TRANSTEL COMMUNICATIONS INC

Telephone System

Master Programming Manual

Rev 2.1c

Notification

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Revision History

Date of Release	Revision	Description
2009	1.1	First Revision Manual
2010-03-18	2.0a	Operation of Voice Mail clarified
2010-04-05	2.0b	Change to MSG function and 46-st-02
2011-07-29	2.1b	Update to G1-A20L+
2011-10-19	2.1c	Update to G1-A20Q+

Revision Note:

Table of Contents

General Description - Introduction

The General Description section contains an easy to understand overview of the ***TransTel***® Lynx Hybrid Telephone System. It is the intent of this document to provide both technical and non-technical readers with information pertaining to the system building blocks, capabilities, key highlights, electrical, physical and environmental characteristics of the ***TransTel*** Lynx Hybrid Telephone System.

FCC Rules and Regulation

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 ***TransTel*** G1-KT/Lynx 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. The FCC Registration Numbers are 3A7TAI-35152-KF-E for key systems registration and 3A7TAI-36015-MF-E for hybrid operation.

Ringer Equivalence Number 0.3B.

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.

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

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

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.

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.

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 A 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.

CTR 21 (98/482/EC) Declaration Network Compatibility

CTR 21 (98/482/EC) Declaration Network Compatibility,'The equipment has been approved in accordance with Council Decision 98/482/EC for pan-European single terminal connection to the public switched telephone network (PSTN). However, due to differences between the individual PSTN networks provided in different countries, the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN network termination point. In the event of problem, you should contact your equipment supplier in the first instance.'

Description

The Lynx is a Hybrid Telephone System employing a microprocessor stored program and digitally controlled solid state Time-division switching. The Lynx system is specifically designed for small business as well as residential applications. At the forefront of the system design is a universal concept to adapting and connecting with a variety of communications devices. Productive ***TransTel*** Digital Key Telephones offer thoughtfully designed productive feature access to keep you connected with one another and customers. TransTel Communications, Inc. technology leads the industry in providing for compatibility with devices such as fax machines, answering machines, cordless phones, computer modems and other office/home equipment.

Key highlights of the Lynx include:

Economy and Efficiency

The base system is equipped to support three (3) CO lines four (4) digital stations and four (4) analog stations.. The system may be expanded to a maximum of five (5) CO lines / four (4) digital stations and eight (8) analog stations, digit station ports may be selected to allow practically any combination ranging from all ***TransTel*** DK Digital Sets to 4 Digital sets plus 8 industry standard Single Line Telephone sets, with multiple combinations of the two types. In addition to being cost effective at the initial phase and for expanding to its maximum capacity, the Lynx also is economical to operate as it consumes about the same amount of electricity as a 60 watt light bulb at full configuration. A maximum of 5 CO lines and 12 Extensions can be accommodated. This allows a wide variety of applications for the system to work effectively.

Easy Installation

- "Factory Ready" - All Lynx systems are "ready to go" right out of the box. A well thought out default database is factory installed on each system which meets the needs for most installations. This alleviates hours of on site time, minimizing installation costs for both dealer and customer.
- "Small & Compact" - The Key Service Unit's small size takes little space for installation.

Easy Maintenance

- Solid-state design minimizes trouble and eliminates periodic maintenance.
- Easy Expansion. Various Interface Cards for simple, modular expansion.
- Versatile programming and options for ease of selection.
- Database Flash Memory Back Up - Customer data is backed up when the power is turned off and there is no battery to replace.
- Battery Back Up (System Operation) - Lynx can be equipped with an optional battery back up which keeps the system operational for up to 1 hour in the case of a commercial power failure.
- Customer Care Programming - Customers and service personnel can easily communicate and perform programming right over the telephone. ***TransTel*** telephone systems allow programming and voice conversations to be performed at the same time.
- Advanced software upgrades – Through the RS232 connection, system software can be upgraded easily without replacing any firmware.

Flexibility of System Applications

Unlike other conventional systems in the Lynx size range, the installer will find an unprecedented range of customer database programmability. In "system parameters" there are extensive options for various timing settings related to features. An array of parameters are programmable for signalling options on outside lines and internal single line telephone sets. The installer may Enable/Disable many system wide features. And in class of service, there are over 20 options for each station providing maximum flexibility for nearly any application.

Varied Extension Alternatives

You can connect proprietary ***TransTel*** DK series Keyphone, Door Phones and conventional industry standard single line sets – Modem, Answering Machine, Cordless phone, etc. directly to the KSU. This feature provides you with the choice to select different extension equipment to suit individual applications.

Liquid Crystal Display

The DK Series Telephone Model DK6 and DK7 phones are equipped with a large, easy to read LCD display. The LCD is 32 characters total, comprised of 2 rows by 16 characters each. This LCD provides an invaluable tool for simplifying the use of the telephone by identifying the calling extension by name, outside lines by name and self prompting displays for feature access. Station feature usage is made simple with the help of the LCD display. Continuous prompting information is displayed during calls so that users know what to do and when to do it.

32/64-character LCD Display shows:

- Time
- Dialed telephone number
- Voice Mail Messages
- CO Line Names
- Last Number Redial
- Speed dial number
- Last number dialled
- The status of operation/function
- Absent messages
- Speed Dial Directory
- Calling Party Number and Name
- Input data during system data entry

***TransTel* Telephone Model DK7**

DK-7

DK6-36

DK6-18

Specifications

MAXIMUM LOOP RESISTANCE/IMPEDANCE	
Key Telephone	Less than 40 ohms 26 AWG / 200 m
Single Line telephone	Less than 800 ohms 26 AWG / 800 m
DoorPhone	Less than 40 ohms
INTERNAL RELAY CONTACTS	
Type	SPST
Rating	1 AMP, 24VDC
Function	Door Switch, Music on Hold, etc
CABLE REQUIREMENTS	
CO/PABX Line	Twisted 1 Pair (2 wires)
ISDN BRI	Twisted 2 Pair (4 wires)
DK1 Digital Key Telephone	Twisted 1 Pair (2 wires)
Doorphone	Twisted 1 Pair (2 wires)
Door Switch	Twisted 1 Pair (2 wires)
External Sensor	Twisted 1 Pair (2 wires)
Single Line Telephone	Twisted 1 Pair (2 wires)

Mechanical Specifications (Key Service Unit)

CABINET DIMENSIONS		
425mm W	85mm D	315mm H
16.7”	3.3"	12.4"
WEIGHT	3.9 Kg (Configuration: 4 x 8)	
	8.59 lbs	

Mechanical Specifications (Battery Back Up Housing)

CABINET DIMENSIONS		
36 cm W	13 cm D	44 cm H
WEIGHT	With Batteries -16 lbs Without Batteries- 4 lbs.	
Mounting Screws	12.25” centre to centre	

Environmental Specifications

	OPERATING CONDITIONS	STORAGE CONDITIONS
Temperature	0º to 30º C (32º to 86º F)	-40º to 66º C (-40º to 150º F)
Humidity	10 to 95% relative Non-condensing	10 to 95% relative non-condensing

Features

System Features

Account Code Capability
Attendant Console Assignment
Attendant Overflow
Automatic Line Access
Automatic Line Search
Automatic Ringdown
Automatic Wake-up
Battery Charger
Behind PABX Operation
Centrex Operation
Class Of Service
CO Line Groups
CO Line Hunting
CO Line Name Programming
CO Line Ring Types
    Linear
    Common Audible
    Circular
    Hunt
Console Assignment
Day/Night Service
    Manual/Automatic Switch
Dial 9 Group
Direct In Line
Dial By Name
Dial Mode Selection(DP/DTMF)
Dial Pulse to DTMF Conversion
Distinctive Ringing
DTMF Signalling
Dual Port Capability
End to End Signalling
Easy Installation and Operation
Flash (Programmable)
Flash Memory Backup Memory
Flexible Expansion
Flexible Ringing Assignment
Flexible Key Group Assignment
Flexible Number Plan 2,3 or 4 Digit
Flexible Time Format 12/24 Hour
Forced Account Code Assignment
Intercom
Intercom Single Digit Assignment
Intercom Ring / Voice Select
Intercom Dialling Restriction
Host PABX Access
Hot line
Line Group Assignment
Loud Bell Assignment
Multiple Attendant Consoles
Multiple Trunk Groups
Night Transfer
On Call Programming
Paging
    Internal
    Zone
    Meet Me
Password Assignment
    DISA
    System programming
    Toll Override
Pause
Pick Up Groups
Power Fail Transfer
Security Code
Single Digit Dialling
Station Group Assignment
Station Hunting
Station Lock
System Speed Dial and Personal Speed Dial
System Date & Time Setting
System Time-Reminder Service
Telephone Directory
Toll Control
    Day / Night
Tone to pulse dialling
Trunk Queuing
Trunk to trunk connections
Uniform Call Distribution
Voice Mail Compatibility

Station Features

Advisory Messages
Access to System Programming
Account Code Capability
Auto Hold
Auto Hold Recall
Automatic Call Back
Automatic Answer-Intercom
Automatic Line Access
Automatic Redial
Automatic Volume Increase
Brokers Call
Call Duration Timer (LCD Phones)
Call Waiting
Call Forwarding
- All Calls
- Busy
- No Answer
- Busy / No Answer
- External

Call Pickup
Call Split
Call Transfer
Calling Name Display (LCD Phones)
Calling Number Display (LCD Phones)
Camp On
Chain Dialling
Conference
Dial By Name (LCD Phones)
Dial Access to Attendant
Direct Station Selection
DoorPhone Access
Do Not Disturb (DND)
Dual Color LED
Duration Time Display (LCD Phones)
Executive Override (Barge-In)
External Call Forwarding
Flash (Open Loop Timed Flash)
Hands-free Answer Back
Hearing Aid Compatibility
Headset Compatibility
Hold (Exclusive / System)
Hold Recall
I Hold Indication
I Use Indication
Intercom
Intercom ring / voice interchange
Intercom Step Call
Intercom Voice Announce
Last Number Redial
Message Waiting
Multi-Language Display
On Hook Dialling

Parts & Peripherals

System Modules

Model	*Description*
G1-KT-308P	KSU with 3 CO lines, 4 Digital ports and 4 Slt ports with CLIP (Caller ID) function RS232/Relay/Sensor
G1K-TLU	Trunk/Single Line Card : 2 CO lines and 4 SLT ports / with CLIP (Caller ID) function

Type of Phones

Model	*Description*
DK7-21	Multifunction Key Telephone. Includes 32 character LCD display, speakerphone, Handsfree, headset jack, 10 dual color keys and 14 function keys for feature access, DSS, CO Lines and speed dial.
DK6-36	Multifunction Key Telephone with 2 line LCD display, speakerphone, Handsfree, headset jack, 36 dual color keys and 7 function keys for feature access, DSS, CO Lines and speed dial.
DK6-12	Multifunction Key Telephone with 2 line LCD display, speakerphone, Handsfree, headset jack, 12 dual color keys and 7 function keys for feature access, DSS, CO Lines and speed dial.
DPU1	Digital Door phone – weather resistant
ACP/RF	Access Control Phone with RF Proximity Card function
PX-Card	RF Proximity Card for ACP/RF
WMU-x	Wall Mount Kits for DK Series Telephones

Peripheral Devices

Model	*Description*
BBOX0	Battery Box without Batteries
BBOX1	Battery Box with Batteries

Optional Interface Cards

Model	*Description*
G1K-NFC-128M	2 Channel Voice mail card

System Installation - Introduction

This section provides directions for installing the system and optional equipment.
The installation must be performed by qualified service personnel.

