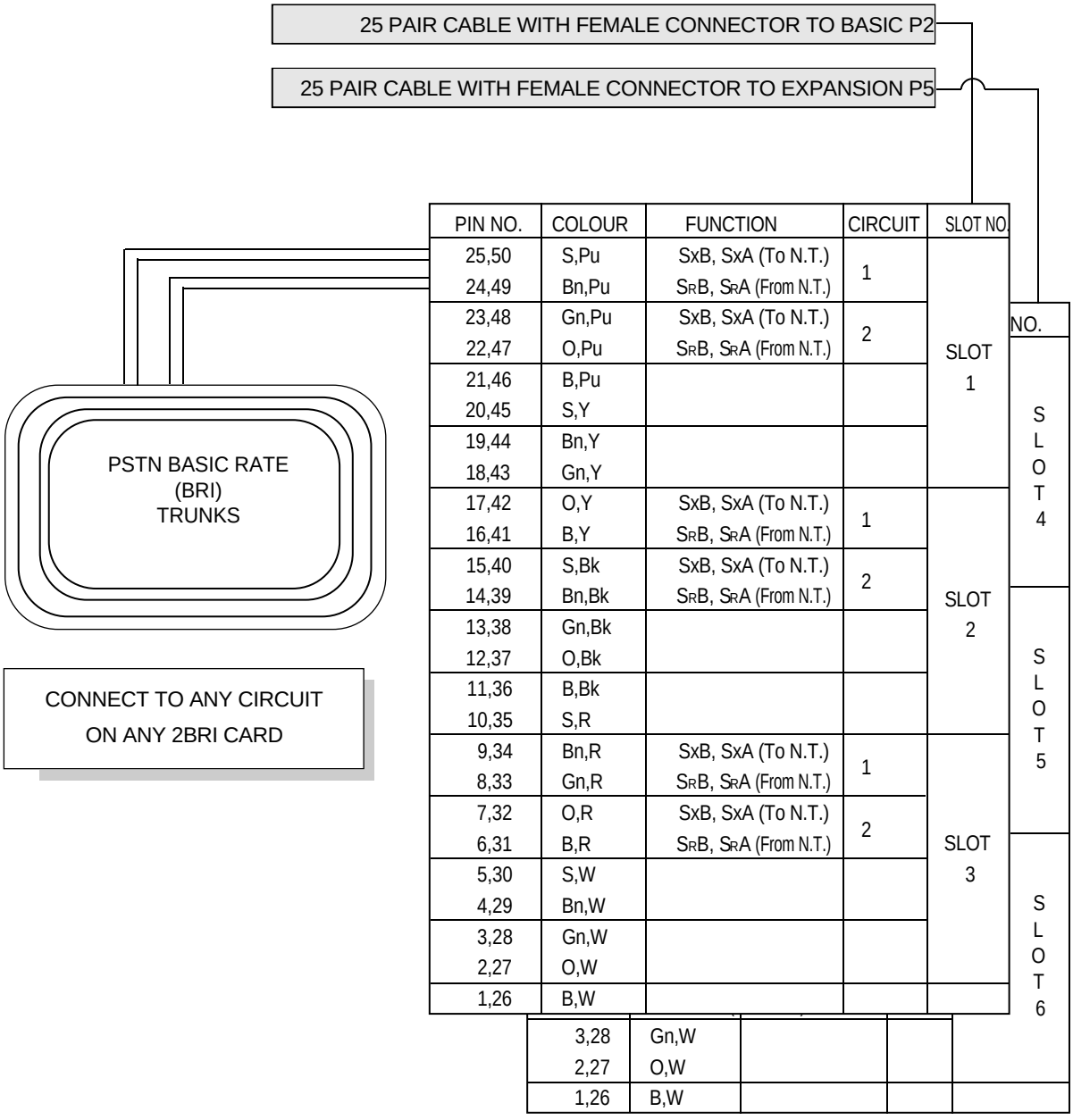
5.6 ISDN BRI Lines

For Basic Rate Interface the BRI card can be used as ISDN TE(Terminal Equipment) (S0 bus) or NT(Network Termination 2/Multiway ISDN Interface). When programmed for T mode, this port provides an ISDN2 network connection (2 channels). (See Figure 5-6 & 5-7)



PIN NO.	COLOUR	FUNCTION	CIRCUIT	SLOT NO.	NO.
25,50	S,Pu	SxB, SxA (To N.T.)	1	SLOT 1	SLOT 4
24,49	Bn,Pu	SRB, SRA (From N.T.)			
23,48	Gn,Pu	SxB, SxA (To N.T.)	2		
22,47	O,Pu	SRB, SRA (From N.T.)			
21,46	B,Pu	SxB, SxA (To N.T.)	3		
20,45	S,Y	SRB, SRA (From N.T.)			
19,44	Bn,Y	SxB, SxA (To N.T.)	4		
18,43	Gn,Y	SRB, SRA (From N.T.)			
17,42	O,Y	SxB, SxA (To N.T.)	1	SLOT 2	SLOT 5
16,41	B,Y	SRB, SRA (From N.T.)			
15,40	S,Bk	SxB, SxA (To N.T.)	2		
14,39	Bn,Bk	SRB, SRA (From N.T.)			
13,38	Gn,Bk	SxB, SxA (To N.T.)	3		
12,37	O,Bk	SRB, SRA (From N.T.)			
11,36	B,Bk	SxB, SxA (To N.T.)	4		
10,35	S,R	SRB, SRA (From N.T.)			
9,34	Bn,R	SxB, SxA (To N.T.)	1	SLOT 3	SLOT 6
8,33	Gn,R	SRB, SRA (From N.T.)			
7,32	O,R	SxB, SxA (To N.T.)	2		
6,31	B,R	SRB, SRA (From N.T.)			
5,30	S,W	SxB, SxA (To N.T.)	3		
4,29	Bn,W	SRB, SRA (From N.T.)			
3,28	Gn,W	SxB, SxA (To N.T.)	4		
2,27	O,W	SRB, SRA (From N.T.)			
1,26	B,W				

<FIGURE 5-6> MDF CONNECTIONS FOR ISDN C.O LINE TO CARD (4BRI)



PIN NO.	COLOUR	FUNCTION	CIRCUIT	SLOT NO.
25,50	S,Pu	SxB, SxA (To N.T.)	1	
24,49	Bn,Pu	SRB, SRA (From N.T.)		
23,48	Gn,Pu	SxB, SxA (To N.T.)	2	
22,47	O,Pu	SRB, SRA (From N.T.)		SLOT 1
21,46	B,Pu			
20,45	S,Y			
19,44	Bn,Y			
18,43	Gn,Y			
17,42	O,Y	SxB, SxA (To N.T.)	1	
16,41	B,Y	SRB, SRA (From N.T.)		
15,40	S,Bk	SxB, SxA (To N.T.)	2	
14,39	Bn,Bk	SRB, SRA (From N.T.)		SLOT 2
13,38	Gn,Bk			
12,37	O,Bk			
11,36	B,Bk			
10,35	S,R			
9,34	Bn,R	SxB, SxA (To N.T.)	1	
8,33	Gn,R	SRB, SRA (From N.T.)		
7,32	O,R	SxB, SxA (To N.T.)	2	
6,31	B,R	SRB, SRA (From N.T.)		SLOT 3
5,30	S,W			
4,29	Bn,W			
3,28	Gn,W			
2,27	O,W			
1,26	B,W			

NO.
SLOT 4
SLOT 5
SLOT 6

<FIGURE 5-7> MDF CONNECTIONS FOR ISDN C.O LINE TO CARD (2BRI)

NOTE

Each ISDN circuit is terminated by a 100 ohm resistor on the BRI card. No other terminator is required. The presence of additional terminators could cause problems.

Chapter 6
Connecting Station Equipment

Chapter 6. Connecting Station Equipment

6.1 Safety Precautions

To limit the risk of personal injury, always follow these precautions before connecting telephone circuits:

a. Never install telephone wiring during a lightning storm.

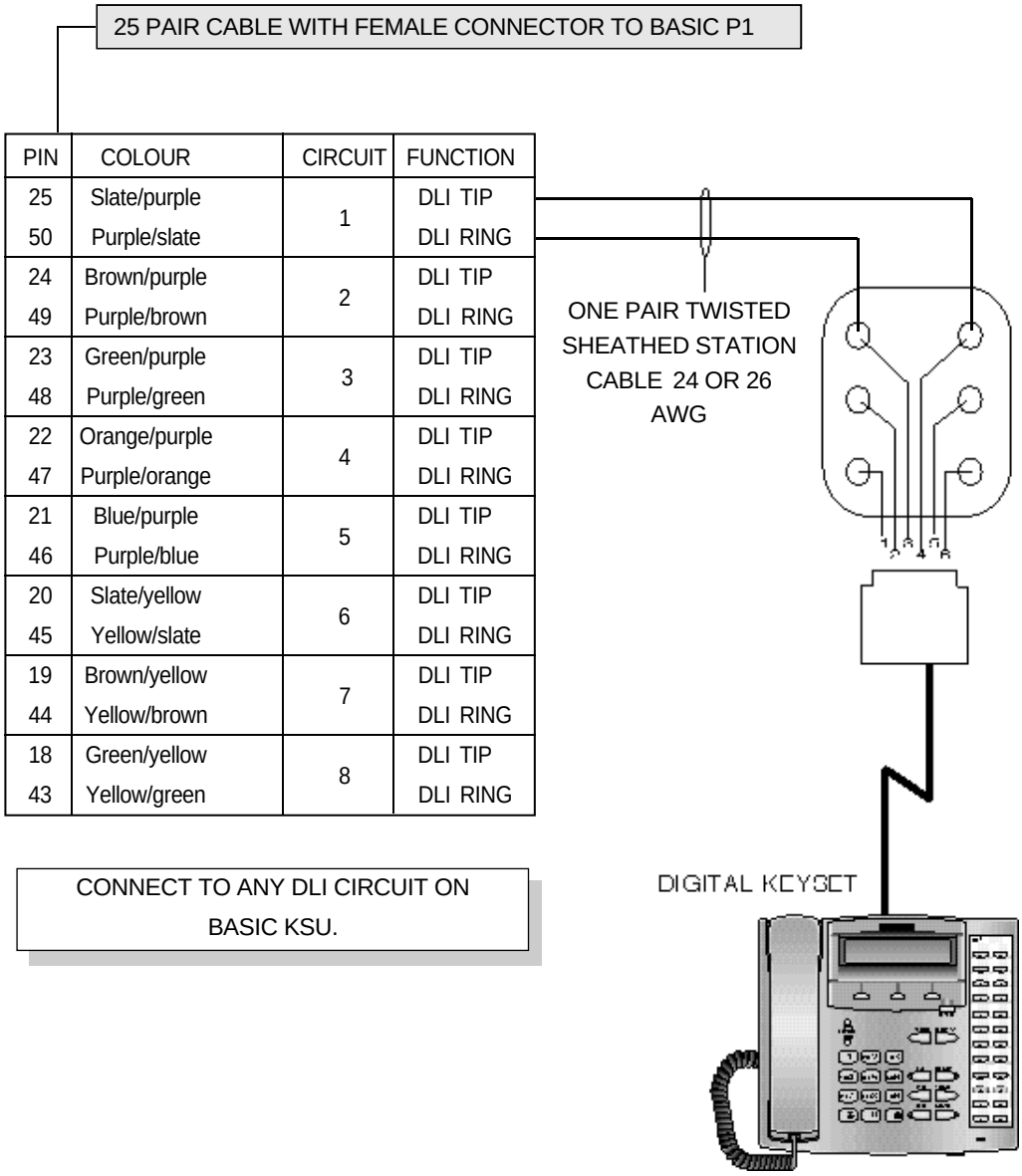
b. Never install telephone jacks in a wet location unless the jack is specifically designed for wet locations.

c. Never touch non-insulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.

d. Use caution when installing or modifying telephone lines.

