



SK-200 - Lodging

SYSTEM INSTALLATION & PROGRAMMING MANUAL

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IMPORTANT NOTICE: PLEASE READ!

This equipment is capable of providing users access to interstate providers of operator service through the use of access codes. Modification of this equipment by call aggregators to block access dialing codes is a violation of the Telephone Operator Consumers Act of 1990.

November 1998, Issue 1.0
TransTel Communications, Inc.

SK-200 Lodging Manual
Equal Access Compliance Notification



SK-200 Lodging Package Installation & Programming Manual

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IMPORTANT SAFETY INSTRUCTIONS

Installation Safety Precautions:

1. Never install telephone wiring during a lightning storm.
2. Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
3. Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
4. Use caution when installing or modifying telephone lines.

SAVE THESE INSTRUCTIONS

The SUPERKEY[®] SK-200 utilizes a detachable power supply cord. This cord is not to be attached to any building surfaces.



IMPORTANT SAFETY INSTRUCTIONS

When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

1. Read and understand all instructions.
2. Follow all warnings and instructions marked on the product.
3. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this product near water, for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.
5. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
6. Slots and openings in the cabinet and the back or bottom are provided for ventilation, to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation unless proper ventilation is provided.
7. This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home or office, consult your dealer or local power company.
8. This product is equipped with a three wire grounding type plug. The plug will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding type plug.
9. Do not allow anything to rest on the power cord. Do not locate this product where the cord will be abused by persons walking on it.
10. Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.
11. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the product.
12. To reduce the risk of electric shock, do not disassemble this product, but take it to a qualified service person when some service or repair work is required. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect reassembly can cause electric shock when the appliance is subsequently used.
13. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - A. When the power supply cord or plug is damaged or frayed.
 - B. If liquid has been spilled into the product.
 - C. If the product has been exposed to rain or water.
 - D. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
 - E. If the product has been dropped or the cabinet has been damaged.
- F. If the product exhibits a distinct change in performance.

-
14. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
 15. Do not use the telephone to report a gas leak in the vicinity of the leak.

SAVE THESE INSTRUCTIONS

Introduction To Installation

The Superkey[®] Series Model SK-200 is an advanced electronic hybrid telephone system employing a microprocessor stored program and digitally controlled solid-state space division switching. With 10 available card slots in a single cabinet, the system provides capacity for up to 20 Central Office (outside) lines and up to 72 system stations. Total expansion capacity allows the system to be expanded up to four cabinets, with a total maximum capacity of 40 card slots, which can be equipped in any capacity not to exceed 40 Central Office lines and 240 system stations. Each incremental cabinet provides ten additional card slots for system expansion. The software structure was developed to accommodate multi-language support in order to adapt efficiently to world markets.

Users who are familiar with other Superkey[®] products will find the operation of the SK-200 to be almost identical to other SK series telephone systems. Installation and maintenance personnel will find the database structure of the SK-200 to be very similar to other SK series systems.

This manual is intended to provide the information required for the physical installation of the SK-200. It is recommended that the installer refer to the separate feature and programming document for fully detailed information on these items.

FCC and Telephone Company Rules and Regulations

In compliance with the requirements of Part 68 of the Federal Communications Commission Rules and Regulations for connection of terminal system equipment to the telephone network and for your convenience, the following information is presented:

FCC Registration Number

The Superkey[®] SK-200 is registered with the FCC in a dual registration capacity enabling the system to operate as a key system only or as a hybrid system.

Superkey SK-200 FCC Registration Number: 3A7TAI-21978-KF-E and 3A7TAI-21765-MF-E.

Ringer Equivalence Number

Ringer Equivalence Number of CO Line Circuit:

USOC code required for Central Office lines: RJ-11-C

1. Notification of the Telephone Company

Customers connecting terminal equipment to the telephone network shall, upon request of the Telephone Company, inform the Telephone Company of the particular line(s) to which such connection is made, the FCC registration number and ringer equivalence number (REN) of the registered terminal equipment.

The REN is useful to determine the quantity of devices you may connect to your telephone line and still have all of those devices ring when your telephone number is called. In most, but not all areas, the sum of the REN's of all devices connected to one line should not exceed five (5.0). To be certain of the number of devices you may connect to your line, as determined by the REN, you should contact your local telephone company to determine the maximum REN for your calling area.

2. Direct Connection to a Party-Line or Coin Operated Telephone Line is Prohibited.

3. Incidence of Harm to the Telephone Lines

Should terminal equipment cause harm to the Telephone Network, the Telephone Company shall, where practical, notify the customer that service may be temporarily discontinued. However, where prior notice is not practical, the Telephone Company may temporarily discontinue service, if such action is reasonable in the circumstances. In case of such un-notified temporary discontinuance of service, the Telephone Company shall:

- (a) Promptly notify the customer of such temporary discontinuance of service.
- (b) Afford the customer the opportunity to correct the situation which gave rise to the temporary discontinuance.
- (c) Inform the customer of the right to bring a complaint to the FCC pursuant to the procedures set out in Subpart E of Part 68 of FCC Telephone Equipment Rules.

4. Compatibility of the Telephone Network and Terminal Equipment.

(a) Availability of telephone interface information.

Technical information concerning interface parameters and specifications not specified in FCC Rules, including the number of Ringers which may be connected to a particular line, which is needed to permit Terminal Equipment to operate in a manner compatible with Telephone Company communications facilities, shall be provided by the Telephone Company upon customer's request.

(b) Changes in Telephone Company Communications Facilities, Equipment, Operations and Procedures.

The Telephone Company may make changes in its communications facilities, equipment, operations or procedures where such action is reasonably required in the operation of its business and is not inconsistent with the rules and regulations in FCC Part 68 of the FCC Rules and Regulations. If such changes can be reasonably expected to render any customer Terminal Equipment incompatible with Telephone Company Communications Facilities, or require modification or alteration of such Terminal Equipment, or otherwise materially affect its use or performance, the customer shall be given adequate notice in writing to allow the customer an opportunity to maintain uninterrupted service.

5. Radio Frequency Interference

This equipment generates and uses radio frequency energy and if not installed and used properly and in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type-tested and found to comply with the limits for a Class B computing device in accordance with the specification in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, this is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Re-orient the receiving antenna.
Relocate the equipment with respect to the receiver.
Move the equipment away from the receiver.
Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

Protection devices

Be sure the primary protection device at the entry point is installed by the local telephone company (telco) in accordance with the National Electrical Code (NEC). If no such device is provided, notify the telephone company **BEFORE** proceeding with the installation.

Site Requirements

Location

The System should be installed in a clean, dry, secure location. This place must have adequate ventilation, and a temperature from 32°F to 113°F (0°C to 45°C) , with 10% to 95% non-condensing relative humidity.

DO NOT install the equipment near sources of static electricity, excessive vibration, or water.
Avoid direct sunlight.

Power Supply

Be sure that the third wire ground of the AC circuit is connected with earth ground. If a music source/external paging equipment is installed, it must be connected to a separate AC circuit rather than the system's dedicated AC line cord. **(The power supply must be connected to a dedicated AC outlet.)**



CAUTION: For continued protection against risk of fire, replace only with the same type and rating of fuse. Fuses are listed below:

Operating Voltage	Fuse Rating
120V AC 50/60 Hz	5 Amp 250 VAC
220V AC 50/60 Hz	3.5 Amp 250 VAC

Equipment Requirements

Check Equipment

Check the cartons of equipment: Key Service Unit, Telephone sets, Component units, or other options for visible damage. If any damage is evident, contact the supplier.

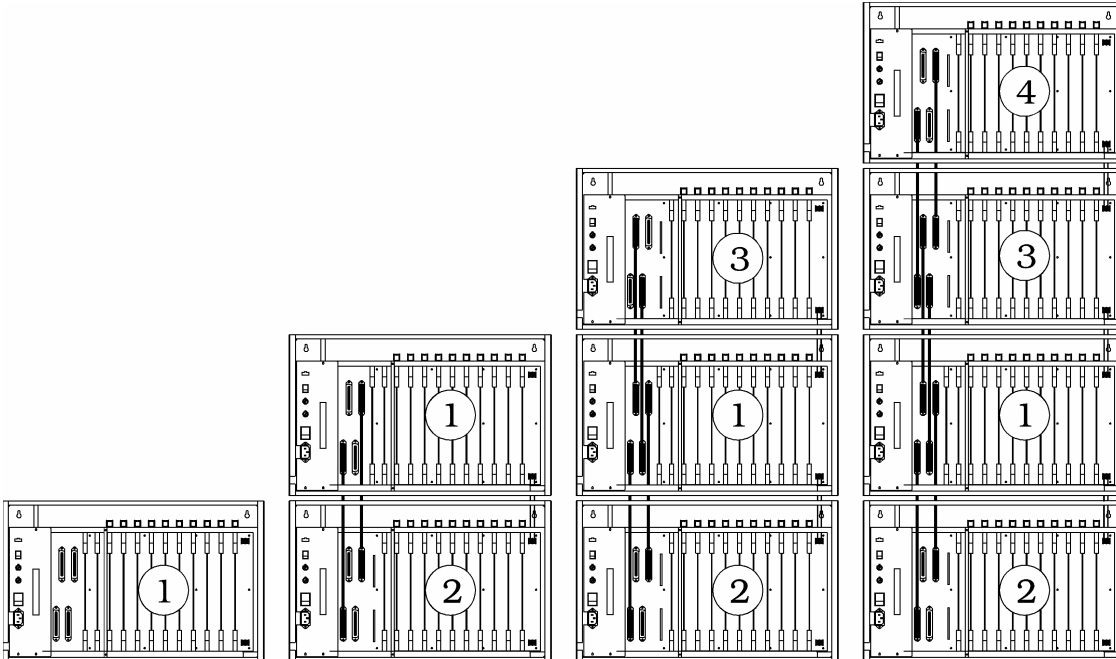
Use plywood as a backboard to wall mount the cabinet.
Three-pair twisted station cable should be used to provide for OHCA.
Grounding wire (14 AWG).
Appropriate installation tools.

Installation check list

INSTALLATION REQUIREMENTS	VERIFICATION
MOUNTING SURFACE	Verify that the surface is flat, dry and has an electrical outlet within a reasonable distance.
AC LINE	AC line should be dedicated exclusively to the system.
POWER OUTLET	Power Outlet must be a 3-wire grounded outlet plug, having parallel blades and ground pin. Input power Line capacity requirements - 10 amperes.
SURGE PROTECTION	A Surge Protector is recommended on the dedicated AC line.
VENTILATION AND TEMPERATURE	Humidity: 10% to 95% relative non-condensing Temperature:32°F to 113°F (0°C to 45°C).
GROUNDING REQUIREMENTS	A Cold Water Pipe or other approved ground connection.
SERVICEABILITY	Lighting conditions and working space are adequate for future service.

Cabinet Installation

Expansion

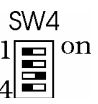


Recommended Cabinet Position

Cabinet Switch Identifier Settings (SW4 on the SK-CCB/2)

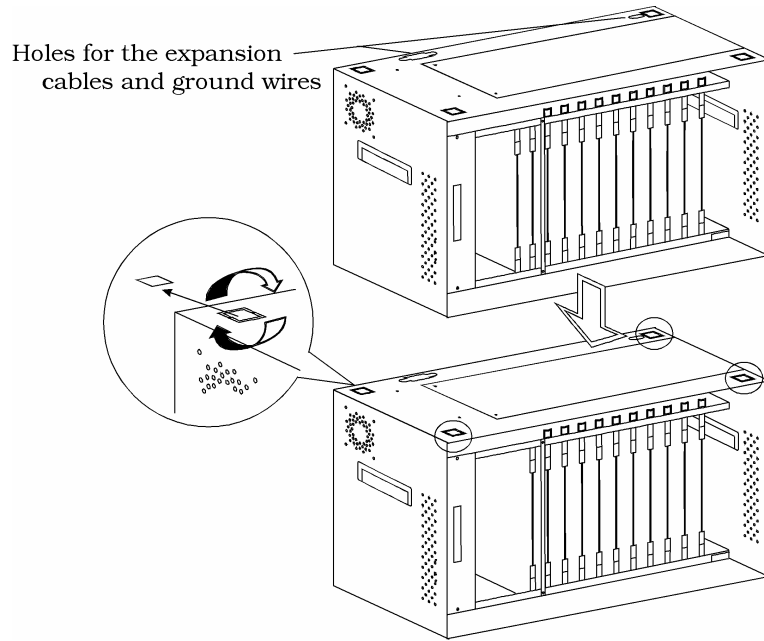
1: 1st Cabinet 

2: 2nd Cabinet 

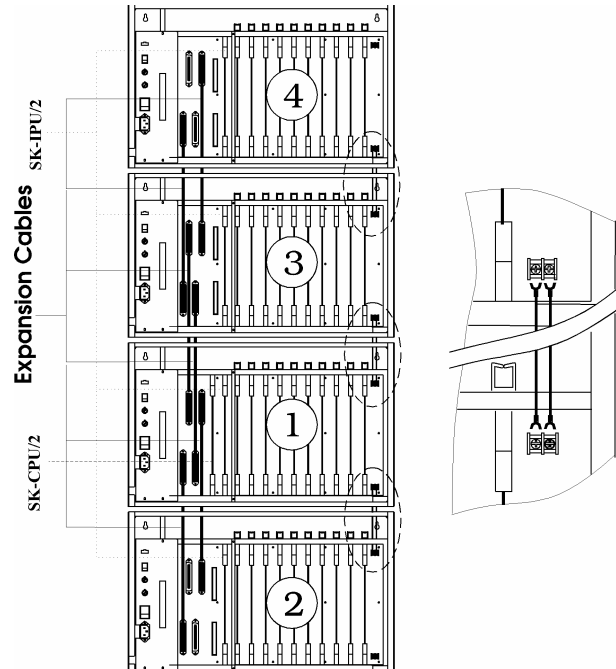
3: 3rd Cabinet 

4: 4th Cabinet 

Cabinet Assembly



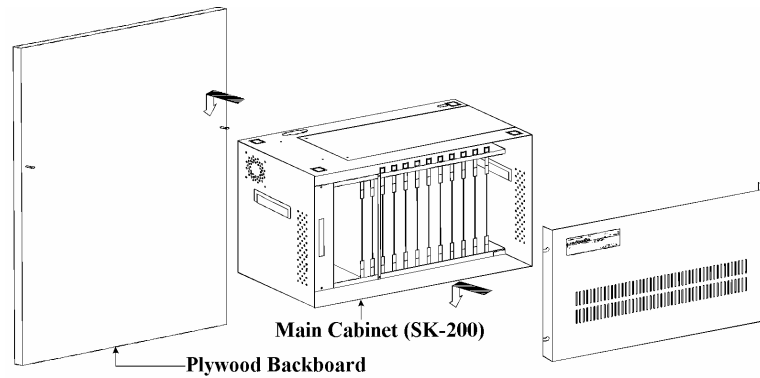
Inter-Cabinet Cabling



Wall mounting

Install the screws into the plywood with appropriate fasteners using the template for a guide for the screws.

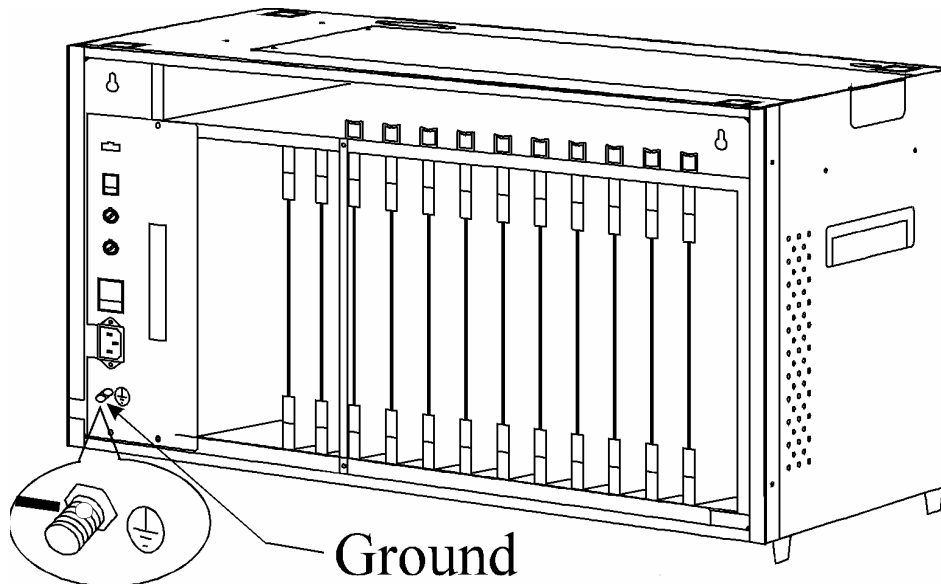
Hook the Unit on the screws.



System Grounding

It is strongly recommended that the system be grounded by connecting a heavy, insulated copper wire (e.g., 14AWG or larger) between the grounding bolt on the front inside of the cabinet and an earth ground.

Do not connect the grounding wire of the unit to a computer, telex, or any other external device.

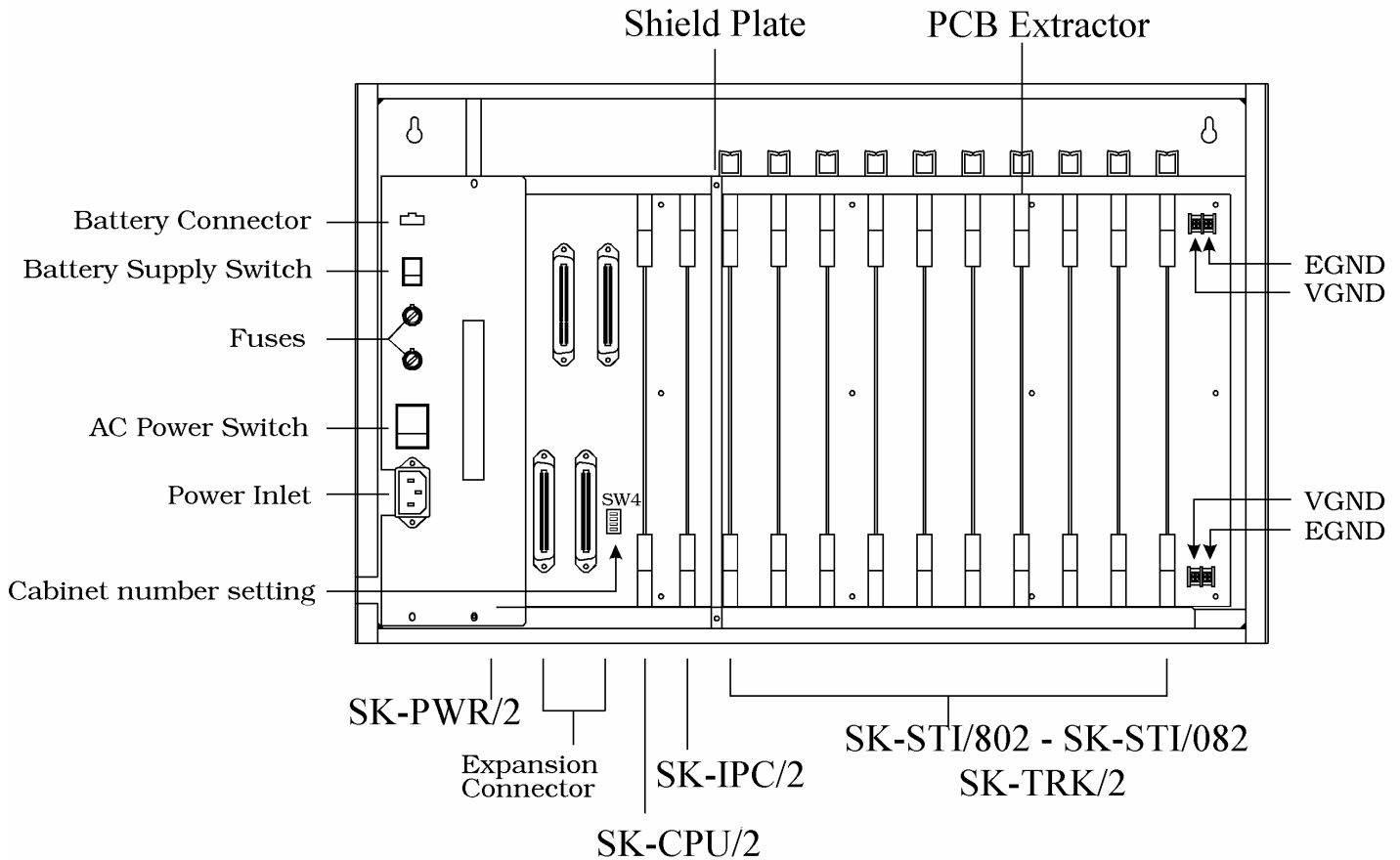


Printed Circuit Board (PCB) Installation

Main components of the system are:

- Power Supply Unit (SK-PWR/2).
- Cabinet (SK-200).
- Central Processing Unit (SK-CPU/2).
- Interface Processing Controller (SK-IPC/2).
- DTMF Generation Card (SK-DTMF/2).
- Trunk & Station Unit (SK-TRK/2, SK-STI/802, SK-STI/082).
- RS-232 Interface Card (SK-RS232)*.
- Remote Programming Interface Card (SK-RPI)*.
- Expand Memory Card (SK-EMC/2)*.
- Voice Service Card (SK-VSU/2)*.
- *:optional

Note: Only the 1st Cabinet needs to have the SK-CPU/2 installed .



Installation Information

CAUTION!!

The Printed Circuit Boards of SK-200 are sensitive to static electricity. During installation and maintenance, take precautions against static damage.

Printed Circuit Board Insertion

Raise the Extractor of the Printed Circuit Board, with components facing right.

Hook the extractor onto the metal edge of the case, press down the extractor, and push the Printed Circuit Board into the slot until it is fully inserted.

Power Supply Installation

The Power Supply for the unit can be configured for:

110-VAC: 100 to 120 V AC (50/60Hz) **or**

220-VAC: 210 to 230 V AC (50/60Hz).

Select the input voltage by the 110/220 jumper on the SK-PWR/2

It is important to verify that the setting is correct prior to initial system power up.

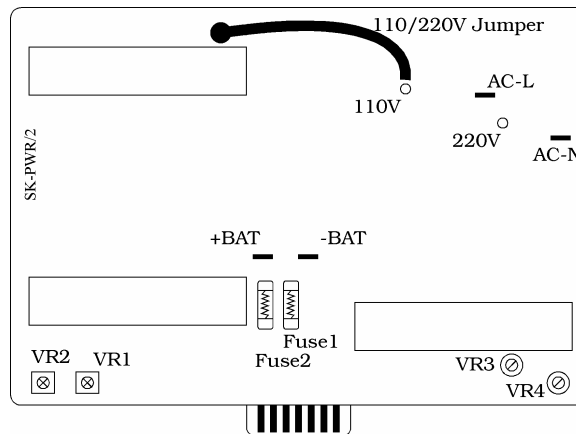
Verify that the input voltage and input voltage jumper are correct before you power up the system.

Installation steps:

Check the Jumper for the input voltage on the SK-PWR/2 to assure that it is correct for your power source.

Insert the SK-PWR/2 into left-most card slot of the Main Cabinet.

Secure the power supply unit by the screws.





Note:


- VR1: +28V Voltage Adjuster (Factory use only).
- VR2: +28V Current Limit Adjuster (12A, Factory use only).
- VR3: +12V Voltage Adjuster (Factory use only).
- VR4: +5V Voltage Adjuster (Factory use only).
- Fuse 1: 250V/3A for protecting 5V/12V output.
- Fuse 2: 250V/8A for protecting battery connection.

SK-CPU/2 Installation

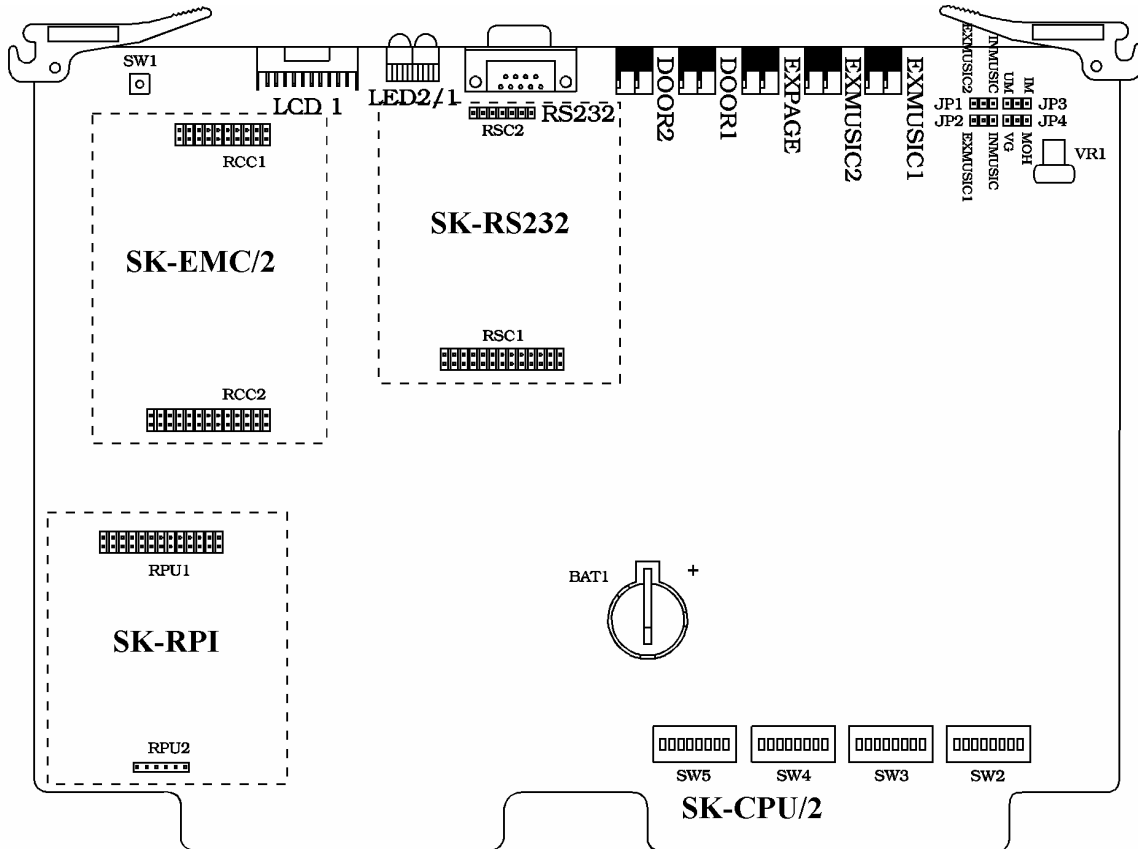
Attach the optional cards - SK-RS232, SK-RPI, SK-EMC/2 on the SK-CPU/2.
 To select the music sources for MOH (Music on Hold) and BGM (Background Music).

- MOH: Use External Music 2 **JP1**  MOH: Use Melody IC **JP1** 
- BGM: Use External Music 1 **JP2**  BGM: Use Melody IC **JP2** 

Same Music Source for MOH and BGM:  **JP3**

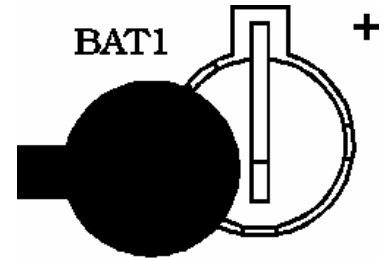
Independent Music Sources for MOH and BGM:  **JP3**

Music disable:  **JP4** Music on:  **JP4**



Note:

- SW1: Reset button.
- VR1: Volume Control for Melody IC.
- Remove the insulating paper from BAT1.



- 1) SK-CPU/2 has a **LITHIUM Battery** (3V/170 mAh) for system data's back up. The system data is maintained for about 2266 hours (94 days = 3 months) during power failure.
- 2) A plastic isolation paper is on the Lithium battery to isolate power during transportation. Please take off this paper after the system is ready for use.