Main components of the system are:

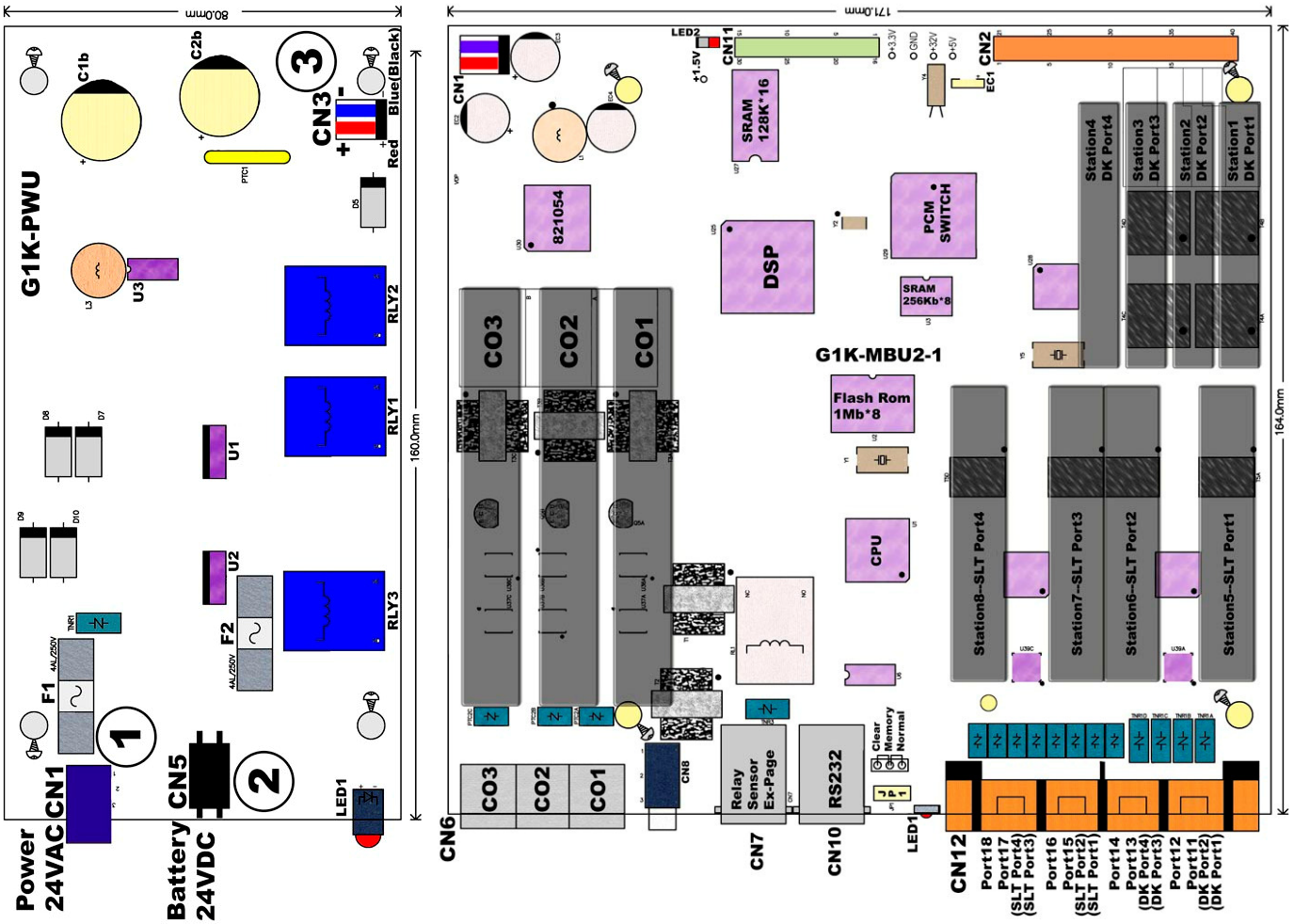
Key Service Unit, which includes:

- Power Supply Unit (G1K-PWU)
- Main Board Unit (G1K-MBU2 / Common Control, 4 digital port circuits and 4 SLT ports) On board messaging and Auto Attendant.

Optional Expansion Cards:

- TLU Card (2 CO + 4 single line port circuits)

NOTE: Please follow the directions step by step. The Lynx system should be installed in strict accordance with this manual.



Site Requirements

Location

Choosing the Right Environment

- System should be installed in a clean, dry, secure location. This location must have adequate ventilation, and a temperature from 0 □ to 30□ (32□ to 86□), 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.

Installation Checklist

INSTALLATION REQUIREMENTS	***VERIFICATION***
MOUNTING SURFACE	Flat surface with adequate space for main cabinet, power supply, wiring and optional Battery Backup cabinet.
AC LINE	AC line should be dedicated exclusively to the system.
POWER OUTLET	Power Outlet must be a 3-wire grounded outlet plug. The socket outlet shall be installed near the system and be easily accessible. Input power Line capacity requirements - 10 amperes. **CAUTION DOUBLE POLE/NEUTRAL FUSING ON EUROPEAN PLUGS**
SURGE PROTECTION	A Surge Protector is recommended on the dedicated AC line.
VENTILATION AND TEMPERATURE	Humidity: 10% to 95% relative non-condensing Temperature:32□ to 113□ (0 □ to 45 □).
EARTH GROUND	A proper ground connection. (14 AWG)
SERVICEABILITY	Lighting conditions and working space adequate for future service.

Equipment Requirements

- Unpack, Check and Verify Equipment - Unpack the telephone equipment boxes and verify the contents in accordance with the packing list provided. If any discrepancies are noticed, please contact TransTel Communications, Inc. or Authorized Dealers.
- Damaged Boxes - If you notice any damage to the packages, please notify both the shipper and TransTel communications, Inc. or Authorized Dealers at once.
- List of parts included in basic KSU box:
    - KSU Main Cabinet
    - Mounting Template
    - Mounting Screws
    - Station Quick Connectors
    - Spare Fuses
    - Cable Cover

Installation

Caution

1. **This system should be installed by qualified service personnel.**
2. **Do not install the Power Supply unless you have read the following instructions and completed all the installation and wiring.**

3. **STATIC SENSITIVE DEVICES! Please handle with care.**

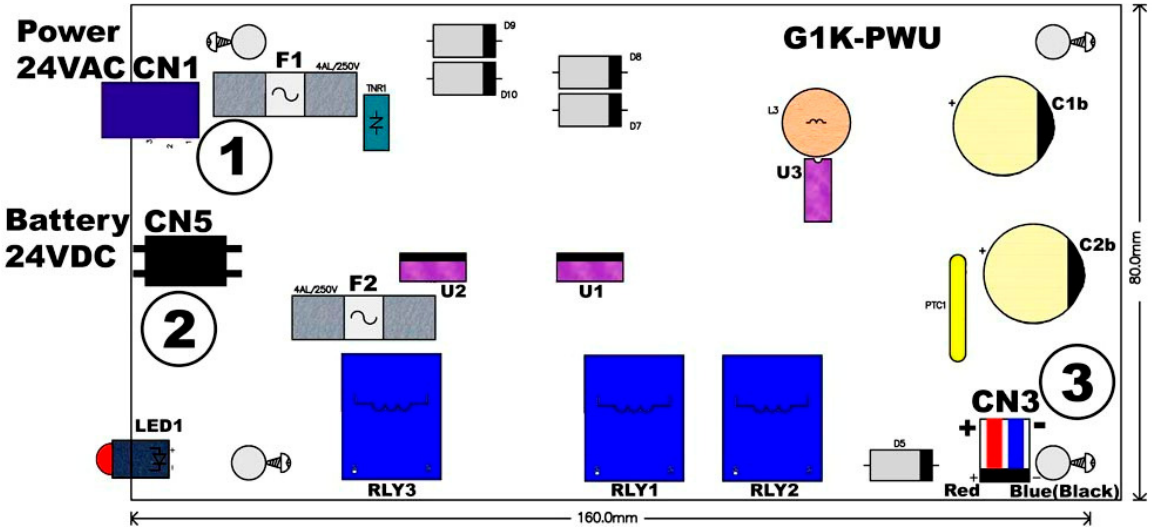
Installing expansion and optional cards

In this step you will be installing printed circuit cards on to header pins of the main board in the basic cabinet. Take your time and extra care to assure the printed circuit cards are properly aligned. After installing each option and expansion card, perform a visual inspection to assure the printed circuit card is installed properly.

1. Position the cabinet on a flat surface like a table or countertop. Avoid doing this on carpet.
2. Remove the 4 screws located at the corners of the cabinet and lift the front cover off.
3. Locate the expansion and option cards and unpack them at this time.

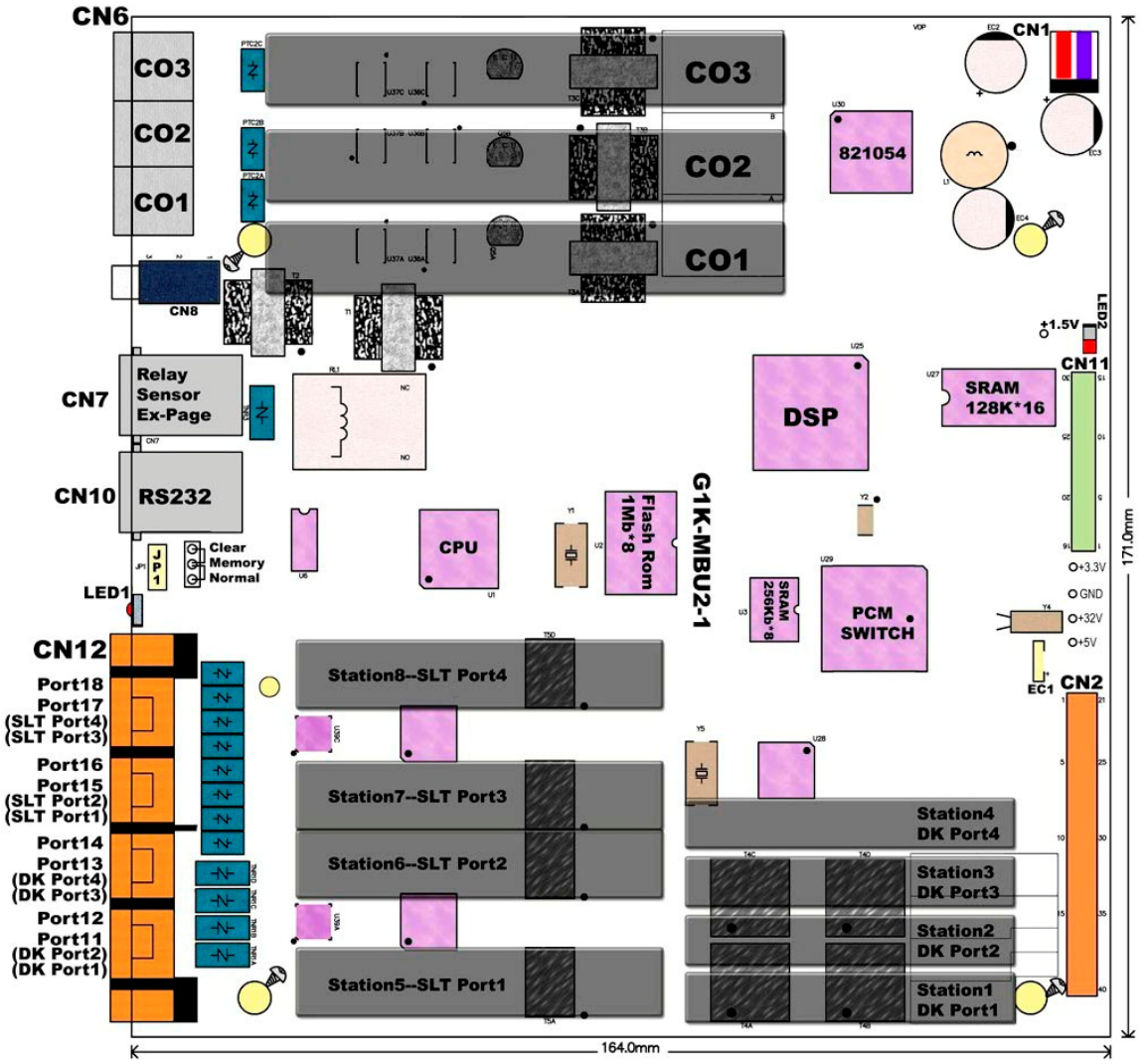
Card Introduction

G1K-PWU-Power Supply Interface Card



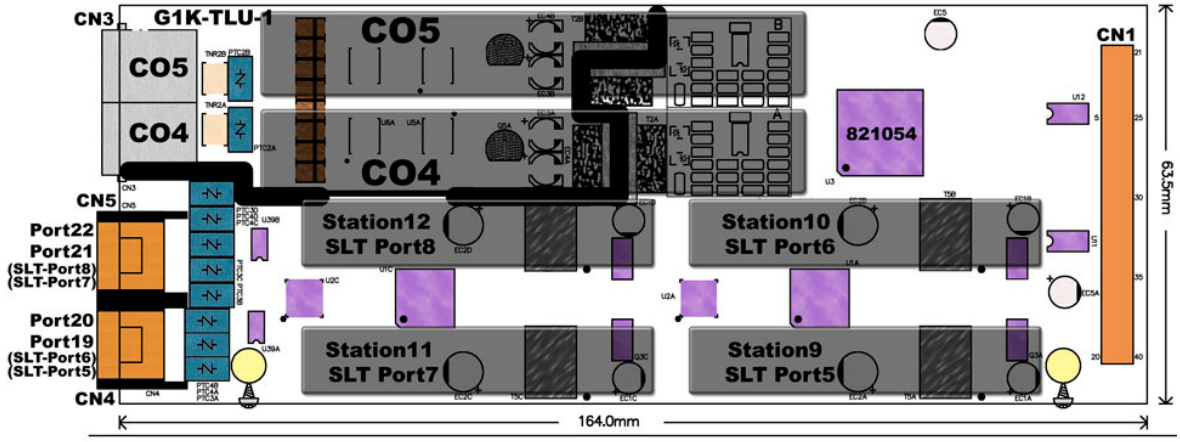
1. CN1: AC 24VAC Input
2. CN50: Battery Connection +24V to +27V DC
3. CN3: Cable connection from G1K-PWU to G1K-MBU CN1
4. LED1: G1K-PWU DC +24V indication
5. F1/F2: 4A/250V