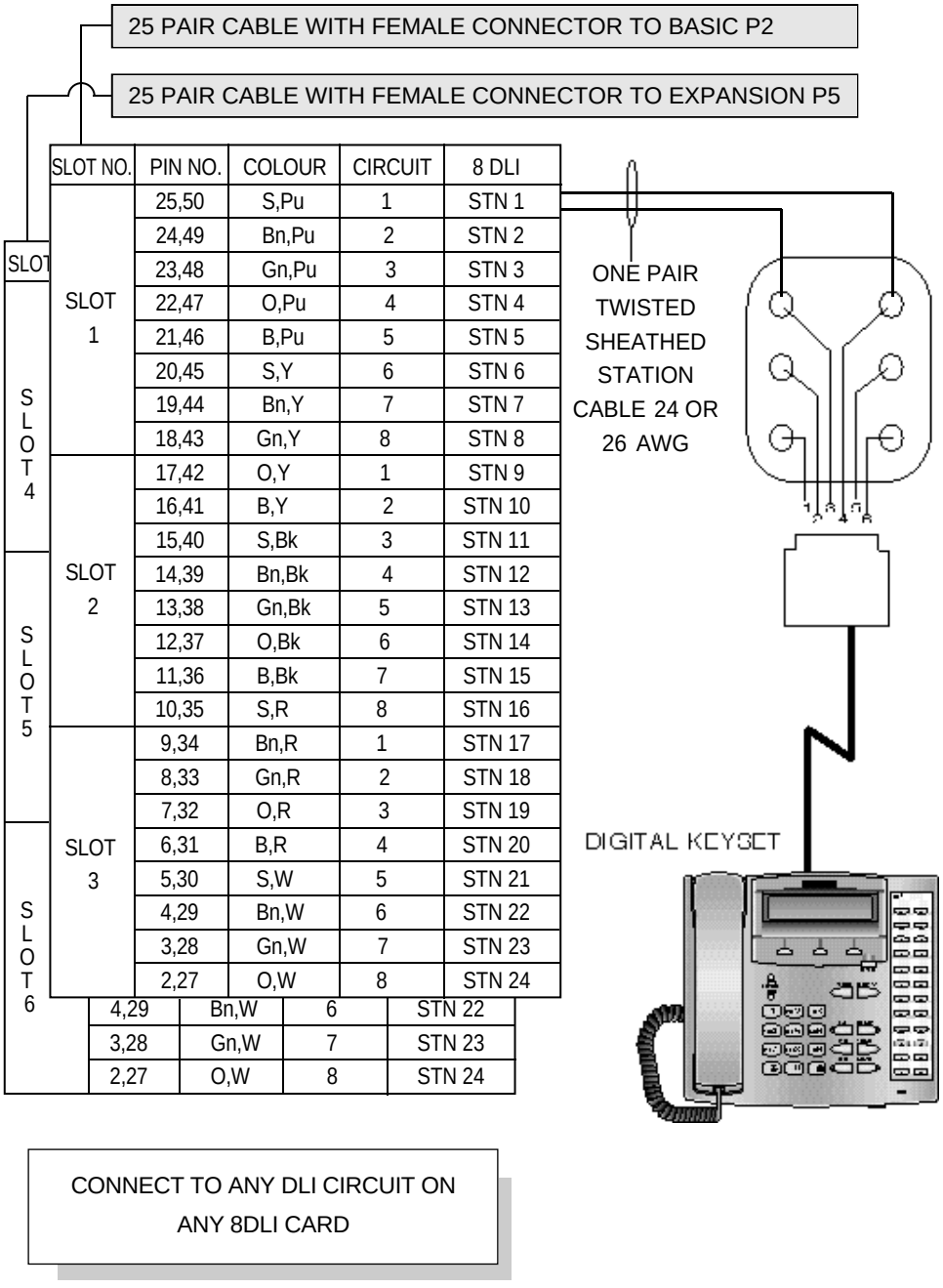
6.2 DCS Compact II Keyset

Using one pair twisted #24 AWG or #26 AWG jumper wire, cross-connect each keyset to the DLI port of your choice (See Figures 6–1 and 6–2).



PIN	COLOUR	CIRCUIT	FUNCTION
25	Slate/purple	1	DLI TIP
50	Purple/slate		DLI RING
24	Brown/purple	2	DLI TIP
49	Purple/brown		DLI RING
23	Green/purple	3	DLI TIP
48	Purple/green		DLI RING
22	Orange/purple	4	DLI TIP
47	Purple/orange		DLI RING
21	Blue/purple	5	DLI TIP
46	Purple/blue		DLI RING
20	Slate/yellow	6	DLI TIP
45	Yellow/slate		DLI RING
19	Brown/yellow	7	DLI TIP
44	Yellow/brown		DLI RING
18	Green/yellow	8	DLI TIP
43	Yellow/green		DLI RING

<FIGURE 6-1> MDF CONNECTIONS DIGITAL KEYSET TO BASIC KSU



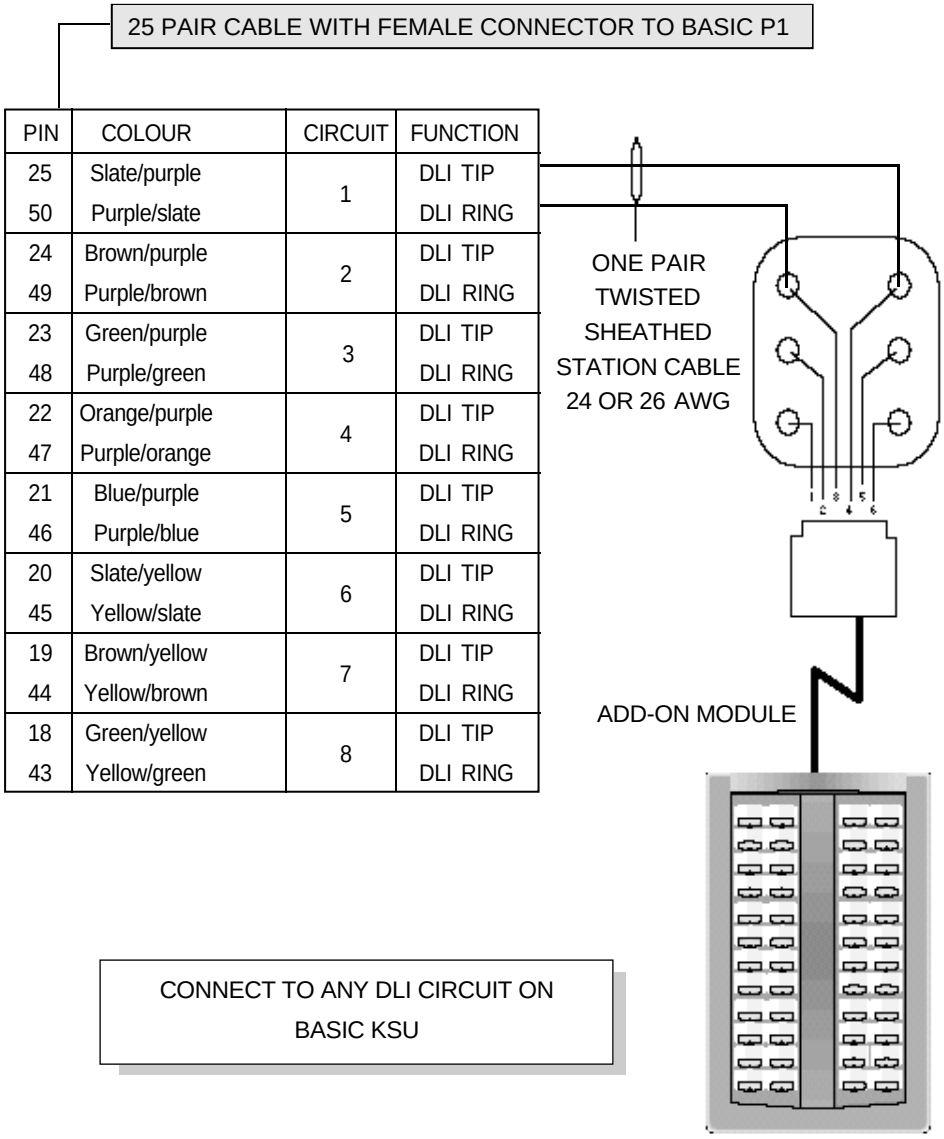
<FIGURE 6-2> MDF CONNECTIONS DIGITAL KEYSET TO 8DLI CARD

NOTE

Because the DCS Compact II is a self-configuring system, if you connect a 12 button keyset to a DLI port that previously had a 24 button keyset installed, the existing data will be rewritten with 12 button keyset default data (See MMC 723).

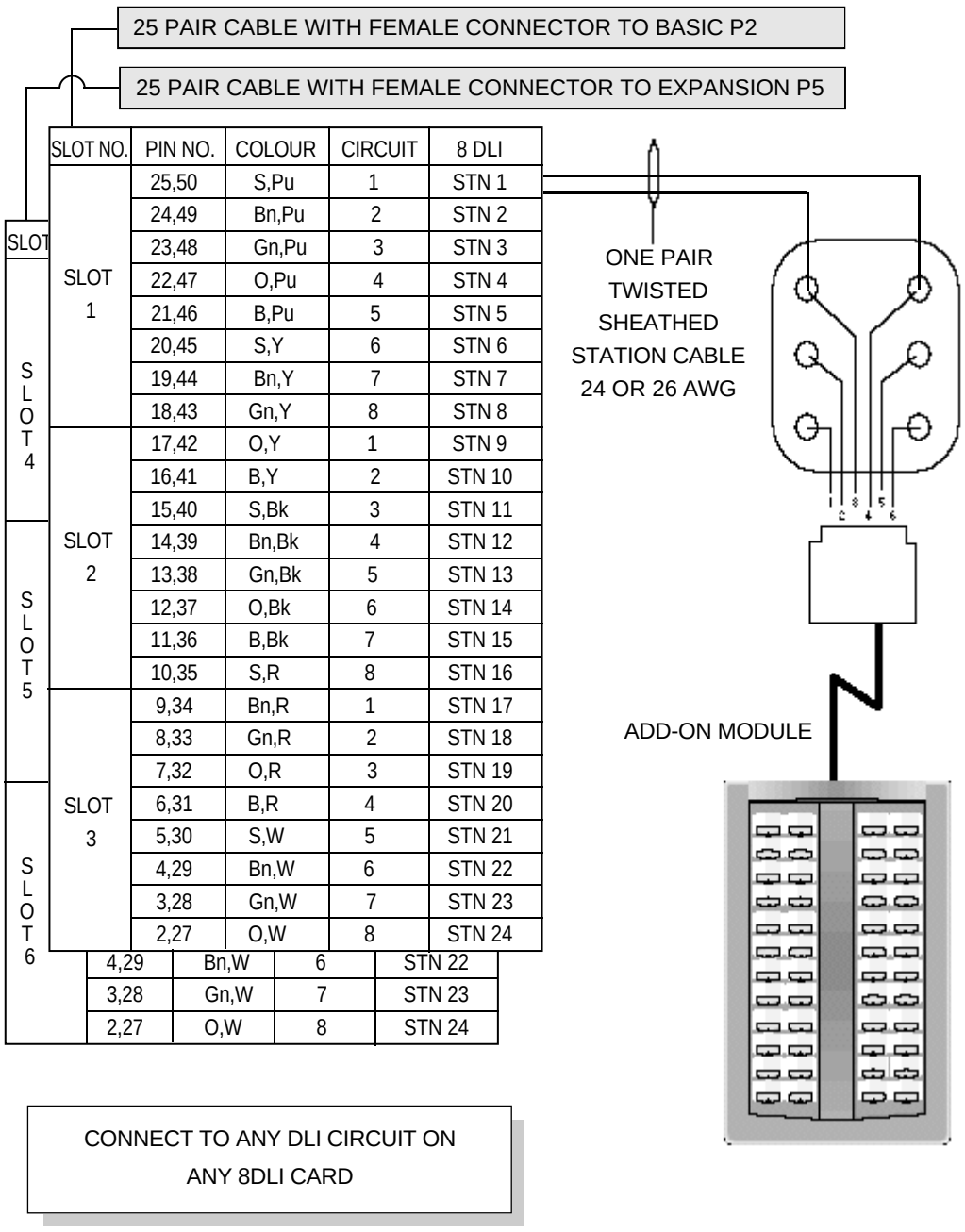
6.3 Add-On Module

Using one pair twisted #24 AWG or #26 AWG jumper wire, cross-connect each add-on module (AOM) to the DLI port of your choice (See Figures 6–3 and 6–4).



PIN	COLOUR	CIRCUIT	FUNCTION
25	Slate/purple	1	DLI TIP
50	Purple/slate		DLI RING
24	Brown/purple	2	DLI TIP
49	Purple/brown		DLI RING
23	Green/purple	3	DLI TIP
48	Purple/green		DLI RING
22	Orange/purple	4	DLI TIP
47	Purple/orange		DLI RING
21	Blue/purple	5	DLI TIP
46	Purple/blue		DLI RING
20	Slate/yellow	6	DLI TIP
45	Yellow/slate		DLI RING
19	Brown/yellow	7	DLI TIP
44	Yellow/brown		DLI RING
18	Green/yellow	8	DLI TIP
43	Yellow/green		DLI RING