Adjust SW2, SW3, SW4, SW5 according to the number of SK-TRK/2 cards that you wish to install.

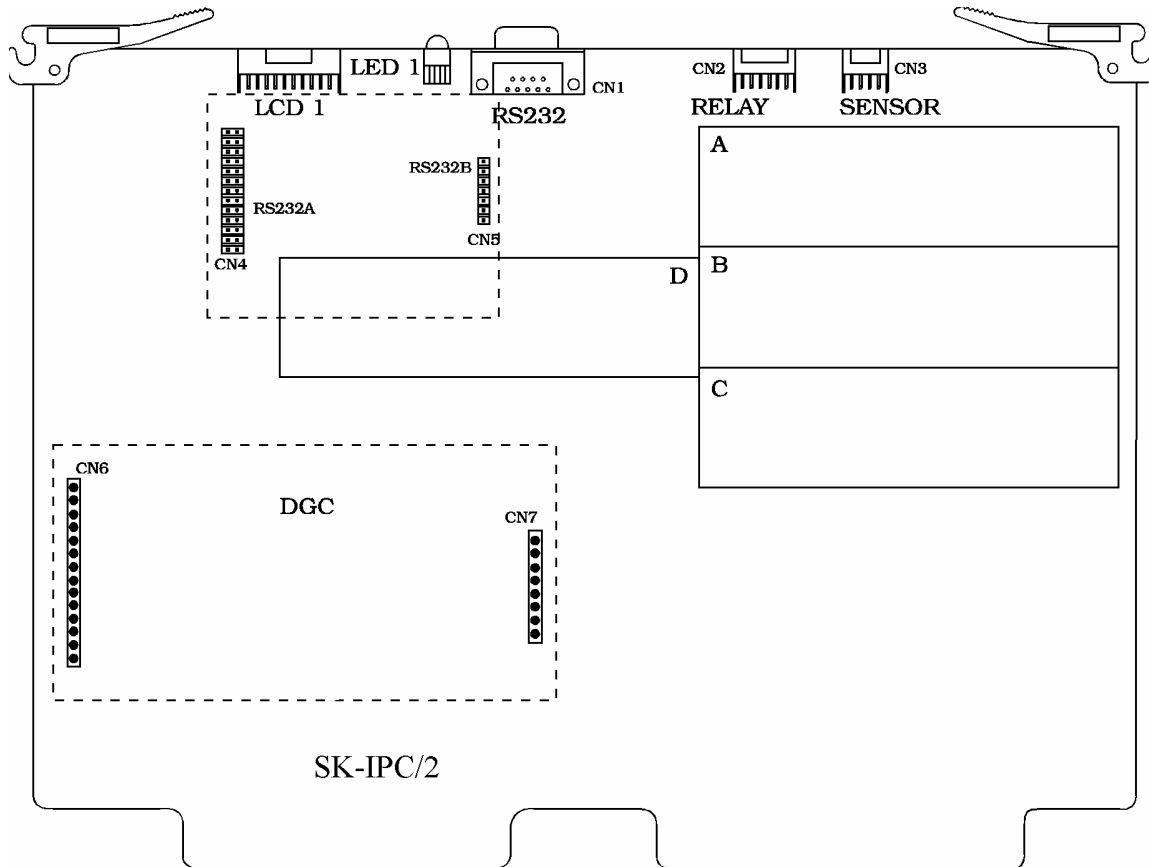
Table 1 Link Path Setting

Qty. of SK-TRK/2	SW2 - DIP		SW3 - DIP		SW4 - DIP		SW5 - DIP	
	1~4	5~8	1~4	5~8	1~4	5~8	1~4	5~8
1~2	on	on	on	on	on	on	on	on
3	off	on	on	on	on	on	on	on
4	off	off	on	on	on	on	on	on
5	off	off	off	on	on	on	on	on
6	off	off	off	off	on	on	on	on
7	off	off	off	off	off	on	on	on
8	off	off	off	off	off	off	on	on
9	off	off	off	off	off	off	off	on
10	off	off	off	off	off	off	off	off

Insert the SK-CPU/2 into the position according to **Figure 6** PCB Location.

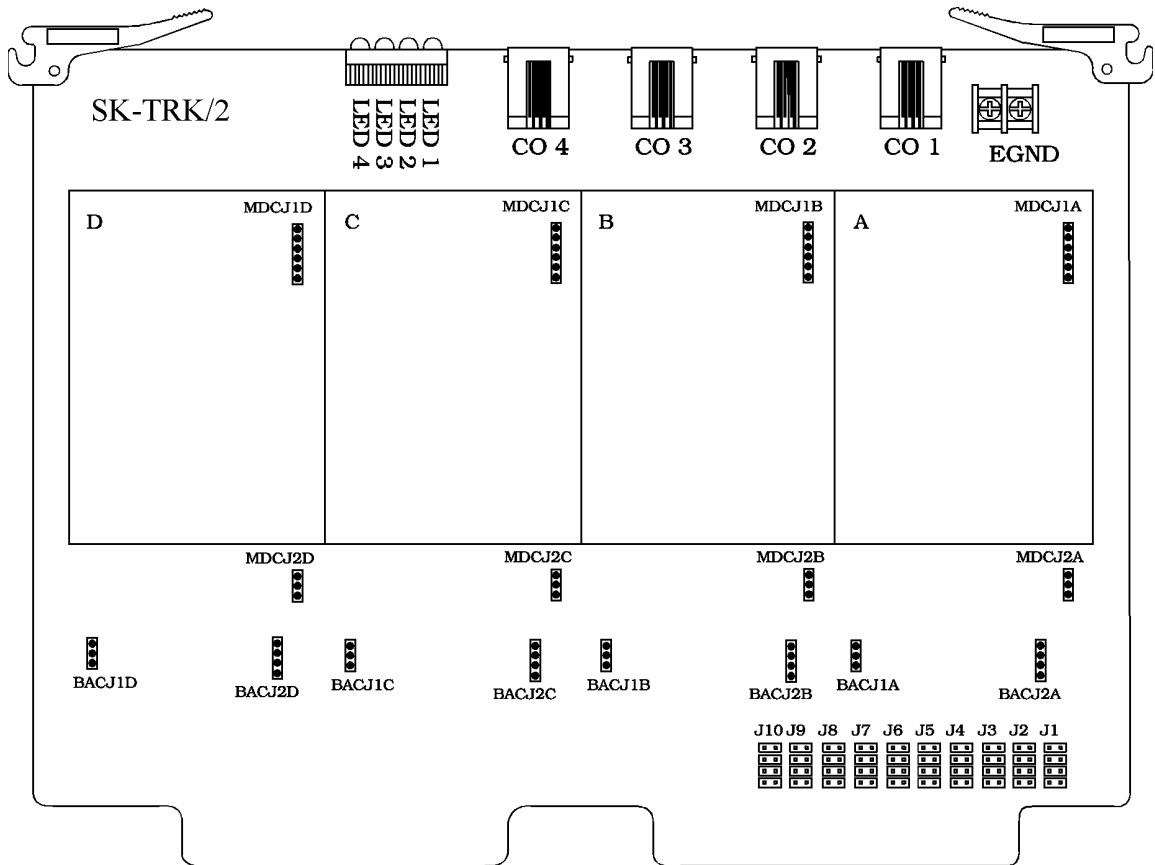
SK-IPC/2 Installation

Attach the optional cards - SK-RS232, SK-DTMF/2 on the SK-IPC/2.
Insert the SK-IPC/2 into the position according to **figure 6** PCB Location.



SK-TRK/2 Installation

Insert the SK-TRK/2 into the position according to Figure 6, Printed Circuit Board Locations.



To select the system link paths for the installed SK-TRK/2 card. (On: Short, Off: Open.)

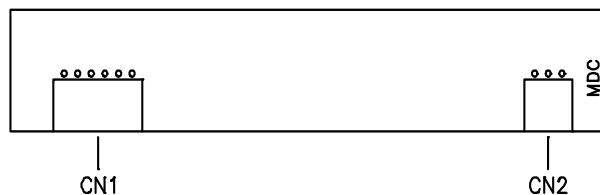
Table 2 Assign Link Paths for SK-TRK/2

SK-TRK/2 Position	J1	J2	J3	J4	J5	J6	J7	J8	J9	J10
	1~4	1~4	1~4	1~4	1~4	1~4	1~4	1~4	1~4	1~4
1st	on	off	off	off	off	off	off	off	off	off
2nd	off	on	off	off	off	off	off	off	off	off
3rd	off	off	on	off	off	off	off	off	off	off
4th	off	off	off	on	off	off	off	off	off	off
5th	off	off	off	off	on	off	off	off	off	off
6th	off	off	off	off	off	on	off	off	off	off
7th	off	off	off	off	off	off	on	off	off	off
8th	off	off	off	off	off	off	off	on	off	off
9th	off	off	off	off	off	off	off	off	on	off
10th	off	off	off	off	off	off	off	off	off	on

Meter Pulses Detector Card (Not applicable to most U.S. Applications)

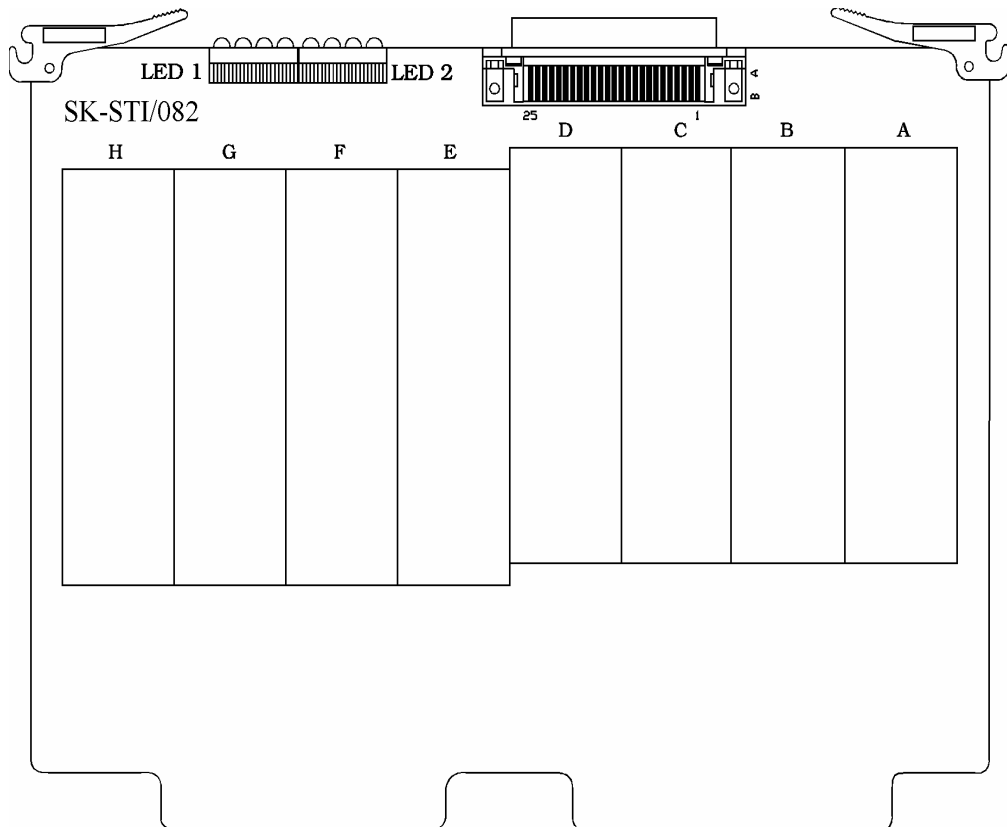
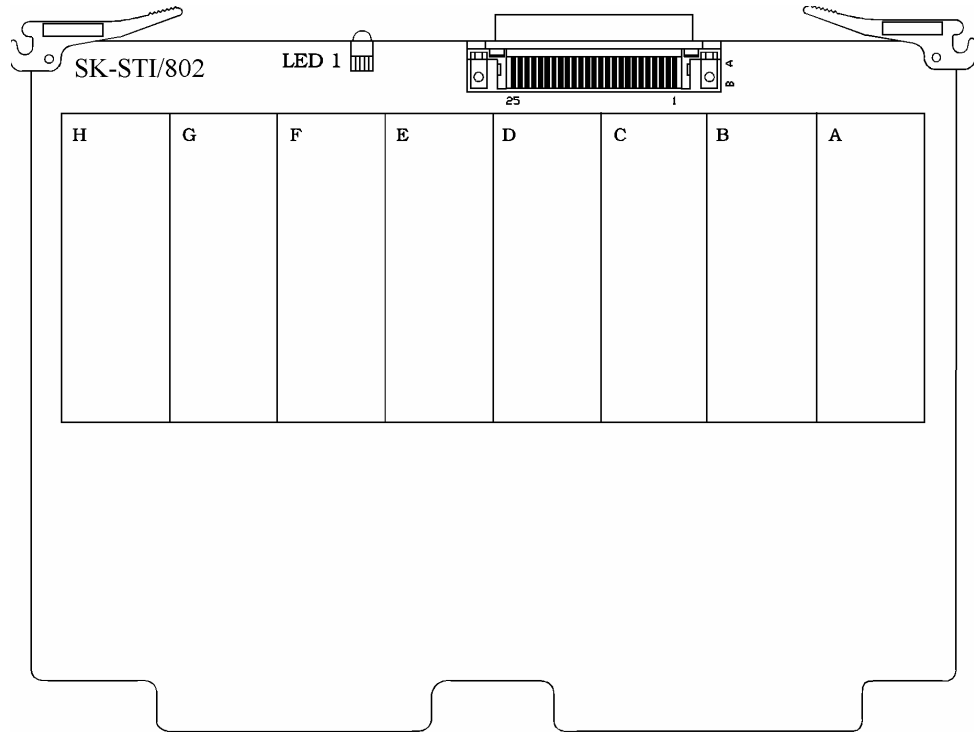
*** Refer to **Figure 10** SK-TRK/2

- 1) SK-PMxx is an optional daughter board installed for each trunk line.
- 2) There are two kinds of detectors:
 SK-PM12: Metering Detector Card for 12 KHz
 SK-PM16: Metering Detector Card for 16 KHz
- 3) Remove the **MDJC1(A,B,C,D)/MDCJ2(A,B,C,D)** jumpers of the SK-TRK/2 before installing Meter Pulse Detector boards. **(The jumpers must remain on the SK-TRK/2 if you don't install the Meter Pulse Detector board.)**
- 4) To install these Meter Pulse Detector boards, simply plug them onto the SK-TRK/2.



SK-STI Installation

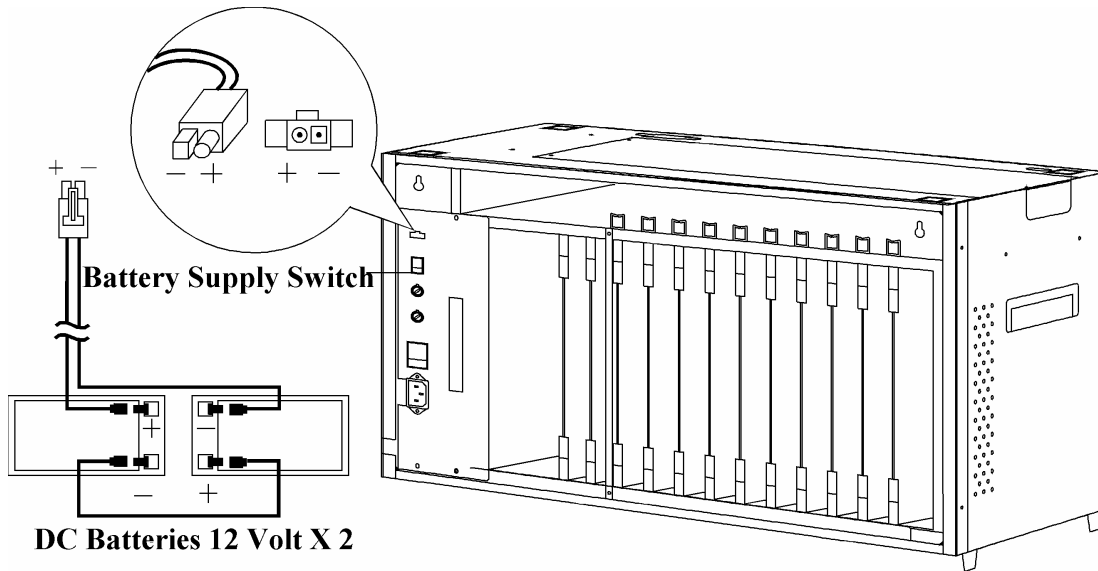
Insert the SK-STI card into the position according to **Figure 6**, Printed Circuit Board Locations.



Cabling:

External Backup Battery Connection:

The Service Unit can have two external backup batteries in series (12 volts each) for emergency power supply when a power failure takes place. Be sure to connect the battery line by referring to the following direction:



Installing or Replacing Batteries

Caution - To Reduce the Risk of Fire or Injury to persons, Read and Follow these Instructions.



1. Use only the following type and size batteries:
12 Volt 6.5 Amp/Hour "Gel-Cell" sealed batteries (2).
Dimensions, approximately 3 1/4" (H), 5 15/16" (W), 2 1/2" (D).
PowerSonic model PS660 or equivalent.
2. Do not dispose of the batteries in a fire. The cell may explode. Check with local codes for possible special disposal instructions.
3. Do not open or mutilate the batteries. Released electrolyte is corrosive and may cause damage to the eyes or skin. It may be toxic if swallowed.
4. Exercise care in handling batteries in order not to short the battery with conducting materials such as rings, bracelets, and keys. The battery or conductor may overheat and cause burns.

This product is defined as a secondary battery operated device. As such, the following instructions should also be read and followed:



1. Charge the batteries provided with or identified for use with this product only in accordance with the instructions and limitations specified in this manual.
2. Observe proper polarity orientation between the batteries and battery charger.
3. Do not mix old and new batteries in this product.
4. Do not mix batteries of different sizes or from different manufacturers in this product.

Before installing or replacing batteries, turn off the battery supply switch to the KSU and disconnect the polarized battery connector at the KSU. Due to the weight of the batteries, it is advised that the battery cabinet be removed from the wall before working on it.

Charging the Battery:

The rechargeable batteries are automatically charged when the Battery Supply Switch is on.

Change the batteries every two years.

You can determine the capacity of the batteries needed according to the following Table of Power Consumption:

Table 3 Power Consumption

Approximate Power Consumption		
Item	Description	Power consumption
1	Main System with CPU, IPC	46.2 watt.
2	Key Phone	1.9 watt.
3	DSS Console	0.8 watt.
4	SK-CPU/2	4.5 watt.
5	SK-IPC/2	7.7 watt.
6	SK-TRK/2	9.6 watt.
7	SK-STI/802	1.1 watt.
8	SK-STI/082 (Full Load)	7.0 watt.
9	SK-STI/082 (No load)	0.22 watt.

Example: System **824** : 8 CO trunks and 24 key telephones

8 trunks=2 SK-TRK/2

24 Extension ports (keyphones)=3 SK-STI/802.

46.2(System) + 9.6x2(2 TRK/2) + 1.1x3(3 STI/802) + 1.9x24 = 114.3 watts.

If using 24Vdc/6A battery (24x6x0.8=115 watt.)

System can operate for 1 hour (115 + 114.3 _ 1 hour)

Trunk and Station Cabling

Trunk Cabling

Use **6 Pin 2, Conductor (6P2C)** or **6 Pin 4 Conductor 6P4C)** line cords to connect SK-TRK/2 - **CO1-CO4**. Route the line cords through cabling hole and connect the line cords with the CO/PABX terminals (from CO1 to CO4) of the RJ11C connectors on SK-TRK/2 in the Service Unit. 2-conductor wiring is required. Refer to the following cabling:

Station Lines Cabling

Use a 16-pair or 25 pair Amphenol Cable to connect SK-STI/802 or SK-STI/082. Route the cables through cabling hole and connect the Amphenol cable with the terminal (CN1 on SK-STI/802 or SK-STI/082). Connect the other end of the cable to the station Terminal Block.

Key Telephone Wiring

- 1) Use a 25-pair Amphenol cable to connect Station Board (SK-STI/802) and Terminal Block.
- 2) Connect one end of the Station line (two-pair) to the Terminal Block (66M1-50). Punch down the free conductors from the cables on the connecting block according to standard telephone color code (**Table 4.**)
- 3) Connect the other end of the Station line (two-pair twisted cable) to Extension. Terminate the station cable in a 4-wire or 6 wire modular jack. The Modular jack assemblies should be screw-type. Connect the Audio Tip to the GREEN terminal and the Audio Ring lead to the RED terminal. Connect the Data Tip lead to the BLACK terminal and the Data Ring lead to the YELLOW terminal.

Table 6-2 Block connection of SK-STI/802 - STI/082

Block Pin	Connector	Wire Color	ID
1	26	Wh-BI	Audio Tip Circuit 1
2	1	BI-Wh	Audio Ring Circuit 1
3	27	Wh-Or	Data Tip Circuit 1
4	2	Or-Wh	Data Ring Circuit 1
5	28	Wh-Gr	Audio Tip Circuit 2
6	3	Gr-Wh	Audio Ring Circuit 2
7	29	Wh-Br	Data Tip Circuit 2
8	4	Br-Wh	Data Ring Circuit 2
9	30	Wh-SI	Audio Tip Circuit 3
10	5	SI-Wh	Audio Ring Circuit 3
11	31	R-BI	Data Tip Circuit 3
12	6	BI-R	Data Ring Circuit 3
13	32	R-Or	Audio Tip Circuit 4
14	7	Or-R	Audio Ring Circuit 4
15	33	R-Gr	Data Tip Circuit 4
16	8	Gr-R	Data Ring Circuit 4
17	34	R-Br	Audio Tip Circuit 5
18	9	Br-R	Audio Ring Circuit 5
19	35	R-SI	Data Tip Circuit 5
20	10	SI-R	Data Ring Circuit 5
21	36	Bk-BI	Audio Tip Circuit 6
22	11	BI-Bk	Audio Ring Circuit 6
23	37	Bk-Or	Data Tip Circuit 6
24	12	Or-Bk	Data Ring Circuit 6
25	38	Bk-Gr	Audio Tip Circuit 7
26	13	Bk-Br	Audio Ring Circuit 7
27	39	Br-Bk	Data Tip Circuit 7
28	14	Bk-SI	Data Ring Circuit 7
29	40	SI-Bk	Audio Tip Circuit 8
30	15	YI-BI	Audio Ring Circuit 8
31	41	YI-BI	Data Tip Circuit 8

32	16	Bl-Y	Data Ring Circuit 8
----	----	------	---------------------

NOTE Port Number Definition: CSN

C= Cabinet No. (1-4)

S= Slot No. (0-9) counted after SK-IPC/2

N= Port No. (1-8) on B3-STU/B3-SLU

Example:

- In **Cabinet (1)**
- an SK-STI is installed in slot 1 after SK-IPC/2, (First slot is slot 0) and
- a key telephone or a single line telephone is installed in the **Fourth (4)** port on an SK-STI. →
The Default Port Number of the station is 114.

Single Line Telephone Wiring

- 1) Use a cable with a 50-pin connector to connect Single Line phone Board (SK-STI/082, CN1) and terminal block (for example, 66M1-50).
- 2) Connect one end of the telephone line (one-pair) to the Terminal Block (66M1-50). Punch down the free conductors from the cables on the connecting block according to standard telephone color code (**Table 4.**)
- 3) Connect the other end of the Telephone line (one-pair twisted cable) to a Single Line Telephone. Terminate the station cable on a modular jack.
- 4) Modular jack assemblies should be screw-type terminals. Connect the Audio Tip lead to the GRN terminal. Connect the Audio Ring lead to the RED terminal.

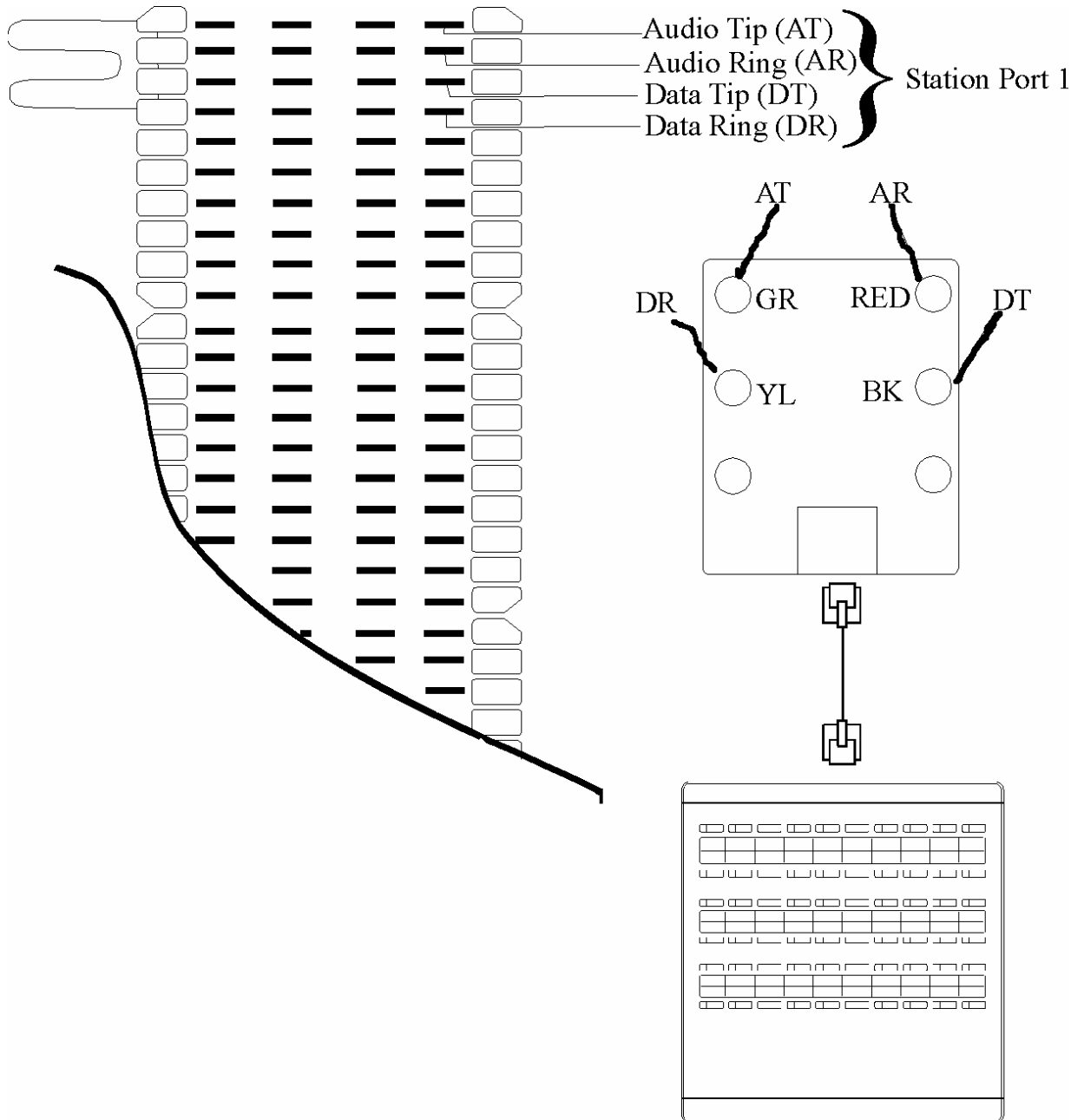
DSS Console Wiring

The DSS Console wiring is the same as key telephone.