G1K-MBU2 Main Board Unit



1. CN1: Power connection to G1K-PWU CN3
2. LED2: DSP operation indication when slow flashing is normal
3. CN11: To G1K-NFC 128 CN1
4. EC1: Gold capacitor which provided for Real Time Clock
5. CN2: To G1K-TLU CN1
6. CN6: CO 1~CO 3 input from Central Office
7. CN8: External Music
8. CN7: Relay/Sensor/Ex-Page
9. CN10: RS232 connection
10. JP1: Clear Flash Memory / Normal Operation
11. LED1: System operation indication when slow flashing is normal
12. CN12: Connections for Digital Ports 11~14 (ST1~ST4) and SLT Ports 15~18 (ST5~ST8)

G1K-TLU 2 Port CO Line and 4 Port SLT



CN1: To G1K MBU CN2
CN3: CO 4 and CO 5 input from Central Office
CN5: Connections for SLT port 19, 20 (ST9~ST10)
CN4: Connections for SLT port 21, 22 (ST11~ST12)

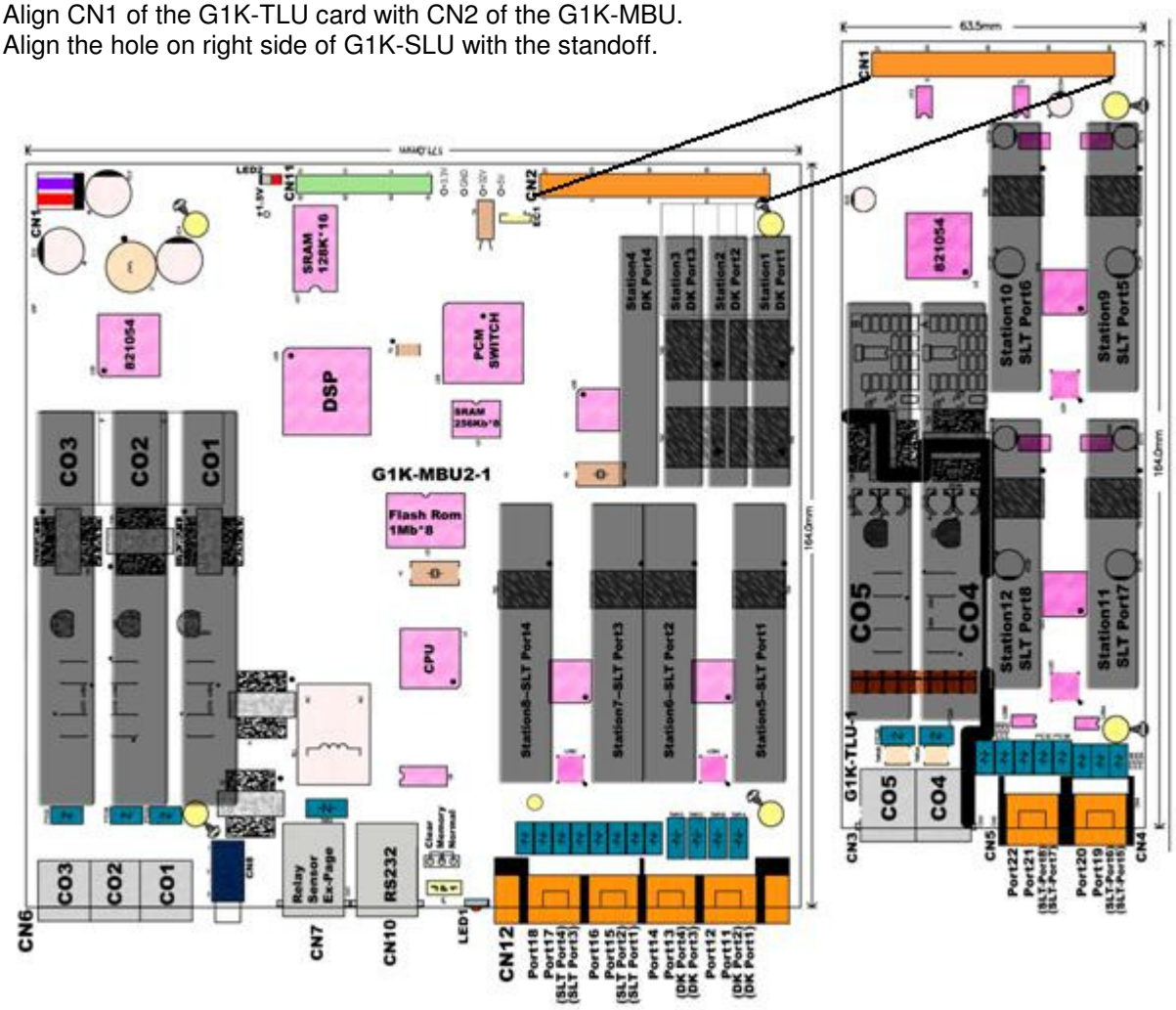
G1K-NFC 128

CF Card	G1K-NFC (32kbps)				G1K-NFC (16kbps)			
	Total Unit	1 Unit Duration (secs)	Duration (mins)	Duration (hours)	Total Unit	1 Unit Duration (secs)	Duration (mins)	Duration (hours)
128M								

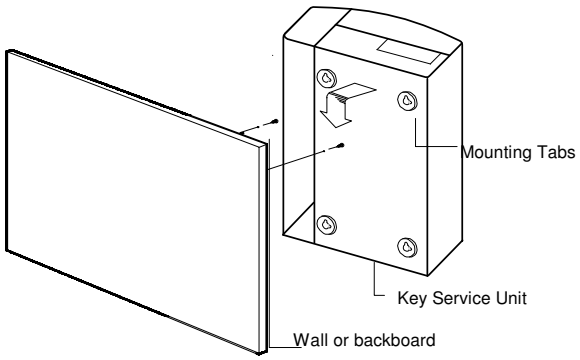
For a description of the VMU and Auto Attendant setup and configuration including how to record messages see the section at the end of the Installation Manual

Install G1K-TLU 2 CO line 4 port SLT

Power off the system before installing card
Install 2 spacers to the MBU by removing screws from the MBU and replacing with spacers
Align CN1 of the G1K-TLU card with CN2 of the G1K-MBU.
Align the hole on right side of G1K-SLU with the standoff.



Installing the Equipment



Backboard

Be sure to plan and allow enough space to mount and connect the key service unit, power supply and system battery back up if applicable.

Key Service Unit

Use the enclosed paper template to locate the mounting position for the Key Service Unit. Drill appropriately spaced holes and mount the KSU on the wall. When mounting the KSU, make certain that there is adequate room for the system power supply and that the connecting cable between the Power Supply and the KSU will reach the KSU. The same applies for the battery back up unit.

Power Supply

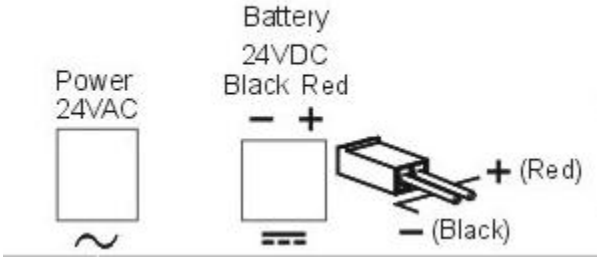
Dedicated Power Source - The power supply must be connected to a dedicated AC outlet.
Be sure that the third wire earth ground of the AC circuit is connected to a good electrical ground. If a music source is installed, it must be connected to a separate AC circuit rather than the system's dedicated AC line cord.

Check Your power adapter

Verify that the input voltage and power adapter input voltage are correct before you connect and power on the system. The input voltage is set according to the Customer's requirement before shipping. However it is important to verify that the setting is correct prior to initial system power up.

Power adapter supply voltage options for the unit:

100-VAC: 100 to 120 V AC (50/60Hz) or 240-VAC: 205 to 265 V AC (50/60Hz).



Mount Power adapter

Using screws provided with the system, mount the power adapter close to the KSU so that the connector reaches from the Power Supply to the KSU.

Preparing The External Battery Backup

The Key Service Unit uses one external backup battery unit containing 2 x 12v batteries in series (24 volts) for emergency power when a power failure takes place.

If you are installing an optional Battery Backup (BBOX1), make certain that there is adequate room for its installation. Make certain that the Battery Backup is mounted close enough to the Power Supply that the interconnecting cable between the Battery Backup and the Power Supply can connect.
Do Not Connect the Battery Backup at this time!

> ***Do Not Connect the Battery Backup at this time! Battery Backup should not be connected to the System power supply until all power up testing has been completed!***

Charging the Battery

The rechargeable batteries are automatically charged when the KSU is plugged in.
When System is in a full-load condition (seven CO Trunks and 16 Extensions all in use), the batteries provide a minimum of 1 hour's consecutive use. Change the batteries every two years.

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).
Power Sonic model PS660 or equivalent.

2. Do not dispose of the batteries in a fire. The cell may explode.
3. Check with local codes for possible special disposal instructions.
4. 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.
5. 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.

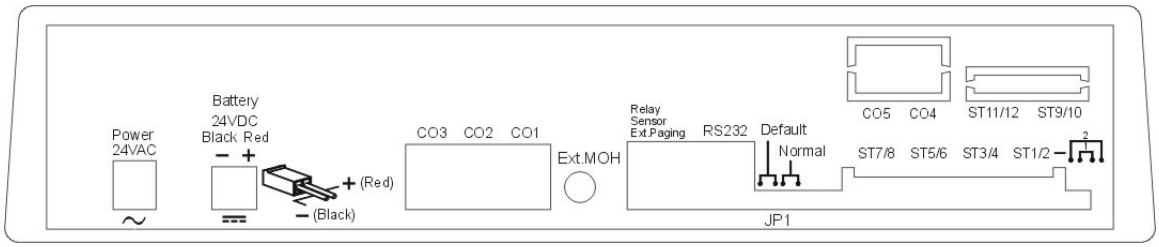
This product is defined as a secondary battery operated device. As such, the following instructions should also be read and followed:

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, disconnect the battery supply unit to the KSU by removing 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.

KSU Connecting (Main) Panel Layout

The following illustration should be used as a reference when connecting equipment to the Lynx KSU.