<FIGURE 6-3> MDF CONNECTIONS AOM TO BASIC KSU

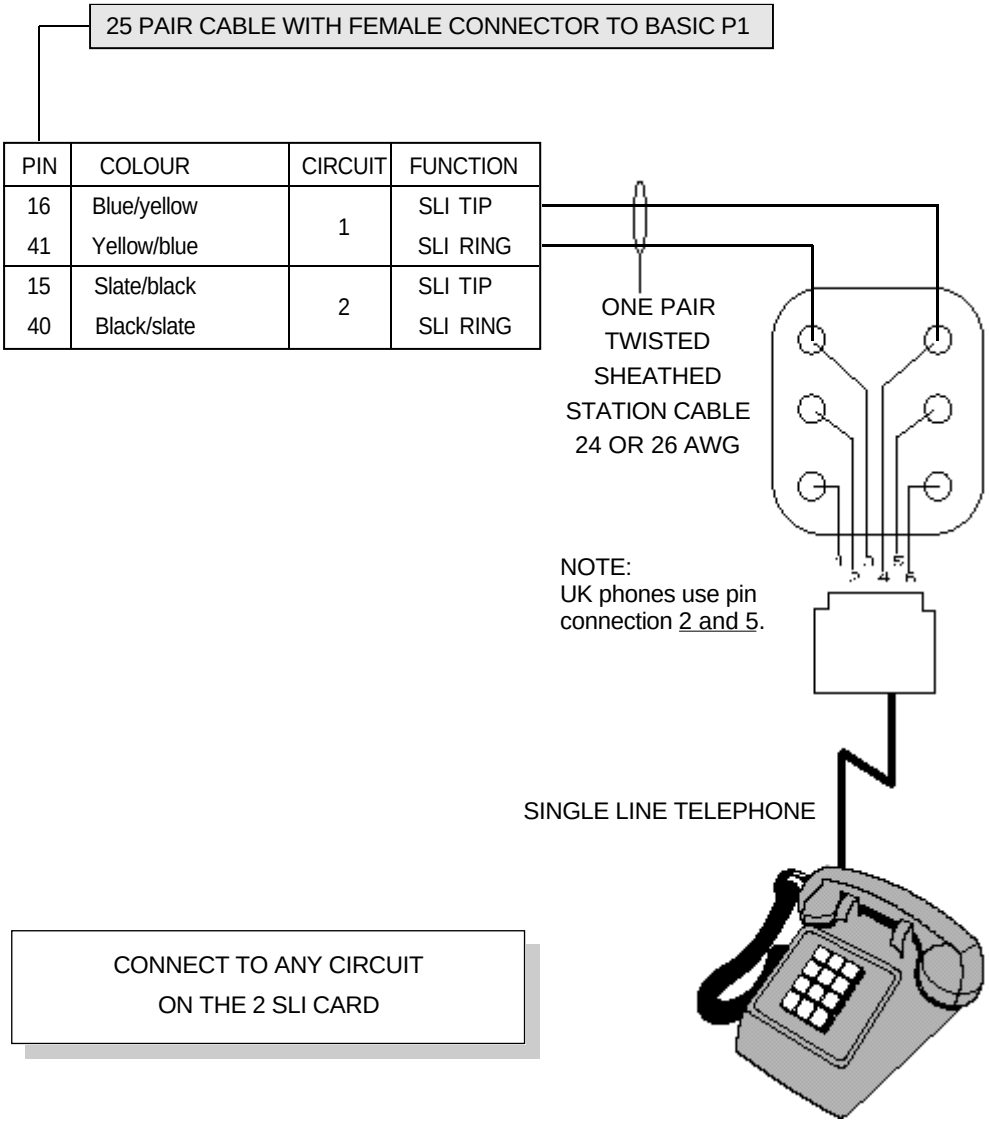


<FIGURE 6-4> MDF CONNECTIONS AOM TO 8DLI CARD

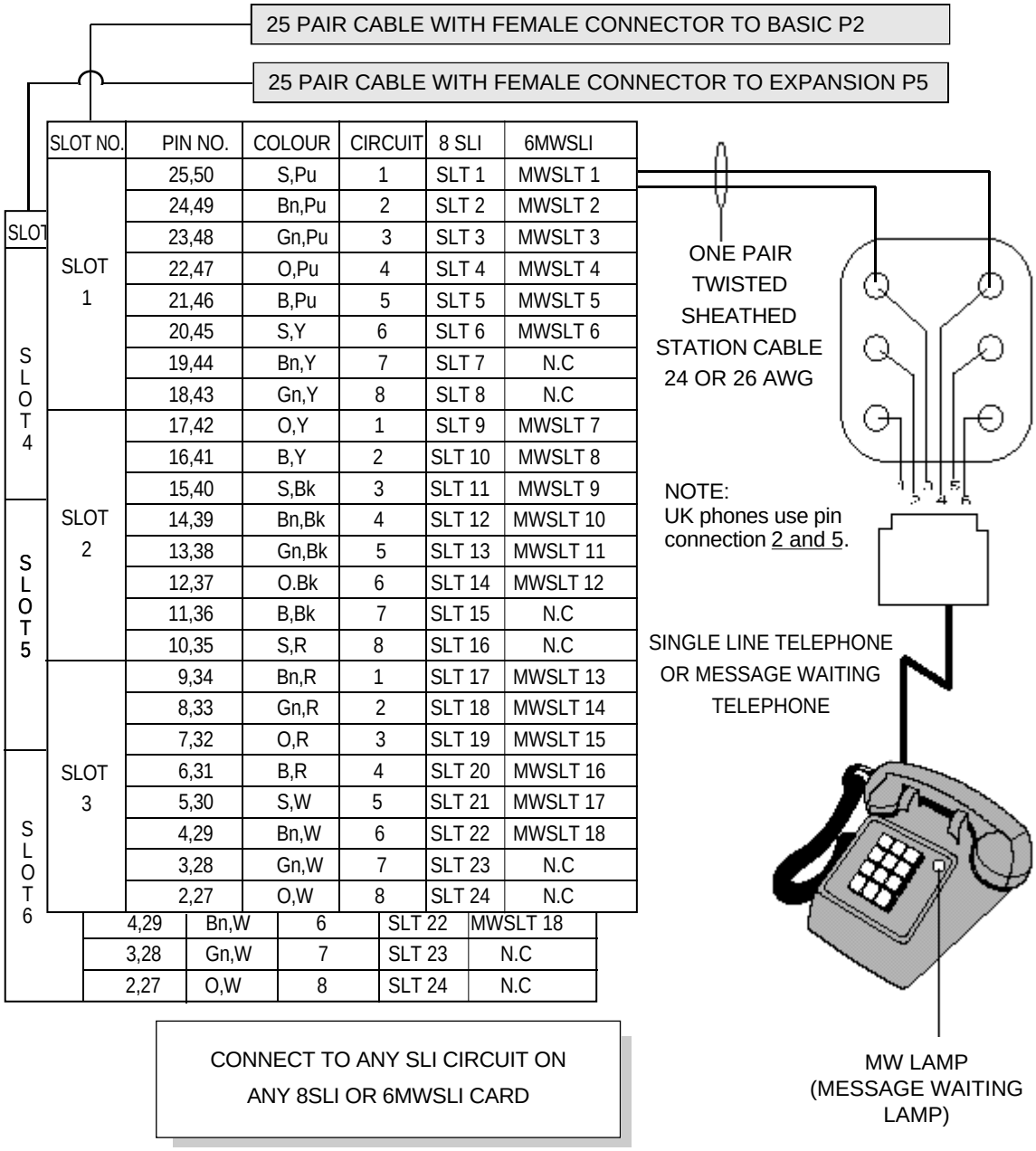
If an AOM is to operate as a stand-alone unit, there is nothing else required other than assigning keys. When an AOM is to be used with a station, it must be assigned in MMC 209. Add-on modules can be assigned to any keyset: a maximum of two AOMs per keyset is allowed. Assign keys in MMC 722.

6.4 Single Line Telephone

Using one pair twisted #24 AWG or #26 AWG jumper wire, cross-connect each single line telephone to the SLI port of your choice (See Figures 6–5 and 6–6).



<FIGURE 6-5> MDF CONNECTIONS SINGLE LINE TELEPHONE TO 2 SLI CARD

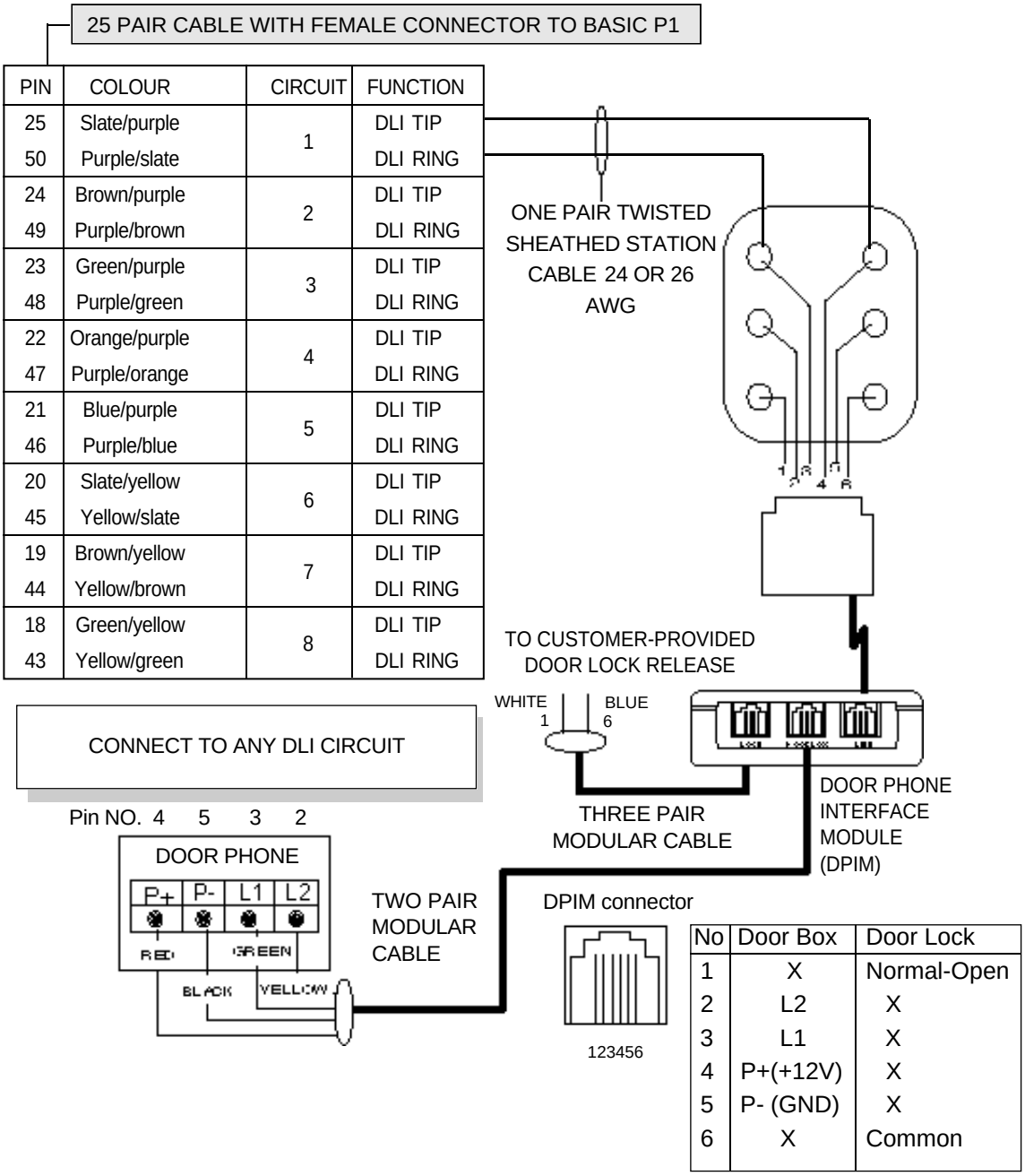


SLOT NO.	PIN NO.	COLOUR	CIRCUIT	8 SLI	6MWSLI
SLOT 1	25,50	S,Pu	1	SLT 1	MWSLT 1
	24,49	Bn,Pu	2	SLT 2	MWSLT 2
	23,48	Gn,Pu	3	SLT 3	MWSLT 3
	22,47	O,Pu	4	SLT 4	MWSLT 4
	21,46	B,Pu	5	SLT 5	MWSLT 5
	20,45	S,Y	6	SLT 6	MWSLT 6
	19,44	Bn,Y	7	SLT 7	N.C
	18,43	Gn,Y	8	SLT 8	N.C
SLOT 2	17,42	O,Y	1	SLT 9	MWSLT 7
	16,41	B,Y	2	SLT 10	MWSLT 8
	15,40	S,Bk	3	SLT 11	MWSLT 9
	14,39	Bn,Bk	4	SLT 12	MWSLT 10
	13,38	Gn,Bk	5	SLT 13	MWSLT 11
	12,37	O.Bk	6	SLT 14	MWSLT 12
	11,36	B,Bk	7	SLT 15	N.C
	10,35	S,R	8	SLT 16	N.C
SLOT 3	9,34	Bn,R	1	SLT 17	MWSLT 13
	8,33	Gn,R	2	SLT 18	MWSLT 14
	7,32	O,R	3	SLT 19	MWSLT 15
	6,31	B,R	4	SLT 20	MWSLT 16
	5,30	S,W	5	SLT 21	MWSLT 17
	4,29	Bn,W	6	SLT 22	MWSLT 18
	3,28	Gn,W	7	SLT 23	N.C
	2,27	O,W	8	SLT 24	N.C