See the above, **Key Telephone Wiring.**

Refer to the system programming mode:

- | | |
|-----------|--|
| 22-gp-IP | Flexible DSS Key Group Assignment. |
| 29-st-07 | Port Number for DSS Console. |
| 29-CSN-01 | Assign Station Number for DSS Console. |
| 29-CSN-03 | DSS Key Group. |



Off Hook Call Announce (OHCA)

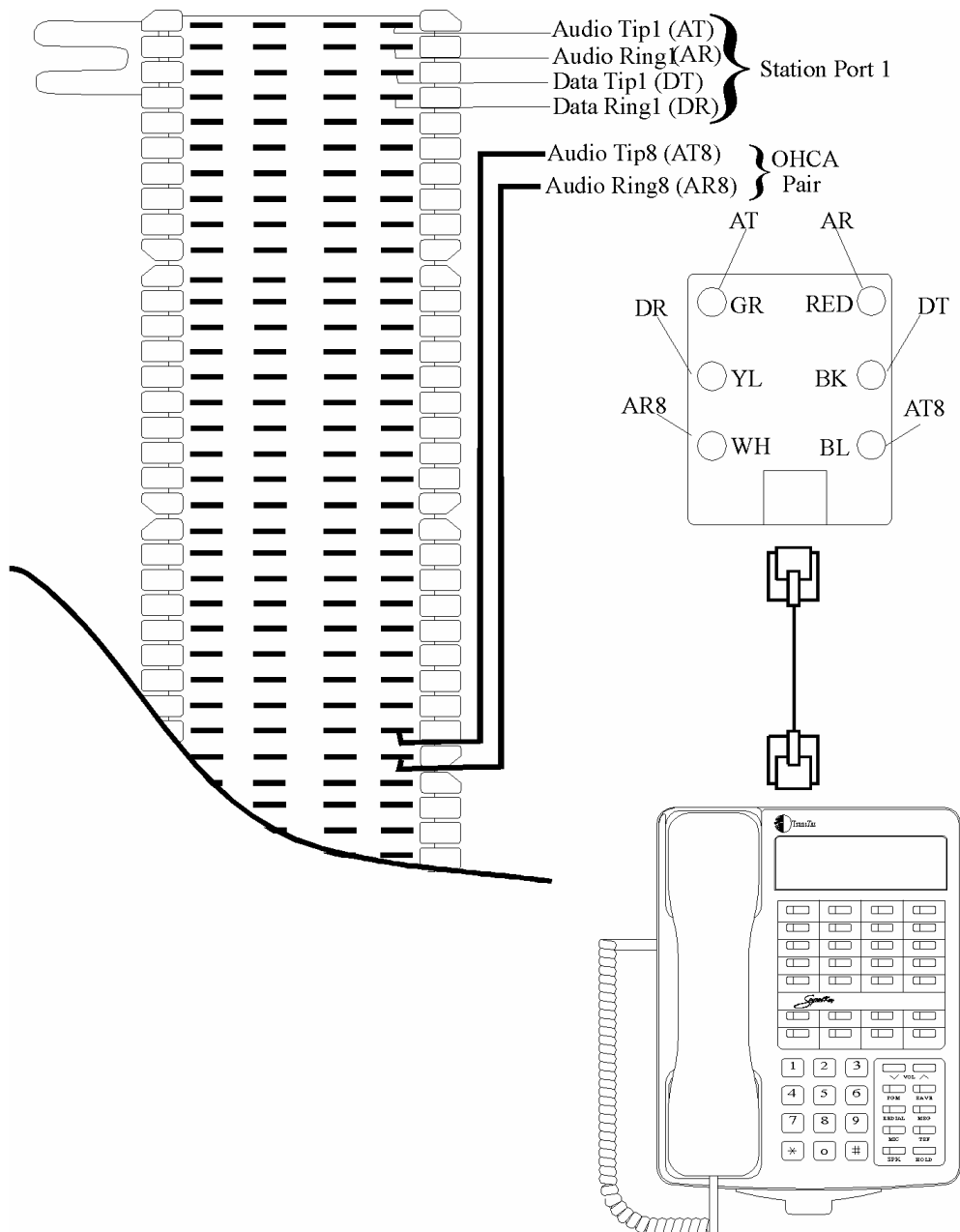
*** Please refer to System Programming mode: 29-csn-02

- 1) Connect White and Blue of this selected extension port to the 8th port on the same SK-STI/802.

EXAMPLE: (See the following graphic)

To Install OHCA for **EXT 11:**

Connect the extra two terminals of **EXT 11** to the 8th port on the same SK-STI/802 as the following diagram.



- 2) SK-EKT/M cannot receive OHCA.
- 3) Only one extension can use the OHCA function at a time for each SK-STI/802 card.

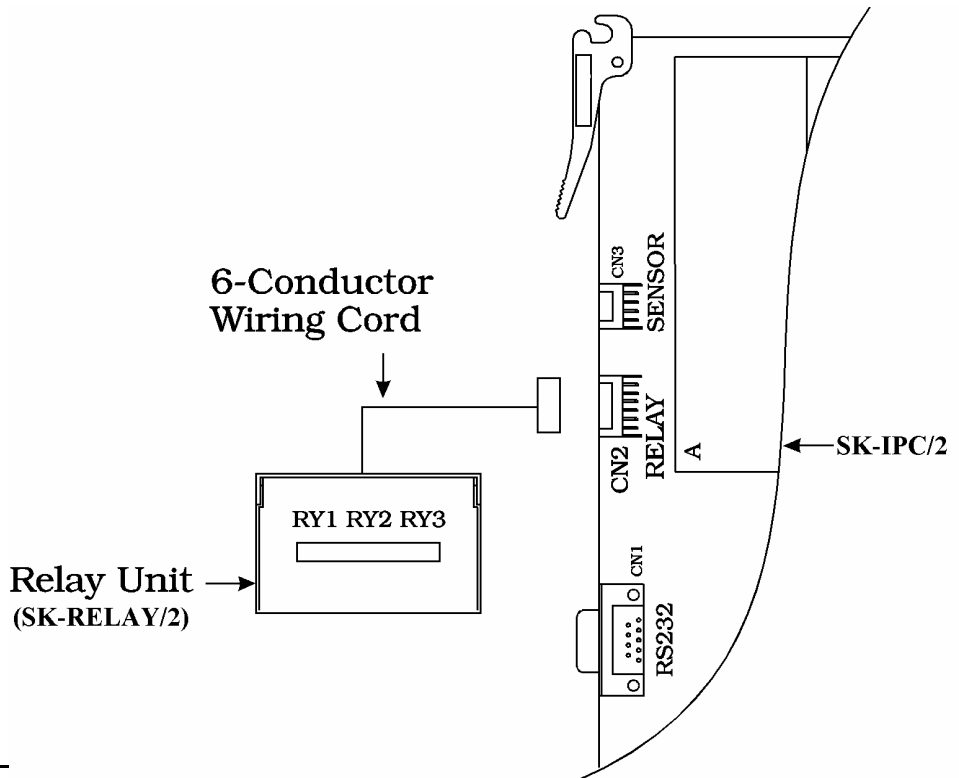
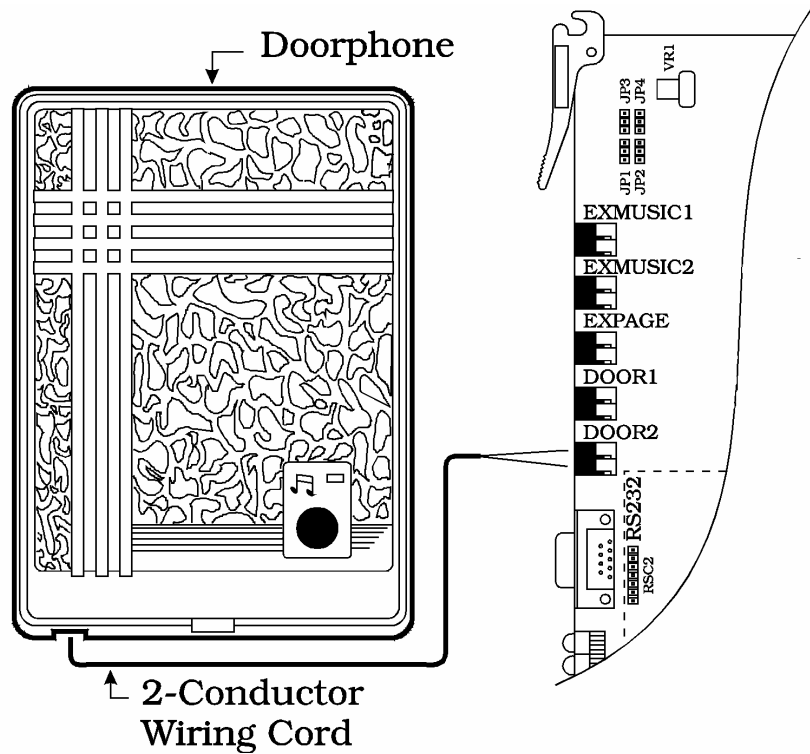
Optional Cabling

Doorphone Connection:

Two Doorphones may be connected to the SK-200 system. 2-conductor wiring is required. Connect the Doorphone to the "DOOR 1" or "DOOR 2" terminal on SK-CPU/2.

Door Switch Connection: (Relay Connection)

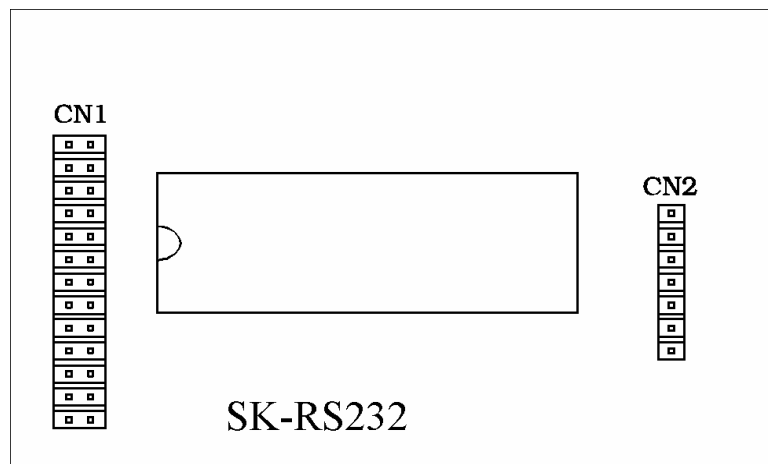
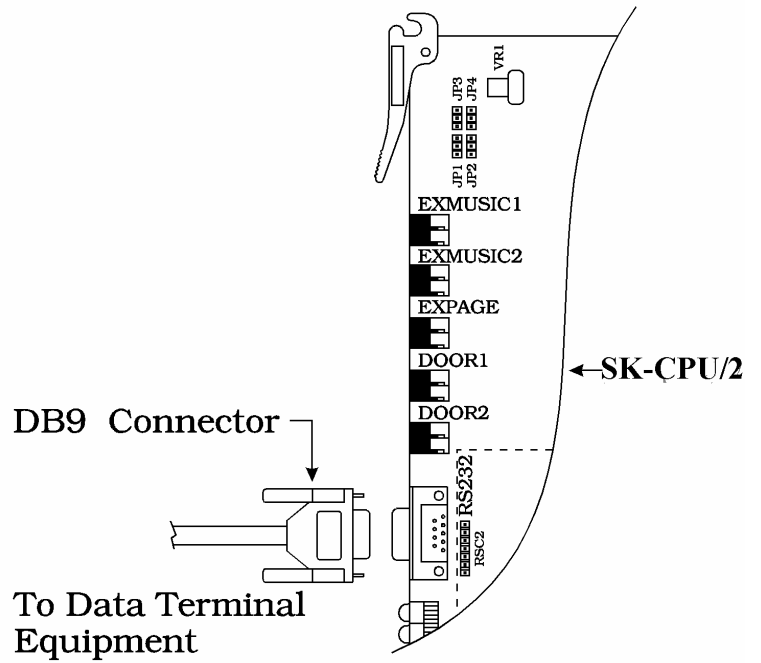
Two Door Switches may be used on the SK-200 system. Connect the SK-RELAY/2 to the SK-IPC/2, CN2. Connect the door switch to the RELAY terminal on SK-RELAY. **2-conductor wiring is required.** Each relay unit contains 3 sets of dry relay contacts (220V/10A).



Station Message Detail Recording (SMDR)

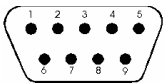
- 1) The SK-RS232 is used for connecting Data Terminal Equipment (DTE) such as PC (Personal Computer) for Data Dump, Version Update, System Programming, Accounting System (to analyze SMDR message,) or Printer (to print out SMDR data.)
- 2) Both SK-CPU/2 and SK-IPC/2 have RS232 connectors. Connect DTE to either of the cards which has a SK-RS232 Card.
- 3) Use DB9 connector of the RS232 cable to connect the RS232 port on SK-CPU/2 or SK-IPC/2 to the Data Terminal Equipment (Serial Printer or Personal Computer).
- 4) Electrical specification of RS-232:

Baud Rate:	1200 bps
Data Format:	8 bits
Start bit:	1 bit
Parity:	None



5) **Table 5 DB9 Pin Connections to DTE:**

DB9 Pin Connections to DTE			
Pin	Description	Pin	Description
1	CD (Carrier Detect)	5	GND (Ground)*
2	RxD (Receive Data)*	6	DSR (Data Set Ready)*
3	TxD (Transmit Data)*	7	RTS (Ready To Send)*
4	DTR (Data Terminal Ready)	8	CTS (Clear To Send)*
		9	NC (No Connection)



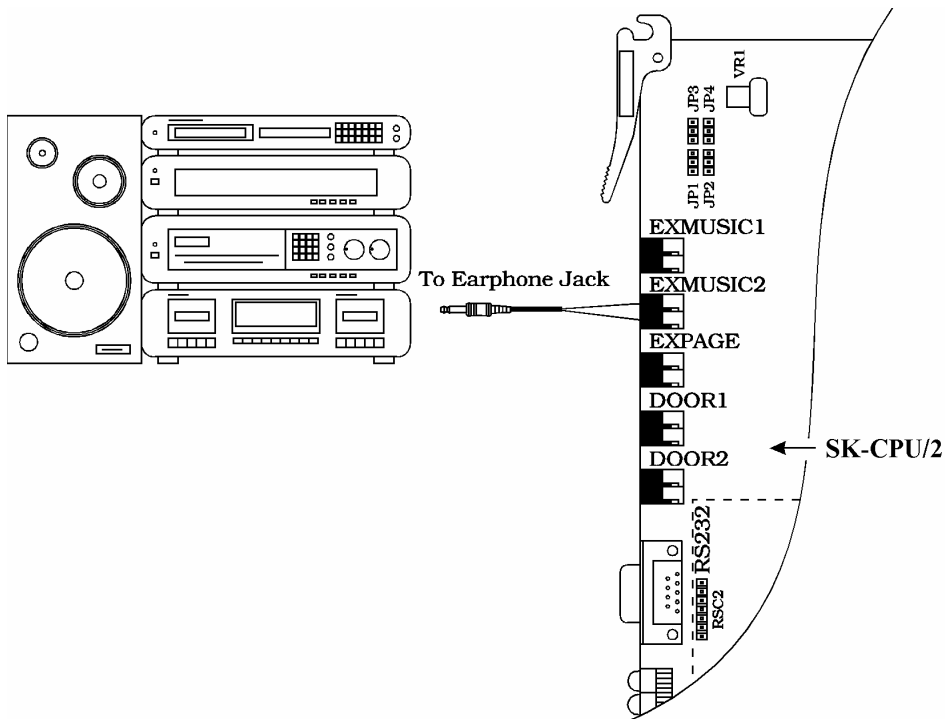
Background Music and Music on Hold Connection:

Connect the external music sources to the "EX MUSIC1" or "EX MUSIC2" terminal on SK-CPU/2. 2-conductor wiring is required.

The terminal "EX MUSIC1" is for Background Music and the terminal "EX MUSIC2" is for Music on Hold.

You can select the external music or internal music by the jumpers setting.

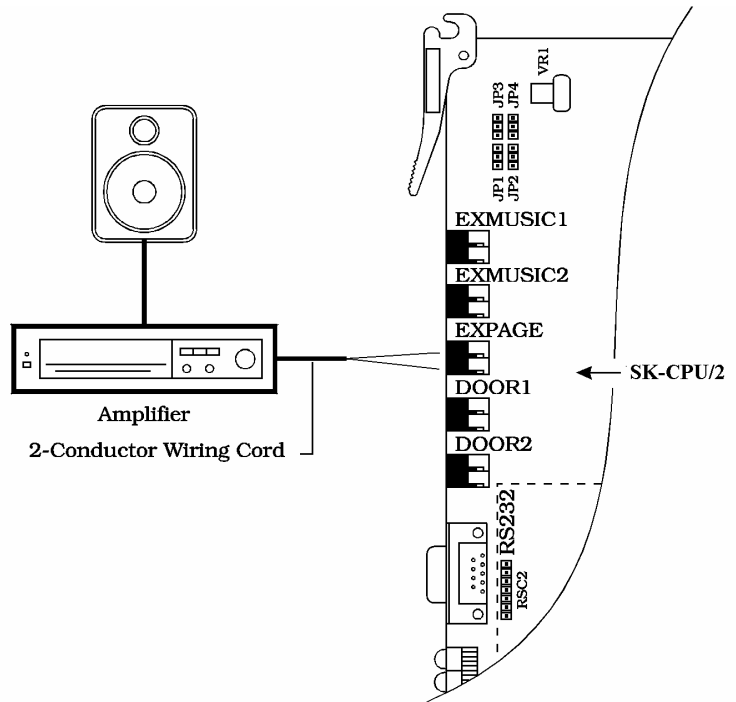
(Please refer to SK-CPU/2 Installation.)



Ext

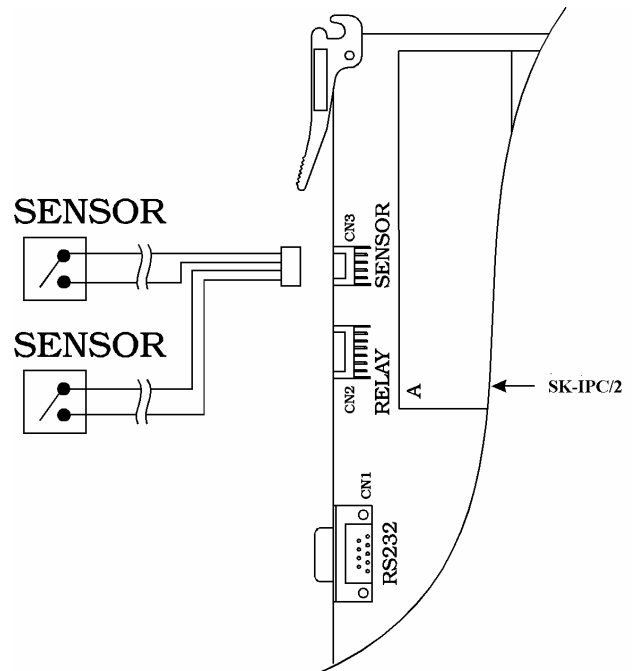
ernal Paging Equipment Connection:

Connect the amplifier with the "EX PAGE" terminal on SK-CPU/2
 The output impedance is 600 ohms;
 the signal level is 250 millivolts (mV).
 2-conductor wiring is required.
 Refer to the figure 19, External Paging
 Equipment Connection:



External Input Sensor:

The Sensor connector on SK-IPC/2 may be used for the External Sensor input.
 The sensor type may be normally open or normally closed.
 2-conductor wiring is required.
 Refer to the Figure 20, External Sensor Connection.
 Refer to System Programming mode 09 -- Sensor Assignment.



Power On and Operational Test

WARNING:

DISCONNECT THE POWER SUPPLY FROM THE AC POWER OUTLET BEFORE WIRING OR CHANGING ANY WIRING.

Before turning on the power:

Verify that input voltage and input voltage selection jumper on SK-PWR/2 are correct before you power on the system.

Recheck the cabling for wrong connections and fragments that cause short-circuits.

Plug the power cord into a power outlet.

After turning on the power:

On SK-CPU/2 and SK-IPC/2:

Both the red LED1 flash. If any short-circuit occurs, the red LED lights steadily. In order to prevent any system data loss caused by power failure, remove the **black plastic insulator** from over the **Lithium Battery**.

Operational Tests

Check each telephone and CO line to verify the outgoing lines are connected properly.

Check that intercom calls can be made from extension to extension.

NOTICE:

ONCE THE SYSTEM IS WORKING PROPERLY, PROCEED TO SYSTEM PROGRAMMING. (REFER TO THE SYSTEM PROGRAMMING MANUAL.)

Programming Initialization

BEFORE ATTEMPTING ANY PROGRAMMING ON A NEW SYSTEM, AFTER ALL CARDS ARE INSTALLED AS PER THE FINAL CONFIGURATION PERFORM A SYSTEM RESET IN FORM 25 AND VERIFY THAT THE MEMORY BACKUP BATTERY IS ENABLED. THIS ALSO APPLIES IF A LATER VERSION OF SOFTWARE HAS BEEN INSTALLED IN THE SYSTEM. DO NOT SKIP THIS PROCEDURE, AS FUTURE PROBLEMS CAN OCCUR IF NOT PERFORMED.

Entering Program Mode

Password. The system is not password protected when first installed. After setting a Password in **Program 13**, the system becomes Password protected so that only the person who knows the "password" has access to system database information.

To Enter System Programming Mode From Any Station:

Password Protected

1. Press [PRG], [7]
2. Key in " PASSWORD "
3. Press [SAVE]/[DSS20]

Not Password Protected

1. Press [PRG], [7]
2. Press [SAVE]/[DSS20]

To Enter Programming Mode From The First Key Phone Port In the System.

Password Protected

1. Press [SPK], [7], [0], [7]
2. Enter " PASSWORD "
3. Press [SAVE]/[DSS20]

Unprotected

1. Press [SPK], [7], [0], [7]
2. Press [SAVE]/[DSS20]

Select the PROGRAM MODE:

Enter Form number (01-48).

Enter Sub-Form number.

Enter Item number.

Press [SAVE]/[DSS20] to confirm the selection.

Set data. Press [SAVE]/[DSS20] to confirm the entered data.

Press [SPK] to exit.

Note 1: When in a Program Mode, press [SAVE]/[DSS20] and System will save all valid information in the current form.

Note 2: Busy Tone means that some or all of the data is invalid or out of range. Press [PRG]/[DSS25] and re-enter the data.

Programming Overlay and Default Soft Key Plans

Once programming mode is accessed the function keys will revert to the default settings to allow programming functions to be set. If there is no [PRG] or [SAVE] in the plan used then [SPK] 7, 0, 7 [SAVE]/[DSS 20] from Port 11 will enter programming no matter what the soft key plan has set for [DSS 20].

Programming Overlay

SUB Form	SUB Form	CURSOR	CURSOR	
DOWN	UP	LEFT	RIGHT	MENU
				SAVE
				MW/PT
				SPD
			DND/CN	AT/MIC


























The default Soft Key plan for all SK Key Stations in the SK-200 Lodging is Group 3.

Default Soft Key plan for Group 3.

20		21		23		24		25	
	PGM		SAVE		DND/CN		SPD		FWD
16		17		18		19		20	
	STN 15		STN 16		STN 17		STN 18		MSG
11		12		13		14		15	
	STN 11		STN 12		STN 13		STN 14		MIC
6		7		8		9		10	
	TK:05		TK:06		TK:07		TK:08		VOL >
1		2		3		4		5	
	TK:01		TK:02		TK:03		TK:04		VOL <

Group 1 and 3 have hidden features which are accessed by pressing **[PGM]** then a DSS key to Access them.

Hidden Features for DSS keys

				
				
				
				
				
CHECK IN	CHECK OUT	CHARGE INQUIRY	METERING RATE	

On Line Programming

With this feature, Users can perform programming changes while speaking with an outside party. This is useful for consulting engineering personnel when any problems occur or programming changes are required.

1. During conversation with an outside party.
2. Press **[SPD]→[PRG]→[7]**.
3. Key in **password** (If protected)
4. Press **[SAVE]/[DSS20]** to enter.

Remote Programming using a modem and the system manager.

By using this feature, a user can call the dealers service personnel and allow them to access the programming and make changes from the dealers office via Modem. The users system must have SMDR (SK-RS232) and RPU (SK-RPI) cards fitted. The baud rate on your modem must be set to 2400.

The Procedures are as per the following Table.

	Customer's Location	Service Center
1	Call the Service Center for help.	
2		Answer the call from the Customer.
3		Guide Customer to allow the dealer into remote programming.
4	Press [SPD],[prog],[*] , [Hang up the handset].	
5	The LCD will display Remote Programming Message.	
6	Wait recall from the Service Center.	
7		Switch the conversation to MODEM.
8		Use System Manager to upload/download /modify and download the Customer's data.
9		Use System Manager to recall the Customer.
10		Switch the conversation back to telephone.
11	Answer the recall.	

System Manager

It is recommended that dealers use the optional System Manager software to save a copy of System Programming on disk. This can then be used to reload the system programming from a PC rather than having to manually reprogram after software upgrades or system faults.

Remote Programming System to System

By using this feature, a user can call the dealer's service personnel and allow them to access the programming and make changes from the dealers office via a display phone .Both the dealers system and the users system must be equipped with SMDR (SK-RS232)and RPU (SK-RPI) cards.

The Procedures are as per the following Table.

	Customer's Location	Service Centre
1	Call the Service Center for help.	
2		Answer the call from the Customer.
3		Guide Customer to allow the dealer into remote programming.
4	Press [SPD],[prog],[*] , Hang up the handset.	Press [SPD],[PROG],[#] Hang up the handset.
5	The LCD will display Remote Programming Message.	The LCD will display Remote PGM Sys <-----> Sys
6	LCD will display Remote PGM ready!	LCD will display Remote PGM ready!
8		Depress [SPD],[PROG], [7] + Password + [SAVE] to enter program mode.
9		Program the system
10		Press [SPK] to quit programming.
11	Answer the ringing phone	Lift handset and talk

Note: Operate the remote programming slowly because data transfer is not reliable at high speed. When the

LCD display changes then you can go on to the next step of the programming.

Function Keys -- for system programming

Function	Keys	Where to use
Digits	[0] to [9]	
Previous Subform	[DSS 21]	
Next Sub-form	[DSS 22]	Every program
Cursor Left	[DSS 23]	
Cursor Right	[DSS 24]	
Confirm Setting	[SAVE]/[DSS20]	
* (DTMF Signal)	[*]	
# (DTMF Signal)	[#]	
Pulse to DTMF	[MW/PT]/[DSS15]	Speed dial
Pause	[HOLD]	
Flash	[FL]	
Assign Trunk line	[AT/MIC]/[DSS5]	
Don't Care (d)	[DND]/[DSS4]	Speed dial, Allowed Area Code, Allowed Office Code, Voice Mail Digits.
Clear All Digits	[REDIAL]	Common Permitted Code, Ring Assignment, Console Assignment, Door Ring Assignment, Dial 9 & 87 Group Assignment
Clear Single Digit	[FL]	Common Restricted Code
Exit Current Form	[PRG/VU]/ [DSS25]	
Exit Programming	[SPK]	

Any time that **[PGM]/[DSS25]** is pressed, any new programming that has not been saved by pressing the **[SAVE]/[DSS20]** button is abandoned and the system will return to the MAIN MESSAGE.

LCD display - For System Programming

Shows the current programming status to help prevent incorrect data entry.
The LCD display has 2 lines each of 16 digits:



- MM : Form Number (2 digits)
- SS : Sub-Form Number (2, 3, or 4 digits)
- IP : Item Pointer for entering data.
- NNNNNNN : Data Entry Area.

Station Numbering Plan:

System Default

On the SK-200 the station numbering will automatically change to 3 digits when station numbers exceed the allowed 2 digit numbering scheme.

Change Station Numbering Plan

If the original numbering plan is two-digit:

Change to three digits: The system will add 100 to Station numbers.
(Example: 23 will become 123).

Change to four digits: The system will add 1000 to Station numbers.
(Example: 23 will become 1023).

If the original numbering plan is three-digit:

Change to four digits: Add 1000 to the Station numbers.
(Example: 123 will become 1123).

Change to two digits : Delete the first digit
(Example: 123 will become 23).

If the original numbering plan is four-digit:

Change to three digits: Delete the first digit
(Example: 1234 will become 234).

Change to two digits : Delete the first two digits
(Example: 1234 will become 34).