Refer to the wiring diagram located on the inside of the cable cover for all connections

Connecting Stations

The station cabling for the Lynx should be a home run from the jack to the telephone room. The termination should be at conventional 66 type connecting blocks or Krone blocks or directly to the provided station connectors. One pair twisted wiring is required for each station location. The Lynx station ports are not digital twin ports and each station must be a home run to either the inner or outer pair of each DDK

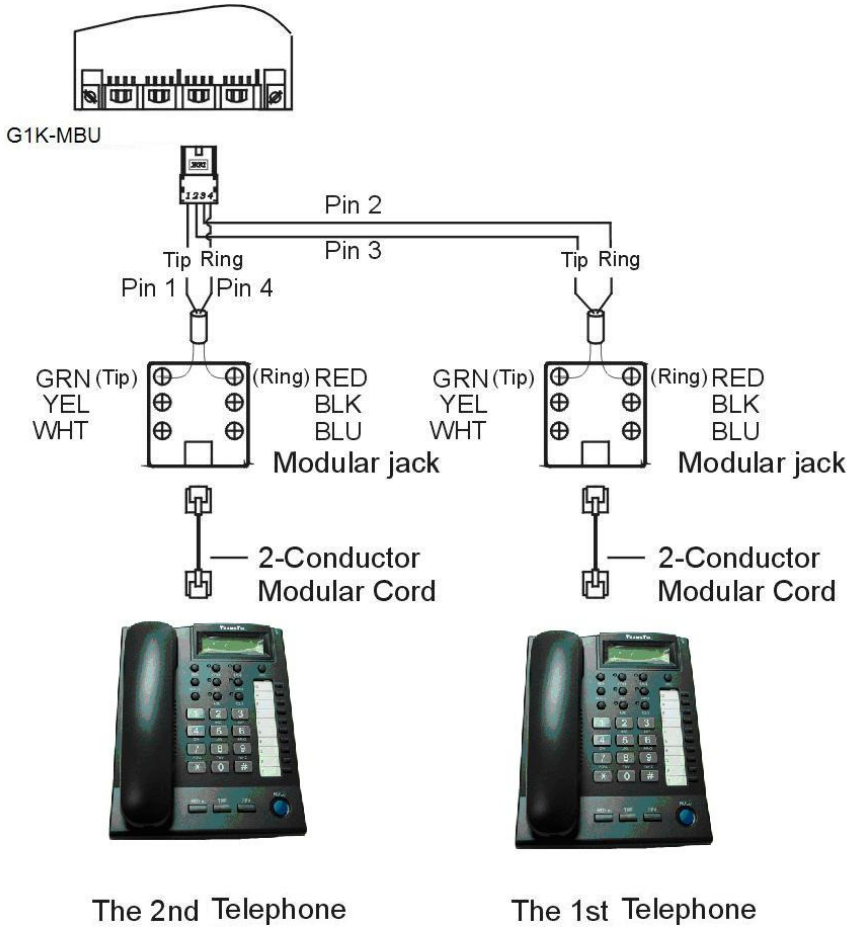
connector. Attention to proper cabling will go a long way towards a successful installation and minimizing service calls after installation. Some guidelines for running station cable are as follows:

- Avoid running cable parallel to fluorescent light fixtures or electrical lines not in conduit. If these obstacles are unavoidable, run the cable at right angles across them.
- Do not run station cable inside conduit already occupied by electrical wiring.
- Do not run station cable near equipment with electric motors or strong magnetic fields.
- Do not place station cable on the ground where it can be stepped on or rolled over by office furniture or office equipment.

Digital Key Telephone –DK6 - DK7

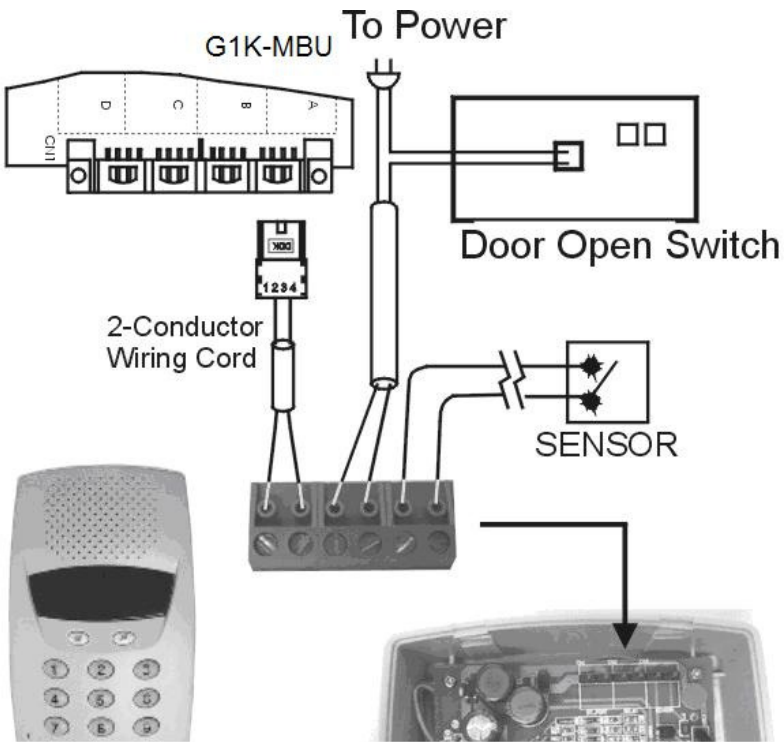
- A cable cover is provided with the KSU. Station cables enter from the bottom of the KSU. Remove the cover and route the station cable through the hole. Terminate the station wires with the connectors that are provided. The stations will connect to the KSU as shown on the main panel (above) on connector locations ST1~ST4 (port11~port14).
- **Connect the stations to Inner pair for Port 1 and outer pair for Port 2 of the DDK connector.**
- Connect Tip terminal with GRN terminal (screws) of the modular jack, Ring with RED.
- There is no polarity requirement on Tip and Ring.
- 2-conductor wiring is required for DK series Digital Key Telephones.
- Select the 1st station position. ALL phones are to be set to this position for the Lynx
- For DK6 and DK7 phones the switch is on the underside of the phone and should always be set to first position.

CAUTION!: Avoid shorting Tip and Ring together. It may damage the G1K-MBU or G1K-TLU board.


G1K-MBU
Pin 2
Pin 3
Tip Ring
Pin 1 Pin 4
Tip Ring
GRN (Tip)
YEL
WHT
(Ring) RED
BLK
BLU
Modular jack
GRN (Tip)
YEL
WHT
(Ring) RED
BLK
BLU
Modular jack
2-Conductor
Modular Cord
2-Conductor
Modular Cord
The 2nd Telephone
The 1st Telephone

Access Control Telephone/Door Phone – ACP/DPU

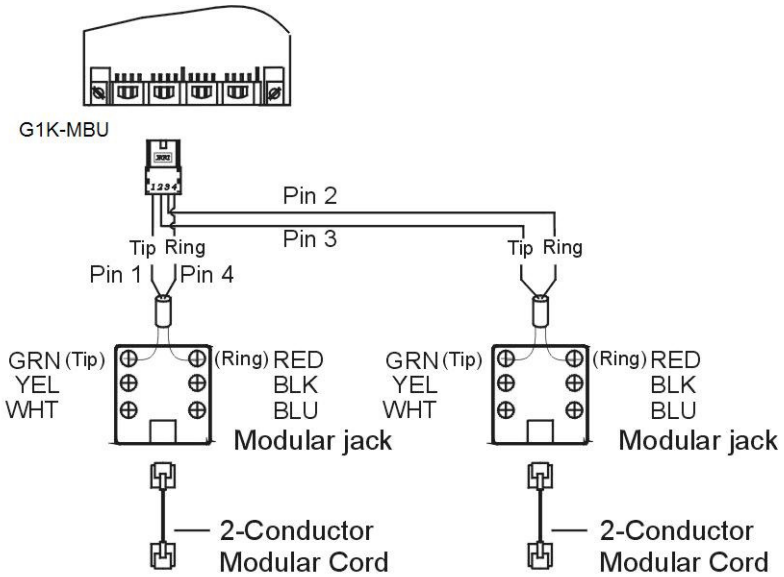
- A cable cover is provided with the KSU. Station cables enter from bottom of the KSU. Remove the cover as required and route the station cable through the hole. Terminate the station wires with the connectors that are provided. The stations will connect to the KSU as shown on the main panel (above) on connector locations ST1~ST4 (port11~port14)
- Connect Tip/Ring terminals from KSU (G1K-MBU) to the ACP/DPU connector (6 contacts).
- There is no polarity requirement on Tip and Ring.
- Connect Relay for applications such as door open to the ACP/DPU connector (6 contacts).
- Connect Sensor for applications such as door open alarm to the ACP/DPU connector (6 contacts).
- Mount ACP connector on to ACP/DPU itself.
- Select the 1st station jumper as shown in diagram below.
- Mount ACP/DPU on the wall.



CAUTION!: Avoid shorting Tip and Ring together. It may damage the G1K-MBU board.

Single Line Telephone (connected to G1K-MBU)

- Station cables can enter from the bottom of the KSU. Remove the cover and route the station cable through the hole. Terminate the station wires with the connectors that are provided. The stations will connect to the KSU as shown on the main panel (above) on connector locations ST5~ST8 (port15~port18) or ST9~ST12 (port19~port22) (Needs G1K-TLU installed).
- Connect Tip terminal with GRN terminal (screws) of the modular jack, Ring with RED.
- There is no polarity requirement on Tip and Ring.
- 2-conductor wiring is required for Single Line Telephones.



The 2nd Single Line Telephone

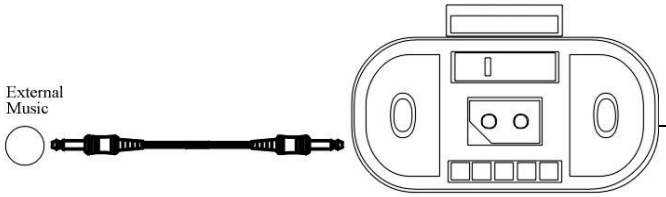
The 1st Single Line Telephone

CO/PABX Connections

- Make your CO line connection to the telephone company on this connector. Pins 3 and 4 of the connector are for the CO line.
- RJ-11C (2 wire) modular connector is required.
- 2-conductor wiring is required.

Music on Hold Connection

- Connect the (optional) external music source to the external Music input labeled on the KSU.
- Use a 1/8" mini plug to connect the music source to the KSU via an approved line isolation unit.



Optional Cabling

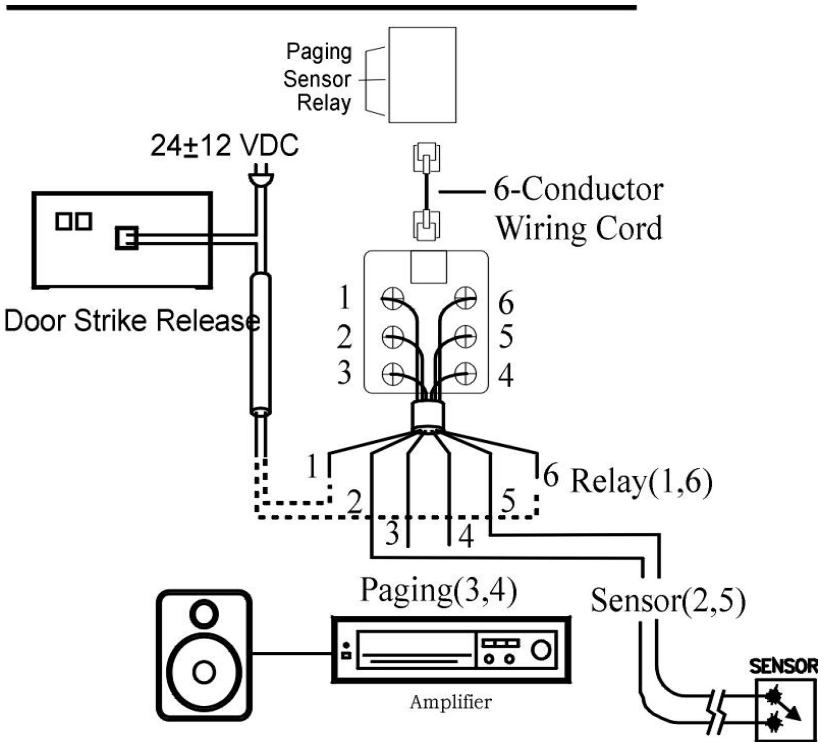
Connect a 6 conductor mounting cord from the KSU to a RJ-25 modular block.