<FIGURE 6-6> MDF CONNECTIONS TO 8SLI OR 6MWSLI CARD

6.5 Door Phone and Door Lock Release

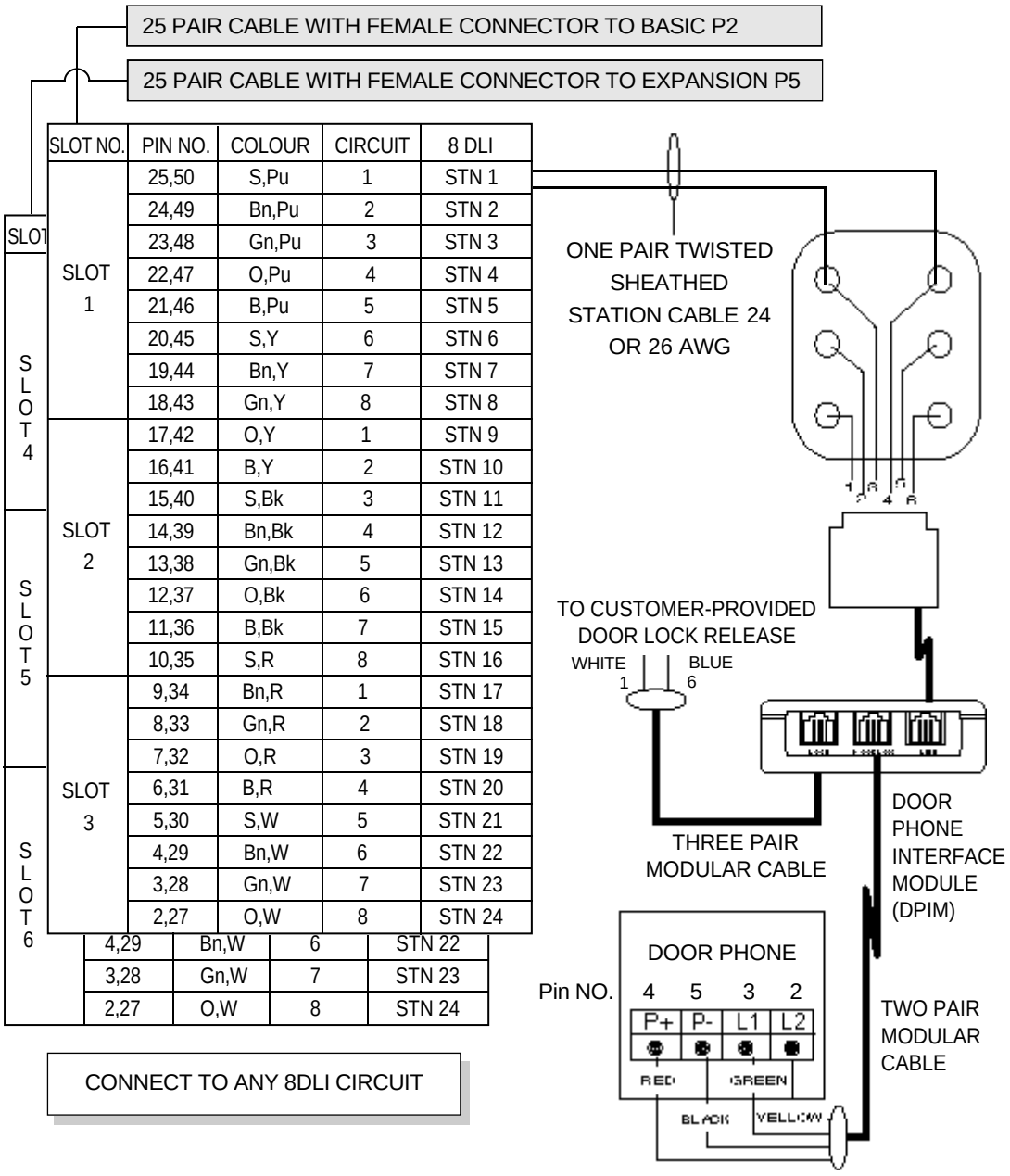
Using one pair twisted #24 AWG or #26 AWG jumper wire, cross-connect each DPIM to the DLI port of your choice (See Figures 6–7 and 6–8). Next, connect the DPIM to the door phone using two pair twisted #24 AWG or #26 AWG jumper wire.



PIN	COLOUR	CIRCUIT	FUNCTION
25	Slate/purple	1	DLI TIP
50	Purple/slate		DLI RING
24	Brown/purple	2	DLI TIP
49	Purple/brown		DLI RING
23	Green/purple	3	DLI TIP
48	Purple/green		DLI RING
22	Orange/purple	4	DLI TIP
47	Purple/orange		DLI RING
21	Blue/purple	5	DLI TIP
46	Purple/blue		DLI RING
20	Slate/yellow	6	DLI TIP
45	Yellow/slate		DLI RING
19	Brown/yellow	7	DLI TIP
44	Yellow/brown		DLI RING
18	Green/yellow	8	DLI TIP
43	Yellow/green		DLI RING

No	Door Box	Door Lock
1	X	Normal-Open
2	L2	X
3	L1	X
4	P+(+12V)	X
5	P- (GND)	X
6	X	Common

<FIGURE 6-7> MDF CONNECTIONS DOOR PHONE TO BASIC KSU



<FIGURE 6-8> MDF CONNECTIONS DOOR PHONE TO 8DLI CARD

When a customer-provided electric door release is installed, cross-connect the corresponding door release contacts on the DPIM to the door lock-mechanism (See Figures 6–7 and 6–8). Use MMC 501 to program the duration of the contact closure as required. (See the user guides for door lock release operation.) The door release contacts on the DPIM are to be used for low voltage relay control only. The contacts are rated at 24 VDC-1 amp.

WARNING

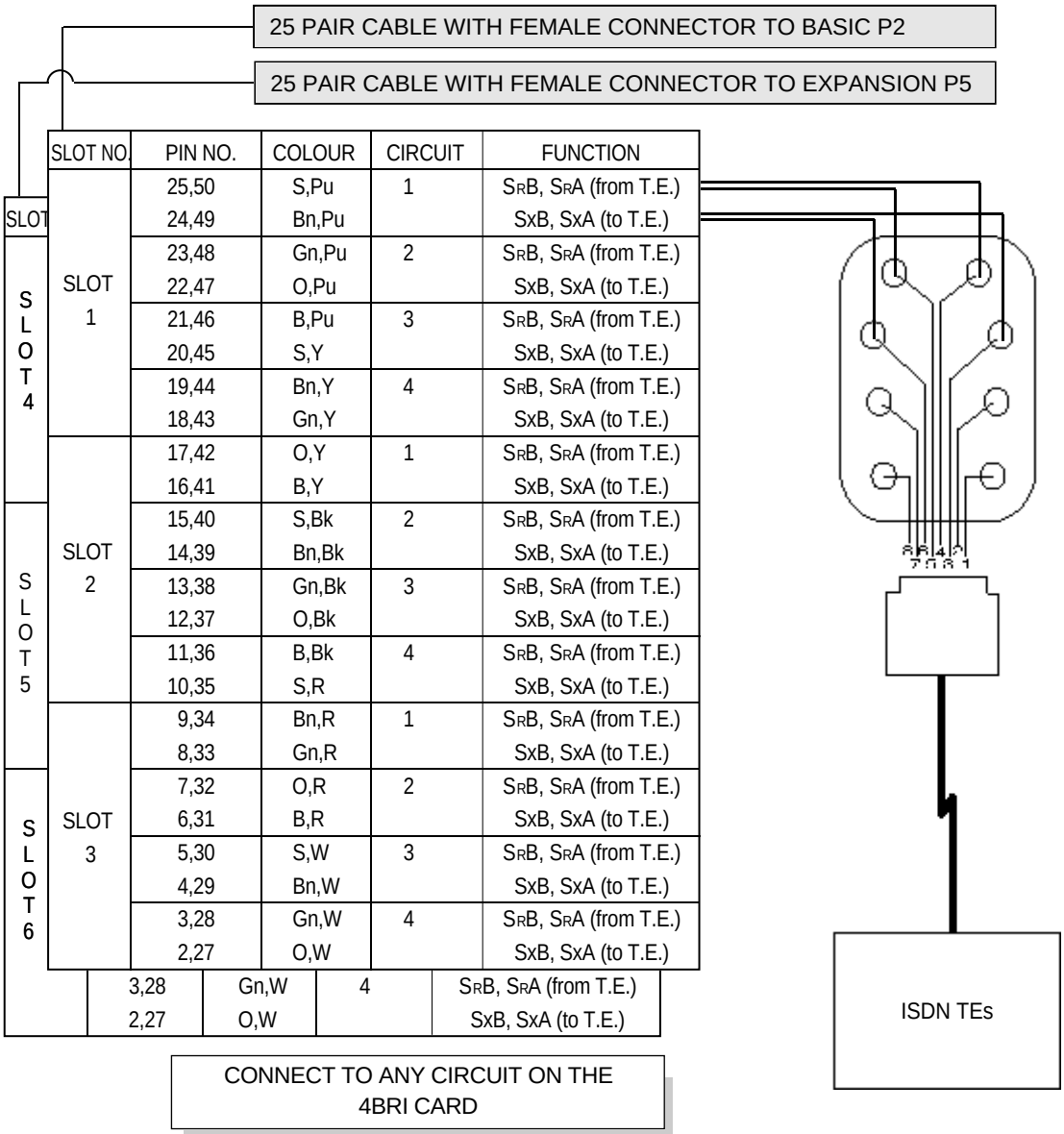
Do not attempt to connect commercial AC power to these contacts.

6.6 ISDN Terminal Equipment (S0 Bus)

ISDN Terminal Equipment (TE) includes ISDN phone, G4 fax, ISDN terminal adaptor, etc.

Using two pair twisted #24 AWG or #26 AWG jumper wire, cross connect each ISDN TE to the 4BRI's S mode slot. (See Figure 6-9 & 6-10)

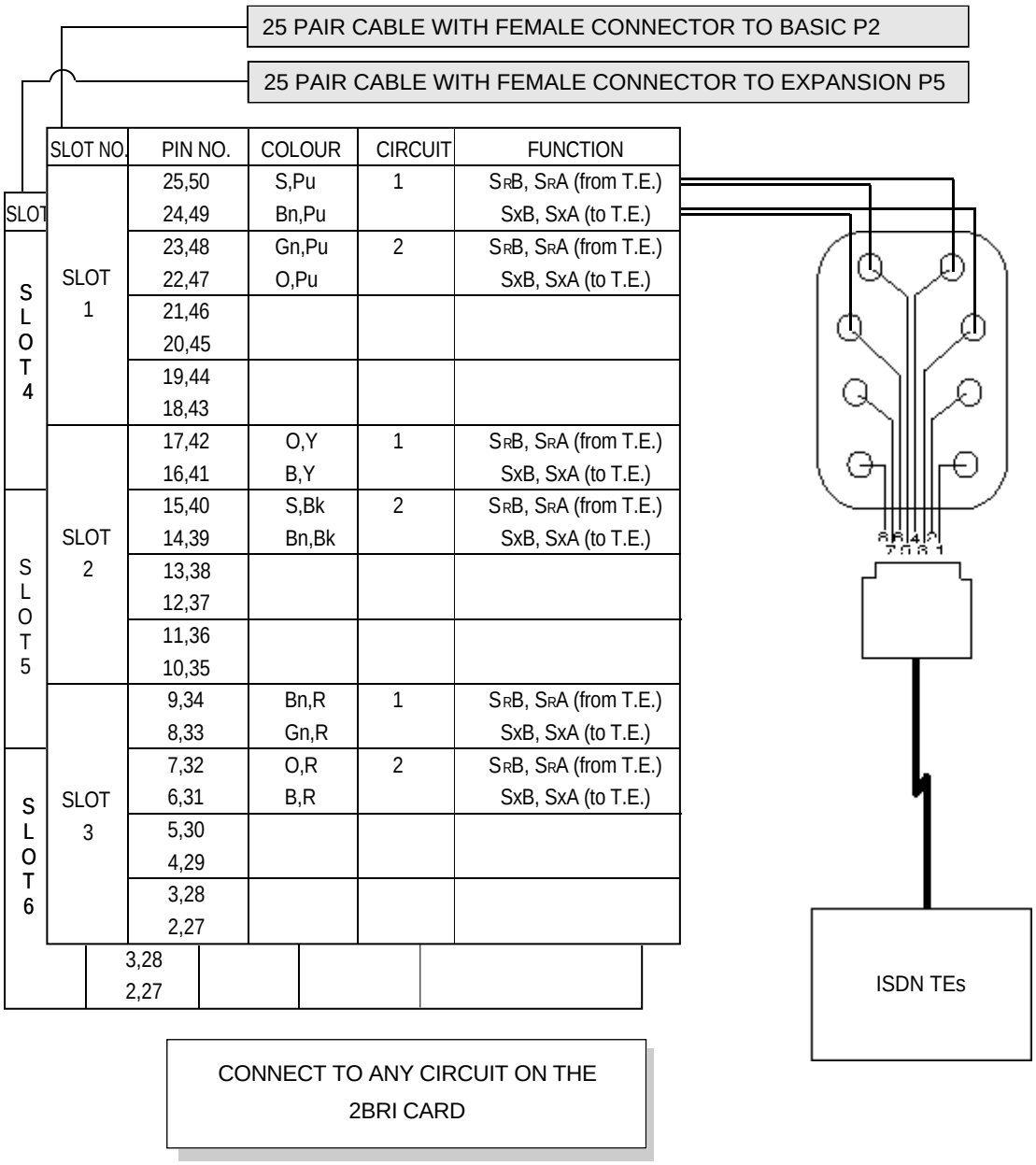
NOTE
This is different to ISDN trunk connection



SLOT NO.	PIN NO.	COLOUR	CIRCUIT	FUNCTION
SLOT 1	25,50	S,Pu	1	SRB, SRA (from T.E.)
	24,49	Bn,Pu		SxB, SxA (to T.E.)
	23,48	Gn,Pu	2	SRB, SRA (from T.E.)
	22,47	O,Pu		SxB, SxA (to T.E.)
	21,46	B,Pu	3	SRB, SRA (from T.E.)
	20,45	S,Y		SxB, SxA (to T.E.)
	19,44	Bn,Y	4	SRB, SRA (from T.E.)
	18,43	Gn,Y		SxB, SxA (to T.E.)
SLOT 2	17,42	O,Y	1	SRB, SRA (from T.E.)
	16,41	B,Y		SxB, SxA (to T.E.)
	15,40	S,Bk	2	SRB, SRA (from T.E.)
	14,39	Bn,Bk		SxB, SxA (to T.E.)
	13,38	Gn,Bk	3	SRB, SRA (from T.E.)
	12,37	O,Bk		SxB, SxA (to T.E.)
	11,36	B,Bk	4	SRB, SRA (from T.E.)
	10,35	S,R		SxB, SxA (to T.E.)
SLOT 3	9,34	Bn,R	1	SRB, SRA (from T.E.)
	8,33	Gn,R		SxB, SxA (to T.E.)
	7,32	O,R	2	SRB, SRA (from T.E.)
	6,31	B,R		SxB, SxA (to T.E.)
	5,30	S,W	3	SRB, SRA (from T.E.)
	4,29	Bn,W		SxB, SxA (to T.E.)
	3,28	Gn,W	4	SRB, SRA (from T.E.)
	2,27	O,W		SxB, SxA (to T.E.)