Available station numbers

two-digit:	10 to 69
three-digit:	100 to 699
four-digit:	1000 to 6999

Programming Applicable to Station Numbering

Program	41-st-07	Show the port number (csn)
	05-03-06	Assign Station digit length
	43-(csn)-01	Enter a Station number for the port

Programming Description

Program 01-tk-IP: Ringing Assignment - Day Service

```
01-tk-IP FLX DAY
111 112 113 114
```

tk = (01-40)
IP = Item (01-16) Assigned station number.

General:

This program assigns each incoming line to ring the programmed stations. The ringing methods can be COMMON AUDIBLE (All stations will ring simultaneously), LINEAR (ring the first available station), CIRCULAR (Ring the next station following the last station who just answered an incoming call) or HUNT (Ring the first assigned station for a set period of time (program form 05-08-01) then if no answer ring the next ring assigned station then the next etc.) See Program Form: 35-tk-07 to assign.

Description:

1. This program sets ringing while the system is in Day Service.
2. The station number can be 2,3,4 digits.
3. A total of 16 stations can be assigned to ring for each trunk.
4. If the location is to be assigned to no station, the location value is set to " 0 ".
5. To clear all entries press **[REDIAL]**.

Program 02-tk-IP :Ringing Assignment - - Night Service

```
02-tk-IP FLX NIG
111 112 113 114
```

tk = (01-40)
IP = Item Pointer (01-16) ← Assigned station number.

General:

This program assigns each incoming line to ring the programmed stations. The ringing methods can be COMMON AUDIBLE (All stations will ring simultaneously), LINEAR (ring the first available station), CIRCULAR (Ring the next station following the last station who just answered an incoming call) or HUNT (Ring the first assigned station for a set period of time (program form 05-08-01) then if no answer ring the next ring assigned station then the next etc.) See Program Form: 35-tk-08 to assign.

Description:

1. This program sets Night Service ringing.
2. The station number can be 2,3,4 digits.
3. A total of 16 stations can be assigned to ring for each trunk.
4. If the location is to be assigned to no station, the location value is set to 0.
5. To clear all entries press **[REDIAL]**.

Program 03-nn-IP : Door Ring Assignment

03-nn-IP Door
111 112 113 114

nn = Door phone (01-02)
IP = 01-08 Assigned station number.

General:

This program assigns the door phone to ring the programmed stations.

Description:

1. There are two door phone ports available in the SK-200.
2. Eight stations can be assigned to ring for each door phone.
If the first position is entered as 99 (two digit numbering), 999 (three digit numbering) or 9999 (four digit numbering) all phones will ring.
3. To clear all entries press **[REDIAL]**.
4. Door phone ringing time is set in Form 05-11-07.
5. Door Relay Unlock Time is set in Form 05-12-04.
6. Door phone Ringing frequency is set in Form 05-03-08.

Program 04-gp-IP : Console Assignment

04-gp-IP Console
111 112 113 114

gp = Station group (01-08)
IP = 01-04 Assigned station number(2 to 4 digits).

General:

This program permits the selection of the consoles (Operators) in each station group.

Description :

1. There are 8 console groups available.
2. A total of four stations can be set to be the console in each group.
3. The first assigned station is the master console.
4. To clear all entries press **[REDIAL]**. Do this in all unused groups.
5. It is recommended that only one console is used.

Program 05-01-IP : System Timing Parameters - 01

05-01-IP SYS PAR 1 1 1 1 4 2 2 1

IP = 01-08
System Default.

Item Pointer	Display Data	Programming Data Description	Timing Table	Default
01	0-9	Hold Recall Time	A	1=60 Secs.
02	0-9	Exclusive Hold Recall Time	A	1=60 Secs.
03	0-9	Hold recall Timeout	A	1=60 Secs.
04	0-9	DISA Access Delay Time	C	1=2 Secs
05	0-9	Busy Remind Cycle Time	C	4=8 Secs.
06	0-9	Pause Time	D	2=800 Ms.
07	0-9	DTMF Generation Time	E	2=83 Ms.
08	0-9	Call Forward No Answer TRF. Time		1=20 Secs

General:

This programming section allows the programmer to assign different system parameters.

Description:

Item 01 - Hold Recall Time:

This parameter sets the time duration from when Hold is initiated to when the held call starts to ring (recall) the station.

After a pre-determined recall time (see 05-01-03: Hold Recall Timeout), if the station still does not answer, the held call will automatically transfer to the Console.

Item 02 - Exclusive Hold Recall Time:

This parameter sets the time duration from when Exclusive hold is initiated to when the held call starts to recall the station.

After a pre-determined recall time (see 05-01-03: Hold Recall Timeout), if the station still does not answer, the held call will recall to the Console in addition to the holding station.

Item 03 - Hold Recall Timeout:

This parameter sets the time between a call recalling to a holding or transferring station and then recalling to the console if unanswered.

See timing table A for parameters of these 3 features.

Item 04 - DISA Access Delay Time:

This parameter sets the time duration that a DISA trunk will ring prior to connection with return dial tone or VSU message. (Stations can answer during this time.)

0	=	Automatic connection, no ring to the stations
1-8	=	Automatic connection after 2-254 seconds ringing.

See timing table C for parameters for this feature.

Item 05 - Busy Remind Cycle Time (Off-Hook Ringing):

This parameter selects the length of time an incoming trunk call rings the system before a busy ring assigned station is reminded of the call. A muted, one-second ring will be given to the station through the speaker to indicate the call. The tone will be repeated every busy remind time interval. This parameter also sets the timing for the SLT Camp-On feature (see Form 05-08-03 to extend timing for SLT Camp on tone) and the camp on tone for key stations.

See timing table C for parameters of this feature.

Item 06 - Pause Time:

This parameter sets the system pause time duration for speed dial entry, trunk access time and voice mail call forwarding tone delay.

See timing table D for parameters of this feature.

Item 07 - DTMF Generation Time:

This parameter permits the selection of DTMF Generation output time. The generation time may need to be lengthened to access some Voice Mail or answering machines.

See timing table E for parameters of this feature.

Item 08 - Call Forward No Answer Transfer Time:

This parameter sets the duration between calling a station which has set call forward no answer, and the transfer of the call to the station to which it has been forwarded.

0 = 10 seconds	1 = 20 seconds	2 = 30 seconds	3 = 40 seconds	4 = 50 seconds
5 = 60 seconds	6 = 70 seconds	7 = 80 seconds	8 = 90 seconds	9 = 100 sec.

TIMING TABLE

Table	0	1	2	3	4	5	6	7	8	9	unit
A	30	60	90	120	150	180	210	240	253	∞	sec.
C	0	2	4	6	8	15	30	60	120	254	sec.
D	400	600	800	1000	1200	1400	1600	1800	2000	2200	ms.
E	50	66	83	100	115	132	149	164	180	195	ms.

Program 05-02-IP : System Timing Parameters - 02

05-02-IP SYS PAR 5 5 1 5 4 1 2 4

IP = 01-08
System Default.

Item Pointer	Display Data	Programming Data Description	Timing Table	Default
01	0-9	SLT Dial Tone Timeout	C	5=15 Secs
02	0-9	SLT Inter-Digit Timeout	C	5=15 Secs.
03	0-9	Auto Redial Ringing Time		1=10 Secs
04	0-9	SLT Release Signal	B	5=800 Ms.
05	0-9	Flash Time - Key Phone	I	4=440 Ms.
06	0-9	SLT Hold Signal	G	1=100 Ms.
07	0-9	Ring On Time	J	2=240 Ms.
08	0-9	Ring Off Time	F	4=4 Secs

Description:

Item 01 - SLT Dial Tone Timeout:

This parameter is for Single Line Telephones. If a key is not pressed before the assigned time period expires when Dial Tone is given, a Busy Tone will be heard.

Item 02 - SLT Inter-Digit Timeout:

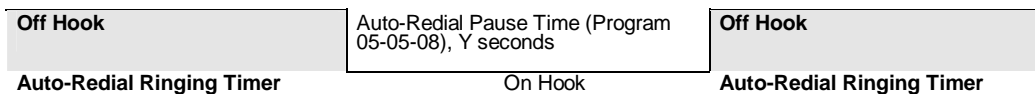
This parameter is for Single Line Telephones. If the interval between digits dialed exceeds the assigned time period, a Busy Tone will be given.

See timing table C for parameters of these features.

Item 03 - Auto Redial Ringing Time:

This parameter is the time duration for which the system will redial the telephone number automatically and then hang up during Auto Redial.

1 = 10 seconds	2 = 20 seconds	3 = 30 seconds	4 = 40 seconds	5 = 50 seconds
6 = 60 seconds	7 = 70 seconds	8 = 80 seconds	9 = 90 seconds	



Item 04 - SLT Release Signal:

This parameter is the time duration of depressing the hook switch of an SLT that the system will see as a hang up, the system will take it as a hold signal if less than this time but longer than the SLT hook flash time.

See timing table B for parameters of this feature.

Item 05 - CO Line Flash Time - Key Phone & SLT:

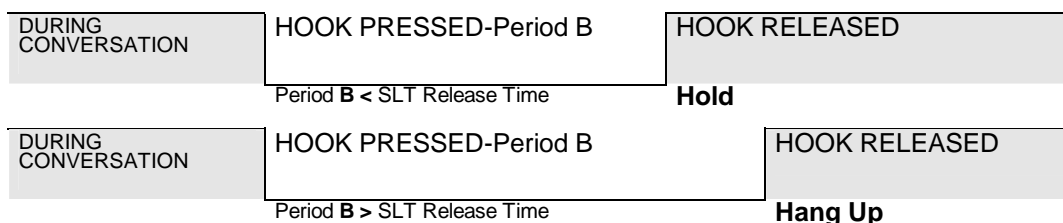
This parameter permits the selection of Flash time for Key stations when pressing the [TR/FL] key or a single line phone that presses flash and then dials 800 while connected to an outside line. After dialing 800 the flash signal will be sent to the CO line and the SLT phone will reconnect to the CO line.

See timing table I for parameters of this feature.

Item 06 - SLT Hold (Flash) Signal:

This parameter permits the selection of the Flash time from a single line telephone that the system will see as a Hold signal if the time is greater than the hold signal but less than the SLT release time.

See timing table G for parameters of this feature.



Item 07 - Ring On Time:

This parameter allows the system to identify Ring On Time Interval from the Central Office. This is how long a ring signal is required to indicate an incoming CO call.

See timing table J for parameters of this feature.

Item 08 - Ring Off Time:

This parameter allows the system to identify Ring Off Time Interval from the Central Office. A period longer than this setting will indicate to the SK-200 that the ringing call has been abandoned.

See timing table F for parameters of this feature.

TIMING TABLE

Table	0	1	2	3	4	5	6	7	8	9	unit
B	200	200	300	400	600	800	1000	1200	1400	1600	ms.
C	0	2	4	6	8	15	30	60	120	254	sec.
F	2	2	2	3	4	5	6	7	8	9	sec.
G	80	100	200	300	400	500	600	700	800	900	ms.
I	80	120	200	280	440	640	840	1040	1240	1440	ms.
J	120	160	240	360	440	560	640	760	840	960	ms.

Program 05-03-IP : System Timing Parameters - 03

```
05-03-IP SYS PAR
0 0 0 9 0 2 0 7
```

IP = 01-08
System Default.

Item Pointer	Display Data	Programming Data Description	Default
01	0-1	Make / Break Ratio	0=33/66
02	0-1	Automatic Trunk Search	0=Yes
03	0-1	Intercom Call Signaling Method	0=Voice
04	0-9,d	PABX (Centrex) Outgoing Code	9=9
05	0-9	Toll Access Code	0=0
06	2-4	Station Numbering Plan	2=2
07	0-7	Intercom Dial Tone Pattern	0=Steady
08	0-9,d	Door Phone Ringing Frequency	7=Freq 7

Description:

Item 01 - Make/Break Ratio:

This parameter permits the selection of a Make/Break Ratio for Dial Pulse signaling. The default setting of 33/66 is correct for North America.

0 = 33/66	1 = 40/60
-----------	-----------

Item 02 - Automatic Trunk Search:

This parameter allows the system to search for an available trunk according to the assigned dial 9 trunk group when automatic dialing features are used; i.e., Speed Dial, Save Redial, Redial, etc.

0 = Allowed	1 = Not Allowed
-------------	-----------------

Item 03 - Intercom Call Signaling Method:

This parameter selects the Intercom calling method. The user can still override this selection by dialing 3 after initiating an intercom call. Individual stations can be set to automatic microphone switch-on in Form 46-st-03 and thus override the system wide ring method.

0 = Voice Signaling	1 = Ring Signaling
---------------------	--------------------

Item 04 - PABX (Centrex) Outgoing Code: (Refer to Program 35-TK-01):

This parameter assigns the PABX outgoing call access code for Redial and Save Redial when the system is installed behind a PABX.

It is used when Trunk Lines are set to be PABX lines in Form 35-TK-01.

This assignment also enables the system to identify whether the user's dialing is a PABX's Intercom call or an Outgoing call for toll restrictions.

Item 05 - Toll Access Code:

This parameter assigns the long distance call access digit. This parameter affects the operation of SMDR operation in regard to recording or not recording local calls. See Form 14-01-03. With 8 digit numbering plans in use this parameter is not always useable.

Item 06 - Station Numbering Plan:

This parameter assigns the number of digits used for the station numbering plan. 2, 3, or 4 digits may be used. The SK-200 system will initially set the digits to 2 unless the number of stations installs exceeds the allowed numbering plan in which case the digit length will be set to 3.

Item 07 - Intercom Dial Tone Pattern:

This parameter assigns the pattern of intercom dial tone. If the parameter is set to 1 or 2 then analogue phones will receive the special DND tone if call forward or DND has been set for that extension. Item 2 is particularly designed for use when there is a Voice Mail system connected to the system as some Voice mail units have problems with the broken dial tone.

SK-200 Lodging

Value / Function	Dial Tone Type	Special Dial Tone for "Do Not Disturb" or "Call Forward"	Special Dial Tone for Message Waiting
0	Steady Tone	Yes	No
1	Interrupted Tone	Yes	No
2	Steady Tone	No	No
3	Interrupted Tone	No	No
4	Steady Tone	Yes	Yes
5	Interrupted Tone	Yes	Yes
6	Steady Tone	No	Yes
7	Interrupted Tone	No	Yes

Item 08 - Door Phone Ring Pattern:

This parameter allows for different ring patterns or frequencies for the Door Phone.

0	=	Continuous ring
1-8	=	Ring using Ring frequency 1 to 8 of the SK1 Phone
9	=	Ring tone 250 ms on 250 ms off 250 ms on 750 ms off 500 ms on 500 ms off.

Program 05-04-IP : System Timing Parameters - 04

```
05-04-IP SYS PAR
1 1 0 0 0 1 0 0
```

IP = 01-08
System Default.

Item Pointer	Display Data	Programming Data Description	Default
01	0-2	Baud Rate For RS232 Port	1=2400
02	0-1	Dial 9 Flag	1=Enable
03	0-8	Action for Call Duration Limiting	0=Warning
04	0-1	12/24 Hours Clock	0=12 Hours
05	0-9	Flash Delay Time	0=No Delay
06	0-9	Speed Dialing Distribution	1=200 Sets
07	0-1	Single Digit Intercom	0=Disable
08	0-3	Message Waiting Method - Single Line Phones	0=No Ring

Description:

Item 01 - Baud rate For RS232 Port:

This parameter sets the Baud rate of the RS232 port of the system.

0 = 1200	1 = 2400	2 = 3600
----------	----------	----------

Item 02 - Dial 9 Flag:

This parameter sets if a station can access an outgoing line by dialing 9. If this parameter is disabled the station can still access an outgoing line by pressing a line key.

0 = Can not access dial 9 feature	1 = Can access dial 9 feature
-----------------------------------	-------------------------------

Item 03 - Action for Call Duration Limiting:

This parameter decides what action will be taken if a station has limit call duration enabled in Form 40-nnnn-03. Settings 0 to 3 are for outgoing calls only. The outside party will also hear the warning tone.

- 0 & 5 = Continuous Warning Tone after Timeout.
 - 1 & 6 = 1 second Warning Tone for each cycle of Limit Call Duration
 - 2 & 7 = At 10 seconds before Timeout, 1 second Warning Tone, At 5 seconds before timeout, continuous Warning Tone, At timeout the line is released.
- At 1 minute before timeout, 1 second warning tone, At 30 seconds before timeout, continuous

3 & 8 = warning tone, At timeout the line is released.

Item 04 - 12/24 Hour Clock:

0 = 12 Hour Clock	1 = 24 Hour Clock
-------------------	-------------------

Item 05 - Flash Delay Time:

This parameter defines the period after the user has lifted the handset on a single line phone before the flash signal can be sent.

0 = No Delay after off hook	1-9 = Delay 1- 9 seconds after off hook
-----------------------------	---

Item 06 - Speed Dialing Distribution:

This parameter sets the number of speed dial numbers allocated to the system speed dial. Adding extra numbers to system Speed Dial reduces the number of personal Speed Dial numbers available to share between individual stations.

0	=	System 100 (100 to 199)	Individual 900/400 (SK-200)
1	=	System 200 (100 to 299)	Individual 800/300 (SK-200)
2	=	System 300 (100 to 399)	Individual 700/200 (SK-200)
3	=	System 500 (100 to 599)	Individual 500/100 (SK-200)
4	=	System 600 (100 to 699)	Individual 400/000 (SK-200)
5	=	System 700 (100 to 799)	Individual 300 (SK-200)
6	=	System 800 (100 to 899)	Individual 200 (SK-200)
7	=	System 900 (100 to 999)	Individual 100 (SK-200)

Numbers after backslash indicate sets available with name feature enabled

Item 07 - Single Digit Intercom:

Single digit intercom allows the stations to call up to 5 other stations by dialing one digit only (1 to 5). This feature is for the Hotel / Motel Environment. Up to eight different groups may be programmed. If a group is not programmed with any entries then stations which are in the same number station group will be able to make intercom calls without dialing the room to room dialing prefix (6).

0 = Disable	1 = Enable
-------------	------------

Item 08 - Message Waiting Method for Single Line Phones:

On the SK-200 if the setting is 0 and the SLUM (message waiting lamp) card is installed, the message wait will be 90V DC signaling. to drive the neon light on properly equipped single line telephones.

If the setting is Ring, the phone will receive 30 seconds intercom ringing every 5 minutes until the station answers.

If the setting is Voice Message, the station which is left a message will hear the voice message which is stored by the console after answering the message waiting.

If the setting is 250 Ms. ring the single line phone will receive a 250 Ms. ring burst every 5 minutes. This is for use with special handsets designed to receive the “pling” signal to turn on message lamp.

0 = No Message Waiting / 90 V Neon Enable		1= Ring
2 = Voice Message	3 = 250 Ms. Ring	4 = Ring once

Program 05-05-IP : System Timing Parameters - 05

```
05-05-IP SYS PAR
1 0 0 0 0 1 1 0
```

IP = 01-08
System Default.

Item Pointer	Display Data	Programming Data Description	Default
01	0-3	Morning Call Type	1=Music
02	0-1	Meter Pulse Detect	0=Enable
03	0-9	Speed Dial Unrestricted-1	0=0
04	0-9	Speed dial Unrestricted-2	0=0
05	0-7	Name Feature For Extensions, Trunks, Speed dials	0=Disable
06	0-1	Dial Tone Detection	1=Enable
07	0-9	Auto Redial Times	1=2 Times
08	0-9	Auto Redial Pause Time	0=10 Secs.

Description:

Item 01 - Morning Call:

This parameter is for the Hotel/Motel environment to decide what an extension will hear upon receiving a wake up call and whether the Morning call will be recorded to allow printout on request. If Fidelio PMS is enabled (05-13-01) and Morning call history is enabled then the Front Office computer will automatically print out unsuccessful Morning calls for Immediate attention.

0	=	Voice message (requires VSU)
1	=	Back-ground music or DND tone.
2	=	VSU + Record Morning Call History via SMDR
3	=	Back-ground music or DND tone + Record Morning Call History via SMDR

Each station can be set in 44-st-08 to decide whether they hear Background Music or DND tone.

Item 02 - Metering Detector:

If setting is Enable, the system will detect the metering signal from the Exchange during the conversation. Depending on the Exchange's equipment, the metering signal may be 50 Hz (obsolete), or 12 KHz, or 16 KHz. (currently 12 KHz detection is available new) The SMDR print out will have one more column to indicate the total pulses which are detected by the system during the conversation. This feature is enabled in default and there is no need to disable it. On very old exchanges where obsolete 50 Hz metering is in use it may be necessary to set Meter Pulse detect delay time in Form 05-07-08 to detect local call meter pulses.

0 = Enable	1 = Disable
------------	-------------

Item 03, 04 - Speed Dial Unrestricted 1, 2:

If 03, 04 settings are A, B, then the speed dial codes from 100 to AB0 are not toll restricted. For example if the settings are 1 and 1 then Speed dials up to 110 can be used by stations whether they conflict with toll restrictions or not. Individual stations can be restricted from using this feature in Form 45-st-07. If 03, 04 settings are set to 0, 0, then all speed dial codes are toll restricted if the station using the speed dial is restricted.

Item 05 - Name Function:

This parameter enables the naming feature for trunks, extensions and speed dials.

Features \ Values	0	1	2	3	5	7
Display Name instead of number for Extension		X		X	X	X
Directory Dial for Speed Dial			X	X		X
Directory Dial for Extension					X	X

Note: When any of the above features are enabled the total number of speed dial sets will be reduced by 500 (SK-200)

Item 06 - Dial Tone Detection:

If setting is enable, then the system will send out the dialing signals after the system detects the Dial Tone which is sent from the exchange, if dial tone is not detected by the system then dialing signals will not be sent out. If setting is disable, then the system will send out dialing signals whether Dial Tone is detected or not.

0 = Disable	1 = Enable
-------------	------------

Item 07 - Auto Redial Times:

This parameter is to set the number of auto redial times which the system will attempt.

0 = Disabled	1 = 10	2 = 20	3 = 30	4 = 40
5 = 50	6 = 60	7 = 70	8 = 80	9 = 90

Item 08 - Auto Redial Pause Time:

This parameter is the time duration between the system hanging up an auto redial attempt and starting to redial automatically.

0 = 10 Seconds	1 = 20 Seconds	2 = 30 Seconds	3 = 40 Seconds	4 = 50 Seconds
5 = 60 Seconds	6 = 70 Seconds	7 = 80 Seconds	8 = Seconds	9 = 100 Seconds

Auto-Redial Pause Time (Program

Off Hook

05-05-08), Y seconds

Off Hook

Auto-Redial Ringing Timer

On Hook

Auto-Redial Ringing Timer

Program 05-06-IP : System Timing Parameters - 06

```
05-06-IP SYS PAR
1 0 0 0 0 3 0 0
```

IP = 01-08
System Default.

Item Pointer	Display Data	Programming Data Description	Timing Table	Default
01	0-9	TRF Busy Recall Timeout	A	1=60 Secs.
02	0-9	TRF Idle Recall Timeout	A	0=30
03	0-1	DISA & ACD-1 VSU Grouping (SK-200)		0=Disable
04	0-9	Polarity Reversal		0=Disable
05	0-9	Operator Code		0=0
06	0-9	Unsupervised Conference And ECF Time Setting		3=3 Min
07	0-1	Hold Method for SLT		0=Flash
08	0-2	Station Hunting Group Ring Method (not used on SK-200)		0=Disable

Description:

Item 01 - Transfer Busy Recall Timeout:

This parameter sets the time duration between transferring a call to a busy party and automatic transfer back to the transferring party when the called party is busy.

Item 02 - Transfer Idle Recall Timeout:

This parameter sets the time duration between transferring a call to a station and automatic transfer back to the transferring party when the called party does not answer.

See timing table Grade A for parameters of these 2 features.

Item 03 - DISA and ACD-1 VSU Grouping:

This parameter enables voice channel grouping for DISA and ACD-1. The groups that VSU channels are assigned to is set in Form 19-GP-09. Trunks will also need to be assigned to the same groupings in Form 36-GP.

0 = Disable	1 = Enable
-------------	------------

Item 04 - Polarity Reversal:

This parameter is to enable the Polarity Reversal detection feature for incoming caller hang up detection in North America. See Form 14-01-08 for SMDR setting. Telco will need to enable polarity reversal at the CO.

0	=	Disable
1	=	Enable for 1 polarity reverse signal
2-9	=	Delay for 1-8 Seconds and then detect Polarity Reverse Signal

Item 05 - Operator Code:

This parameter is to set whether to dial "0" or "9" for the operator or for accessing a CO. line.

1-9	=	Dial "9" for operator, "0" for CO. line.
0	=	Dial "0" for operator, "9" for CO. line.

Item 06 - Unsupervised Conference and ECF Time Setting:

This parameter sets the time that the system will allow an Unsupervised Conference or External Call Forward to continue before sending a warning tone to the parties and then disconnecting the call. If either party sends a DTMF digit (0-9) to the system the timer will reset and allow the call to continue for the time setting.

0 = No Limit	1 = 1 Minutes	2 = 2 Minutes
3 = 3 Minutes	4-9 = 4 Minutes	

Item 07 - Hold Feature for SLT:

This parameter is to set whether Single Line Telephones use [FLASH] (or [Hook-switch]) or [FLASH, 7] (or [Hook-switch, 7]) to place a call on Hold.

0	=	Normal -----> Using [FLASH] or [Hook-switch] to put a call on Hold.
1	=	Alternate --> Using [FLASH, 7] or [Hook-switch, 7] to put a call on Hold.

Item 08 - Not Used:**TIMING TABLE**

Grade	0	1	2	3	4	5	6	7	8	9	unit
A	30	60	90	120	150	180	210	240	253	None	sec.

Program 05-07-IP : System Timing Parameters - 07

```
05-07-IP SYS PAR
0 0 2 0 0 0 0 0
```

IP = 01-08
System Default.

Item Pointer	Display Data	Programming Data Description	Timing Table	Default
01	0-1	Intercom Searching		0=Disable
02	0-1	SLT Toll Override Prevention		0=Disable
03	2-4	Reserved		2
04	0-7	DISA Transfer To Console - No Digits Dialed		0=Enable
05	0-1	Key Phone Toll Override Prevention		0=Disable
06	0-9	SMDR Digit Mask		0=Disable
07	0-9	Meter Pulse Detect Delay Time	K	0=0 Ms.
08	0-1	Reserved		0

Description:

Item 01 - Intercom Searching:

If setting is enable, when calling an internal station which is busy or does not answer, pressing [4] will call the next station which is in the same station group as the called station. If setting is disable then there will be no transfer.

0 = Disable	1 = Enable when/busy
2 = Enable no/answer	3 = Enable busy /no answer

Item 02 - Toll Override Prevention from quick dial (Calling Proof)

To protect toll override control when a Key Phone selects a trunk and quickly dials one digit and overriding the toll control. If Enabled then after selecting a trunk the first digit dialled will be delayed one pause interval

0= Disable	1= Enable
------------	-----------

Item 03 - Reserved:

Item 04 - DISA Recall To Console - No Digits Dialed:

If this function is activated, when a DISA call is answered but the caller does not dial any digits or a station number the system will recall the Operator after the assigned DISA Transfer Time no dialing (Form 05-08-07). If this function is disabled the call will be disconnected after Transfer Time No Dialing elapses.

--	--	--

0 = Recall To Operator	1 = No Recall To Operator	2-7 = See table on following page
------------------------	---------------------------	-----------------------------------

Value	No dialing after the first voice announcement of VAC.	The VAC has already announced that the called station is busy/ no answer.	The VAC has already announced the null or number not received completely.
2	X	O	X
3	O	O	X
4	X	X	O
5	O	X	O
6	X	O	O
7	O	O	O✓
Note	X = Transfer the incoming call to console. O = System will announce the VAC function 6 to the incoming call if time for no dialing exceeds the form 05-08-07. And then, system will release the outgoing call if time for no dialing exceeds the form 05-08-07 again.	X = See Form 46-st-04 O = See Form 46-st-04. If it is no recall to console, system will announce the VAC function 6 to the incoming call if time for no dialing exceeds the form 05-08-07. And then, system will release the outgoing call if time for no dialing exceeds the form 05-08-07 again.	X = System will transfer the incoming call to console if time for no dialing exceeds the form 05-08-07. O = System will announce the VAC function 6 to the incoming call if time for no dialing exceeds the form 05-08-07. And then, system will release the outgoing call if time for no dialing exceeds the form 05-08-07 again.