Door Switch (Relay) Connection

- One Door Switch (24+-12VDC) may be used on the G1K-MBU.
- 2-conductor wiring is required.
- Connect the door switch to pins 1 and 6 of the RJ-11 connector.

Sensor Connection

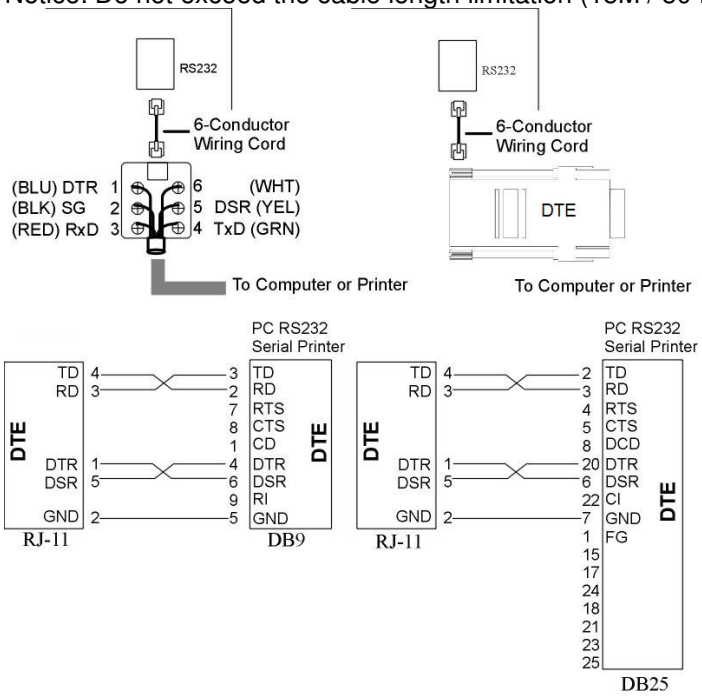
- The Sensor connector on G1K-MBU may be used for the External Sensor input.
- The sensor may be configured for normally open or normally closed operation.
- 2-conductor wiring is required.
- Connect the sensor to pins 2 and 5 of the RJ-11 connector.
- Refer to System Programming Mode 39 -- Sensor Assignment.



RS232 Port Connection

Use the RJ-11 connector to terminate the RS232 cable. Then connect the RJ-11 to the KSU with a 6 conductor line cord. Insert the line cord into the connector labeled RS-232.

Notice: Do not exceed the cable length limitation (15M / 50 feet.) for the RS232 connection



VMU Setup

The G1K-MBU contains a G1K-NFC card 2 Channel Auto Attendant with voice messaging. Also included is a 2 minute MOH section. In Default the MOH is pre-recorded with copyright free music.

Messages are recorded in G1K-NFC Flash Ram and do not require any battery backup to maintain.

For a description of this procedure see mode 25 in the Programming manual

To access the MBU Flash Ram to setup or record messages dial **89** from the Console.

External Music on Hold Source

The Lynx system has an external Music port but relies on using the 2 Minute MOH message recorded on the G1K-NFC Flash ram. This message can be recorded by the customer to allow them to use their own message or used to connect an external Music source if required.

1. Connect music source to external music port.
2. 05-08-08= 4/5 (4= BGM uses Internal music and HOM uses external music, 5=BGM and HOM uses external music port).

Power On and Operational Test

Before connecting the G1K Power Adapter to AC power:

- Verify that input voltage and Adapter input voltage are correct before you power up the system.
- Recheck the cabling for incorrect connections, loose wires and wiring fragments that may cause short-circuits.
- Plug the power adapter cord into a power outlet.
- Verify the system boots properly by checking the display of a telephone set.
- You may now connect the battery back up unit if applicable.

Operational Tests

Check each telephone and CO line to verify that outgoing lines are connected properly.
Check that intercom calls can be made from extension to extension.

WARNING:
DISCONNECT THE POWER SUPPLY FROM THE AC POWER SOURCE BEFORE WIRING OR CHANGING ANY WIRING.

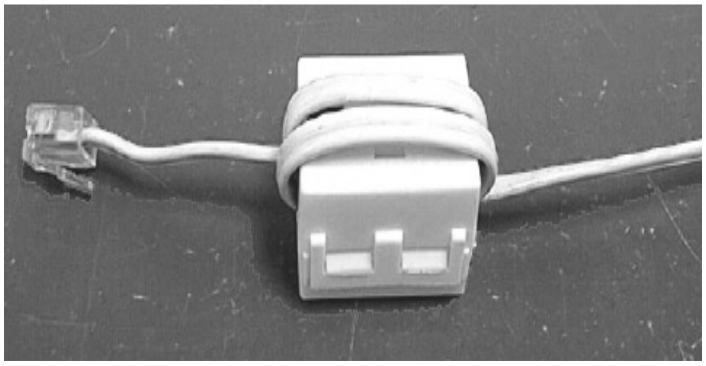
Connect the Battery Backup *AFTER* AC power has been connected to the Power Supply.
Disconnect Battery Backup *BEFORE* disconnecting AC power from the Power Supply.

NOTICE:
ONCE THE SYSTEM OPERATES PROPERLY, PROCEED TO SYSTEM PROGRAMMING.
(REFER TO THE SYSTEM PROGRAMMING MANUAL.)

Special Immunity Protection for System and terminals

Adding **Noise Filters** to the points below can enhance the immunity capability of the system from outside environmental noise.

For Line:



Introduction

The manual contains all the parameters that could be flexible programmed inside the LYNX+ Hybrid IP Telephone System.

New Systems

We recommend that all new systems have the system memory reset before system programming takes place. This ensures that any extraneous information that may be present in system memory is erased and that the system database will not be corrupt for unpredicted data.

To reset the database in LYNX+, from a LCD display phone to enter programming by pressing [PRG], [2], Enter Password if programmed. (New systems will not have a system password), so, press [SAVE] key then you will see the LCD display as follow:

PROGRAM MODE: __ (01 – 95)	Then enter [2] [5] and press [SAVE]. You will be in Program Mode 25-01. The display will show:
25- Reset Data 0-9 Default	Enter [2] to reset entire data and phone will beep and return to the previous screen.

You may begin database entry at this point or exit system programming by pressing [SPK] key or by lifting and replacing the handset.

A station can access the trunk line and talks on a phone when entering system programming mode. This allows a technician to guide a customer into program mode and make minor changes by programming the system data during their conversation.

Note: Before Powering Down the Lynx System please complete following entry from any DK7 Phone.
“Prog Hold #”
This will tell the system to backup any customer data in its RAM Memory.

Basic Programming Commands

Enter Programming:

To begin database programming in LYNX+ from a LCD display phone, press [PRG], [2], Enter Password if programmed. (New systems will not have a system password). Press [SAVE] key then you will see the LCD display as follow:

PROGRAM MODE: __
(01 – 95)

You may now enter the programming Mode (form) you wish to program in the system. When you have entered the two digit mode, you may need to enter additional digits to access a specific sub-form and Item Pointer (IP).

Note: Keys listed between [ ] indicate the default keys shown on a telephone set. Keys listed between { } indicate the effect they have on programming.

These commands are active while in the system programming mode

[PRG] {PRG}**:** Moves to the Top Level Programming Mode Display (does not save information entered into any field unless [SAVE] is pressed first).

[SAVE] {SAVE}**:** Commits the data that is shown on the LCD display into the system database.

[DSS 1] {PREVIOUS}: Moves to the previous section of any multiple part form.

[DSS 2] {NEXT}: Moves to the next section in any multiple part form.

[DSS 3] {CURSOR LEFT}: Moves the programming cursor to the left position.

[DSS 4] {CURSOR RIGHT}: Moves the programming cursor to the right position.

[DND/CN] {DON'T CARE}: Enters a Wild Card (don't care) into Account Codes or Toll control entries. LCD will display d (lower case letter "d") to indicate don't care entry.

[HOLD] {PAUSE}: Inserts a Pause when programming a Speed Dial Entry or for Voice Mail Programming. LCD will display p (lower case "p") to indicate a Pause entry.

[TRF/FL] {FLASH}: Enters a FLASH command as part of a Speed Dial Entry. LCD will display F (upper case "F") to indicate a Flash command. This key also means clears a digit during other entries (Passwords, etc).

[MSG] {PULSE > TONE}: Enters a command to convert from pulse dialling to DTMF dialling into a Speed Dial Entry. LCD will display T (upper case "T") to indicate a tone conversion command.

[MIC/AT] {CHANGE}: CHANGE key. Depending on the form, it will toggle through available Programming parameters.

[TRF/FL] {CLEAR DIGIT}: Enters a FLASH command as part of a speed dial number. This key also means clears a digit during other entries (Passwords, etc).

[SPK] {EXIT}: Exits Programming. Returns telephone to normal idle mode.

[REDIAL] {CLEAR ALL}: Clears all digits on an entry such as speed dial or account codes.

Alphanumeric Entry:

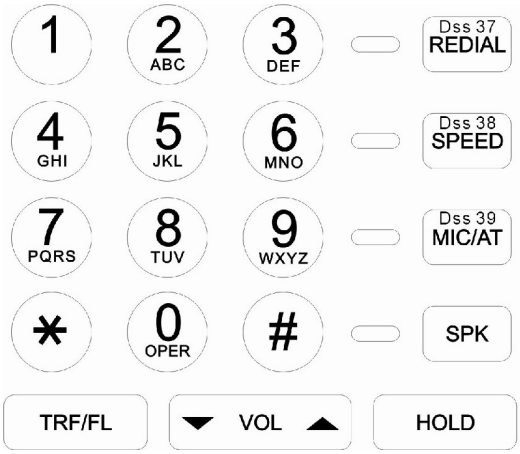
The following table indicates the capabilities of the name programming functions if they are selected on the system. System Speed Dial, Personal Speed Dial, Stations, CO Lines and Sensors may be programmed with names.

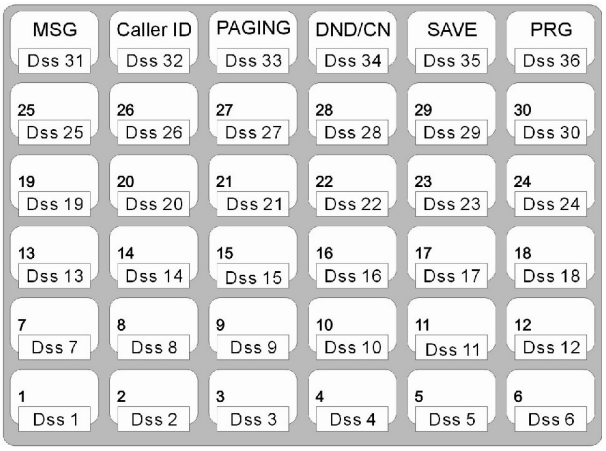
Key 1 =	(Blank Space) – 1	Key 2 =	A - B - C – 2
Key 3 =	D - E - F – 3	Key 4 =	G - H - I – 4
Key 5 =	J - K - L – 5	Key 6 =	M - N - O – 6
Key 7 =	P - Q - R - S – 7	Key 8 =	T - U - V – 8
Key 9 =	W - X - Y - Z – 9	Key 0 =	(Period). : & – 0
Key # =	( ) $ #	Key * =	(Dash) / ! *
DSS Key 1 =	Backspace Cursor (Left)	DSS Key 2 =	Cursor Forward

If an entry is made that is not within valid system parameters, the system will not accept the entry when [SAVE] is pressed. The Speaker on the programming set will return a busy tone and the LCD Display will place the programming cursor under the invalid entry. You may make corrections and press [SAVE] again. If multiple errors are made, the system will continue to return you to the illegal entries until they are corrected.