<FIGURE 6-9> MDF CONNECTIONS ISDN TEs TO 4BRI CARD

NOTE
DCS Compact II is a self-configuring system, but you must program 4BRI (including 2BRI) mode by MMC #423, #419, #421, #418, #424.



SLOT	SLOT NO.	PIN NO.	COLOUR	CIRCUIT	FUNCTION
SLOT 4	SLOT 1	25,50	S,Pu	1	SRB, SRA (from T.E.)
		24,49	Bn,Pu		SxB, SxA (to T.E.)
		23,48	Gn,Pu	2	SRB, SRA (from T.E.)
		22,47	O,Pu		SxB, SxA (to T.E.)
		21,46			
		20,45			
		19,44			
		18,43			
SLOT 5	SLOT 2	17,42	O,Y	1	SRB, SRA (from T.E.)
		16,41	B,Y		SxB, SxA (to T.E.)
		15,40	S,Bk	2	SRB, SRA (from T.E.)
		14,39	Bn,Bk		SxB, SxA (to T.E.)
		13,38			
		12,37			
		11,36			
		10,35			
SLOT 6	SLOT 3	9,34	Bn,R	1	SRB, SRA (from T.E.)
		8,33	Gn,R		SxB, SxA (to T.E.)
		7,32	O,R	2	SRB, SRA (from T.E.)
		6,31	B,R		SxB, SxA (to T.E.)
		5,30			
		4,29			
		3,28			
		2,27			
		3,28			
		2,27			

<FIGURE 6-10> MDF CONNECTIONS ISDN TEs TO 2BRI CARD

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Chapter 7
Connecting Optional Equipment

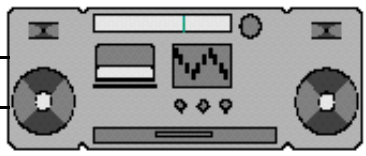
Chapter 7. Connecting Optional Equipment

7.1 Music On Hold/Background Music

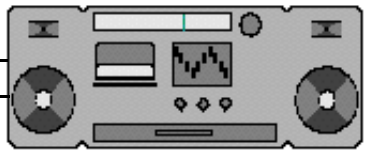
Connect each customer-provided music source to the music input on the KSU connecting block (See Figure 7–1). The music input has internal automatic gain compensation features.

25 PAIR CABLE WITH FEMALE CONNECTOR TO KSU P1

PIN	COLOUR	CIRCUIT	FUNCTION
11	Blue/black		OPEN A
36	Black/blue		OPEN B
10	Slate/red	1	BGM 1A
35	Red/slate		BGM 1B
9	Brown/red	2	BGM 2A
34	Red/brown		BGM 2B
8	Green/red		PAGE 1A
33	Red/green		PAGE 1B
7	Orange/red		PAGE 2A
32	Red/orange		PAGE 2B
5	Slate/white		TACT 1A
30	White/slate		TACT 1B
4	Brown/white		TACT 2A
29	White/brown		TACT 2B
3	Green/white		TACT 3A
28	White/green		TACT 3B
2	Orange/white		ALARM 1
27	White/orange		ALARM 2



CUSTOMER-PROVIDED MUSIC SOURCE



CUSTOMER-PROVIDED MUSIC SOURCE

CONNECT ONE MUSIC SOURCE TO EACH INPUT AS NEEDED

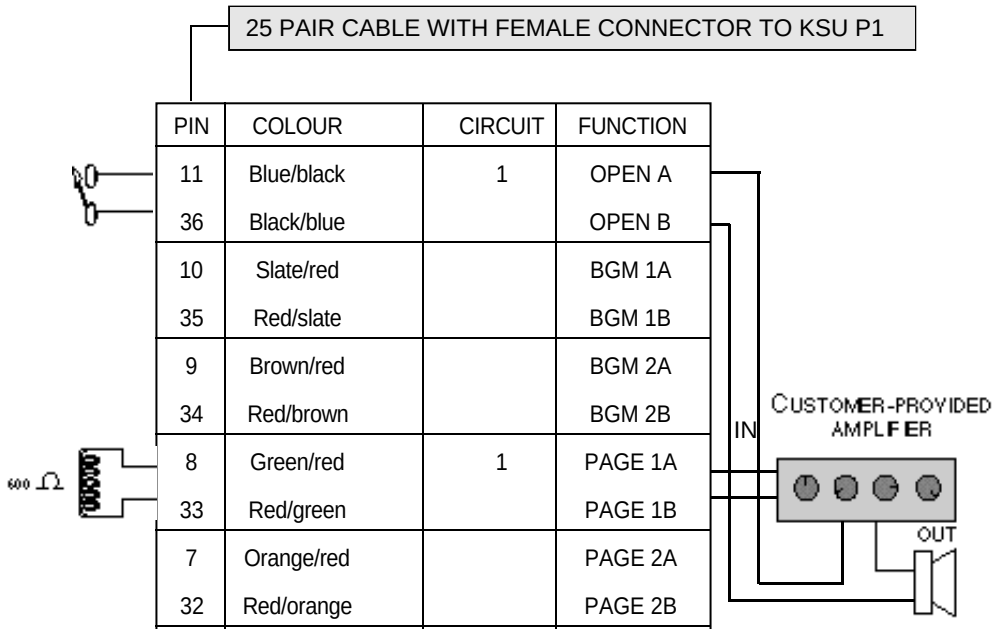
NOTE: MOH 2 REQUIRES A MISC CARD

<FIGURE 7-1> MDF CONNECTIONS MOH SOURCE TO KSU

Each C.O. line (trunk) can be programmed to receive a music source, system generated TONE or NO MUSIC when it is put on hold.(See MMC 408.) Each keyset can receive a music source or NO MUSIC for background music. See the programming manual for instructions (MMC 308).

7.2 External Paging

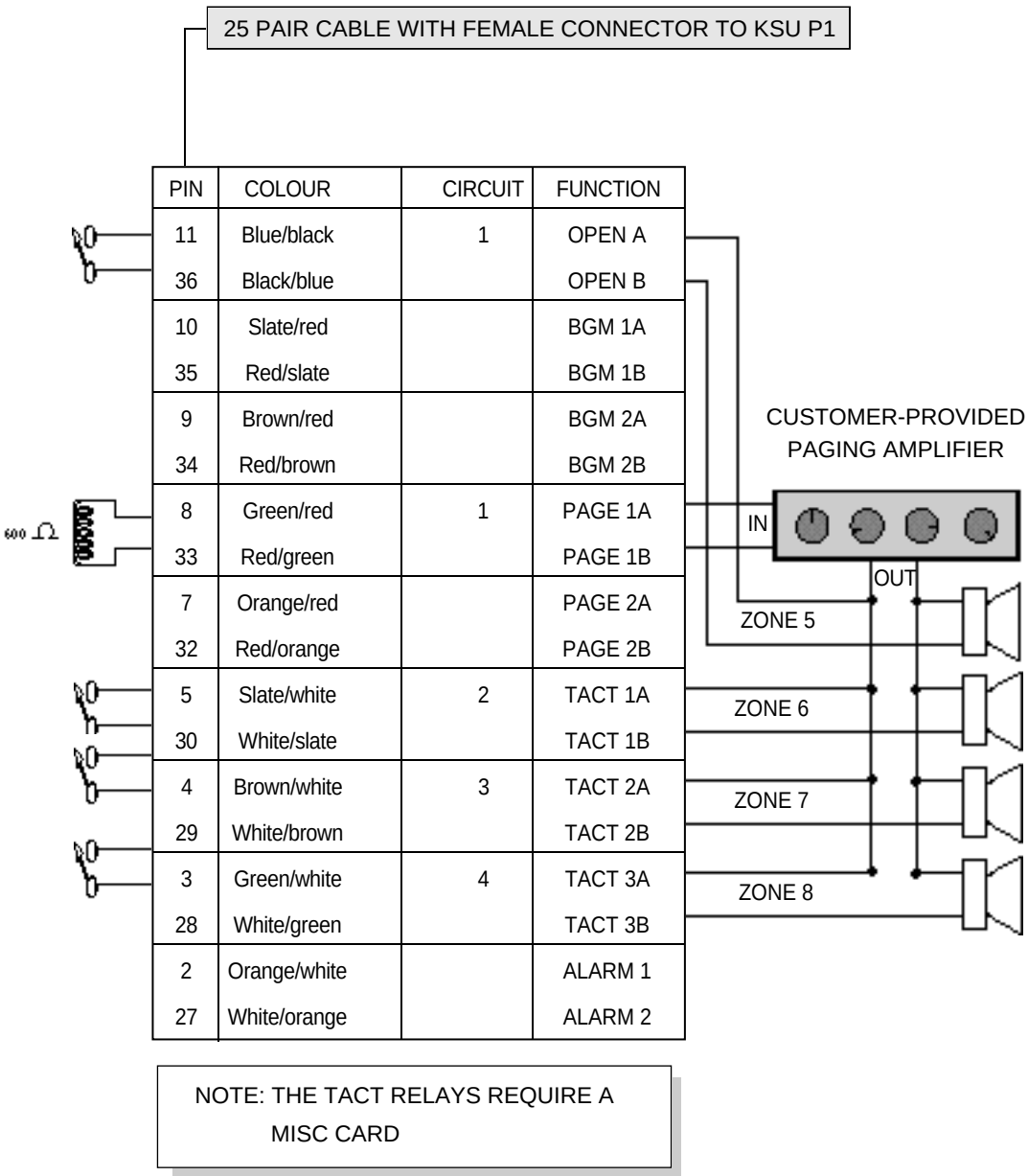
The KSU provides a voice pair to be used with customer-provided paging equipment.
Connect the customer-provided paging equipment to the page output pins of the KSU connecting block (See Figure 7–2). The page voice pair is 600 ohm impedance. If the amplifier page input is not 600 ohm, an impedance matching transformer must be used.



PIN	COLOUR	CIRCUIT	FUNCTION
11	Blue/black	1	OPEN A
36	Black/blue		OPEN B
10	Slate/red		BGM 1A
35	Red/slate		BGM 1B
9	Brown/red		BGM 2A
34	Red/brown		BGM 2B
8	Green/red	1	PAGE 1A
33	Red/green		PAGE 1B
7	Orange/red		PAGE 2A
32	Red/orange		PAGE 2B
5	Slate/white		TACT 1A
30	White/slate		TACT 1B
4	Brown/white		TACT 2A
29	White/brown		TACT 2B
3	Green/white		TACT 3A
28	White/green		TACT 3B
2	Orange/white		ALARM 1
27	White/orange		ALARM 2

<FIGURE 7-2> MDF CONNECTIONS PAGE AMPLIFIER TO KSU

One zone control relays is provided by default. If installed, the MISC card provides three additional zone control relays (See Figure 7–3). These paging contact pairs are for control of low voltage circuits or amplifier output. The contacts are rated at 24 VDC-1 amp.