Item 05 - Toll Restriction Override Prevention:

If the setting is Disabled, after accessing a line a user will be able to use a DTMF generator directly to the network rather than the DTMF signal generated within the KSU. The result of this is that Toll restriction can be over-ridden.

If setting is Enable, then no audio will be sent from the handset until 3 digits are received by the KSU from the key station dial pad preventing Toll restrictions being overridden. This parameter will be automatically disabled on any lines which are set to Pulse dial.

0 = Disable	1 = Enable
-------------	------------

Item 06 - SMDR Digit Mask:

If setting is "0", then the full length of the telephone number will be output to the SMDR. If setting is n, then the length of the telephone number will be n digits long.

n = 0 to 9

Item 07 - Meter Pulse Detect Delay Time:

If this parameter is enabled the system will wait at the end of a call for the meter pulse to be sent from the Central Office. During this delay time the line is not able to be accessed. This is necessary for some older COs and only affects local call metering.

This parameter is also used to insert a pause between a line being released and being able to be re-selected for outward dialing. **See timing table grade K for parameters for this feature.**

Item 08 - Reserved:

TIMING TABLE

Grade	0	1	2	3	4	5	6	7	8	9	unit
-------	---	---	---	---	---	---	---	---	---	---	------

K	0	600	1000	2000	3000	4000	5000	6000	7000	8000	m sec.
---	---	-----	------	------	------	------	------	------	------	------	--------

Program 05-08-IP : System Timing Parameters - 08

05-08-IP SYS PAR 0 0 0 0 7 0 0 1

IP = 01-08
System Default.

Item Pointer	Display Data	Programming Data Description	Timing Grade	Default
01	0-9	Hunt Time Setting	C	0=0 Secs
02	0-1	DSS Access To Other Trunk Group		0=Enable
03	0-9	SLT Camp On Tone		0=Disable
04	0-1	DISA/DID Transfer Group(No Answer)		0=Station Grp
05	0-8	SLT Programming digit		7=7 + Code
06	0-9	DISA /DID TRANSFER Time No Answer or Busy		0=8 Secs
07	0-9	DISA Transfer Time No Dialing		0=0 Secs.
08	0-2	Station Hunt Group Ring Method/SK-200		1=Linear

Description:

Item 01 - Hunt Time Setting:

If setting is n, Then when an incoming call rings the first ring assigned extension and that extension is busy, after n seconds the call will ring the second of the ring assigned extensions. If the 2nd extension is busy the call will go to the 3rd extension immediately. All stations which have been passed by the ring assignment will receive off hook busy remind. Up to 16 stations can be in the ring hunt group. If the setting is 0 then only the first ring assigned station will ring.

See timing table C for parameters of this feature.

Item 02 - DSS Access To Other Trunk group:

This feature enables or disables the ability of stations to use a DSS key to answer Ringing CO lines not in their own group.

0 = Enable.	1 = Disable
-------------	-------------

Item 03 - SLT Camp On Tone:

This feature enables a tone to indicate call waiting for a busy Single Line phone and sets the interval between tones. The interval between tones will be the Off Hook Busy Remind Interval (t) x by the setting in this parameter. Off Hook Busy Remind Time is set in Form 05-01-05.

0 = Disable	1 = t x 1	2 = t x 2	3 = t x 3	4 = t x 4
-------------	-----------	-----------	-----------	-----------

5 = t x 5	6 = t x 6	7 = t x 7	8 = t x 8	9 = t x 9
-----------	-----------	-----------	-----------	-----------

Item 04 - DISA Transfer Group:

This parameter decides to which group an unsuccessful DISA call will be transferred if the called station has transfer enabled in Form 46-st-04.

0 = Console for the Called Station's group	1 = Console for the Incoming Trunk's group
--	--

Item 05 - SLT Programming Digit:

This feature changes the programming digit used by an Analogue phone to perform its programmable features. For example call forward is normally 701, If this parameter is set to 3 the call forward code will be 301. If the setting is 0 then the analogue phones cannot do programming. If the setting is 8 it is necessary to press [*][#] before accessing programming or dialing any 8 codes. This will allow the use of digits 1 to 8 as the first digit of a station number.

0 = Disable	1 = 1xx	2 = 2xx	3 = 3xx
4 = 4xx	5=5xx	6=6xx	7=7xx

8 = [*][#][7] for programming, [*][#][8] to access functions beginning with 8.

Item 06 - DISA /DID Transfer Time No Answer:

An incoming call is answered by the DISA voice message and transferred to the called extension or a DID call is transferred to the called extension. If the called extension does not answer after this time duration the voice card will announce the status of the station (no answer) or if the station is busy will announce the status (busy) immediately and then retry the station the number of times set in Form 05-11-06 and depending on the settings for individual stations in Form 46-st-03 will also transfer the call to the console of the group specified in Form 05-08-04, transfer the call to the console only or disconnect the call.

0 = 8 Seconds	1 = 16 Seconds	2 = 24 Seconds	3 = 32 Seconds	4 = 40 Seconds
5 = 48 Seconds	6 = 56 Seconds	7 = 64 Seconds	8 = 72 Seconds	9 = 80 Seconds

Item 07 - DISA Transfer Time No Dialing:

This parameter sets the time that a DISA call will wait after the voice message is completed before transferring to the console if no digits are dialled by the caller. Do not set this to less than about 3 seconds for normal operation.

0 = Immediate	1 = 1 Second	2 = 2 Seconds	3 = 3 Seconds	4 = 4 Seconds
5 = 5 Seconds	6 = 6 Seconds	7 = 7 Seconds	8 = 8 Seconds	9 = 9 Seconds

Item 08 - Hunt Group Ring Method:

TIMING TABLE

Grade	0	1	2	3	4	5	6	7	8	9	unit
-------	---	---	---	---	---	---	---	---	---	---	------

C	0	2	4	6	8	15	30	60	120		sec.
---	---	---	---	---	---	----	----	----	-----	--	------

Program 05-09-IP : System Timing Parameters - 09

```
05-09-IP SYS PAR
0 1 0 0 0 0 0 0
```

IP = 01-08
System Default.

Item Pointer	Display Data	Programming Data Description	Timing Grade	Default
01	0-7	Paging Tone and Loop Start Control (SK-200)		0=Normal
02	0-1	Busy Console Queuing (Intercom Calls)		1=Enable
03	0-9	Clear Forward - Loop Break detection		0=Disable
04	0-9	DISA Busy Tone Detection		0=Disable
05	0-1	Save Redial Numbers - 1 or 6		0=1
06	0-9	ACD-1 Enable Time	O	0=5 Secs
07	0-9	ACD-1 Segment 2 Recall Time	N	0=Disable
08	0-9	ACD-1 Release Time	P	0=No Release

Description:

Item 01 - External Paging Control:

This parameter enables or disables the start tone and loop start for external paging equipment

Setting	Internal Page with Page Tone	External Page with Page Tone	Page Equipment is Loop Start
0	Yes	Yes	No
1	Yes	No	No
2	Yes	Yes	Yes
3	Yes	No	Yes
4	No	Yes	No
5	No	No	No
6	No	Yes	Yes
7	No	No	Yes

Item 02 - Console Queuing:

This feature enables the busy console(s) to have an intercom call(s) queued to it(them). If the station dials the operator (by 0 or 9) and all the consoles are busy, the system will put this call in the queue to wait for the operators to be free. The calling station will hear ring back tone instead of busy tone and the first operator in the group will receive the Busy Remind Signal. The first operator to go on-hook will receive the call.

0 = Disable	1 = Enable
-------------	------------

Item 03 - Clear Forward Signal Detection - Loop Disconnect

This feature enables loop disconnection as a Clear Forward Signal. This parameter sets the minimum open loop time that the system will recognize as a disconnect.

0 = Disable	1 = 80 ms	2 = 160 ms	3 = 240 ms	4 = 320 ms
5 = 400 ms	6 = 480 ms	7 = 560 ms	8 = 640 ms	9 = 720 ms

Item 04 - DISA Busy Tone Detection:

This feature allows the system to recognise busy tone from the exchange line during DISA operation for clearing down the call.

Type 1 = busy tone is 250 ms. on, 250 ms. off.

Type 2 = 500 ms. on and 500 ms. off.

Type 3 = Continuous busy tone (>3.2 seconds).

Type 4 = 375 ms. on and 375 ms. Off

0 = Disable	1 = Type 1	2 = Type 2	3 = Type 1 and 2	4 = Type 3
5 = Type 1 and 3	6 = Type 2 and 3	7 = Type 1, 2 ,3.	8 = Type 4.	

Item 05 - Save Redial Numbers - 1 or 6:

If this parameter is enabled then the user will be able to enter 6 numbers in the Save/Redial scratch pad and then automatically dial them in sequence.

0 = 1 Save/Redial	1 = 6 Save/Redials
-------------------	--------------------

Item 06 - ACD-1 Enable Time:

This parameter is to set the time duration before the system answers an incoming call when the ring assigned station(s) are busy, if a VSU card is fitted. The incoming call will show as a normal ring signal on the DSS key and can be answered by the operator at any time even while the voice message is playing to the caller.

See Timing table Grade O for settings for this parameter.

Item 07 - ACD-1 Segment 2 Recall Time:

This parameter sets the time an ACD-1 call which has been answered by the VSU company greeting message will stay on hold in the operator queue before the system will play the second part of the ACD-1 message to apologise for the continuing delay. The call back time for the second message starts at 30 seconds and increases in 15 second increments. The message will be played to the caller every time the recall time is reached until answered by the operator or the caller hangs up.

See Timing table Grade N for settings for this parameter.

Item 08 - ACD-1 Release Time:

This parameter sets the time at which the system will release the incoming caller during ACD-1 operation when it has not been answered by an operator. The system will play a warning message to the caller before releasing the call. If polarity reversal or Loop Disconnect is used for incoming call clear down then this parameter must be disabled.

See Timing table Grade P for settings for this parameter

TIMING TABLE

Grade	0	1	2	3	4	5	6	7	8	9	unit
N	Dis	30	45	60	75	90	105	120	135	150	sec.
O	5	10	15	20	25	30	35	40	45	50	sec.
P	Dis	5	10	15	20	25	30	35	40	45	Min.

Program 05-10-IP : System Timing Parameters - 10

```
05-10-IP SYS PAR
d d d d d d d d
```

IP = 01-08
System Default.

Description:

This parameter allows the system to insert digits before the call forwarded station number when the call forward is received by the voice mail port if Standard Protocol is selected. If the station numbering is 2, 3 or 4 digits the system will insert additional digits if the Voice Mail requires more. The last digits of the voice mail box number will still have to be the same as the station numbering for correct recognition. The HOLD key can be used to insert a pause in the DTMF tone sending and will display as a (p). The DND key is no digits sent and is shown as (d).

Example:

The SK-200 is set to 2 digit numbering but the voice mail requires 4 digits. The voice mail also requires a pause between answering the call and the tones being sent. Set this parameter to the following

```
05-10-IP SYS PAR
p 1 1 d d d d d
```

When the call forwarded station 11 is answered by the voice mail port after the pause time the digits 1111 will be sent to the port by the system. If station 11's voice mail box is 1111 then the mailbox number 1111 will be automatically opened by the tones.

There are 2 different Voice Mail Protocols available in the SK-200 series depending on the setting in Form 05-12-05. If this form is set to 0 then the Protocol will be the leading digits entered in this Mode plus the Station Number of the forwarded station. If Form 05-12-05 is set to 1 then the Enhanced Protocol shown on the following page will be used.

Enhanced Protocol

Internal Calls	Digits	DISA and CO Calls	Digits
CFWD All Calls	11-STB-STA	CFWD All Calls	21-STB-TRK
CFWD Busy	12-STB-STA	CFWD Busy	22-STB-TRK
CFWD No Answer	13-STB-STA	CFWD No Answer	23-STB-TRK
Direct Call to V-Mail Port	14-STA-STA	Recall to Voice Mail	25-STB-TRK
Direct Call From Trunk	24-TRK-TRK	This digit sequence is played only on cncoming calls when 05-12-05 is set at a value of 1 or 3.	

STA = The originating station presented as 4 digits.
STB = The forwarding station presented as 4 digits.
TRK = the CO trunk presented as 4 digits.

In systems using 2 digit number plans, the STA and STB fields use leading digits. For example,

extension 11 is presented as 0011, extension 12 is presented as 0012, etc.

In systems using 3 digit number plans, the STA and STB fields use leading digits. For example, extension 111 is presented as 0111, extension 112 is presented as 0112, etc.

Systems using 4 digit extension numbering will present all four digits for STA and STB.

TRK is provided as the two digit trunk number (01-40). The field is also filled with leading zeros, so trunk 01 is presented as 0001, trunk 08 is presented as 0008, etc.

Program 05-11-IP : System Timing Parameters - 11

```
05-11-IP SYS PAR
1 0 0 0 0 0 0 0
```

IP = 01-08
System Default.

Item Pointer	Display Data	Programming Data Description	Timing Grade	Default
01	0-1	Resume Key Phone Volume On Plug In		1=Disable
02	0-1	DISA Password - 1/(24 or 50) Sets		0=1
03	0-1	Select Music On Hold Or Ring Back Tone		0=RBT
04	0-1	DISA Answer Method - VSU Busy		0=Yes
05	0-3	DISA Special Function Access		0=All
06	0-9	DISA Re-check Times To Busy Console		0=2 Times
07	0-9	Door Phone Ringing Time		0=5 Sec.
08	0-8	DISA Single Digit Dialing		0=Disable

Description:

Item 01 - Resume KeyPhone Volume Settings On Plug In:

In default when the system is turned on after being in service or the KeyPhone has been unplugged, the Key phones will reload the volume settings the user has programmed for Ring volume, Speaker volume and Handset volume (on handsets with the new processor it will also reload the Ring frequency). If this parameter is disabled then the default settings will be used instead.

0 = Enable	1 = Disable
------------	-------------

Item 02 - Number of DISA Passwords:

This parameter when enabled will increase the number of DISA passwords from 1 to 50 (SK-200). At the default setting of 0 the DISA password will be set in form 13-02. If the parameter is set to 1, 50 passwords are available and they will be the same as the forced account codes numbers (49 to 99). Forced account codes are set in Form 17-(00-99).

0 = 1 password	1 = 50 Passwords
----------------	------------------

Item 03 - Select Music on Hold or Ring Back Tone:

This parameter selects what the incoming caller will hear during Ring Transfer and Hold Recall conditions. The feature is designed specifically for North America to prevent the caller incorrectly recognising the SK-200's International Ring Back Tone as a disconnect or engaged signal and hanging up even though their call is still in progress.

--	--

0 = Ring Back Tone	1 = Music On Hold
--------------------	-------------------

Item 04 - DISA Call Processing Method When The VSU is busy or not Installed:

0	=	The DISA caller will hear system dial tone after the system answers the incoming call.
1	=	When the VSU is busy, the DISA call will not be answered by the system unless an internal party answers this DISA call or the VSU is available for service again. During VSU busy, the system will ring the stations assigned in Programming Form 01 and 02.

Item 05 - DISA Special Function Access:

This parameter sets which of the system functions are able to be accessed by DISA callers.

0	=	Allow users to access the DISA special functions by pressing [8],[9],[*],[#].
1	=	Allow users to access the DISA special functions by pressing [*],[#]. Disallow users to access the DISA special functions by pressing [8],[9].
2	=	Allow users to access the DISA special functions by pressing [8],[9]. Disallow users to access the DISA special functions by pressing [*],[#].
3	=	Disallow users to access the DISA special functions by pressing [8],[9],[*],[#].

Item 06 - DISA Re-check Times To Station/Console:

This function sets the number of times that an unsuccessful DISA call will attempt to retry a station and or transfer to a console after the ringing time set in Form 05-08-06 if the Voice Sectioning function is activated and depending on the setting for individual stations in Form 46-st-04. If polarity reversal is available set this parameter to 9 and the call will continue to retry until the caller hangs up.

0 = 2 Times	1 = 3 Times	2 = 4 Times	3 = 5 Times	4 = 6 Times
5 = 7 times	6 = 8 Times	7 = 9 Times	8 = 10 times	9 = Unlimited

Item 07 - Door Phone Ringing Time:

This parameter sets the time that Door Phone ring assigned stations will ring for when the Door Phone button is pressed.

0 = 5 Seconds	1 = 10 Seconds	2 = 15 Seconds	3 = 20 Seconds	4 = 25 Seconds
5 = 30 Seconds	6 = 35 Seconds	7 = 40 Seconds	8 = 45 Seconds	9 = 50 Seconds

Item 08 - DISA Single Digit Dialing:

This feature allows a DISA caller to dial stations by 1 digit (1-5) using the settings in Form 10-gp-IP to set which station will be dialed by each digit.

0 = Disable SDD	1 = Dial Station in Group 1	2 = Dial Station in Group 2	3 = Dial Station in Group 3	4 = Dial Station in Group 4
-----------------	-----------------------------	-----------------------------	-----------------------------	-----------------------------

5 = Dial Station in Group 5	6 = Dial Station in Group 6	7 = Dial Station in Group 7	8 = Dial Station in Group 8	
-----------------------------	-----------------------------	-----------------------------	-----------------------------	--

Program 05-12-IP : System Timing Parameters - 12

```
05-12-IP SYS PAR
0 0 0 2 0 0 1 0
```

IP = 01-08
System Default.

Item Pointer	Display Data	Programming Data Description	Default
01	0	Reserved	0
02	0	Reserved	0
03	0-1	Exclusive Hold	0 = Enable
04	0-9	Door Unlock Relay Activation Time	2 = 3 seconds
05	0-7	Voice Mail Call Forward Protocol Type / Mute Digits	0 = Standard
06	0-1	Linear/Circular Trunk group access	0=Linear
07	0-1	LED indication of Check in / Check out on DSS console	1=Enable
08	0-9	Fire Alarm Ringing Time	0=1 Sec.

Description:

Item 01 - Reserved:

Item 02 - Reserved:

Item 03 - Exclusive Hold Capability:

If this parameter is enabled all stations can use the Exclusive Hold Function. If the parameter is disabled no stations will be able to place calls on Exclusive hold.

0 = Enabled	1 = Disabled
-------------	--------------

Item 04 - Door Unlock Relay Activation Time:

This parameter sets the time that the door unlock relay will remain activated after the Door Unlock function is activated by the user. The Door unlock relay is programmed in Form 06.

0 = 1 Second	1 = 2 Seconds	2 = 3 Seconds	3 = 4 Seconds	4 = 5 Seconds
5 = 6 Seconds	6 = 7 Seconds	7 = 8 Seconds	8 = 9 Seconds	9 = 10 Secs.

Item 05 - Voice Mail Call Forward Protocol Selection and Muting Leading Digits

This parameter selects between Standard Voice Mail Call Forward Protocol and the Enhanced Protocol. For a full description of Voice Mail Protocol see Form 05-10. It will also set the muting of the leading digits

Setting Value	0	1	2	3	4	5	6	7
VMS Leading Digit Type	Short	Long	Short	Long	Short	Long	Short	Long
Mute Leading Digit	No	No	Yes	Yes	No	No	Yes	Yes
Leading Digit for Auto Attendant (VMS)	No	Yes	No	Yes	No	No	Yes	No

“Short” type: Use the Leading Digit(s) programmed in program 05-10 plus Station number.

“Long” type: Use 10 Digit protocol as explained below.

“Mute Leading Digit”: The caller will not hear the DTMF signal during the transmission of leading digits. The system will use the last intercom link for this feature.

“Long” Enhanced Protocol

Internal Calls	Digits	DISA and CO Calls	Digits
CFWD All Calls	11-STB-STA	CFWD All Calls	21-STB-TRK
CFWD Busy	12-STB-STA	CFWD Busy	22-STB-TRK
CFWD No Answer	13-STB-STA	CFWD No Answer	23-STB-TRK
Direct Call to V-Mail Port	14-STA-STA	Recall to Voice Mail	25-STB-TRK
Direct Call From Trunk	24-TRK-TRK	This digit sequence is played only on incoming calls when 05-12-05 is set at a value of 1 or 3.	

STA = The originating station presented as 4 digits.

STB = The forwarding station presented as 4 digits.

TRK = the CO trunk presented as 4 digits.

In systems using 2 digit number plans, the STA and STB fields use leading digits. For example, extension 11 is presented as 0011, extension 12 is presented as 0012, etc.

In systems using 3 digit number plans, the STA and STB fields use leading digits. For example, extension 111 is presented as 0111, extension 112 is presented as 0112, etc.

Systems using 4 digit extension numbering will present all four digits for STA and STB.

TRK is provided as the two digit trunk number (01-40). The field is also filled with leading zeros, so trunk 01 is presented as 0001, trunk 08 is presented as 0008, etc.

Item 06 - Linear/Circular Trunk Group Access:

If this parameter is set to 0 then line selection will be the first available trunk in the users dial (9-0) group. If the parameter is set to 1 then the lines will be selected in a Circular fashion till all lines have been used and then the selection will start again. Do **NOT** use Circular unless there is a very good reason as call collision will result.

0 = Linear	1 = Circular
------------	--------------

Item 07 - LED indication of Check in/ Check out:

This parameter disables or enables the LED indication for Check in/Check out and Clean room status for the DSS consoles and DSS Keys.

0 = Disable	1 = Enable
-------------	------------

The LED indications are as follows:

Red / slow flash:	When Reception checks out an extension, the extension LED will slow flash red.
Green:	When the checked out extension's room has been cleaned by the cleaner, they can dial [776] from the phone and hang up. The LED for that extension will go Green. This means the room is clean and ready for a new guest.
Red:	The room is checked in and the phone is in use
Off:	The room is checked in and idle.

Item 08 - Fire Alarm Ringing Time:

This parameter sets the time the Fire Alarm will ring for when activated.

0 = 1 minute	1 = 2 minutes	2 = 3 minutes	3 = 4 minutes	4 = 5 minutes
5 = 6 minutes	6 = 7 minutes	7 = 8 minutes	8 = 9 minutes	9 = 10 minutes

Program 05-13-IP : System Timing Parameters - 13

```
05-13-IP SYS PAR
0 0 0 0 0 0 0 0
```

IP = 01-08
System Default.

Item Pointer	Display Data	Programming Data Description	Default
01	0-1	PMS (Fidelio) Enable	0 = No
02	0	Reserved	0
03	0	Call Cut Off Timer - No Pulse Reversal Received	0 = No
04	0-9,d	Door Phone Ring Frequency (Key Phone Only)	0
05	0	Reserved	0
06	0	Reserved	0
07	0	Reserved	0
08	0	Reserved	0

Description:

Item 01 - PMS (Fidelio) Enable:

This parameter when enabled will allow the SK-200 to interface with the Micros Fidelio Property Management System in Hotels/Motels. Enabling this parameter will completely change the SMDR output and will allow the Front Office computer to control Check In/Out, Guest names, Room Change, Wake Up calls, Message Waiting, Clean Room status and DND status. See the Hotel Motel manual for full details.

0 = Disable	1 = Enable
-------------	------------

Item 02 - Reserved:

Item 03 - Call Cut Off Timer - No Polarity Reversal Received:

In Program 29-tk-06 each trunk can be set to cut of an outgoing call if the Polarity Reversal signal is not received within the time set here.

0 = Disable	1 = 30 Seconds	2 = 45 Seconds	3 = 60 Seconds	4 = 75 Seconds
5 = 90 Seconds	6 = 105 Seconds	7 = 120 Seconds	8 = 135 Seconds	9 = 150 Seconds

Item 04 - Door phone Ring Frequency for Key Phones:

This parameter can assign different ringing frequencies or ring types for Door phone calls.

0 = As the setting of key phone's Ring.	1~8 = Use the ringing frequency 1~8 of AK key phones as
---	---

	the Door phone's ring.
9 = Use "Tone" as the Door phone's ring.	d = Use "Background Music" as the Door phone ring

Program 05-14-IP : System Timing Parameters - 14

05-14-IP SYS PAR 0 0 0 0 0 0 0 0

IP = 01-08
System Default.

All Items currently Reserved and Unused:

Program 06-IP : Relay Assignment

```
06-gp-IP Relay
00 00 00
```

gp = 01-04. IP = 01-03
System Default.

ItemPointer	Display Data	Programming Data Description
01	00-18	Relay # 1 of B4-IPU
02	00-18	Relay # 2 of B4-IPU
03	00-18	Relay # 3 of B4-IPU

Description:

On the SK-200 each relay card has 3 Dry Contact Relays and each IPU can support 1 relay card making a total of 12 relays in a 4 cabinet system.

No voltage is provided by the system, the installer will have to provide their own source to suit the application. Do not use the relays to switch 240 V. They are only designed for low voltage control circuits. All Relays are Normally Open contacts and will close on activation of the function for which they have been programmed.

Assign the required Relays one of the following functions.

Set data	Function	Set data	Function
00	No Operation	06	System Alarm
01	Music On Hold	07	Remote Relay Control
02	Door 1 open	08	Trunk loud bell - Continue on
03	Door 2 open	09	Station loud bell - Continue on
04	Trunk loud bell	10	All zone page
05	Station loud bell	11-18	External Zone 1-8 page

An outside caller using DISA, on receiving dial tone, can key in the relay password to turn relays on/off, a tone after keying in the password means the relay is activated.

Relay controlling password:

- 841 ---> to control the 1st relay on.
- 842 ---> to control the 2nd relay on.
-
- 849 ---> to control the 9th relay on.
- 851 ---> to control the 1st relay off.
- 852 ---> to control the 2nd relay off.
-
- 859 ---> to control the 9th relay off.

Program 07-gp-IP : Flexible Key Group Assignment

07-gp-IP KEY GRP
TK: **nn**

gp = 01-08 IP = 01-25 (DSS Key Number)
TK number for the key

07-gp-IP KEY GRP
xxx

gp=01-08 IP=01-25 (DSS Key Number)
Station number for the key

07-gp-IP KEY GRP
FN: **ff**

gp=01-08 IP=01-25 (DSS Key Number)
Function number for the key

General:

This program assigns 8 groups of Flexible key plans for Key phones.
Each KeyPhone can be assigned to use two groups (Form 42-st-(02 & 03).

Description:

Each key can be assigned as either a **Trunk**, a **Station** or a **Function**.
To change the assignment from TK to Station or to Function or vice versa, press the **[AT/MIC]** key before setting.

nn = 01-08 - Trunk Key (1 to 08)	xx = 10-69 - Station Key (2 digits)
xxx = 100-699 - Station Key (3 digits)	xxxx = 1000-6999 - Station Key (4 digits)
ff = 00-64 - Function Key (0 to 64)	

Default Key Telephone Templates

Group 1

VOL-	VOL+	FWD	DND	PROG
ST15	ST16	ST17	ST18	SAVE
ST11	ST12	ST13	ST14	MSG/PT
TK05	TK06	TK07	TK08	SPD
TK01	TK02	TK03	TK04	MIC/AT

Group 3 (Default for SK1-2X)

PROG	SAVE	DND	SPD	FWD
ST15	ST16	ST17	ST18	MW/PT
ST11	ST12	ST13	ST14	AT/MIC
TK05	TK06	TK07	TK08	VOL +
TK01	TK02	TK03	TK04	VOL -

Group 3 (Default for SK1-33 Not available in U.S.)