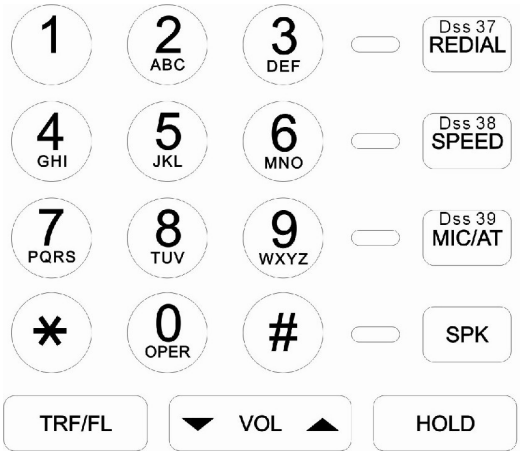
It is not necessary to re-enter existing information on a multi-item form. You need enter only the information that is to be changed. You may move the cursor to the left or right in order to access only the specific entry that you want to change. You may press [SAVE] without regarding for the placement of the cursor on the LCD display.

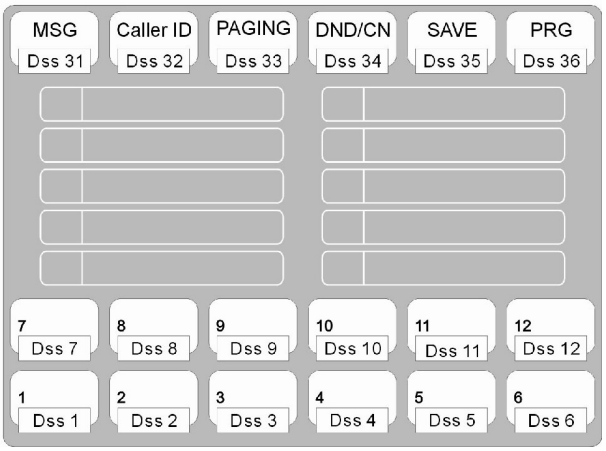
DK6 Key Telephone – Key Layout (36 Button)





DK6 Key Telephone – Key Layout (18 Button)





DK7 Key Telephone – Key Layout

LYNX System Setup

The LYNX system has been setup to enable it to be plugged in and turned on to enable a customer to use the system with little or no Programming changes.

The following details some of the points you should be aware of, please refer to your Manual for more detailed information.

Numbering Scheme

- Dial 9 for outside line
- Dial 0 for Operator Position
- Extensions: 11 – 18 with standard System, with expansion card 19 – 22 will be added
- Virtual Extensions 41 and 42 can be used as Voice Mail Answer points
- Dial 89 to Record Main System Greetings (From Console, Ext 11)
- Dial 86 for Extension Voice Mail

Ringing Assignments

- Extension 11, 12, 13, and 14 will ring on all incoming calls in Day Mode
- Extension 11, 12, 13, and 14 will ring on all incoming calls in Night Mode
- Faxibility setup on Line 3, by default Fax call will ring extension 18

General Setup

Digital extensions 11,12,13, and 14, analog extensions 15 and 16 and virtual extensions 41 and 42 have Voice Mail assigned

- SLT Hook Switch Time on System set to 600ms
- Centrex / Gateway Flash Time set to 800ms
- MOH will use VMU Card
- System Enabled for Clear Forward (Please note if your country uses AR you must enable)
- Hot Keys enabled of System Phones
- Toll COS 0 Allows all calls
- Toll COS1 setup to Bar Toll calls but allow 0800 and 0508
- Toll COS 2 setup to Restrict International Call

Program 01-tk-IP : Day Ringing And Ringing Line Preference Assignment

01-tk-IP FLX DAY 11 12 13 14	tk=Trunk No. (01-12), IP=Item Pointer (01-26) Assigned station number

General:

This program assigns each incoming line to ring the programmed stations. The ringing methods can be LINEAR (ring the first available station), CIRCULAR (Ring the next station following the last station who just answered an incoming call), HUNT (Ring the first assigned station for a set period of time (program mode 05-08-01) then if no answer ring the next ring assigned station then the next etc.) or COMMON AUDIBLE (All stations will ring simultaneously). See Program Mode: 35-tk-07 to assign. An overflow Ring Hunt Group can be assigned to make additional stations ring after a time interval in addition to this ring assignment. See program Mode 29-07/08.

Description:

1. This program sets Day Time ringing.
2. The station number can be 2,3,4 digits.
3. A total of 26 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]**.
6. Lunch ringing is programmed in Mode 94.

Note: Faxibility on Line 3 set to ring Extension 18.

Program 02-tk-IP : Night Ringing And Ringing Line Preference Assignment

02-tk-IP FLX NIG 11 12 13 14	tk=Trunk No. (01-12), IP=Item Pointer (01-26) Assigned station number

General:

This program assigns each incoming line to ring the programmed stations. The ringing methods can be LINEAR (ring the first available station), CIRCULAR (Ring the next station following the last station who answered an incoming call), HUNT (Ring the first assigned station for a set period of time (program mode 05-08-01) then if no answer ring the next ring assigned station then the next etc.) or COMMON AUDIBLE (All stations will ring simultaneously). See Program Mode: 35-tk-08 to assign. An overflow Ring Hunt Group can be assigned to make additional stations ring after a time interval in addition to this ring assignment. See program Mode 29-07/08.

Description:

1. This program sets Night Time ringing.
2. The station number can be 2,3,4 digits.
3. A total of 26 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]**.
6. Lunch ringing is programmed in Mode 94.

Program 03-01-IP : Door Phone Ringing Assignment

03-01-IP Door 11 12 13 14 15	IP = 01-26 Assigned station number.

General:

This program assigns the Door Phone/s to ring the programmed stations.

Description:

1. To assign an ACP or digital door phone to follow Mode 03 it must be set to “d” in mode 46-st-07. Otherwise it will ring the stations assigned in the Hunt Group allocated in mode 46-st-07
2. Twenty six stations can be assigned to ring for the door phone.
3. To clear all entries press **[REDIAL]**.
4. Door phone ringing time is set in Mode 05-11-07.
5. Door Relay Unlock Time is set in Mode 05-12-04.
6. Door phone Ringing frequency is set in Mode 05-03-08.

Program 04-gp-IP : Console Assignment

04-gp-IP Console 11 00 00 00	gp = Station group (01-08) IP = (Item Pointer) 01-04 Assigned station number (2 to 4 digits)

General:

This program permits the selection of the consoles in each station group. Consoles are stations that can program System speed dials, Record system Voice messages, receive hold recalls and ring when callers dial 9/0 for the operator. For DISA calls only the ring type is Common Audible otherwise Linear is standard

Description:

1. There are 8 console groups available. Four stations can be set in each group
2. Assign either a station or the pilot number of a hunting group as the console(s).
4. The first assigned station is the master console if a pilot number is assigned here.
5. Only the Console can operate some special Voice Mail features.
6. To clear all entries press **[REDIAL]**. Do this in ALL unused groups.

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

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

IP=Item Pointer (01-08)
Value for each Item

IP	Value	Default	Item Description
01	0-9	1= 60 sec.	Hold Recall Time
02	0-9	1= 60 sec.	Exclusive Hold Recall Time
03	0-9	1= 60 sec.	Hold Recall Timeout
04	0-9	1= 2 sec.	DISA & ECF Access Delay Time - Day
05	0-9	4= 8 sec.	Busy Remind Cycle Time
06	0-9	2= 800 ms	Pause Time
07	0-9	2= 83 ms	DTMF Generation Time
08	0-9	1= 20 sec.	Call Forward No Answer Transfer Time

01. Hold Recall Time

This parameter set the time duration from the line is put on Hold to this held call recalls the station.
After a pre-determined recall time (see 05-01-03: Hold Recall Timeout), if the called station still does not answer, the held call will be automatically transferred to the Console.

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-01-01	30	60	90	120	150	180	210	240	253	∞	sec.

Note: ∞ = Infinite. It means no Hold Recall.

02. Exclusive Hold Recall Time

This parameter sets the time duration from the line is put on Exclusive Hold to the held call recalls the station.
After a pre-determined recall time (see 05-01-03: Hold Recall Timeout), if the called station still does not answer, the held call will recall to the Console in addition to the station that put this line on Exclusive Hold.

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-01-02	30	60	90	120	150	180	210	240	253	∞	sec.

Note: ∞ = Infinite. It means no Exclusive Hold Recall.

03. Hold Recall Timeout

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

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-01-03	30	60	90	120	150	180	210	240	253	∞	sec.

Note: ∞ = Infinite. It means no Hold Recall to console.

04. DISA & ECF Access Delay Time - Day

This parameter sets the timer that a DISA/ECF (External Call Forwarding) trunk will ring assigned stations (set by Program 01-tk-IP, 02-tk-IP) prior to be connected to Auto Attendant (DISA) or another Trunk (ECF) in Day mode. Stations can answer the incoming trunk before it is connected to Auto Attendant or another Trunk.

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-01-04	0	2	4	6	8	15	30	60	120	254	sec.

Note: 0 = Incoming trunk connects to Auto Attendant or another trunk without ring those assigned stations.

1-9 =Incoming trunk connects to Auto Attendant or another trunk after 2-254 seconds ringing.

Also see Program 05-11-04 for night and Program 05-17-4 for Lunch delay.

05. Busy Remind Cycle Time (Off-Hook Ringing)

This parameter sets the timer an incoming trunk rings periodically the busy station before it answers the call. It is used to remind the busy station that another trunk is waiting on the line. A muted, one-second ring will be given to the station through the speaker to indicate the waiting call. The ring will be repeated every this busy remind cycle time interval.

This parameter also sets the timing for the SLT Camp-On feature (see Mode 05-08-03 SLT Camp On Time) and the camp on tone for key stations.

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-01-05	0	2	4	6	8	15	30	60	120	254	sec.

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.

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-01-06	400	600	800	1000	1200	1400	1600	1800	2000	2200	ms.

07. DTMF Generation Time

This parameter sets DTMF generation time. It may need to be lengthened to access some Voice Mail or answering machines.

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-01-07	48	64	80	100	114	132	156	164	180	196	ms.

08. Call Forward No Answer Transfer Time

This parameter sets the timer between a call is ringing a station (set Call Forward No Answer) and then be transferred to the station been forwarded.

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-01-08	10	20	30	40	50	60	70	80	90	100	ms.

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

```
05-02-IP SYS PAR
5 5 1 2 1 0 2 4
```

IP=Item Pointer (01-08)
Value for each item

IP	Value	Default	Item Description
01	0-9	5= 15 Sec.	SLT Dial Tone Timeout
02	0-9	5= 15 Sec.	SLT Inter-Digit Timeout
03	1-9	1= 10 Sec.	Auto Redial Access Time – PSTN Lines
04	0-9	6=1000 ms.	SLT Release Signal Time
05	0-9	5= 800 ms.	PSTN Lines Flash Time - Key Phone & Analog Phone
06	0-9	0= 70 ms.	SLT Hold Signal Time
07	0-9	2= 240 ms.	Ring On Time
08	0-9	6= 6 Sec.	Ring Off Time

01. SLT Dial Tone Timeout

This parameter is for SLT (Single Line Telephone). If a key of SLT is not pressed before this assigned timer expires when Dial Tone is given, a Busy Tone will be heard.

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-02-01	0	2	4	6	8	15	30	60	120	254	Sec.

02. SLT Inter-Digit Timeout

This parameter is for SLT (Single Line Telephone). If the interval between digits dialled exceeds this assigned timer, a Busy Tone will be given.

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-02-02	0	2	4	6	8	15	30	60	120	254	Sec.

03. Auto Redial Access Time – PSTN Lines

This parameter sets the waiting timer after system redial the telephone number in Auto Redial feature. If the call is not answered before this timer expired, system will hang up and wait for the Auto Redial Pause Time – Program 05-05-08, and then try to redial again. ISDN lines will hang up immediately if the called number is busy. Refer to Program 05-05-07 Auto Redial Trials for number of redial attempts

IP \ Value	1	2	3	4	5	6	7	8	9	Unit
05-02-03	10	20	30	40	50	60	70	80	90	Sec.