PIN	COLOUR	CIRCUIT	FUNCTION
11	Blue/black	1	OPEN A
36	Black/blue		OPEN B
10	Slate/red		BGM 1A
35	Red/slate		BGM 1B
9	Brown/red		BGM 2A
34	Red/brown		BGM 2B
8	Green/red	1	PAGE 1A
33	Red/green		PAGE 1B
7	Orange/red		PAGE 2A
32	Red/orange		PAGE 2B
5	Slate/white	2	TACT 1A
30	White/slate		TACT 1B
4	Brown/white	3	TACT 2A
29	White/brown		TACT 2B
3	Green/white	4	TACT 3A
28	White/green		TACT 3B
2	Orange/white		ALARM 1
27	White/orange		ALARM 2

NOTE: THE TACT RELAYS REQUIRE A MISC CARD

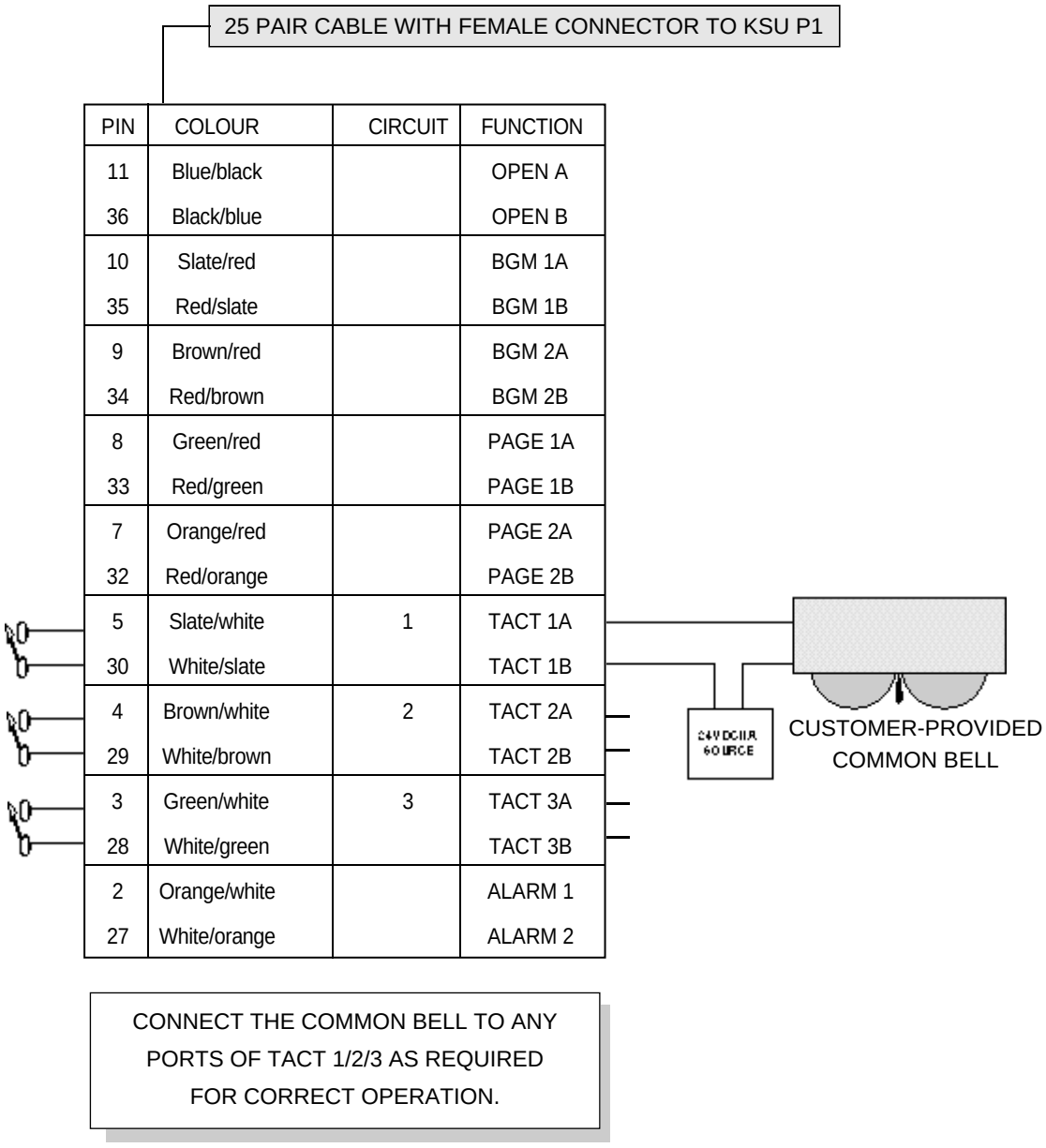
<FIGURE 7-3> MDF CONNECTIONS PAGE AMPLIFIER TO KSU

WARNING

Do not attempt to connect commercial AC power to these contacts.

7.3 Common Bell

A customer-provided loud ringing device can be controlled using the dry contact pair on the KSU. (See Figure 7–4).



PIN	COLOUR	CIRCUIT	FUNCTION
11	Blue/black		OPEN A
36	Black/blue		OPEN B
10	Slate/red		BGM 1A
35	Red/slate		BGM 1B
9	Brown/red		BGM 2A
34	Red/brown		BGM 2B
8	Green/red		PAGE 1A
33	Red/green		PAGE 1B
7	Orange/red		PAGE 2A
32	Red/orange		PAGE 2B
5	Slate/white	1	TACT 1A
30	White/slate		TACT 1B
4	Brown/white	2	TACT 2A
29	White/brown		TACT 2B
3	Green/white	3	TACT 3A
28	White/green		TACT 3B
2	Orange/white		ALARM 1
27	White/orange		ALARM 2

<FIGURE 7-4> MDF CONNECTIONS COMMON BELL CONTACTS

Using MMC 204 programming allows for INTERRUPTED or CONTINUOUS operation of the contacts. The interrupted selection follows the C.O. ring cadence - one second ON/three seconds OFF.

After connecting a common bell, you must assign it to a group as a ring destination by using the code for Common Bell.(See MMC 601)

The basic steps for common bell operation are the following:

a. Wire the loud ringing device to the common bell control contact pair.

b. Program the contacts for continuous or steady operation.

c. Program the hunt group to include the common bell.

d. Assign the trunk to ring the hunt group containing the common bell.

Common bell control can be used with station hunt groups, individual stations and Universal Answer. Contacts are rated at 24 VDC-1 amp.

WARNING
Do not attempt to connect commercial AC power to these contacts.

7.4 Ring Over Page

When a customer-provided paging system is installed, incoming calls can be assigned to ring over page(ROP). Program the line or lines to ring a hunt group. Using MMC 601, assign ROP as a destination in this hunt group. ROP can be used for day or night operation or both.

7.5 Station Message Detail Recording (SMDR)

To receive an SMDR printout, connect a customer-provided printer to one of the serial interface connectors on a MISC card (See Figure 3–3). Port 2 defaults as SMDR.

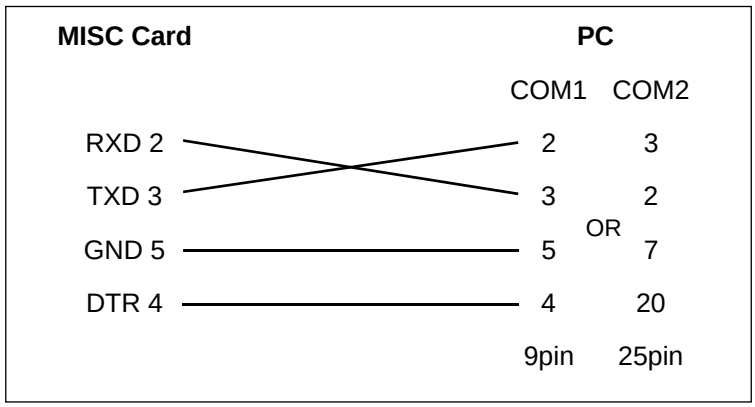
<FIGURE 7-5> PIN CONNECTIONS FOR MISC CARD TO PRINTER

Use a pin-to-pin RS232C cable. Only pins 2, 3, 4 and 5 are required (See Figure 7–5).
When the printer or optional call accounting device needs to be more than 15 feet away from the KSU, use shielded computer cable. Attach a male DB9 connector to the MISC end and then attach a connector that matches the requirements of the call accounting device or printer to the other end. This cable must not exceed 300 feet.

Use MMC 725 to set SMDR print options and MMC 804 to set the transmission parameters and the MISC port.

7.6 PC Programming

To program the system via a personal computer (PC), connect a PC equipped with PCMMC to a serial interface connector on a MISC card (See Figure 3–3). Port 1 defaults as PCMMC.



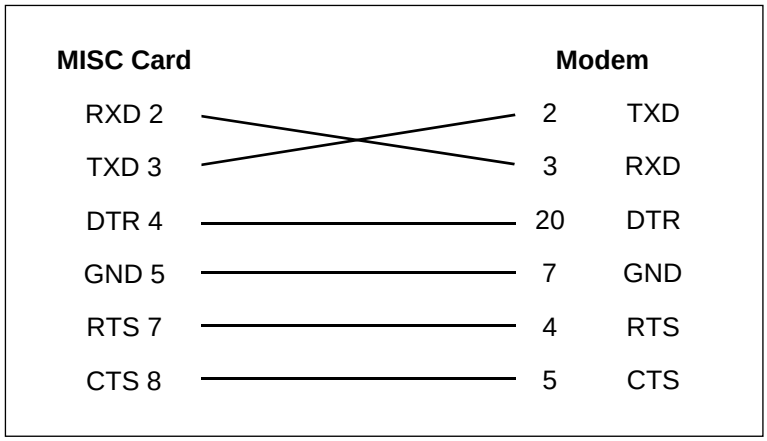
<FIGURE 7-6> PIN CONNECTIONS FOR MISC CARD TO PERSONAL COMPUTER

Use an RS232C cable with connections as shown in Figure 7–6. When the PC needs to be more than 15 feet away from the KSU, use shielded computer cable. Attach a male DB9 connector to the MISC end and then attach a connector that matches the requirements of the PC to the other end. This cable must not exceed 300 feet.

Use MMC 804 to set the transmission parameters and the MISC port.

7.7 Remote Programming

To remotely program a system, connect a customer-provided modem to a serial interface connector on a MISC card (See Figure 3–3).



<FIGURE 7-7> PIN CONNECTIONS FOR MISC CARD TO MODEM

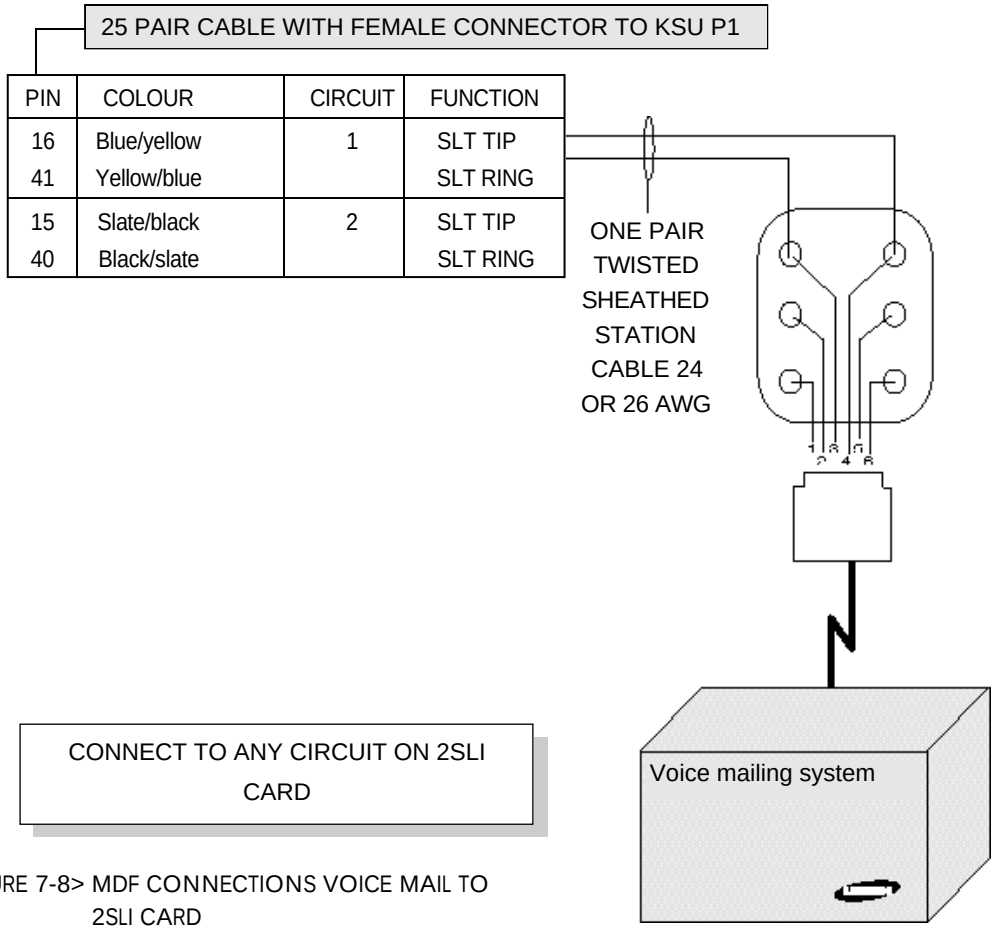
Use an RS232C cable as shown in Figure 7–7. When the modem needs to be more than 15 feet away from the KSU, use shielded computer cable. Attach a male DB9 connector to the MISC end and then attach a connector that matches the requirements of the modem to the other end. This cable must not exceed 300 feet.
Use MMC 804 to set the transmission parameters and the MISC port to be used.