PROG	SAVE	DND	SPD	VOL+
TK01	TK02	TK03	TK04	VOL -

Key Telephone Function Codes

ff Code	Function	ff Code	Function
00	No Operation	20	All Paging (Internal)
01	Program	21	All Paging (External)
02	Do Not Disturb/Conference	22	All Paging (Internal/External)
03	Message Waiting/Pulse-Tone	23	Zone Paging (Internal)
04	Microphone/ AUTO answer	24	Zone Paging (Internal) 1
05	Speed Dial	25	Zone Paging (Internal) 2
06	SAVE	26	Zone Paging (Internal) 3
07	Volume UP	27	Zone Paging (Internal) 4
08	Volume Down	28	Zone Paging (Internal) 5
09	Forced Account Code	29	Zone Paging (Internal) 6
10	Voice Set up	30	Zone Paging (Internal) 7
11	User Speed Dial Set up	31	Zone Paging (Internal) 8
12	Console User Speed Dial Set up	32	CLI Status
13	Console System Speed Dial Set up	33	Zone Paging (External) 1
14	Security Code Set up	34	Zone Paging (External) 2
15	Help List	35	Pickup Own Group
16	Temporary Security Code	36	Pickup All Groups
17	Check In	37	Pickup Group

18	Check Out	38	Pickup Group 1
19	Charge Inquire	39	Pickup Group 2
ff Code	Function	ff Code	Function
40	Pickup Group 3	53	Forward All
41	Pickup Group 4	54	Forward Busy
42	Pickup Group 5	55	Forward No Answer
43	Pickup Group 6	56	Meet me Page
44	Pickup Group 7	57	Shift Key
45	Pickup Group 8	58	Meter Rate Setting
46	Toll Password	59	Hotel/Motel Function
47	Alarm Assign	60	Call Park
48	User Alarm	62	Directory key (for name search)
49	Console- Set up Alarm	63	ISDN Pre-Dial Key
50	Console- Set up System Time	64	Log in/Log out of Queue
51	Message Select	65	Wake Up
52	Day / Night		

Program 08-01-IP : Flexible DSS Key-Group Assignment

08-gp-IP KEY GRP TK: nn

gp = 01(-08) IP = 01-60 (DSS Key Number)
TK number for the key

08-gp-IP KEY GRP xxx

gp = 01(-08) IP = 01-60 (DSS Key Number)
Station number for the key

08-gp-IP KEY GRP FN: ff

gp = 01(-08) IP = 01-60 (DSS Key Number)
Function number for the key

General:

This program sets 8 groups of programmable DSS keys for **the DSS Console**.
There are eight groups for the SK-200.

Description:

Each key can be assigned as either a **Trunk**, a **Station** or a **Function**.

To change the assignment from TK to Station to Function or vice versa, press the **[AT/MIC]** key before setting.

nn = 01-40 - Trunk Key (1 to 40)	xx = 10-69 - Station Key (2 digits)
xxx = 100-699 - Station Key (3 digits)	xxxx = 1000-6999 - Station Key (4 digits)
ff = 00-64- Function Key (0 to 58)	

For function key setting use the list provided in Form 07.

Program 09-nnn-DP : System Speed Dial

```
09-nnn-DP TK:tt
nnnnnnnnnnnnnnnnnn
```

nnn = 100-599(999) DP = 01-30
 tt = 01-08
 Telephone number.

General:

This program permits the assignment of up to 500(900) sets of system speed dialing codes.

Description:

nnn	=	100-999	=	Speed dial code, up to 900 sets in total.
DP	=	01-30	=	Digit Pointer for telephone number. 30 digits per speed dial code
tt	=	01-40	=	Pre-assigned CO line number

Pre-Assigned CO Line:

Press the [MIC] key to change or clear the Pre-assigned CO line number. This CO line is the dedicated outgoing line for the speed dial code. If the user presses a speed dial code without selecting a CO line first, the system will select this CO Line automatically. If no CO line is assigned, the system will select an available CO line according to the assigned Dial 9 group (Program 41-nnnn-04). A line may also be selected directly by the user.

Telephone Number:

30 digits maximum may be entered in each memory.
 In addition to the digits 1 to 0, *, # the following can also be stored: Pause, Flash, Pulse to DTMF. Each function occupies one digit.

- "Pause" is represented by the [HOLD] key. -- p
- "Flash" is represented by the [FL] key. -- F
- "Pulse to DTMF" is represented by the [PT] key.-- T

- i) Pause : During dial procedures, the dialing will wait for a programmable period (Refer Program 05-01-06).
- ii) Flash : This will make a loop disconnection of a pre-assigned duration. (Refer program form 05-02-05).
- iii) Pulse to DTMF : If the dial signal is "pulse", it will change to "DTMF".

Note: Pressing [DND] will erase the digit which the cursor is on.
 Pressing [REDIAL] will erase all the assigned digits.

Program 10-gp-IP: Intercom or DISA Single Digit Assignment

```
10-gp-IP S.D.I.  
000 000 000 000 000
```

gp = 01-08, IP = 01-05 (digit 1 to 5)
Station number for digit 1 to 5

General:

This program permits the stations in one or more station groups to call a specific station by dialing one digit only. This feature is for the Hotel/Motel environment only. (Refer to programming form 05-04-07 to enable single digit dialing). The settings in this Form are also used by DISA Single Digit Dialing (see Form 05-11-08 to enable).

Description:

Single Digit Intercom.

When single digit dialing is enabled then the room to room call prefix digit (6) must be dialed to call another room.

If a particular group has no entries programmed, the stations in the same number station group will not have single digit dialing and will not have to use the room to room prefix.

Single Digit DISA.

When single digit dialing is enabled and a group (1-8) selected in Form 05-11-08 then DISA callers will be able to dial the stations in the group selected by dialing the digits 1 to 5. The digit 1 will call the first station in the group, 2 will dial the second station in the group and so on up to digit 5. The caller can also dial 6 and then dial a full extension number to call other extensions or dial (0 or 9) to call the operator.

If a position is left programmed to 0 then station numbers starting with the digit which corresponds to this position can be dialled in full.

Example

```
10-gp-IP S.D.I.  
111 153 222 000 550
```

In the above example an incoming DISA caller who dials 1 will call station 111, dialing 2 will call station 153, 3 will call Station 222. Dialing 4 will allow the caller to dial the full extension number of any extension which starts with 4, eg 444. 550 has been assigned as a Hunt Group Pilot number so a DISA caller dialing 5 will call the Station hunting group which has 550 as it's pilot Number. Pilot numbers are set in Form 67 and Hunt groups are programmed in Form 68 and 69.

Program 11-IP : Date and Time Setting

11-IP Date/Time 08 27 87 18 16 4

IP = 01-06
Setting Data

ItemPointer	Display Data	Programming Data Description
01	01-12	Month.....
02	01-31	Day.....
03	00-99	Year.....
04	00-23	Hour.....
05	00-59	Minute.....
06	1-7	Week day (Monday = 1, Tuesday = 2)..

General:

This program permits the setting of system Date & Time. Please note that all TransTel products are Year 2000 compliant including the recognition of the year 2000 as a leap year

Description:

The Date & Time will be held during a power failure on the SK-200, there is no need to reset the Time after power is restored.

Program 12-nn : System Alarm Clock

12-nn Alarm hh mm dd

nn = Alarm schedule (01-10)
Setting Time

ItemPointer	Display Data	Programming Data	Description
hh (01)	00-23	Hour.	
mm (02)	00-59	Minute.	
dd (03)	00-99	Duration.	

General:

This program permits the assignment of 10 time schedules for alarm clock purposes.

Description:

When the assigned time is reached, Background music will be broadcast over all Key telephones which are idle. The time duration for alarm clock music is programmable (00 to 99 minutes).

Program 13-nn : Password

13-nn Password d d d d d d d d

nn = Password Assigned (01-09)
Setting password

General:

This program permits the assignment of 9 different passwords in the system.

Description:

The password length is from 1 to 8 digits. All unused digit positions must have d entered in them.

Password No. 1 = Programming Password. System Default is None.

Password No. 2 = DISA Password. System Default is 3472

Password No. 3 = Toll Free. System Default is 8655

Password No. 4 = DISA Monitor Password.

Password No. 5 = Password for remote access to VSU Default is 97d3dddd

Password No. 6 = DISA Remote Paging Password.

Password Nos. 7 to 9 = Future.

Program 14-01-IP: SMDR Specifications

<pre>14-01-IP S.M.D.R. 0 0 0 0 0 21 0 0</pre>	<pre>IP = 01-08 System Default</pre>
---	--------------------------------------

Item Pointer	Display Data	Programming Data Description	Default
01	0-9	Call Duration Start Time	0=00 Secs.
02	0-1	Record Incoming Call	0=Record
03	0-1	Record Local Call	0=Record
04	0-1	Record Incoming Call No Answer	0=Record
05	0-1	Print out the Title	0=Yes
06	00-99	Number of records between titles	21=21
07	0-4	SMDR Output Port - SK-200	0=MPU
08	0-8	Polarity Reversal/Mini Call Acc/CLI.	0=No

General:

This program assigns SMDR parameters.

Description:

Item 01 - Call duration start time:

This parameter assigns the start time for the Call duration timer.

0 = 00 seconds	1 = 05 seconds	2 = 10 seconds	3 = 15 seconds	4 = 20 seconds
5 = 25 seconds	6 = 30 seconds	7 = 35 seconds	8 = 40 seconds	9 = 45 seconds

Item 02 - Record Incoming Calls:

This parameter decides whether incoming calls will be recorded.

0 = Record	1 = Do not Record
------------	-------------------

Item 03 - Record Local Calls:

The system decides which are local calls by the toll access code set in Form 05-03-05.

Item 04 - Record Incoming Calls No Answer:

This parameter decides whether unanswered incoming calls will be recorded.

0 = Record	1 = Do not Record
------------	-------------------

Item 05 - Print the Header:

This parameter decides whether the system will output the description of each column.

0 = Print the Header	1 = Do not print the Header
----------------------	-----------------------------

Item 06 - Number of records between the Header:

This parameter permits the assignment of the number of records between each Header. If the Number = 00, The whole SMDR feature will be disabled.

Item 07 - SMDR Output Port (SK-200):

This parameter sets which RS232 port on the SK-200 will carry the SMDR information.

0 = MPU	1 = IPU1	2 = IPU2	3 = IPU3	4 = IPU4
---------	----------	----------	----------	----------

Item 08 - Polarity Reversal and Mini Accounting Feature:

If reversal is disabled, the system will start the call timer after accessing a CO line.

If reversal is enabled, the system will start the call timer after the called party answers.

0	=	Not Detect P.R. / Normal SMDR format output
1	=	Detect P.R. / Normal SMDR format output
2	=	Not Detect P.R. / Simple SMDR format output
3	=	Detect P.R. / Simple SMDR format output
4	=	Not Detect P.R. / Enable Mini-Accounting Feature
5	=	Detect P.R. / Enable Mini-Accounting Feature
8	=	Not Detect P.R. / Enable intercom SMDR / Normal SMDR format output (899 records)
9	=	Detect P.R. / Enable intercom SMDR / Normal SMDR format output (1400 records)

* If the Mini-Accounting Feature has been enabled, the system will not record the call without any meter pulses being received.

* When the Mini Call Accounting feature is enabled it is necessary to set Administration phones to not record calls against them in Form 45-st-08. This will prevent the system memory from being used to record calls unnecessarily. If administration phones are allowed to record their calls and are not checked out regularly then they will fill the system memory and prevent other calls being recorded. The SK-200 can store 1400 records.

SMDR OUTPUT DATA FORMAT - OLD

<u>ST.</u>	<u>TK</u>	<u>S</u>	<u>TELEPHONE NUMBER</u>	<u>Account</u>	<u>MM/DD</u>	<u>START</u>	<u>DURATION</u>	<u>RING</u>	<u>UNIT</u>
112	01		001188629645752	12345678	10/02	08:35	00:02'35"		00012
115	02		Incoming	87654321	10/02	08:45	00:10'20"	00'10"	
000	03		Incoming no answer		10/02	12:00		00'35"	
112	04		001188629645752	FAC:01	10/02	12:10	00:02'00"		00023
112	03	X	FAC or PSW error		10/02	12:30			
112	05	X	001		10/02	12:35	00:00'05"		
121	01	#	0294150100		10/02	14:15	00:00'55"		00001
117	01	*	0294150100		10/02	14:15	00:03'10"		00004
D3	05		0418220212		10/02	21:01	00:02'30"		00003
D-03	D		<< D I S A OFF >>		10/02	21:00	00:02'40"		

TITLE DESCRIPTION:

ST = Station No. : 11 to 6999, D = DISA
 TK = Trunk No. : 01 to 08,
 S = Status : # = Hold, * = Answered the hold, X = Cut off by toll restrictions.
 Telephone Number : First 24 digits
 Account : 8 digits in total
 MM/DD : Month/Day
 Begin_Time hh:mm : The start time of accessing the trunk line.
 Duration_Tm hh:mm:ss : Time duration of the call.
 Ring_Tm mm:ss : Incoming ring time.
 Unit 00000 : Meter Pulse Count

CASE EXPLANATION:

CASE 1: October 2, 08:35 A.M., Station 112 made a call (telephone No. is 00116495256611) through line 1. The call lasted 2 minutes and 35 seconds, Account code No. 12345678 was entered for the call and 12 meter pulses were recorded.

CASE 2: October 2, 08:45 A.M., An incoming call on line 2, rang for 10 seconds, station 115 answered the call and stored an Account No. 87654321.

CASE 3: October 2, 12:00 P.M., An incoming call through line 3, rang for 35 seconds, no one answered and the call was abandoned.

CASE 4: October 2, 12:10 P.M., Station 112 made a Long Distance call through line 4 by Forced Account Code 1 and 23 meter pulses were recorded.

CASE 5: October 2, 12:30 P.M., Station 112 made a call by Forced Account Code but was denied because of a wrong code.

CASE 6: October 2, 12:35 P.M., Station 116 made a call which was restricted.

CASE 7: Line 1 was used by station 121 for 55 seconds then put on hold. One meter pulse was recorded against this station for it's section of the call.

CASE 8: The held line 1 was answered by station 117 and he occupied the line for 3 minutes and 10 seconds. Four meter pulses were recorded against this station for it's section of the call.

CASE 9: Incoming Line 3, using the DISA function, made an outside call 018220212 on line 5. The Duration time is for line 5. 3 meter pulses were recorded for this call.

CASE 10: DISA is completed. The Duration time is for line 3.

SMDR OUTPUT DATA FORMAT - NEW With CLI Output

<u>ST.</u>	<u>TK</u>	<u>S</u>	<u>TELEPHONE NUMBER</u>	<u>Account</u>	<u>MM/DD</u>	<u>START</u>	<u>DURATION</u>	<u>RING</u>	<u>UNIT</u>
112	01		001188629645752	12345678	10/02	08:35	00:02'35"		00012
112	02		DDI Num: 94150112		10/02	08:45	00:10'20"	00'10"	
	03		CLI NoAns:294176288		10/02	12:00	00:00'00"	00'35"	
111	05		CLI Num :294150100*11		10/02	12:35	00:00'05"	00'05"	
	05		DDI NoAns:94150112		10/02	12:37	00:00'00"	00'27"	

Case 1: Outgoing call. All information remains as before.

Case 2: Incoming call on an ISDN system. The number displayed is the Indial number dialled by the calling party. The system can be programmed on a station by station basis to select whether calls to that station will display the Indial number dialled or the CLI information of the incoming caller

Case 3: An incoming call rang for 35 seconds and no one answered. The CLI number of the calling station is displayed.

Case 4: An incoming call on line 5 (ISDN) was answered by station 111. The SMDR displayed the CLI number (294150100) of the calling party and the extension number (112) of the calling party. The extension number shown is what the system will receive if the call is from another SK-200 with **ISDN**. The format may be different or non existent from other telephone systems or on PSTN lines. The system can be programmed on a station by station basis to select whether calls to that station will display the Indial number dialled or the CLI information of the incoming caller. The number 94150100 is the pilot number of the Indial group.

Case 5: An incoming call rang for 27 seconds and no one answered. The Indial number the calling station dialed is displayed.

Program 17-nn : Forced Account Code

17-nn FCAC CODE - - - - -

nn = Forced Account Code (01-99)
Forced account code (8 digits max.)

General:

This program creates 99 (SK-200) Forced Account codes.

Description:

The forced account code will temporarily override a station's toll restrictions. 99 (SK-200) codes of up to 8 digits maximum are allowed. If the system is fitted with a call accounting output the entry for a call made using a forced account code will display the code used in the account code column. The actual numbers of the code will not be displayed for security reasons, the reading will show FAC:XX. XX is the forced account code number 01 to 99.

The Forced Account Code will not be displayed on the screen of Executive phones when it is entered.

Digit "_" is keyed in by **[FL]** button and means " No digit ".

Clear all digits by pressing **[TRF/FL]** to insert a line in place of the original entry.

Do not use Redial to clear forced account code entries as this will insert "don't cares" which will allow any digit as a forced account code.

The Forced Account Codes may also be used as DISA passwords to allow call accounting to show which user was making an external call using DISA from outside the system. In the B1-408 & BX8, Forced Account Codes 24 to 48 can be used for this purpose and in the SK-200, Forced Account Codes 49 to 99 can be used. This feature will need to be enabled in Form 05-11-02.

Program 18-nn-TK : Assign Toll Plans To Trunk Lines

```
18-nn-tk Toll
0 0 0 0 0 0 0 0
```

nn = Toll plan number (00-09), tk = (01-08)(01-40)
Toll class for each trunk (class 0-9)

General:

This Form assigns Toll Plans to trunk lines. The Toll plans are to be written in Forms 51 to 59 and 61 to 66.

Description:

10 toll plans can be used.

Each Toll Plan assigns each trunk line a Toll Class. It is possible to allow a toll class to have different restriction level on a line by line basis.

Example 1: Form 18-00 is set to 0000dddd. Any station in the system which is set to toll class 0 will be unrestricted on lines 1 to 4 but will be unable to dial out on lines 5 to 8.

Example 2: Form 18-01 is set to 111100dd. Any station in the system which is set to toll class 1 will be restricted by toll class 1 on lines 1 to 4, will be unrestricted on lines 5 and 6 but will be unable to dial out on lines 7 and 8.

To assign toll plans to stations, see Program **41-st-05, 41-st-06**.

Toll Classes:

Class	Function	Prog. Form
0	Unrestricted	Default
1	Use Form 51 for the Unrestricted numbers. Use Form 61 for the Restricted numbers	Form 51,61
2	Use Form 52 for the Unrestricted numbers. Use Form 62 for the Restricted numbers	Form 52,62
3	Use Form 53 for the Unrestricted numbers. Use Form 63 for the Restricted numbers	Form 53,63
4	Use Form 54 for the Unrestricted numbers. Use Form 64 for the Restricted numbers	Form 54,64
5	Use Form 55 for the Unrestricted numbers. Use Form 65 for the Restricted numbers	Form 55,65
6	Use Form 56 for the Unrestricted numbers. Use Form 66 for the Restricted numbers	Form 56,66
7	Use Form 57 for the Unrestricted numbers.	Form 57
8	Use Form 58 for the Unrestricted numbers.	Form 58
9	Use Form 59 for the Unrestricted numbers.	Form 59
*	Use Form 51-56 for unrestricted numbers. Use Form 61-66 for all restricted numbers	
d	Cannot access the trunk line.	

Program 19-IP : Voice Service (VPC) Assignment

19-VS-IP VAC ASN 00 00 00 00 00

VS = VSU Module Number (01-40)
IP = 01-08
Function of Voice segment on VPC

General:

This program assigns voice services to segments of the VPC. On the SK-200 the channel numbers are X901 to X940. X is the SLT programming digit set in Form 05-08-05 (normally 7).

The station numbers on the first VSU card are X901-X904.

The station numbers on the second VSU card are X905-X908.

The station numbers on the last VSU card are X937-X940.

Description:

IP = 01	Voice segment number 01.	IP = 05	Voice segment number 05.
IP = 02	Voice segment number 02.	IP = 06	Voice segment number 06.
IP = 03	Voice segment number 03.	IP = 07	Voice segment number 07.
IP = 04	Voice segment number 04.	IP = 08	Voice segment number 08.
IP = 09	Assign Channel to VSU Group (SK-200)		
IP = 09	0 = 60 second voice chip		

Eight voice segments are valid for the VAC card and each can be assigned one of 18 functions.

Set data Function

- 00 No-Operation
- 01 DISA: Company greeting message (on answer)
- 02 DISA: Message to tell the outside party that the called extension is **Busy**.
- 03 DISA: Message to tell the outside party that the called extension is **No Answer**.
- 04 DISA: Message to tell the outside party that the extension number is **Not-Valid**.
- 05 DISA: Message to tell the outside party the Console is busy, please wait.
- 06 DISA: Message to tell the outside party the DISA Time duration has expired.
- 07 DISA: Message to tell the outside party that the Console is still busy, this line will be disconnected, please call again later.
- 08 DISA: Night greeting message (on answer).
- 09 ECF: Message to advise caller that the call is being external call forwarded.
- 10 ACD: Message to tell caller that the console is busy, please wait
- 11 ACD: Message to tell caller that the console is still busy, please wait.
- 12 ACD: Message to tell caller that the console is still busy, call will be disconnected, please call back later.
- 13 * Reserved for future use.
- 14 Morning Call -- Wake up Message.
- 15 Call Waiting Message.(Refer to programming form 05-04-08.)
- 16 * Reserved for future use.
- 17 * Reserved for future use.
- 18 Company Greeting message instead of Music On Hold (BX8).

09. When VSU grouping is enabled for the SK-200 in form 05-06 then this parameter assigns the channel to the group (1 to 8) with which it will work.

During DISA operation if there is no VSU channel allocated to DISA Night Answer (type 08) then DISA calls will be answered by the DISA Day message in both Day and Night form.

RECORDING VOICE MESSAGES

VOICE MESSAGES MUST BE RECORDED FROM AN OPERATOR CONSOLE ONLY.

There is only one channel available in the BX8 and this is accessed by dialing 86 from the console. The SK-200 has multiple channels which will be numbered 79 (01-40). Each channel can be divided into 1 to 8 segments depending on requirements. Channel numbers indicated on the sample screens in Bold only refer to the **SK-200**.

```
VOICE PORT 7901 (1)
0=REC 7=PLAY
```

Dial 0 and after the tone has stopped, record the company greeting message,

```
VOICE PORT 7901
RECORDING.....
```

When completed Dial 1 and the screen display will be,

```
VOICE PORT 7901 (2)
0=REC 7=PLAY
```

The 2 in brackets indicate that the second message segment is ready to record. Dial 0 and record the message to apologise for the continuing delay,

```
VOICE PORT 7902
RECORDING.....
```

When the message is recorded dial 1. Continue using the same procedure until all the required segments are recorded and then hang up.

Remote VSU Recording Feature

This allows the user to remotely record/play/copy VSU messages. To use this feature it will be necessary to enable DISA and install the EMC card on the B4-MPU.

The method of operation is:

- (1) Enable DISA feature by setting form 35-tk-04.
- (2) Dial [#][7] during DISA to access the remote access code.
- (3) Dial [Password] that has been assigned in form 13-05.
- (4) Dial 7901 ~ 7940 to access different VSU channels.
- (5) Dial [0] for remote recording

-
- Dial [7] for remote playing
 - Dial [1] to change to the next recording segment
 - Dial [3] to copy the first channel of the VSU card into the other three channels.
 - Dial [#] to go back to the first voice segment of VSU channel.
 - (6) Dial [*] to end this feature.

Programming Form 13-05 - Password for Remote Accessing VSU Card. The default is 9703.

Programming Form 25 - press [8] to clear all related timers of VSU remote accessing.

Only one DISA line can remotely access the VSU at a time.

The VSU cannot answer DISA lines during remote access of the VSU.

The remote access feature will always access the first voice segment of the channel (7901~7940).

Program 20-nn : Define Day-Time Schedule

20-nn Day Time hh mm HH MM

nn = Day schedule pointer (00-06)
Setting data

General:

This program assigns day time from Sunday to Saturday for automatic night switching.

Description:

The system is capable of switching automatically between day and night settings using the time parameters set in this Form. To change from manual to automatic night switching the console presses **[PRG] / [TRF] / ***. Pressing * toggles between the 2 forms.

If a Function key has been set to function 52 then pressing this key will change from Day to night form by one touch but will not change between Automatic and Manual switching.

00 = Sunday
01 = Monday
02 = Tuesday
03 = Wednesday
04 = Thursday
05 = Friday
06 = Saturday

HH, hh = Hour MM,mm = Minute

Day time is from hh:mm to HH:MM.

Program 25 : Reset Data to System Default

25 - Reset Data
0 - 9 Default

General:

This program resets all data to System Default. All new systems must be reset to default before any programming in case corruption has been caused during handling or shipping. It will also be necessary to reset to default after a software upgrade is installed. When using item 3 or 4 these must be done AFTER the system reset is performed.

Description:

1 = System data will be reset to system default except System Speed Dial Programming.

2 = The system data will be totally reset to system default.

WARNING: All user defined data will be lost.

3 = For all Stations set

44-st-02=1 (Hold Feature restricted)

44-st-03=1 (Call Split Feature restricted)

This feature is for Hotel/Motel operation. After setting this Form it is necessary to reprogram the Console and any Administration phones in Form 44-st-02 to allow them to place calls on hold.

4 = For all stations set

40-st-01=0 (Barge In not allowed)

40-st-02=0 (Monitor not allowed)

It is strongly recommended that this parameter is used on ALL systems to prevent accidental Barge In operations being misinterpreted as crosstalk.

All other system programming information remains unchanged when using 3 or 4.

5= Clear all registered CT2 Handsets and restart all CT2 Base Stations(CFP). (Not currently used in North America).

6= Restart all CT2 Base Stations(CFP). (Not currently used in North America).

7 = Spare

8 = Clear all timers for VSU Remote Programming

Program 26-gp-IP : DID Route Table (Analog Indial) (Not used in North America)

```
26-000 DID ROUTE
000
```

cd = 000-999
<- Setting Data

Program 27-tk-IP : Print Programming Data

```
27-01-IP
0 0 0 0 0 0 0 0
```

IP = 01-99
System Default

General:

This program permits programming information to be passed to a serial printer via the system's RS232 port on the SK-200.

Description:

00	=	Stop printing out data
01-98	=	Print out the programming forms individually
99	=	Print out all programming data

If a serial printer is connected to the MPU serial port, the system programming can be sent to the printer to provide a hard copy for record purposes.

Program 29-tk-IP : Trunk Specifications - 2

29-tk-IP TK SPEC
0 0 0 0 0 0 0 0

tk = 01-08, IP = 01-08
System Default

Item Pointer	Display Data	Programming Data Description	Default
01	0-1	Place Calls On Hold Awaiting Answer	0=Disable
02	0-8	ACD-1 Function Enable	0=Disable
03	0-3	ISDN Incoming Call type (Reserved for North America)	0=Inblock sending
04	0-9,d	Set Ring Frequency (SK H/sets Only)	0=H/set Setting
05	0-9	Allow Audible Ring For Incoming Calls	0=All Stns
06	0-1	Trunk Timer Start Time	0=Line Loop
07	0-	Reserved	0=
08	0-	Reserved	0=

General:

This program permits each trunk line to be assigned different parameters.

Description:

Item 01 - Place Calls On Hold Awaiting Answer:

This parameter requires the exchange to provide a polarity reverse signal on B party answer. If this is available the call can be placed on hold awaiting answer and then the system will notify the caller when the called party has answered.

0 = Disable	1 = Enable
-------------	------------

Item 02 - ACD-1 Function Enable:

This parameter enables or disables the ACD-1 function for each trunk individually and is able to select whether ACD-1 operates in Day or Night or Both Modes.

0	=	Day Time - Disable ACD function	Night Time - Disable ACD function
1	=	Day Time - Disable ACD function	Night Time - Enable ACD function ^{*1}
2	=	Day Time - Disable ACD function	Night Time - Enable ACD function ^{*2}
3	=	Day Time - Enable ACD function ^{*1}	Night Time - Disable ACD function
4	=	Day Time - Enable ACD function ^{*1}	Night Time - Enable ACD function ^{*1}
5	=	Day Time - Enable ACD function ^{*1}	Night Time - Enable ACD function ^{*2}
6	=	Day Time - Enable ACD function ^{*2}	Night Time - Disable ACD function
7	=	Day Time - Enable ACD function ^{*2}	Night Time - Enable ACD function ^{*1}
8	=	Day Time - Enable ACD function ^{*2}	Night Time - Enable ACD function ^{*2}
9	=	Reserved for future use.	