04. SLT Release Signal Time

The time duration of depressing the hook switch of an SLT longer than this timer and then system will recognize it as a Release Signal. Please note that the system will take it as a Hold signal if less than this timer but longer than the SLT Hold Signal Timer (Program 05-02-06).

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-02-04	100	200	300	400	600	800	1000	1200	1400	1600	ms.

05. PSTN Line Flash Time - Key Phone & Analog Phone

This parameter sets the Flash timer at PSTN trunk line when Key Phones pressing the **[TRF/FL]** key or an analog phone makes a flash and then dials 800 while accessing an outside line. After dialling 800 the flash signal will be sent to the PSTN line and the analog phone will be reconnected to the PSTN line again.

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-02-05	40	80	160	240	400	600	800	1000	1200	1400	ms.
UK, Italy, Aust	60	80	100	120	140	160	180	200	300	600	ms.

06. SLT Hold Signal Time

This parameter permits the selection of the Flash time from a single line telephone that the system will recognize as a Hold signal if the time is greater than this hold signal time but less than the SLT release time (Program 05-02-04)

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-02-06	70	80	100	200	300	400	500	600	700	800	ms.

07. Ring On Time

This parameter allows the system to identify a effective Ring On Time Interval from the PSTN line. This parameter should never be changed without a clear understanding of the operation of the feature.

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-02-07	0	160	240	360	440	560	640	760	840	960	ms.

08. Ring Off Time

This parameter allows the system to identify Ring Off Time Interval from the PSTN line. This parameter should never be changed without a clear understanding of the operation of the feature.

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-02-08	2	2	2	3	4	5	6	7	8	9	Sec.

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

05-03-IP SYS PAR 0 0 1 9 0 3 0 6	IP=Item Pointer (01-08) Value for each Item

IP	Value	Default	Item Description
01	0-1	0= 33/66	Make / Break Ratio
02	0-1	0= Yes	Automatic Trunk Search
03	0-1	1= Ringing	Intercom Call Signalling Method
04	0-9	1= 1	PABX (Centrex) Outgoing Code
05	0-9	1= 0	Toll Access Code
06	2-4	2= 2 Digits	Station Numbering Plan
07	0-1	0= Steady	Internal Dial Tone Pattern
08	0-9	6= DK ringing tone 6	Door Phone / ACP Ringing Frequency

Description:

01. Make/Break Ratio

This parameter permits the selection of a Make/Break Ratio for Dial Pulse signalling.

IP \ Value	0	1
05-03-01	33/66	40/60

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 dialling features are used; i.e., Speed Dial, Save Redial, Redial, etc.

IP \ Value	0	1
05-03-02	Allowed	Not Allowed

03. Intercom Call Signalling Method

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

IP \ Value	0	1
05-03-03	Voice Signalling	Ring Signalling

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 Mode 35-TK-01.

This assignment also enables the system to identify whether the user's dialling is a PABX's Intercom call or an Outgoing call for toll restrictions. This Outgoing Code can be any one digit (0,1,2,3,4,5,6,7,8,9).

05. Toll Access Code

It is the first dialling digit that will be checked as an effective Toll Call or not. This has no effect on toll control within the system. It is only used to notify SMDR that a call is Toll Call or not. Refer to Program 14-01-03. Record Local Calls. The Toll Access Code can be any one digit (0,1,2,3,4,5,6,7,8,9).

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.

IP \ Value	2	3	4
05-03-06	2 Digits	3 Digits	4 digits

07. Internal Dial Tone Pattern

System will initial different Dial tone to Analog phone when it is off hook for notifying its setting situation. There are four different situations could be identified as follow:
Intercom: Normal situation without setting to DND, CFW or MW.
DND: Do Not Disturb.
CFW: Call Forwarding
MW: Message Waiting (Some left message on the phone).

There are three different Dial Tone patterns:
Steady: Continue Dial Tone
2-Burst (Stutter Dial Tone): 250ms on / 250ms off / 250ms on / 1250ms off
3-Burst: 250ms on / 250ms off / 250ms on /250ms off / 250ms on / 750ms off
Notes:

1) If the parameter is set to 0 or 1 then analog phone will receive the 2-Burst tone if call forward or DND has been set for that extension.
2) Value 2 (and 6) is particularly designed for use when there is an external Voice Mail system connected to the system, as some Voice mail units have problems with the broken dial tone.
3) Value 6 will also provide what is known as Stutter dial tone to extensions when they are left a message, useful where phones do not have a message light. When this is enabled as well as MW light to handsets by other methods the phones with messages will receive both Message light and stutter dial tone.

IP	Value	Intercom	DND	CFW	MW
05-03-07	0	Steady	3-Burst	3-Burst	Steady
05-03-07	1	2-Burst	3-Burst	3-Burst	2-Burst
05-03-07	2	Steady	Steady	Steady	Steady
05-03-07	3	2-Burst	2-Burst	2-Burst	2-Burst
05-03-07	4	Steady	3-Burst	3-Burst	2-Burst
05-03-07	5	2-Burst	3-Burst	3-Burst	Steady
05-03-07	6	Steady	Steady	Steady	2-Burst
05-03-07	7	2-Burst	2-Burst	2-Burst	Steady

08. Door Phone Ring Pattern

This parameter allows for different ring patterns for the Door Phone. This Parameter will also affect the ACP phone. If this mode is set to = 0 then the ACP will follow the extension ringing frequency otherwise it will follow settings in this Mode.

IP \ Value	0	1-8	9
05-03-08	Continuous ring	Same Ringing - 1 to 8 as DK handset	Background Music (Program 05-08-08)

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

05-04-IP SYS PAR 8 1 0 0 0 0 0 0	IP=Item Pointer (01-08) Value for each Item

IP	Value	Default	Item Description
01	0-8	8 = 115200	System Baud Rate Setting
02	0-1	1= Enable	Dial 9 Flag
03	0-8	0= Warning	Action for Call Duration Limiting
04	0-1	0= 12 Hours	12/24 Hours Clock
05	0-9	0= None	SLT Hook flash Answer Delay
06	0-4	0= 100 (100 to 199)	Speed Dialling Distribution
07	0-1	0= Disable	Single Digit Intercom
08	0-4	0= 90v DC	Message Waiting Method - Analog Phones

Description:

01. System Baud Rate Setting

This parameter sets the system Baud Rate of RS232 port for the following application:
1) SMDR= 9600 bps
2) SM5= 3600 bps
3) Software update = 57600 bps
4) LYNX Monitor= 57600 bps (Refer to Program 05-24)

IP \ Value	0	1	2	3	4	5	6	7	8	Unit
05-04-01	1200	2400	3600	4800	9600	19200	38400	57600	115200	bps

02. Dial 9 Flag

This parameter sets if a station can access an outgoing line by dialling 9. If this parameter is disabled the station can still access an outgoing line by pressing a line key at Key phone or dial 8xx (xx is the trunk number).

IP \ Value	0	1
05-04-02	Dial 9 feature is enable	Dial 9 feature is disable

03. Action for Call Duration Limiting

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

IP \ Value	Value	Value Description
05-04-03	0 & 5	Continuous Warning Tone after Timeout
05-04-03	1 & 6	1 second Warning Tone for each cycle of Limit Call Duration
05-04-03	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.
05-04-03	3 & 8	At 1 minute before timeout, 1 second warning tone, At 30 seconds before timeout, continuous warning tone At timeout the line is released.

Related System Program: 40-st-03

04. 12/24 Hours Clock

This parameter to let the time displayed on LCD display of key phone to be formatted as 12 Hours or 24 Hours Clock.

IP \ Value	0	1
05-04-04	12 Hours Clock	24 Hours Clock

05. SLT Hook Flash Answer Delay

This timer provides a guard time to prevent an SLT user from making an un-intended Hook Flash, such as lifting the handset but dropping on hook again, when it tries to answer a call. The Hook Flash detection will be delayed this time interval before activating.

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-04-05	disable	1	2	3	4	5	6	7	8	9	sec.

06. Speed Dialling Distribution

This parameter sets the number of speed dial numbers allocated to the system or personal. The total number is 1000 sets with 100 allocated to system and 900 to personal. If name feature is enable the total number of speed dial will be reduced to half its total. For example: if personal has 900 speed dial, when name feature is enable, its total number will be dropped to 450. Please note that the personal speed dials are shared between all extensions. To assign the number of personal speed for each extension refer to Mode 42-nnn-DP

IP \ Value	Value	Speed Dial Number	Personal Total / Name Feature
05-04-06	0	100 (100 to 199)	900/450
05-04-06	1	200 (100 to 299)	800/400
05-04-06	2	300 (100 to 399)	700/350
05-04-06	3	400 (100 to 499)	600/300
05-04-06	4	500 (100 to 599)	500/250
05-04-06	5	600 (100 to 699)	400/200
05-04-06	6	700 (100 to 799)	300/150
05-04-06	7	800 (100 to 899)	200/100
05-04-06	8	900 (100 to 999)	100/50

Note: Numbers after backslash at Personal is the total available with name feature enabled.

07. Single Digit Intercom

Single digit intercom allows the stations to call up to 5 other stations by dialling 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 dialling the room to room dialling prefix (6).

IP \ Value	0	1
05-04-07	Disable	Enable

08. SLT Message Waiting Method

IP \ Value	0	1	3
05-04-08	90V DC	Ring	Two 250 ms. Ring Burst

Description:

0=90V Message light
90Volts DC will operate industry standard neon light message waiting phones.

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

3=Special Ring 250 ms
If the setting is 250 ms. Ring, the single line phone will receive two 250-ms. ring burst every 5 minutes. This is for use with the special telephones to turn on message lamp.

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

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

IP = Item Pointer (01-08)
Value for each Item

IP	Value	Default	Item Description
01	0-3	0=	Morning Call Type
02	0-1	0=	Reserved
03	0-5	0=0	Speed Dial Unrestricted-1
04	0-9	0=0	Speed dial Unrestricted-2
05	0-7	3=enable	Name Feature For Extensions, Trunks, Speed dials
06	0-	1=	Reserved
07	0-9	1=2 Times	Auto Redial Trials
08	0-9	0=10 Sec.	Auto Redial Pause Time

01. Morning Call

This parameter is used for the Hotel/Motel manager to decide which kind of Wake-up call is used to notify guests for wake-up service.

IP	Value	Value Description
05-05-01	0	Voice Prompt of Morning Call
05-05-01	1	Background Music or DND Tone
05-05-01	2	Voice Prompt of Morning Call + Morning Call History Output via SMDR Port
05-05-01	3	Background Music or DND Tone + Morning Call History Output via SMDR Port

Each station can be set by Program 44-st-08 to decide whether to hear Background Music or DND tone.
To record Voice Prompt of Morning call: Dial [89],[Password (Default=1234)],[2][3][3] from the console.

02. Reserved

03, 04. Speed Dial Unrestricted - 1, 2

If 03, 04 settings are A and 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 from 100 up to 110 can be used by stations to bypass the Toll Restrictions. Individual stations can be restricted from using this feature in Mode 45-st-07.
If 03, 04 settings are set to 0 and 0, then all speed dial codes are toll restricted if the station using the speed dial will be restricted.

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		V		V	V	V
Directory Dial for Speed Dial			V	V		V
Directory Dial for Extension					V	V

V: The feature is enabled.

Note 1: When any of the above features are enabled the total number of speed dial sets will be reduced. See Program 05-04-06.
Note 2: For setting name for Extension/Speed dial/Trunk, Please refer to the Program 43 press [MIC]
Note 3: For setting “Directory Dial” key, Please refer to Program 07.

06. Reserved

07. Auto Redial Trials

This parameter is to set the number of Auto Redial trials that the system will attempt.

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-05-07	0	2	5	9	19	29	39	49	59	69	times

08. Auto Redial Pause Time

This timer defines the time duration for system hanging up an Auto Redial attempt and starting to Redial.

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-05-08	10	20	30	40	50	60	70	80	90	100	sec.