7.8 Power Failure Transfer (PFT)

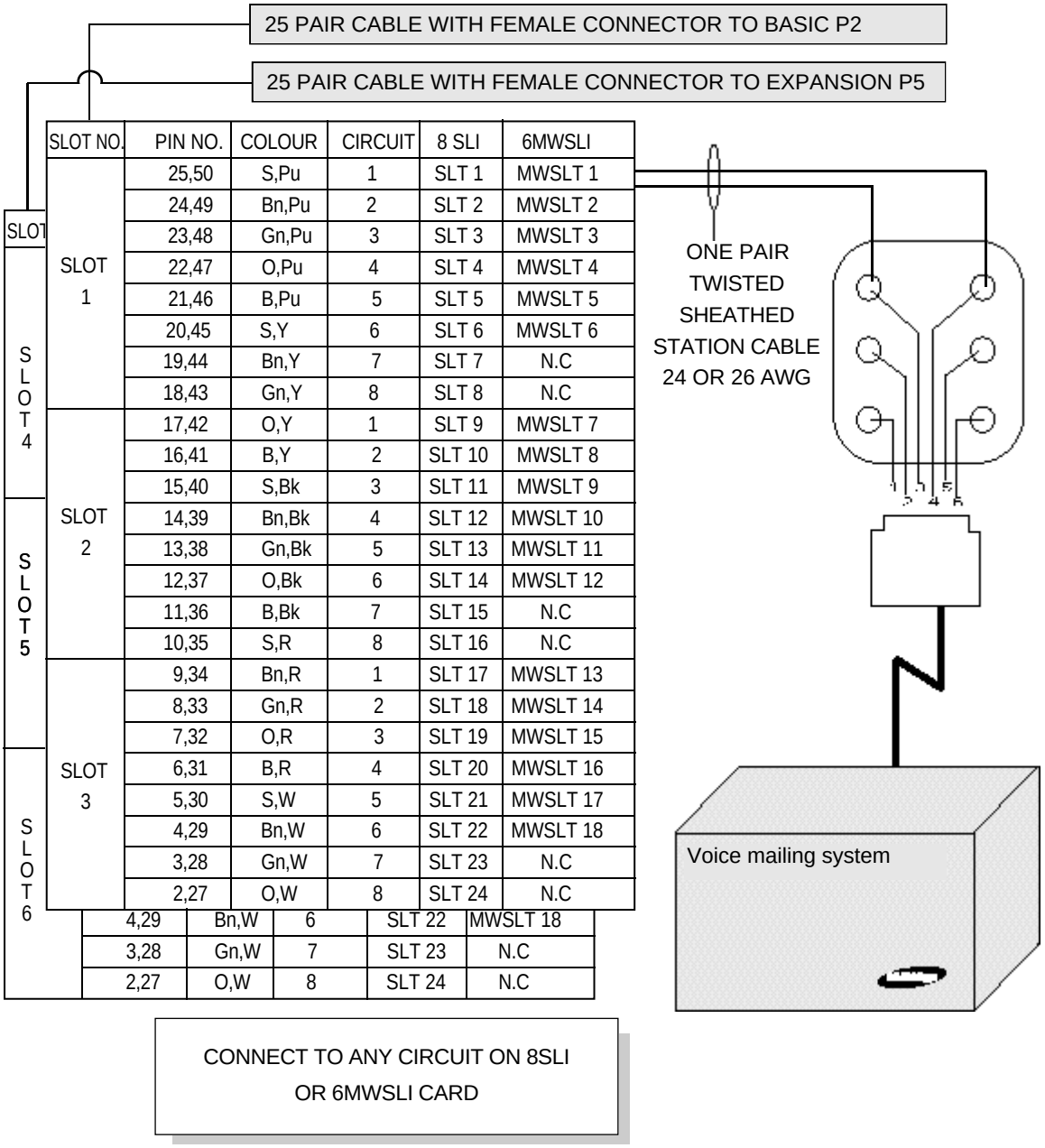
If the system loses AC power and has no external battery, the first two loop start lines on the 3/6 TRK card are automatically switched to the PFT ports. Cross-connect these outputs as shown in Figure 5-1 to the single line phones that are to have power fail operation.

7.9 Voice Mail/Auto Attendant

System operation provides special programming and hardware for use with a customer-provided voice mail/Auto Attendant(VM/AA) system. All single line stations on the SLI card provide a disconnect signal required for VM/AA operation. Use one pair twisted #24 AWG or #26 AWG jumper wire to cross-connect SLI circuits to the VM/AA system (See Figure 7–8, 7-9).



<FIGURE 7-8> MDF CONNECTIONS VOICE MAIL TO 2SLI CARD



SLOT NO.	PIN NO.	COLOUR	CIRCUIT	8 SLI	6MWSLI
SLOT 1	25,50	S,Pu	1	SLT 1	MWSLT 1
	24,49	Bn,Pu	2	SLT 2	MWSLT 2
	23,48	Gn,Pu	3	SLT 3	MWSLT 3
	22,47	O,Pu	4	SLT 4	MWSLT 4
	21,46	B,Pu	5	SLT 5	MWSLT 5
	20,45	S,Y	6	SLT 6	MWSLT 6
	19,44	Bn,Y	7	SLT 7	N.C
	18,43	Gn,Y	8	SLT 8	N.C
SLOT 2	17,42	O,Y	1	SLT 9	MWSLT 7
	16,41	B,Y	2	SLT 10	MWSLT 8
	15,40	S,Bk	3	SLT 11	MWSLT 9
	14,39	Bn,Bk	4	SLT 12	MWSLT 10
	13,38	Gn,Bk	5	SLT 13	MWSLT 11
	12,37	O,Bk	6	SLT 14	MWSLT 12
	11,36	B,Bk	7	SLT 15	N.C
	10,35	S,R	8	SLT 16	N.C
SLOT 3	9,34	Bn,R	1	SLT 17	MWSLT 13
	8,33	Gn,R	2	SLT 18	MWSLT 14
	7,32	O,R	3	SLT 19	MWSLT 15
	6,31	B,R	4	SLT 20	MWSLT 16
	5,30	S,W	5	SLT 21	MWSLT 17
	4,29	Bn,W	6	SLT 22	MWSLT 18
	3,28	Gn,W	7	SLT 23	N.C
	2,27	O,W	8	SLT 24	N.C

<FIGURE 7-9> MDF CONNECTIONS VOICE MAIL TO 8SLI OR 6MWSLI CARD

Program these ports for VM/AA use in MMC 207 and set VM/AA options in MMC 726. (See the Standard Telephone User Guide for feature codes and instructions.) Some voice mail manufacturers may require you to set these stations for data security (See MMC 208) to stop call waiting and intrusion tone.

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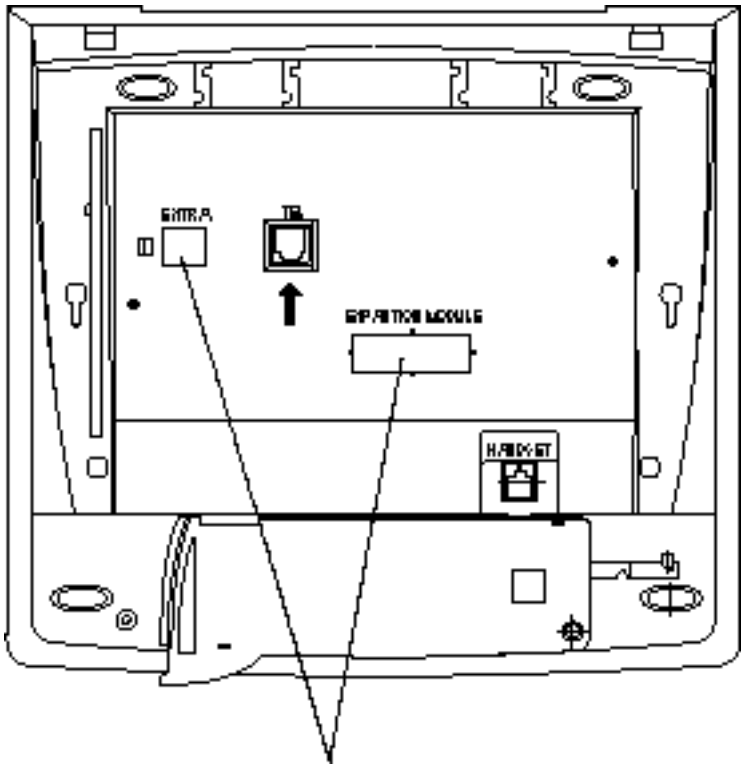
Chapter 8
Installing Keyset Daughter Boards(KDBs)

Chapter 8. Installing Keyset Daughter Boards (KDBs)

8.1 KDB–SLI

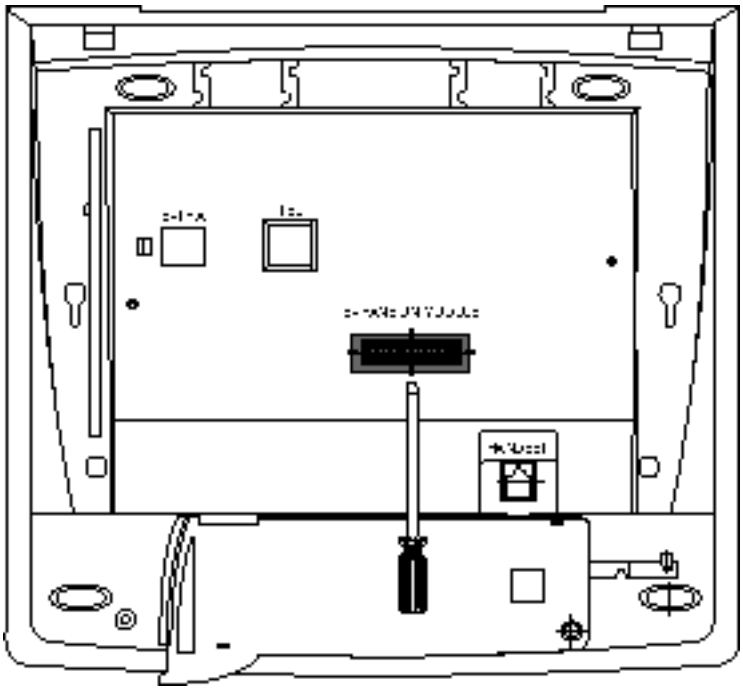
1. Unplug the line cord from the keyset and place the keyset face down on a soft surface. (Figure 8–1)



BLANKING PLATE

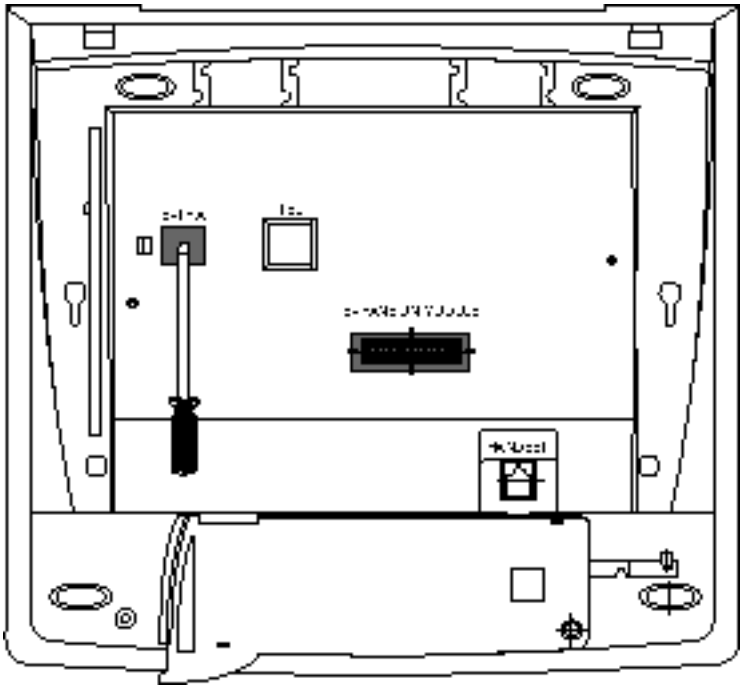
<FIGURE 8-1>

2. Using a screw driver or other similar tool, carefully remove blanking plate marked Expansion Module from the base moulding. (Figure 8–2)



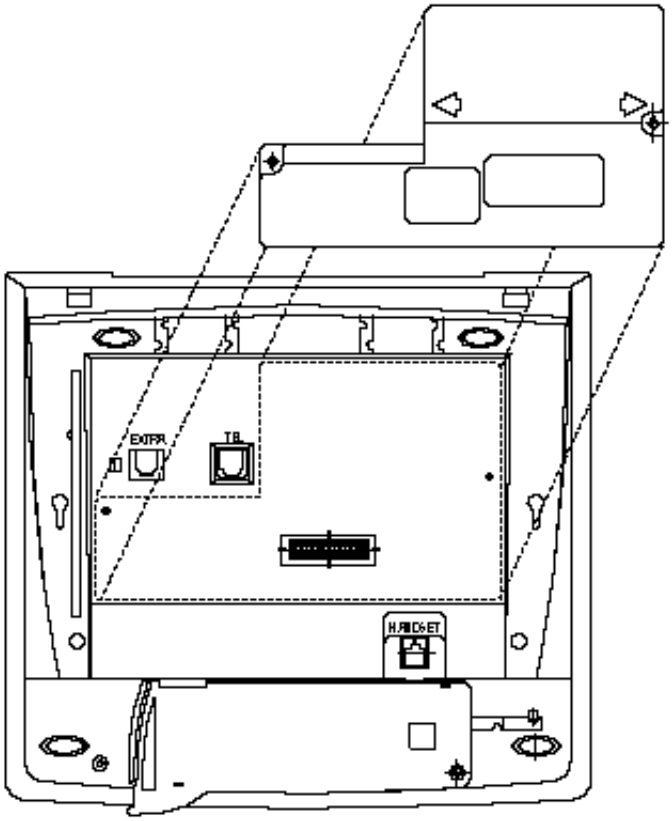
<FIGURE 8-2>

3. As in step 2, carefully remove the blanking plate marked Extra from the base moulding.(Figure 8–3)



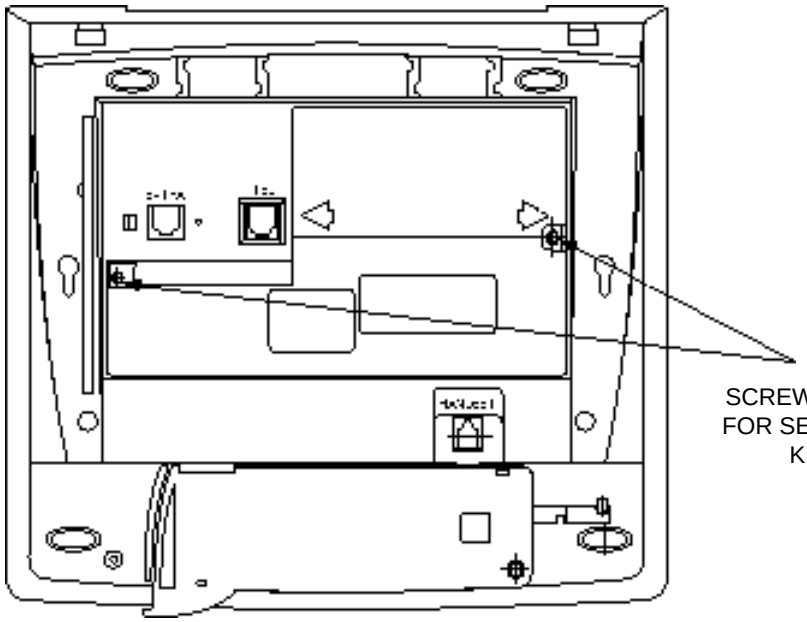
<FIGURE 8-3>

4. Connect the KDB to the keyset by pushing the pins of the KDB into the Expansion Module socket on the keyset.(Figure 8–4)