*1: Enable ACD-1 function only when all ring assigned stations are busy.

*2: Enable ACD-1 function when time set in form 05-09-06 has elapsed even if the ring assigned stations are idle.

Item 03 - ISDN Incoming Call Type: (Reserved for North America)**Item 04 - Set Ring Frequency (SK 1/sets Only):**

This feature allows each trunk to ring at AK handsets with it's own individual ring frequency and override the frequency set by the user for all calls.

0	=	As per the key phone's ring setting (user defined on AK handset)
1~8	=	Use the ringing frequency 1~8 of key phone (AK types) as the trunk's ring
d	=	Use "Background Music" as the Door phone's ring

Item 05 - Allow Audible Ring For Incoming Calls:

This feature allows either some or all stations which are ring assigned in Form 01 or 02 to receive the audible ring signal when a trunk rings at the station. If the audible signal is disabled the station will still be able to answer a call by lifting the handset only, if they are ring assigned in Form 01 or 02

0	=	All stations assigned in Form 01 & 02 will receive audible signal for an incoming call
1	=	Only the first station assigned in Form 01 & 02 will receive audible signal for an incoming call. the other ring assigned stations will still be able to answer a call by lifting the handset only
2	=	The first 2 stations assigned in Form 01 & 02 will receive audible signal for an incoming call. the other ring assigned stations will still be able to answer a call by lifting the handset only
9	=	The first 9 stations assigned in Form 01 & 02 will receive audible signal for an incoming call. the other ring assigned stations will still be able to answer a call by lifting the handset only

Item 06 - Trunk Timer Start Time:

This parameter allows each trunk to be set as to whether the timer starts when the line is looped or when a polarity reversal signal is received. If Form 14-01-08 is set to 1 then all trunks will start their timer when a polarity reverse signal is received otherwise only the trunks set to 1 in this parameter will start their timer when the reversal is received. See also Form 05-13-03 for call cut off timer if no polarity reverse signal is received.

0 = Start at loop	1 = Start on reversal
-------------------	-----------------------

Program 30-gp-IP : (Not used in North America)

30-gp-IP DID INDEX 000

gp = 1-30, IP = 01 <- Setting Data

Program 33-gp-IP : (Not Used in North America)

33-gp-IP FLX DAY 000 000 000 000

gp = 01-30, IP = 01-16
<- Setting Data

Program 34-gp-IP: (Not Used in North America)

34-gp-IP FLX NIG 000 000 000 000

gp = 01-30, IP = 01-16
<- Setting Data

Program 35-tk-IP : Trunk Specifications - 1

35-tk-IP TK SPEC
0 1 0 0 3 0 0 0

tk =(01-40), IP = 01-08
System Default

Item Pointer	Display Data	Programming Data Description	Default
01	0-4	Trunk Type	0=CO
02	0-1	Dialing Signal	1=DTMF
03	0-8	External Call Forward	0=No
04	0-8	DISA	0=No
05	0-3	Pick Up	3=Yes
06	0-9	Loud Bell	0=No
07	0-4	Inward Line Ringing Type - Day	0=Com. Audible
08	0-4	Inward Line Ringing Type - Night	0=Com. Audible

General:

This program permits every trunk line to be assigned different parameters.

Description:

Item 01 - Trunk Type:

0	=	CO	Trunk line is Central Office line.
1	=	PABX	Trunk line is installed behind a PABX or is a Centrex line.
2	=	DID	Trunk line is a Analogue DID line. The system will automatically detect the installation of a DID card and set this parameter itself.
4	=	ISDN	Trunk line is ISDN The system will automatically detect the installation of an SIU card and set this parameter itself.

Item 02 - Trunk Signal:

0	=	Pulse	Trunk dialing signal is Dial Pulse
1	=	DTMF	Trunk dialing signal is DTMF (Touch Tone).

Item 03 - External Call Forward - ECF:

0	=	No ECF.
1	=	ECF to system speed dial 101
2	=	ECF to system speed dial 102
3	=	ECF to system speed dial 103
4	=	ECF to system speed dial 104
5	=	ECF to system speed dial 105
6	=	ECF to system speed dial 106
7	=	ECF to system speed dial 107
8	=	ECF to system speed dial 108

Item 04 - DISA/ECF (Direct Inward System Access/External Call Forward):

0	=	Day - Disable	Night - Disable
1	=	Day - Disable	Night - DISA Enable
2	=	Day - DISA Enable	Night - Disable
3	=	Day - DISA Enable	Night - DISA Enable
4	=	Day - Disable	Night - ECF Enable
5	=	Day - ECF Enable	Night - Disable
6	=	Day - ECF Enable	Night - ECF Enable
7	=	Day - DISA Enable	Night - ECF Enable
8	=	Day - ECF Enable	Night - DISA Enable

* Enable = Listed feature is operational.

Item 05 - Pick Up:

0	=	Day - can not	Night - can not
1	=	Day - can not	Night - can
2	=	Day - can	Night - can not
3	=	Day - can	Night - can

Can = An incoming call on this line can be answered by non ringing stations.

Can not = An incoming call on this line can not be answered by non ringing stations.

This feature is to assign "Private Lines" in conjunction with the programming of dial 9 groups, or to prevent incoming calls being answered by users other than the ring assigned stations.

Item 06 - Loud Bell:

Refer to Program 06 to assign Relay to operate for a Loud Bell.

0	=	No Operation.	1	=	Relay 1 in cabinet 1
2	=	Relay 2 in cabinet 1	3	=	Relay 3 in cabinet 1
4	=	Relay 1 in cabinet 2	5	=	Relay 2 in cabinet 2
6	=	Relay 3 in cabinet 3	7	=	Relay 1 in cabinet 3
8	=	Relay 2 in cabinet 3	9	=	Relay 3 in cabinet 3

The system does not provide any voltage from the assigned relay. A separate ring voltage and ring device will need to be provided by the installer

Item 07 - Inward Line Ringing Method Assignment (Day):

As described in Program 01-tk-IP, there are four ringing methods plus a Private line setting:

COMMON AUDIBLE

Ring all assigned Extensions simultaneously.

LINEAR

Each incoming call rings the first available Extension in order of the Extensions assigned in Program 01-tk.

CIRCULAR

The first incoming call on each trunk rings the first assigned Extension, the 2nd incoming call rings the next station, etc.

HUNT

If an incoming line rings an extension which is busy or does not answer, after the assigned Hunt Time (Program 05-08-01,) the call will ring the next available extension assigned in the same group. If the next ringing station is busy then the call will immediately move to the next ring assigned extension but if the station does not answer then the call will wait for the Hunt time and then ring the next assigned extension. Once the ring assignment has passed a station which is busy then it will provide Off Hook Busy Remind signal and when the station is free if the call is still unanswered the station will commence ringing for that call. Stations which do not answer a call will also continue to ring until the call is answered.

PRIVATE

This is for an incoming private line. The station that owns this private line can set the call forward (All, Busy, No Answer) for this private line to the Voice Mail Port (See Program 43- ST-02).

0	=	Day - COMMON AUDIBLE	1	=	Day - LINEAR
2	=	Day - CIRCULAR	3	=	Day - HUNT

4	=	Day - PRIVATE			
---	---	---------------	--	--	--

Item 08 - Inward Line Ringing Method Assignment (Night):

As described in Program 02-tk-IP, there are four ringing methods plus a Private line setting: All settings in item 08 are the same as item 07.

0	=	Day - COMMON AUDIBLE	1	=	Day - LINEAR
2	=	Day - CIRCULAR	3	=	Day - HUNT
4	=	Day - PRIVATE			

Program 36-gp-tk : Trunk Group Assignments

36-gp-IP TK GRP
01 02 03 04 05

gp = 01-08, IP =(01-40)
trunks to be included

General:

This program permits each trunk line to be assigned to different Trunk groups. There are eight groups in total.

Description:

In the bottom data-setting area, the trunk number (01-40) means that the trunk is included in the specified group. Press REDIAL to clear all entries from the table before entering the required trunks. Always set outgoing calls to start from the highest fitted trunk and program in descending order to the lowest trunk fitted. This will prevent call collision particularly in systems with SLT'S.

There are 40 trunks maximum in a trunk group.

This parameter will work with the following features:

- . Dial 9 or 0 access to trunk group.
- . Tenant service.
- . ACD-1 and DISA Grouping

Program 37-tk : Busy Out Trunks

37-tk Busy Out
0 0 0 0 0 0 0 0

tk =(01-40)
Busy out Type

General:

This program permits the CO line to be locked by a Technician.

Description:

This feature is used when the user does not want to use the trunk or to remove a problem line. When the trunk is set to BUSY OUT, the LCD display on the phone will display "Access denied" when that line button is pressed.

0	=	Line is unlocked
1	=	Busy for Outgoing calls
2	=	Busy for Incoming and Outgoing calls (set loop on)
3	=	Busy for Incoming and Outgoing calls (set line LED on)

Program 38-gp-tk : Dial 87 Trunk Group Assignment

38-gp-IP TK GRP
01 02 03 04 05

gp = 01-08, IP =(01-40)
trunks to be included

General:

This program permits each trunk line to be assigned to different Trunk groups which can be accessed by dialing [87]. There are 8 groups in total. This group will be available to a station in addition to its dial 9 group. Always set outgoing calls to start from the highest fitted trunk and program in descending order to the lowest trunk fitted. This will prevent call collision particularly in systems with SLT'S. Press REDIAL to clear all entries in the table before entering required trunks.

Description:

This form is programmed in the same way as Form 36-gp-tk. But this program is only used for dialing [87] to access a Trunk Line.

Once a dial [87] group has been programmed it will need to be assigned to the stations who are to use it in Form 46-Stn-01.

Program 39-IP : Sensor Assignment

39-gp-IP Sensor 00 00 00 00

gp = 01-04 IP = 01-04
System Default

Item Pointer	Display Data	Programming Data Description
01	00-18	SENSOR #1 of IPU Card
02	00-18	SENSOR #2 of IPU Card
03	0-6	SENSOR #1 Contact Type and Activating Time
04	0-6	SENSOR #2 Contact Type and Activating Time

Each group can be programmed the same as group 1 and the group number refers to the cabinet number in which the IPU supporting the sensors is installed.

Description:

Each IPU has 2 Sensors (SK-200).

Each Sensor can be assigned one of the following 18 functions in items 39-(01-02) in the SK-200.

Setting		Function
00	=	No Operation
01	=	Fire Alarm
02	=	Break Alarm
03	=	Door Phone 1 (88)
04	=	Door Phone 2 (89)
05-18	=	Reserved for future use

The SENSOR type may be normally open or normally closed and can be set to be activated in Day or Night switching or in both. Parameters (39-gp-(03-04) in the SK-200 set each sensor contact to be a normally open or normally closed type and set whether to work in Day or Night Mode or both.

00	=	Disable Sensor function
01	=	Normally Open, Activated for Day time.
02	=	Normally Closed, Activated for Day time
03	=	Normally Open, Activated for Night time.
04	=	Normally Closed, Activated for Night time.

05	=	Normally Open, Activated for Day and Night time.
06	=	Normally Closed, Activated for Day and Night time.

The applications are as the following:

1	=	<p>Fire Alarm :Sensor detects fire, all idle extensions will be rung and all busy extensions will hear the alarm tone. .The fire alarm will continue for 10 minutes. .Pressing [7][7][7] from the console will stop the fire alarm. The LCD display will show FIRE ALARM !!!! when the alarm is activated.</p>
2	=	<p>Break Alarm .The Sensor detects the signal appears, all idle extensions will be rung. .The Sensor detects the signal disappears, all extensions will stop ringing. The LCD display will show BREAK ALARM !!!! when the alarm is activated.</p>

Individual stations can be programmed to not receive the Break Alarm in Form 45-st-06.

The ring cadence for the fire alarm will be as follows

a = 1.25 seconds on b = 0.25 seconds off c = 0.25 seconds on. b = 0.25 seconds off

This cadence repeats.

If door key has been set in form 07 and form 39, the specific Door key on DSS will get the following indications:

LED Indication	Door Phone Status
Off	Normal Close for Sensor
Red-Slow Flashing	Normal Open for Sensor
Red-Fast Flashing	Door Phone Is Calling
Green on	This Station is talking to Door Phone
Red on	Some other Station is talking to Door Phone

Program 40-st-IP : Station Class of Service - 1

40-st-IP STCOS								
1	1	0	0	0	0	0	00	(Keysets)
0	0	0	0	1	0	0	00	(Single Lines)

st = Extension NO.(2-4 digits). IP = 01-08 System Default

Item Pointer	Display Data	Programming Data Description	Default
01	0-9	Override Level	1=Low
02	0-9	Monitor Level	1=Low
03	0-9	Limit Call Duration	0=No
04	0-3	Station Loud Bell	0=No
05	0-1	Access Paging	0=Yes
06	0-1	Receive Paging	0=Yes
07	0-1	Security Code Status	0=None
08	00-48	Forced Account Code	00=All

General:

This programming Form permits each station to be assigned a different Class of Service.

Description:

Item 01 - Override Level:

Higher level stations can override lower level stations, equal levels may override each other. All values between 1 and 9 are valid.

0 = Disable	1 = Lowest level	9 = Highest level
-------------	------------------	-------------------

Item 02 - Monitor Level:

Higher level stations can monitor lower level stations, equal levels can not monitor each other. All values between 1 and 9 are valid.

0 = Disable	1 = Lowest level	9 = Highest level
-------------	------------------	-------------------

Item 03 - Limit call duration:

Conversation will be interrupted by a Busy Tone. A warning tone will be given 10 seconds before the end of the timed duration. (see Form 05-04-03 to set call limiting action)

--	--	--	--

0 = No limit	1 = 3 min	2 = 5 min	3 = 10 min	4 = 15 min
5 = 20 min	6 = 30 min	7 = 40 min	8 = 50 min	9 = 60 min

Item 04 - Station Loud Bell:

Refer to Program 06 to assign Relay to operate for a Loud Bell.

0	=	No Operation	1	=	Relay 1 in cabinet 1
2	=	Relay 2 in cabinet 1	3	=	Relay 3 in cabinet 1
4	=	Relay 1 in cabinet 2	5	=	Relay 2 in cabinet 2
6	=	Relay 3 in cabinet 3	7	=	Relay 1 in cabinet 3
8	=	Relay 2 in cabinet 3	9	=	Relay 3 in cabinet 3

The system does not provide any voltage from the assigned relay. A separate ring voltage and ring device will need to be provided by the installer

Item 05 - Access Paging:

0 = "All Page" signal can be broadcast by this station.	1 = "All Page" signal can not be broadcast by this station.
---	---

Item 06 - Be Paged:

0 = "All Page" signal can be received by this station.	1 = "All Page" signal can not be received by this station.
--	--

This feature is useful for someone who does not want to be disturbed by page calls.

Item 07 - Security code status:

0 = The station is unlocked.(Can make outgoing calls.)	1 = The station is locked. (Can not make outgoing calls.)
--	---

If a phone becomes locked accidentally or the user forgets their lock code, this parameter will unlock the phone. There is no way of finding what the lock code was.

Item 08 - Forced account code:

There are 99 forced account codes which can be used on the system. Each user can be allocated use of one or all of these. If a station has a Forced Account Code (01-48)(01-99), the user can key **[SAVE] [MW]** and the account code to override toll restrictions for one call only.

If the setting is from (01-48)(01-99) then this Account Code ONLY can be used by the station. If the setting is 00 then the station can use any one or all Account Codes.

Refer to Form 17: Create Forced Account Code

Program 41-st-IP : Station Specifications

41-st-IP STSPE
1 3 0 1 0 0 CN

st = Extension NO.(2-4 digits). IP = 01-07
System Default

Item Pointer	Display Data	Programming Data Description	Default
01	1-8	Station Group / Agent Group for ACD	1=1
02	1-8	Key Group For KeyPhone	3=3
03	0-8	Shift Key Group For KeyPhone	0=None
04	1-8	Dial 9 trunk group	1=1
05	0-9,d	Toll plan - Day	0=0
06	0-9,d	Toll plan - Night	0=0
07	csn	c = Cabinet numbers = Slot Number, n = Port number	

General:

This program permits each station to be assigned to a different Class of Service.

Description:

Item 01 - Station group:

This parameter will work with the following features:

- Call Pickup Group.
- Single Digit Intercom Group
- Paging Group
- ACD-1 Group

Item 02 - Flexible key pattern group assignments (key phone):

This parameter assigns stations to one of 8 flexible key pattern groups.

See Form 07: Flexible key group assignment to write soft key plans.

Item 03 - Shift Key Group For KeyPhone:

Each station can have access to a second soft key group accessed by the shift key. The shift key must be programmed in the first group assigned to the station. When the shift key is used to access the second group then it will light red and over ride the function assigned to it in the second group.

0 = Disable	1-8 = Soft Key Plan 1 to 8
-------------	----------------------------

Item 04 - Dial 9 trunk group:

When a station selects a trunk line by dialing 9, the system finds an available trunk according to the dial 9 group assignment. If a trunk is not in a stations assigned dial 9 group then the station will not be able to make outgoing calls on that trunk.

Item 05 - Toll plan - Day:

This parameter assigns the toll plan to be used by the station in day mode.

Refer to Form 18 for Toll plan details.

Item 06 - Toll plan - Night:

This parameters assigns the toll plan to be used by the station in night mode.

Refer to Form 18 for Toll plan details.

Item 07 - Port number:

This is for checking only, the system will automatically show the correct port number. It is not possible for the user to change or remove this parameter.

In the SK-200 the port number consists of 3 digits, The first is the cabinet number (1 to 4), the second is the slot number in the cabinet (0-9) and the third is the position on the card (1 to 8).

Program 42-st-IP : Register Memory Block for Individual Speed Dial

```
42-st-IP SPD-T
b1 b2
```

st = Station No. (2-4 digits) IP = 01-02
blocks (2 max.) for a Station

- b1:** Block 1 of Individual Speed Dial Codes (00-09)
- b2:** Block 2 of Individual Speed Dial Codes (DSS1-10)

General:

This program divides sets of **Individual Speed Dial** into blocks for use by Stations.

Description:

In program **05-04-06**, divide the 500 (900 for SK-200) sets of Speed Dial into System or Individual Speed Dial.

If in program **05-04-06**, the Individual Speed Dial Codes are assigned:

900 sets, maximum blocks are 90 blocks.	800 sets, maximum blocks are 80 blocks
700 sets, maximum blocks are 70 blocks	600 sets, maximum blocks are 60 blocks
500 sets, maximum blocks are 50 blocks	400 sets, maximum blocks are 40 blocks
300 sets, maximum blocks are 30 blocks	

- Each block has 10 sets of Individual Speed Dial.
- Each set has up to 30 digits.
- Each Station can use up to 2 blocks (20 sets of Individual Speed Dial.)

Example:

```
42-553-IP SPD-T
01 02
```

553: Station No. (2-4 digits)
01 02: Station 553 can use block **01** and **02** for Individual Speed Dial (20 sets)

```
42-105-IP SPD-T
04 00
```

105: Station No. (2-4 digits)
04 00: Station 105 can use block **04** (10 sets) for Individual Speed Dial (00-09), **00** : for no block.

```
42-550-IP SPD-T
00 03
```

550: Station No. (2-4 digits)
00 03: Station 550 can use block **03** for Individual Speed Dial (DSS 1-10)

- * Refer to **KeyPhone Operation**, for the programming of Individual Speed Dial.
- * Be sure to program these parameters before programming speed dial on key phones.

If problems are encountered with stations not being able to program speed dial numbers, check this parameter to be sure that speed dial locations are available to the station. If the station card was fitted at the time of system

initialisation then the blocks will have been allocated automatically.

Program 43-cn-IP : Port Specifications

```
43-cn-IP Port
st 0 1 2 00 00
```

csn = Port No. (3 digits) IP = 01-06
Parameters for the port

csn c = Cabinet number(1-3) s = Slot Number(0-9) n = Position Number on Card

Item Pointer	Display Data	Programming Data Description	Default
01	nnnn	Station Number (2 to 4 digits)	System
02	0-9	Equipment Type	System
03	1-8	DSS Key Group Assignment	1=Grp.1
04	0-8	Disallow SLT Connection	0=Yes
05	00	Reserved	00
06	00	Reserved	00

General:

This program permits each port to be assigned different parameters and station numbers.

Description:

Item 01 - Station number:

Use this setting to assign station numbers for the Flexible Numbering Plan.

This parameter also assigns the DSS console to the station which is to control it. To assign the DSS control station, first ascertain which port the DSS console is connected to, then enter this Port number and then enter the number of the station which will control it in the first position on the screen. It may be necessary to connect the DSS console to the system and then power down and re power the system to allow proper recognition of the DSS unit.

02. Equipment type:

0 = None connected	1 = KeyPhone (25 key without LCD)
2 = KeyPhone (25 key with LCD)	3 = Dual port/Hybrid port no KeyPhone
4 = Single Line Telephone	5 = DSS Console
6 = Reserved	7 = KeyPhone With OHCA
8 = Voice Mail Port	9 = ISDN Extension

Types 0 to 5 are recognised by the system automatically.

Type 3 can be assigned to an analog port on a SK-200 and that port can then be given the same Station number as a Key Phone which will enable operation of the 2 phones in the same way as a Hybrid port on SK-824

with dual port capability enabled.

Type 8 can be assigned to an analog port to enable the system to send DTMF tones identifying a call forwarded calls originating station. A Voice Mail port will receive DTMF tones from call forwarded stations identifying the mail box to which the call is intended. The mail box number must be the same as the station number for this parameter to work although Mode 05-10 can insert leading digits before the station number is sent to the Voice Mail and is also able to insert pauses before or during the string. There is also an Enhanced Protocol to provide more information to the Voice Mail unit, see Mode 05-10 for descriptions of the protocols available.

Item 03 - Key pattern group assignments for DSS:

This parameter assigns DSS consoles to the pattern group.

See Program 08 to create or modify flexible DSS key patterns.

Item 04 - Disallow SLT Connection:

This parameter when enabled will prevent an SLT from being used on a Hybrid port.

0 = Disabled	1 = Enabled
--------------	-------------

Item 05 - Reserved:

Item 06 - Reserved:

To set an extension name -

1. Enter system programming Form 43.
2. Depress [MIC/AT] to enter the Name form.
3. Input the name for the related extension by the following function keys.

<i>Key Pad</i>	<i>Depress 1 time</i>	<i>Depress 2 times</i>	<i>Depress 3 times</i>	<i>Depress 4 Times</i>
1	Q	Z	Space	1
2	A	B	C	2
3	D	E	F	3
4	G	H	I	4
5	J	K	L	5
6	M	N	O	6
7	P	R	S	7
8	T	U	V	8
9	X	Y	Z	9
0	.	:	&	0
*	-	/	!	*
#	()	\$	#
DSS23	Cursor Left			
DSS24	Cursor Right			

4. Press [SAVE] to store the data.
5. The next extension port will appear ready to program names.

Program 44-st-IP : Station Class of Service - 2

```

44-st-IP STCOS
0 0 0 0 0 0 0 0 (Key Telephones)
0 1 0 0 0 0 0 0 (Single Line Phones)
    
```

st = Station No. (2-4 digits)
 IP = 01-08

Item Pointer	Display Data	Programming Data Description	Default
01	0-1	System Alarm	0=Enable
02	0-1	Hold feature	0=Enable
03	0-1	Call Split	0=Enable
04	0-1	Manual Line	0=Disable
05	0-1	Headset feature	0=Disable
06	0-1	Use Engineering Password	0=Enable
07	0-1	DTMF Receiver Control For Voice mail Ports	0=Normal
08	0-1	Station Alarm Signal Type	0=Music

General:

This program permits each station to be assigned to a different Class of Service.

Description:

Item 01 - System Alarm:

If the setting is disabled, the station will not receive system alarm clock signals.

0	=	The "System Alarm" signal will be received on this station.
1	=	The "System Alarm" signal will not be received on this station.

Item 02 - Hold feature:

If the setting is disabled, the station will not be able to place calls on hold.

0	=	Hold function allowed
1	=	Hold function not allowed

Item 03 - Call Split:

If the setting is disable, the station will not be able to activate call splitting function. When activated and the station presses hook flash after placing a call on hold the call will not be retrieved. Dialing 9 (or 0) or 72 will retrieve the held call.

0	=	Call Splitting function allowed
1	=	Call Splitting function not allowed

Item 04 - Manual Line:

If the setting is Enable, lifting the handset of the station will call the operator directly without dialing any digits.

0 = Disable	1 = Enable
-------------	------------

Item 05 - Headset feature:

If this setting is enabled it will be necessary to leave the handset of the key station off hook. The user can then use the [SPK] key to go on or off hook. If the station is a headset phone then it is not necessary to leave the handset off hook

This programming form will be overwritten by the user if they use [SPK 775] to switch between handset and headset form.

0 = Disable	1 = Enable
-------------	------------

Item 06 - Use Engineering Password:

If the setting is disable the station is unable to use the engineering password to enter programming form.

The engineering password is 117277.

0 = Enable	1 = Disable
------------	-------------

Item 07 - DTMF Receiver Control For Voice mail Ports:

This program controls the operation of DTMF detectors for each Voice mail Port. The parameter is set to free DTMF detectors quickly for systems with high Voice Mail traffic.

0	=	After the Voice Mail dials the extension number, The system releases the DTMF receiver after the timeout of form 05-02-02
1	=	After the Voice Mail dials the extension number, The system releases the DTMF receiver immediately

Item 08 - Station Alarm Signal:

This parameter decides what the station will hear when a station alarm or Morning Call is activated.

0 = Back Ground Music	1 = Busy tone
-----------------------	---------------

Program 45-st-IP : Station Class of Service - 3

45-st-IP STCOS
0 0 0 0 0 0 0 0

st = Station No. (2-4 digits) IP = 01-08
System Default

Item Pointer	Display Data	Programming Data Description	Default
01	0-1	Intercom Call Limitation	0=Disable
02	0-1	Dual Port Capability	0=Disable
03	0-1	Ringling Volume Up Gradually	0=Disable
04	0-1	Allow Trunk Access	0=Yes
05	0-1	Intercom Calls To Different Station Groups	0=Yes
06	0-1	Receive Break Alarm	0=Yes
07	0-1	Allow Unrestricted Speed Dial	0=Yes
08	0-1	Record Station's SMDR Data	0=Yes

General:

This program permits each station to be assigned to a different Class of Service.

Description:

Item 01 - Intercom Call Limitation:

If this setting is Enabled, the station can not make an intercom call by dialing a station number. Under this condition, the Key Phone still can press a Flexible Key to make an intercom call or the Key Station or Analogue phones can call a station using the "Single Digit" feature.

0 = Disable	1 = Enable
-------------	------------

Item 02 - Dual port Capability:

If this function is enabled, a Single Line Telephone can be paralleled with the Key Telephone to a Hybrid Extension Port.

0 = Disabled (No Parallel connection)	1 = Enabled (Parallel connection Allowed)
---------------------------------------	---

Item 03 - Ringing Volume Up Gradually Capability:

Using this function, the key telephone's ringing volume will gradually increase when the Extension is ringing.

0= Disable

1= Enable

Item 04 - Allow Trunk Access:

If this function is disabled then the station will be unable to access any trunks for incoming or outgoing calls.

0 = Enable	1 = Disable
------------	-------------

Item 05 - Intercom Calls to Different Station Groups:

If this function is disabled then stations will not be able to make intercom calls outside their own station group (Form 41-st-01). This parameter is for use in tenancy arrangements where each company wish's to remain totally separate although some stations can still be allowed this function, for instance a shared Receptionist.

0 = Enable	1 = Disable
------------	-------------

Item 06 - Receive Break Alarm:

If this parameter is disabled then the station will not receive the Break Alarm signal if one has been programmed in Form 39.

0 = Enabled	1 = Disable
-------------	-------------

Item 07 - Allow Unrestricted Speed Dial Access:

If this parameter is disabled then the station will not be able to access any of the Speed Dial numbers which have been unrestricted in Form 05-05-03/04 if they conflict with the stations toll restrictions.

0 = Enabled	1 = Disable
-------------	-------------

Item 08 - Record Station's SMDR Data:

If this parameter is disabled then calls to and from this station will not recorded or output to the SMDR or the Mini Accounting feature. When the Mini Accounting feature is enabled (see Form 14-01-08) then all stations which are used for administration should have this feature disabled to prevent using memory unnecessarily to record their calls. If calls are allowed to accumulate against stations which are not checked in or out regularly then the system memory buffer will become full and calls will not be recorded.

0 = Record	1 = Do not Record
------------	-------------------

Program 46-st-IP : Station Class of Service - 4

```

46-st-IP STCOS
0 1 0 0 0 7 0 0 (Key Telephones)
0 1 0 0 0 7 2 0 (Single Line Phones)
    
```

st = Station No. (2-4 digits) IP = 01-08
System Default

Item Pointer	Display Data	Programming Data Description	Default
01	0-8	Dial [87] Trunk Group	0=None
02	0-9	Send Message Wait Signal Level	1=Low
03	0-2	Automatic Microphone Switching	0=No
04	0-7	DISA /DID/Indial Recall Capability	0=None
05	0-9	Maximum Number Of Transfer Times Allowed	0=No Limit
06	0-1	Door Lock/DND/CFWD Access	7=Yes
07	0-2	Telephone Software Version	0=1
08	0	Reserved	0

General:

This program permits each station to be assigned to a different Class of Service.

Description:

Item 01 - Dial [87] Trunk Group:

If this setting is from 1 to 8, after the station dials [87], the system will automatically search for a free line which is assigned in group 1 to 8 in Program Form 38.

If the setting is 0, then no dial 87 group is available to this station.

Item 02 - Message Waiting Level:

The Stations assigned higher levels can leave message for stations with the same or lower levels. Ten levels (0-9) are available (9=highest level, 0=lowest level).

0 = Can not do Message Waiting (lowest level).	9 = Can do Message Waiting to Stations assigned level 0-9
--	---

Item 03 - Automatic Answer Capability:

This parameter if enabled will automatically switch on the microphone of the station if it receives an intercom call. This setting is independent of whether the system is set to voice or ring signaling for intercom calls.

--	--	--

0 = No	1 = MIC permanently on	2 = MIC will switch on for Intercom calls
--------	------------------------	---

Item 04 - DISA/DID/Indial Recall Capability:

If this parameter is enabled then when a DISA, DID or ISDN Indial call rings the extension but the station is busy or does not answer (depending on setting) after the voice message announcing the status of the station is heard then the system will recall the operator after the assigned DISA transfer time. Using settings 1 to 3 the called station will continue to ring until the console answers the call. Using Settings 5 to 8 the call will ring the station for 1 cycle (Form 05-08-06) and then camp on to the console only and cease to ring the called station. If the parameter is set to 0 then the call will stay at the station until answered or terminated..

0 = No Recall to Operator	1 = Recall to Operator/No Answer
2 = Recall to Operator/Busy	3 = Recall to Operator/No Answer or Busy
4 = An ISDN Indial call to this station will receive Busy signal if the station is busy	5 = Recall to Operator/no Answer
6 = Recall to Operator/Busy	7 = Recall to Operator/No Answer or Busy

Item 05 - Maximum Re-Transfer Times:

This feature allows the user or the automatic attendant console to re-transfer the same call for the number of times set in this parameter.

0 = No Limit	1 = Allow 6 times
2 = Allow 7 times	3 = Allow 8 times
4 = Allow 9 times	5 = Allow 10 Times
6 = Allow 11 Times	7 = Allow 12 Times
8 = Allow 13 times	9 = Allow 14 times

Item 06 - Door Unlock/DND/CFWD Access:

	0	1	2	3	4	5	6	7
Door Unlock	0	1	0	1	0	1	0	1
DND	0	0	1	1	0	0	1	1
CFWD	0	0	0	0	1	1	1	1

This parameter allows or disallows the station from accessing the Door Unlock, Do Not Disturb and Call Forward features as per the table. (0= Disable 1=Enable)

Item 07 - Telephone Software Type:

This parameter sets the different versions of for SK software equipped telephones. This parameter must be changed manually. All systems should be set to a 2 for SK-1 telephones.

Program 47-st : Hot line Assignment

```
47-st  HOT LINE  
000
```

st = Station No. (2-4 digits)
Data. (Extension Mode)

```
47-st  HOT LINE  
SPD:000
```

st= Station No. (2-4 digits)
Data. (SPEED DIAL Mode)

General:

This feature allows a user to lift the handset and directly call a specific outside party through System Speed Dial or an Intercom Extension without dialing any digits.

* Pressing **[SPK]** on a KeyPhone allows the Hot line to be over-ridden.

Description:

1. Enter a System Speed Dial Number for an outgoing call or a Station Number for an Intercom call.

Example:

```
47-550 HOT LINE  
SPD:101
```

550 = Station No. (3 digits)
Speed Dial 101 (for example: **3190255**)

When the user lifts the handset, the System will automatically call 3190255 through System Speed Dial 101.

2. Press **[MIC]** to select a hot line Intercom. (Press again back to SPD assignment), the display shows:

```
47-550 HOT LINE  
000
```

Enter an Extension number **151**

```
47-550 HOT LINE  
151
```

The system calls Extension **151** when the handset is lifted.

The Hot Line is the recommended method of connecting a Fax machine to the system. Use a spare analogue port and make the Fax extension a Hot Line to an unused Speed Dial number and allocate the fax line to be used by that Speed Dial. Do not program any number into the Speed Dial. When the fax goes off line it will select the Fax line and then wait for the Fax to dial the number required.

Program 48-st-IP : Register Memory Blocks for Function Keys

```
48-st-IP FUN-T  
b1
```

st = Station No. (2-4 digits) IP = 01
block (1 max.) for a Station

b1:(00-99) Block for DSS Function Keys (DSS keys 16-24)

General:

This program allocates memory blocks for use by DSS function keys on individual Key Stations.

Description:

Each block provides memory for programming 9 DSS function keys per station. The DSS keys for functions are the 4 leftmost keys of the top row and the second top row of the KPU handset.

Each memory block allows up to 5 key strokes to be stored by each DSS key.

There are 99 blocks available for assignment.

Program 49-st-IP : Register Credit Limit (SK-200)

```
49-st-IP Credit  
0 0 0 0 0
```

st = Station No. (2-4 digits) IP = 01
< set credit limit for each Station

General:

This feature is for Hotel/Motel installations and allocates credit limits for individual stations when meter pulse detection is fitted to the system.

Description:

This feature allows each individual station to be set a limit on the cost of calls able to be made. When this limit is reached the phone will be automatically Checked Out (locked) by the system and no further calls can be made from it. The call in progress can continue. The credit limit can be set using Hotel Function Key [9] so this programming mode will not normally be used however it is possible to scroll through the program to see what limits are set for stations and also to clear them if needed.

Program 50-st-IP : Station Class of Service - 5

50-st-IP STCOS
0 0 0 0 0 0 0 0

st = Station No. (2-4 digits) IP = 01-08
System Default

Item Pointer	Display Data	Programming Data Description	Default
01	0-1	Disable SPK/HOLD/TRF Key	0=no
02	0-1	Call Forward LED Indicator	0=Yes
03	0-1	ISDN Incoming Call Display Type	0=CLI
04	0-1	Reserved	0
05	0	Reserved	0
06	0	Reserved	0
07	0	Reserved	0
08	0	Reserved	0

General:

This program permits each station to be assigned to a different Class of Service.

Description:

Item 01 - Disable SPK/HOLD/TRF Key:

This parameter when enabled will prevent the operation of the SPK/HOLD/TRF keys. If a KeyPhone is being used for a door phone or courtesy phone or an application where the user should be prevented from accessing system features this feature will be useful.

0 = Enable	1 = Disable
------------	-------------

Item 02 - Call Forward LED Indicator:

This parameter enables or disables the indication of "Call Forward" on the large LED indicator of key telephones.

0 = Show "Call Forward" on big LED of key telephone	1 = Do Not Display
---	--------------------

Item 03 - ISDN Incoming Call Display Type):

This parameter selects what will be displayed on the screen of an LCD phone when an incoming call is received, either the CLI number or the ISDN Indial number. CLI on PSTN lines requires optional equipment to be fitted. This will also select what will be displayed on the SMDR output for incoming calls.

0 = CLI	1 = ISDN Indial Number
---------	------------------------

Program (51 to 56)-code-IP : Toll Plans - Allowed Digits - Class 1 to 6

51-code-01 Allow - - - - -

code = code no 01-16(20), IP = 01-08(12)
< System default

General:

This program sets allowed exception numbers for Toll Class 1. These Forms should be read in conjunction with Forms 61 to 66.

Description:

There are 16 codes for each Toll Class and each code contains up to 12 digits

In default any station allocated to Toll Plans 1 to 6 will be able to dial unrestricted until the associated Forms are programmed.

Allowed entries in this Form are 0 to 9, d and _. d = Don't care and means that any digit can be dialled in this position. _ = no digit is allowed to be dialled beyond this position. If a digit is allowed as the beginning of a number then the entry should be filled with don't care's to the end of the line or the caller will not be able to dial the full number.

Forms 51 to 56 are used in conjunction with Forms 61 to 66 and Forms 57 to 59 are used independently.

Toll Classes:

Class	Function	Prog. Form
0	Unrestricted	Default
1	Use Form 51 for the Unrestricted numbers. Use Form 61 for the Restricted numbers	Form 51,61
2	Use Form 52 for the Unrestricted numbers. Use Form 62 for the Restricted numbers	Form 52,62
3	Use Form 53 for the Unrestricted numbers. Use Form 63 for the Restricted numbers	Form 53,63
4	Use Form 54 for the Unrestricted numbers. Use Form 64 for the Restricted numbers	Form 54,64
5	Use Form 55 for the Unrestricted numbers. Use Form 65 for the Restricted numbers	Form 55,65
6	Use Form 56 for the Unrestricted numbers. Use Form 66 for the Restricted numbers	Form 56,66
7	Use Form 57 for the Unrestricted numbers.	Form 57
8	Use Form 58 for the Unrestricted numbers.	Form 58
9	Use Form 59 for the Unrestricted numbers.	Form 59
d	Cannot access the trunk line.	

Note 1: Default numbers in Form 61, 62, 63, 65, 66 are: dddddddd

Note 2: Default numbers in Form 51, 52, 53, 55, 56, 57, 58, 59 are:-----

Note 3: d: Don't care ie: any digit is allowed in this position.

Note 4: _: The system does not allow any digits dialed after this symbol.

Program (61 to 66)-code-IP : Toll Plans - Restricted Digits - Class 1 to 6

61-code-01 Restrict d d d d d d d d
--

code = code no 01-16(20), IP = 01-08(12)
< System default

General:

This program sets Restricted numbers for Toll Class 1. These Forms should be read in conjunction with Forms 51 to 56.

Description:

There are 16 codes for each Toll Class and each code contains up to 8 digits
In default any station allocated to Toll Plans 1 to 6 will be able to dial unrestricted until the associated Forms are programmed.

Allowed entries in this Form are 0 to 9, d and _. d = Don't care and means that any digit can be dialled in this position. _ = no digit is allowed to be dialled beyond this position. If a digit is allowed as the beginning of a number then the entry should be filled with don't care's to the end of the line or the caller will not be able to dial the full number.

Forms 51 to 56 are used in conjunction with Forms 61 to 66 and Forms 57 to 59 are used independently and do not have an associated restriction table.

In Default stations which are allocated Toll Plans 0 to 6 are able to dial any numbers.
When a station is allocated Toll Plans 7 to 9 they can dial no digits until the plans are programmed.

Form 51 and 61 combine to produce Toll Plan 1, Form 52 and 62 combine to produce Toll Plan 2 and so on up to Form 56 and 66 for Toll Plan 6. Toll Plans 7, 8 and 9 are associated with Form 57, 58 and 59.

The principle of these Toll Plans up to Plan 6 is to deny unwanted digits in Form 61 to 66 and then allow any exceptions for these digits in Form 51 to 56. If 0ddddddd is entered in Form 61 and 000_ and 013 are entered in Form 51 then a station allocated to Toll Plan 1 will be able to dial any local number plus 000 for emergency and 013 for Directory assistance. Any other number beginning with 0 will be disallowed.

Example 1: Local calls and free calls.

Set Form 41-111-05/06 = 1

When this form is set and Form 51 and 61 are still at default then station 111 will still be unrestricted.

Set Form 61 to the following,

Form 61-01 = 0_____
Form 61-02 = 1ddddddddd

Station 111 will now be only able to dial numbers beginning with digits 2 to 8.
To allow local and free calls program Form 51 to the following.

Form 51-01 = 1800ddddddd
Form 51-02 = 1888ddddddd
Form 51-03 = 1877ddddddd

Program (57 & 58)-code-IP : Toll Plans - Allowed Digits - Class 7 & 8

57-code-01 Allow - - - - -

code = code no 01-16(20), IP = 01-08(12)
< System default

General:

This program sets allowed numbers for Toll Plans 7 to 9.

Description:

There are 16 codes for each Toll Class and each code contains up to 12 digits. In default any station allocated to this toll plans will not be able to dial any numbers.

When this form is set and Form 57 is still at default then station 111 will be totally restricted.

Program 59-code-IP : Toll Plan - Common Permitted Code - Class 9

59-code-01 Allow - - - - -

code = code no 01-16, IP = 01-12
< System default

General:

This program sets allowed numbers for **ALL** Toll Plans 0 to 9.

Description:

Up to 16 Common Permitted Codes can be entered and each code contains up to 12 digits. Any number entered in the common permitted code can be dialled by any station regardless of the Class of service they have been allocated. In default the Common Permitted numbers allocated in this table are 000 and 1144d.

Program 67-Gp-IP : Hunt Group Pilot Number

67-gp HUNT NO 000

GP = 01-10
< System default

General:

This program sets Pilot Numbers for Hunting Groups 1 to 30.

Description:

There are 30 Hunt Groups available in SK-200. Each Hunt Group is assigned a Pilot Number in this Form. The pilot number can be any valid unused number and will have the same number of digits as the station numbering scheme used in the system (2, 3 or 4).

Hunt group pilots can be assigned to be rung from Single Digit DISA.

Once Hunting Ring Type is enabled in Form 05-08-08 then ringing this pilot number will access the stations in the group according to the ringing method selected and the order in which they are programmed in Form 68 (Day) and Form 69 (Night). Each Hunt Group can be from 1 to 16 stations in the SK-200.

There are 3 types of Ring available, Common Audible, Linear and Circular.

If Linear Ring is enabled then calling the pilot number will always call the first available station in the order in which they are programmed in Form 68 or 69.

If Circular Ring is enabled then the stations will be called one after the other for each succeeding call until all have taken a call and then the Ring will revert to the beginning of the Ring assignment and then repeat the process.

If Common Audible Ring is enabled then calling the pilot number will call all ring assigned stations simultaneously.

Stations can remove themselves from receiving Hunt calls by using the DND key but this will also prevent them from receiving direct calls. On the SK-200 stations can be given a function key to Log In or Out of the hunt group. This key is programmed in Form 07-Grp to be function key 64.

It is still possible to call each station in the Hunting group directly by dialing it's own individual station number.

If a station in a Hunt Group has set call forward to a station or another Hunt Group (for instance Voice Mail Group) then only direct calls to the station will be forwarded. If Hunt calls come to the station and it is call forwarded it will still ring for the call.

Program 68-Gp-IP : Hunt Group Assignment - Day

68-GP-IP HUNT DA 000

GP = 01-10, Ip = 01-05
< System default

General:

This program sets Stations into Hunting Groups 1 to 30 for the SK-200 and assigns the order in which they will be accessed during Day time.

Description:

There are 30 Hunt Groups available and 16 stations can be assigned into each group for Day and 16 for Night time.

There are 2 types of Ring available, Linear and Circular.

If Linear Ring is enabled then calling the pilot number will always call the first available station in the order in which they are programmed in Form 68 or 69.

If Circular Ring is enabled then the stations will be called one after the other for each succeeding call until all have taken a call and then the Ring will revert to the beginning of the Ring assignment and then repeat the process.

It is still possible to call each station in the Hunting group directly by dialing it's own individual station number.

Program 69-Gp-IP : Hunt Group Assignment - Night

69-GP-IP HUNT NI 000

GP = 01-10, Ip = 01-05
< System default

General:

This program sets Stations into Hunting Groups 1 to 30 for the SK-200 and assigns the order in which they will be accessed during Night time.

Description:

There are 30 Hunt Groups available and 16 stations can be assigned into each group for Day and 16 for Night time.

There are 2 types of Ring available, Linear and Circular.

If Linear Ring is enabled then calling the pilot number will always call the first available station in the order in which they are programmed in Form 68 or 69.

If Circular Ring is enabled then the stations will be called one after the other for each succeeding call until all have taken a call and then the Ring will revert to the beginning of the Ring assignment and then repeat the process.

It is still possible to call each station in the Hunting group directly by dialing it's own individual station number.

Appendix A - Name Function Programming

To set an extension name -

1. Enter system programming Form 43.
2. Enter the port number of the Station to name
3. Depress [AT/MIC] to enter the Name mode.
4. Input the name for the related extension by the following function keys.
5. Press [SAVE] to store the data.
6. The next extension port will appear ready to program names.

To set a Trunk name -

1. Enter system programming Form 35.
2. Enter the Trunk number
3. Depress [AT/MIC] to enter the Name form.
4. Input the name for the related extension by the following function keys.
5. Press [SAVE] to store the data.
6. The next trunk will appear ready to program names.

To set a System Speed Dial name

1. Enter system programming Form 09 or System Speed Dial From the Console
2. Enter the Speed Dial number
3. Enter the telephone number
3. Depress [AT/MIC] twice to enter the Name form
4. Input the name for the Speed Dial by the following function keys
5. Press [SAVE] to store the data.
6. The next Speed dial will appear ready to program

<i>Key Pad</i>	<i>Depress 1 time</i>	<i>Depress 2 times</i>	<i>Depress 3 times</i>	<i>Depress 4 Times</i>
1	Q	Z	Space	1
2	A	B	C	2
3	D	E	F	3
4	G	H	I	4
5	J	K	L	5
6	M	N	O	6
7	P	R	S	7
8	T	U	V	8
9	X	Y	Z	9
0	.	:	&	0
*	-	/	!	*
#	()	\$	#
DSS23	Cursor Left			
DSS24	Cursor Right			

Appendix B - Programming Cross reference

Ringling Assignment

01-tk-IP	Ringling Assignment - Day Time
02-tk-IP	Ringling Assignment - Night Time
20-nn	Define Day-Time Schedule for Automatic Night switch
05-08-01	Hunt Time Assignment
35-tk-07	Inward Line (Day) Ringling Type
35-tk-08	Inward Line (Night)

DISA

35-tk-04	DISA Trunk Day/Night Assignment
05-01-04	DISA Access Delay Time

DISA Transfer

04-(01-08)	Console Assignment
05-06-03	VSU Grouping
05-06-04	Polarity Reverse Detection
05-08-04	DISA Transfer Group (Extension or Trunk Group)
05-07-04	DISA Recall Capability-No Dialing
05-08-06	VPC Remind Time for DISA Transferring (No Answer or Busy)
05-08-07	Dialing Wait Time after DISA Service Message
05-09-04	DISA Busy Tone Detection
05-11-04	DISA Passwords
05-11-03	MOH or RBT
05-11-04	DISA Answering Method-VSU Busy
05-11-05	DISA Call Function Access
05-11-06	DISA Re-Check Times to Busy Station/Console
05-11-08	DISA Single Digit Function
10-(01-08)	Single Digit DISA And Intercom Assignment
46-st-03	DISA Recall Capability (No Answer/Busy)
20-nn	Define Day-Time Schedule for Automatic Night switching
Voice Service (Optional)	
19-IP	Voice Service Assignment

Night Transfer

09-nnn-IP	System Speed Dial (101-109)
35-tk-03	External Call Forward, Speed Dial Assignment
35-tk-04	DISA/ECF, Day/Night Assignment
20-nn	Define Day-Time Schedule for Automatic Night switch

Trunk Pick up

35-tk-05 Pick up (Trunk Specifications)

Trunk Specifications

05-01-05 Busy Remind Cycle Time

05-02-07 Ring On Time

05-02-08 Ring Off Time

Intercom Call Signaling

05-03-03 (Voice/Ring)

46-st-03 Automatic Microphone Switching

05-07-01 Intercom Hunting Capability

41-st-01 Station Group Assignment

Hunt Groups

67-(01-30) Assign Hunt Group Pilot Number

68-(01-30) Assign Stations To Hunting Group-Day

69-(01-30) Assign Stations To Hunting Group-Night

05-08-08 Set Hunting Group Ring Method

Dial Tone Pattern

05-03-07

Single Digit Dialing

05-04-07 Intercom Single Digit Capability

10-gp-IP Intercom Single Digit Assignment

41-st-01 Group Assignment (Station Specifications)

Direct Station Select

07-gp-IP Flexible Key Group Assignment

41-st-02 Keyphone Flexible Key Group

41-st-03 Keyphone Flexible Shift Key Group

Operator Calls

04-(01-08) Console Groups

05-06-05 Operator Code

44-st-04 Manual Line

05-09-02 Intercom Calls Camp on To busy Console

Intercom Dialing Restriction

45-st-01 Intercom Call Limitation
45-st-05 Intercom Calls To Different Station groups

Dial 9/87 Settings

05-04-02 Activate **Dial 9 Flag** Capability
36-gp-tk Dial 9 Trunk Group Assignment
41-st-04 Dial 9 Group (Station Specifications)
38-gp-tk Dial 87Trunk Group Assignment

Outgoing Code

05-03-04 Dial 0/9 for outgoing Access

Trunk Specifications

35-tk-01 Trunk Type
35-tk-02 Dialing Signal
05-01-06 Pause Time Duration
05-01-07 DTMF Generation Time
05-02-05 Keyphone Flash Time
05-02-07 Ring On Time
05-02-08 Ring Off Time
05-03-01 Make/Break Ratio

Speed Dial

05-04-06 Speed Dial Distribution
05-01-06 Pause Duration for Speed Dial
42-st-01/02 Register Memory Blocks for Individual Speed Dial
09-nnn-DP System Speed Dial
05-03-02 Automatic Trunk Search
05-05-03/04 Speed Dial Unrestricted

Auto-Redial

05-03-02 Automatic Trunk Search
05-02-03 Auto-Redial Waiting Time
05-05-07 Auto-Redial Times
05-05-08 Auto-Redial Pause Time

Hold & Hold Recall

05-01-01	Hold Recall Time
05-01-02	Exclusive Hold Recall Time
05-01-03	Hold Recall Timeout
05-06-01	Transfer Busy Recall Time
05-06-02	Transfer No Answer Recall Time
44-st-02	Hold Capability
05-07-04	DISA Recall Capability

Busy Remind signal (Off Hook Signaling)

05-01-05	Busy Remind Cycle Time
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Message Waiting Level

46-st-02	Set message wait Level
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Override

40-st-01	Set Over ride Level
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Console Assignment

04-gp-IP	Assign Consoles for each group
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Flexible Key Group Assignment

07-gp-IP	Flexible Key Group Assignment
41-st-02	Assign Key group to a station
41-st-03	Assign Shift Key group to a station

Trunk Group

36-gp-tk	Trunk Group Assignment
41-st-04	Assign Dial 9 Trunk Group to a Station

Group Assignment (Station Specifications)

41-st-01	(Zone Paging/Pick Up/Station/Single Digit)
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Toll Restriction

18-gp-tk Toll Plan Programming for Trunks
41-st-05/06 Toll Plan Assignment for Stations (Day/Night)

Code Assignment

05-03-05 Toll Access Code
51-59-ip Allow Tables
61-66-ip Restrict Tables
05-05-03/04 Speed Dial Unrestricted

Forced Account Code

17-nn Setting Forced Account Codes
40-st-08 Station Allocation of Forced Account Codes

Call Limit

40-st-03 Station Call Limit Duration
05-04-03 Call Limit Type

Passwords

13-01 Password for System Programming
13-02 Password for DISA
05-11-02 Number of DISA Passwords
13-03 Password for Toll Free

Station Lock

40-st-07 Lock / Unlock by Security Code

Busy Out Trunk

37-tk

Time Setting

05-04-04 12/24 Hours Clock
11-IP Date and Time Setting
20-nn Define Day-Time Schedule

System Alarm

12-nn System Alarm Clock
44-st-01 System Alarm Capability
44-st-08 System/User Alarm Signaling

Morning Call

05-05-01 Morning Call Signaling
19-IP Voice Service Assignment

Flexible Station Numbering

41-st-07 Show the Port Number (cn)(csn)
05-03-06 Assign Station Number Digit Length
43-cn-01 Enter a Station Number for the port

SLT Parameters

05-02-01 SLT Dial Tone Timeout
05-02-02 SLT Interdigit Timeout
05-02-04 SLT Release Time
05-02-06 SLT Hold Signal
05-04-05 SLT Flash Delay Time (SK-200)
05-04-08 SLT Message Waiting Type
05-06-07 Affirmative SLT Hookswitch (Hold) Capability
05-07-02 SLT Calling Proof Capability
05-08-03 SLT Busy Remind Tone Flag
05-08-05 SLT Programming Digit
43-st-04 Analogue Extension allowed on Hybrid port
44-st-02 Hold Feature Enable
44-st-03 Call Split Feature Enable
45-st-02 Dual Port Capability

Paging

40-st-05 Access to Paging
40-st-06 Receive all Page Signal
41-st-01 Station / Paging Group Assignment

Call Split

44-st-03 Allow/Disallow Call Split

Call Transfer

05-06-01 Transfer Recall Timeout (Busy)
05-01-03 Transfer Recall Timeout (No Answer)
05-08-06 VPC Remind Time for DISA Transferring (NoAnswer or Busy)
05-08-07 Waiting Dialing Time after DISA Service Message

Call Forward No Answer Transfer Time

05-01-08 Set Timer for Call Forward No Answer

Hot Line

47-nnnn Allocate Hot Line to Station

09-nnnn-IP System Speed Dial

Doorphone & Doorswitch

03-nn-IP Door PhoneRing Assignment

05-03-08 Door Phone Ring Frequency

05-11-07 Door Phone Ring Time

05-12-04 Door Relay Unlock Time

06-IP Door Relay Assignment

46-st-06 Door Unlock Access

DSS Console

08-gp-IP Flexible DSS Key Group Assignment

41-st-07 Port Number for DSS Console

43-cn-01 Assign Station Number for DSS Console

43-cn-03 DSS Key Group (**SK-200**)

Fax Monitor

05-04-05 Fax Monitoring Capability

Headset

44-st-05 Headset Capability

User Function [SPK][7][7][5]

Loud Bell (Trunk)

06-IP=04 Assign the Relay for Trunk Loud Bell

35-tk-06 Assign the trunk to activate Relay

Loud Bell (Station)

06-IP=05 Assign the Relay for Station Loud Bell

40-st-04 Assign the Station to activate Relay

External Music Source

06-IP=01 Relay Assignment

05-08-08 Music Source Selection (**BX8**)

Paging (External Paging)

06-IP=10-12 Relay Assignment

SMDR

14-01-(01-08) Station Message Detail Recording
05-07-06 SMDR Digit Masking

Meter Pulse Detection

05-05-02 Meter Pulse Detection
05-07-07 Meter Pulse Detection Delay Time

Voice Processing Service

19-IP Voice Service Assignment
05-05-01 Morning Call Signaling

System Reset

- 25- 1 Reset System Programming Data To Default Except Speed Dials.
- 25- 2 Reset **All** System Programming Data To Default.
- 25- 3 Restrict **All** Stations from Using Hold and Call Split.
- 25- 4 Restrict **All** Stations from Using Barge in And Monitor.