<FIGURE 8-4>

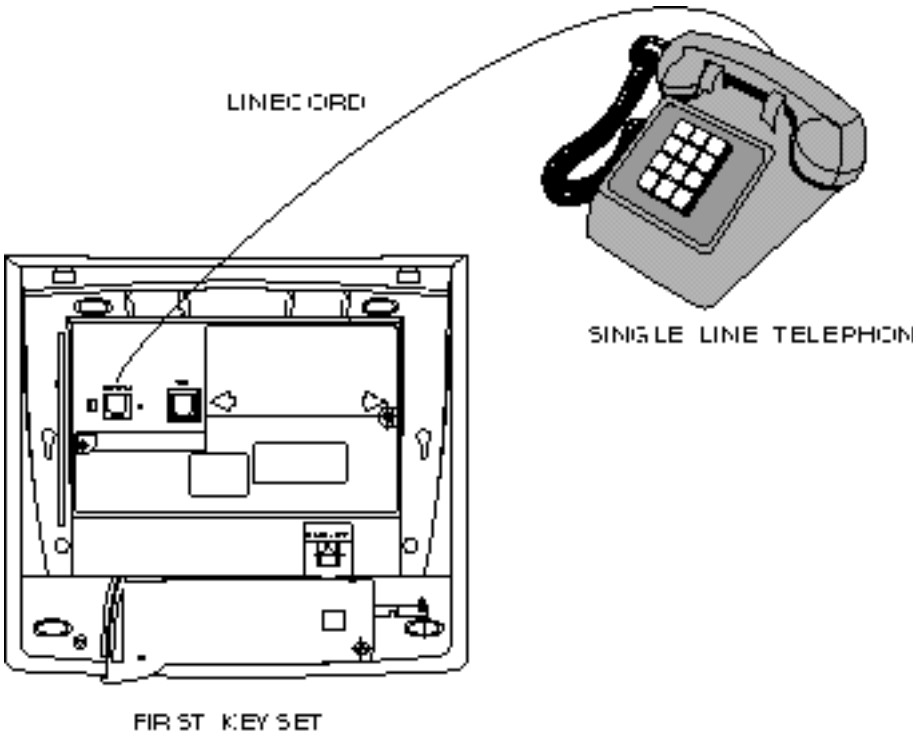
5. Secure the KDB to the keyset base with the two screws supplied. (Figure 8–5)



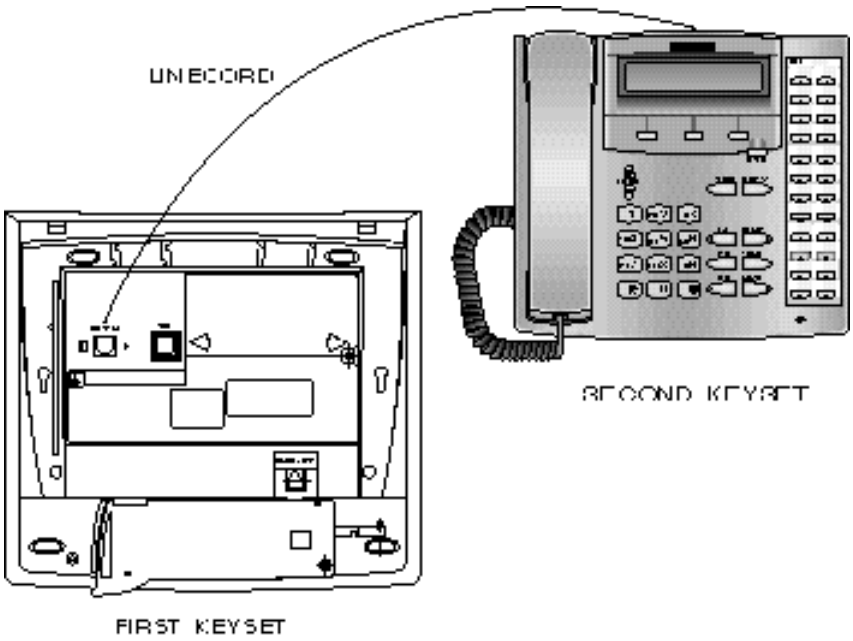
<FIGURE 8-5>

8.2 Connecting to the KDB

There are two methods for connecting devices to KDBs. The simplest method is to connect the second device directly by means of a line cord.(Figure 8-6 and 8-7)

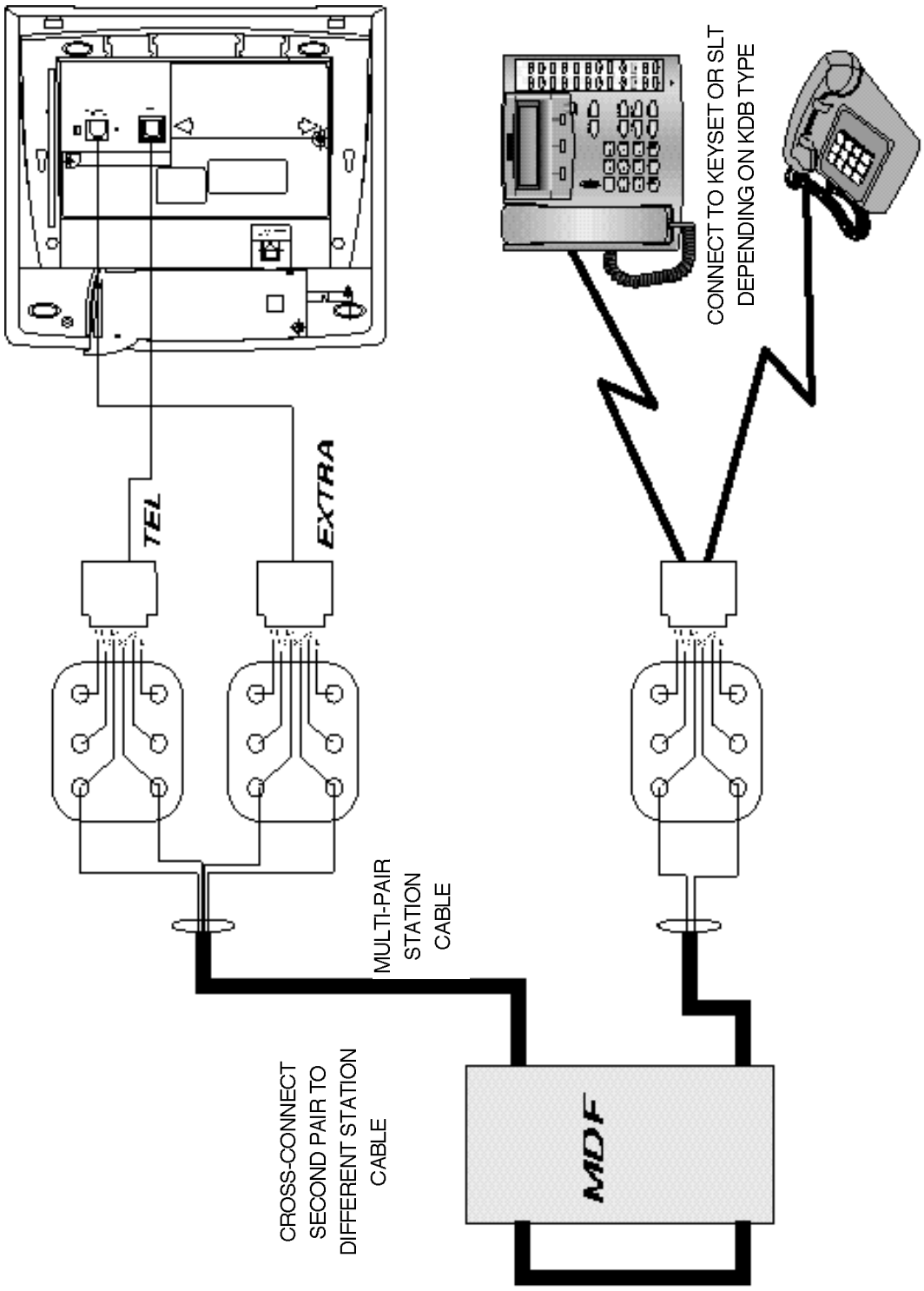


<FIGURE 8-6> CONNECTING A SINGLELINE TELEPHONE TO A KDB-SLI



<FIGURE 8-7> CONNECTING A KEYSET TO A KDB-DLI

The second method is to use a multi-pair station cable, connecting separate station jacks to the first two pairs. A line cord can now be connected between the KDB and the second jack. This returns the KDB port to the MDF for cross-connection to another cable run. (Figure 8–8)

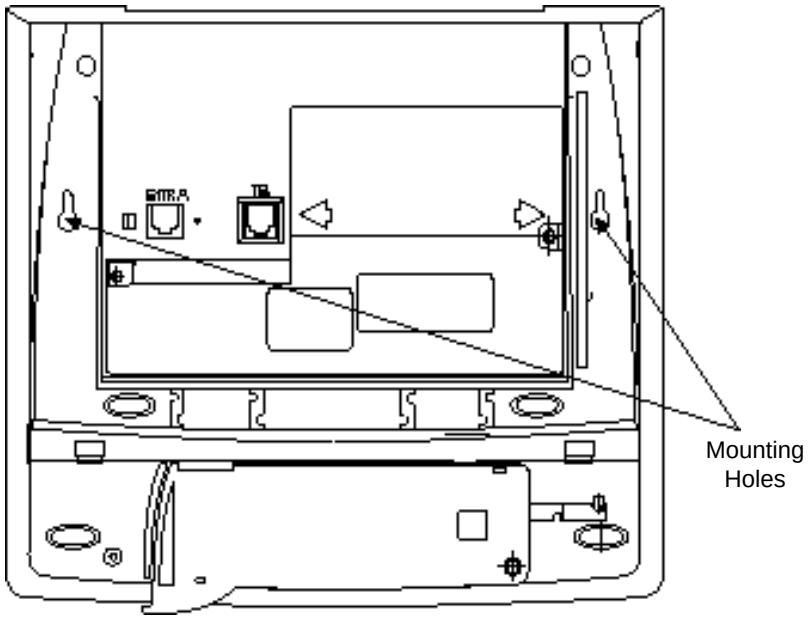


<FIGURE 8-8> CONNECTING A STATION DEVICE TO A KDB VIA THE MAIN DISTRIBUTION FRAME

8.3 Wall-Mounting a Keyset

Keysets come equipped with a reversible base wedge as standard. To wall-mount a keyset, remove the wedge from the keyset, turn it through 180 degrees and reattach it to the keyset.(Figure 8-9)

Use the mounting holes to attach the base wedge to the wall.



<FIGURE 8-9> WALL-MOUNTING A KEYSET

Chapter 9
Changing Software

Chapter 9. Changing Software

In order to easily replace the system software, it may be necessary to partially disassemble the KSU. This procedure should be performed in the following sequence.

1. Back up the software using the relevant MMC.

2. Check the battery switch on the MEM card and make sure it is ON

> NOTE
> If the documentation with the new software indicates that reprogramming will be necessary you may wish to switch the battery OFF at this stage to ensure the system is properly defaulted.

3. Switch Off the KSU and remove the cover.

4. Remove the MEM card.

5. Remove the four EPROMs from MEM card using a chip extraction tool or by gently prising them out with a small, flat-bladed screwdriver. Set the removed EPROMs aside carefully in case they need to be reinstalled.

6. Remove the new EPROMs from their protective packaging and confirm that the legs on the EPROMs are straight. If the legs are not straight, contact your dealer for assistance. Carefully insert the new EPROMs in their designated sockets.

7. Reinstall the MEM card.

8. Switch ON the KSU and verify that it is operating. If it fails to operate, follow the above steps to remove the new EPROMs and reinstall the old EPROMs. If the system still fails to operate contact your dealer for advice.

9. Reset the system to default using MMC 811.

10. Reload the software using the appropriate MMC.

11. When the system is operating satisfactorily, switch ON the battery switch on the MEM card if necessary, and replace the KSU cover.

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