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

05-06-IP SYS PAR
7 4 0 0 0 3 0 0

IP =Item Pointer (01-08)
Value for each Item

IP	Value	Default	Item Description
01	0-9	7=60 Sec.	Transfer Busy Recall Time
02	0-9	4=30 Sec	Transfer Idle Recall Time
03	0-1	0=a- law	ISDN Audio Coding (a-law orμ - law)
04	0-9	0= Disable	Polarity Reversal
05	0-1	0=0	Operator Code
06	0-9	3=3 Min.	Unsupervised Conference & ECF Time Setting
07	0-1	0=Flash	Hold Method for SLT
08	0-2	0=Common	Station Hunting Group Ring Method

01. Transfer Busy Recall Time

This timer defines the time duration for transferring a call to a busy party and then transfer back to the original transferring party when the called party is busy.

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-06-01	5	10	15	20	30	40	50	60	70	∞	Sec.

Note: ∞ = Infinite. It means never Recall.

02. Transfer Idle Recall Time

This timer defines the time duration for transferring a call to a idle station and then transfer back to the original transferring party when the called party does not answer.

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-06-02	5	10	15	20	30	40	50	60	70	∞	Sec.

Note: ∞ = Infinite. It means never Recall.

03. ISDN Audio Coding (a-law orμ- law)

This parameter sets the ISDN Audio companding algorithm. It is not necessary to change this parameter as the software defaults will be set for each market.

IP \ Value	0	1
05-06-03	a-law	μ - law

04. Polarity Reversal

This parameter is to enable the Polarity Reversal detection feature for incoming caller hang up detection in Australia and some European countries. See Mode 14-01-08 for SMDR setting. Telecom provider need to enable its polarity reversal feature at the exchange. When this reversal is enabled the system will hang up the exchange line when the incoming caller hangs up and the exchange sends a Polarity Reversal signal to the system.

IP \ Value	0	1	2 to 9
05-06-04	Disable	Enable	Enable after 1 to 8 seconds delay

Note: 2-9 =Delay for 1-8 Seconds after accessing the line and then detect Polarity Reverse Signal

05. Operator Code

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

IP \ Value	0	1
05-06-05	Dial "0" for operator, "9" for C.O. line.	Dial "9" for operator, "0" for C.O. line.

06. Unsupervised Conference & ECF Time Setting

This timer defines the time duration that system allows an Unsupervised Conference or ECF (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 this time setting. If reversal supervision is used, system will release the line when reversal signal is detected.

IP \ Value	0	1	2	3	4~9	Unit
05-06-06	No Limit	1	2	3	4	Min.

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.

IP \ Value	0	1
05-06-07	Normal Using [FLASH] or [Hook-switch] to put a call on Hold.	Alternate Using [FLASH, 7] or [Hook-switch, 7] to put a call on Hold.

08. Station Hunting Group - Ring Method:

This parameter sets the ring method used in the station hunting groups. Pilot numbers for hunt groups are set in Program 67, Day/Night ring stations are set in Program 68 & 69, Individual Hunt Group Ring type are set in Program 67-gp-02 and will over ride the system wide setting made here.

IP \ Value	0	1	2
05-06-08	Common	Linear	Circular

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

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

IP = Item Pointer (01-08)
Value for each Item

IP	Value	Default	Item Description
01	0-1	0=Disable	Intercom Searching
02	0-1	0=Disable	Toll Override Prevention from Quick Dial
03	0-1	0=Enable	Paging Alert Tone
04	0-7	0=Enable	DISA Transfer To Console - No Dialling
05	0-1	0=Disable	Key Phone Toll Override Prevention
06	0-9	0=Disable	SMDR Digit Mask
07	0-9	0=0 sec.	Guard Time for CO Line Re-accessing
08	0-	0=	Reserved

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 such searching.

IP \ Value	0	1	2	3
05-07-01	Disable	Enable when busy	Enable when no answer	Enable when busy or no answer

02. Toll Override Prevention from Quick Dial

To protect toll override control when a Key phone selects a trunk and quickly dials one digit to bypass the toll control. When this parameter is set to Enabled, after selecting a trunk, the first digit dialled will be delayed one pause interval to send to the Central Office.

IP \ Value	0	1
05-07-02	Disable	Enable

03. Paging Alert Tone

This parameter enables/disables the paging alert tone.

IP \ Value	0	1
05-07-03	Enable page alert tone	Disable page alert tone

04. DISA Recall To Console - No Dialling

If this function is activated, when a DISA call is answered but the caller does not dial any digits or station number, the system will recall the Operator after the assigned DISA Transfer Time No Dialing (Program 05-08-07). If this function is disabled the call will be disconnected after Transfer Time No Dialing elapses. This parameter is also used to clear the VMU channels after 10 minutes of operation where problems are found with locked up VMU channels.

IP \ Value	0	1	2	3
05-07-04	Recall to operator	No Recall to operator	Recall to operator and release line after 10 min.	No Recall to operator and release line after 10 min.

05. Key Phone Toll Override Prevention

If the setting is Disable, 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 restrictions can be over-ridden.
If the 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.

IP \ Value	0	1
05-07-05	Disable	Enable

06. SMDR Digit Mask

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

n = 1 to 9

07. Guard Time for CO Line Re-accessing

This timer offers a pause time when a line is released before It can be accessed again to prevent some malfunctions from the Central Office.

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
05-07-07	0	1	2	3	4	5	6	7	8	9	sec.

08. Reserved

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

05-08-IP SYS PAR
3 0 3 0 7 2 4 0

IP = Item Pointer (01-08)
Value for each Item

IP	Value	Default	Item Description
01	0-9	3= 6 seconds	Ring Hunt Time
02	0-1	0=Enable	DSS Access To Other Trunk Group
03	0-9	3= T=3	SLT Camp On Tone
04	0-1	0=Station Group	Console of DISA Transfer Group for No Answer
05	0-8	7=7 + Code	SLT Programming Digit
06	0-9	2=24 Sec.	DISA Transfer Time No Answer
07	0-9	4=4 Sec.	DISA Transfer Time No Dialling
08	0-1	8= VMU Music	Music source selection

01. Ring Hunt Time

If setting is n, then when an incoming call rings the first 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 called by the ring assignment will receive off hook busy remind. Up to 26 stations can be set in the ring group. If this setting is 0 then only the first ring assigned station will be ringed. Related Program: 35-tk-07, 35-tk-08

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
05-08-01	Disable	2	4	6	8	15	30	60	120	254	sec.

02. DSS Access to Other Trunk Group

This feature enables or disables the ability of stations to use a DSS key to answer a Ringing CO line that is not in its own group.

IP \ Value	0	1
05-08-02	Enable	Disable

03. SLT Camp on Time

This feature enables a tone to indicate call waiting for a busy analog phone and sets the interval between tone insertion. 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 Mode 05-01-05.

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
05-08-03	Disable	1	2	3	4	5	6	7	8	9	sec.

Note: Disable means no Camp on Tone.

04. Console of DISA Transfer Group for No Answer

This parameter defines which console will be rung if an unsuccessful DISA call needs to be transferred. The called station must be set in Program 46-st-04 to decide what transfer action will be taken.

IP \ Value	0	1
05-08-04	Console of the Called Station's group (Program 41-st-01)	Console of the Incoming Trunk's group (Program 36-gp)

05. SLT Programming Digit

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

IP \ Value	0	1	2	3	4	5	6	7	8
05-08-05	Disable	1xx	2xx	3xx	4xx	5xx	6xx	7xx	[*][#][7xx] for programming [*][#][8xx] for accessing functions beginning with 8

Note:
1. 0=Disable. It means SLT has no programming capability.
2. 9=Disable and the [*][#] means Redial function.

06. DISA Transfer Time No Answer

An incoming call is answered by Auto Attendant and transferred to the called extension. If the called extension does not answer after this time duration, a voice prompt will announce the status (no answer) of the called station or busy immediately if the station is busy. The system will try to recall the console several times (by Program 05-11-6) then release the call. Program 46-st-04 defines whether the call shall be transferred or not. Program 05-08-04 defines which console shall be transferred to.

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
05-08-06	8	16	24	32	40	48	56	64	72	80	sec.

07. DISA Transfer Time - No Dialling

This timer defines the waiting time after the Auto Attendant answers the call and plays the voice prompt before transferring the call to the console if no digits are received. Do not set this timer to less than 3 seconds for normal operation.

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
05-08-07	0	1	2	3	4	5	6	7	8	9	sec.

08. Music Source Selection

This parameter sets the Music Source for the Internal Background Music, Music on Hold for CO line and Door phone music-type ringing signal. (Program 05-03-09=9)

IP	Value	BGM	MOH	Door
05-08-08	0	Internal Music	Internal Music	Internal Music
05-08-08	1	Internal Music	Internal Music	External Source
05-08-08	2	External Music	External Source	Internal Music
05-08-08	3	External Music	External Music	External Source
05-08-08	4	SLT Music (43-SLT-02=7)	SLT Music (43-SLT-02=7)	SLT Music (43-SLT-02=7)
05-08-08	5	External Music	SLT Music(43-SLT-02=7)	External Source
05-08-08	6	Internal Music	Internal Tone	Internal Music
05-08-08	7	External Music	Internal Tone	External Source

Note:
1. BGM = Background music for internal extension only.
2. MOH = Music on Hold for CO line is put on hold.
3. Door = Set Door ringing as background music. (Program 05-03-08=9)
4. Internal Music Clip (Internal Music): This audio clip can be recorded by dialling [89] [2][3][2] at console.
5. External Music Source (External Music): Refer to Installation Manual for linking to external music source.
6. SLT Music Source (SLT Music): Use special music interface at SLT port
7. Internal Tone: Double “DO” tone.

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

```
05-09-IP SYS PAR
0 1 0 0 0 1 5 2
```

IP = Item Pointer (01-08)
Value for each Item

IP	Value	Default	Item Description
01	0-1	0=	Reserved
02	0-1	1= Enable	Busy Console Queuing (Intercom Calls)
03	0-9	4= Break Time over 320 ms will recognize a formal CFS.	Clear Forward Signal (Loop Disconnect) Detection
04	0-9	0=Disable	DISA Busy Tone Detection
05	0-	0=	Reserved
06	0-9	3=15 Sec	ACD-1 Enable Time
07	0-9	6= 30 sec	ACD-1 Segment 2 Recall Time
08	0-9	2=10 min	ACD-1 Release Time

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.

IP \ Value	0	1
05-09-02	Disable	Enable

03. Clear Forward Signal (Loop Disconnect) Detection

Clear Forward Signal (CFS) is a signal sent in the forward direction to terminate a call (or call attempt) so that the associated circuits can be released. This signal is normally originated when the calling party hangs-up the phone.
Some Central Office provides this kind of signal by breaking (disconnecting) the Loop circuit for a period of time and then making (connecting) again. This Break time period is varied at different CO line and some CO line even doesn't offer this feature.
The parameter in this mode is the minimum Break time for formal Clear Forward Signal, so that phone system can release the line back to idle status.
Break Time Table :

IP	Value	Value Description
05-09-03	0	No need to detect Clear Forward Signal
05-09-03	1	Break Time over 80 ms will recognize a formal CFS.
05-09-03	2	Break Time over 160 ms will recognize a formal CFS.
05-09-03	3	Break Time over 240 ms will recognize a formal CFS.
05-09-03	4	Break Time over 320 ms will recognize a formal CFS.
05-09-03	5	Break Time over 400 ms will recognize a formal CFS.
05-09-03	6	Break Time over 480 ms will recognize a formal CFS.
05-09-03	7	Break Time over 560 ms will recognize a formal CFS.
05-09-03	8	Break Time over 640 ms will recognize a formal CFS.
05-09-03	9	Break Time over 720 ms will recognize a formal CFS.

04. DISA Busy Tone Detection

This setting allows system to recognize busy tone from the exchange line during DISA call to release the call.

IP	Value	Value description
05-09-04	0	Disable
05-09-04	1	Australia: (420 Hz, 375ms on/off) (400 Hz, 375ms on/off)
05-09-04	2	Italian: (420 Hz, 500ms on/off)
05-09-04	3	Mexico: (420 Hz, 250ms on/off)
05-09-04	4	South African: (400 Hz, 500ms on/off)
05-09-04	5	Span: 420 Hz, 200ms on/off)
05-09-04	6	New Zealand: (400Hz, 250ms on/off)
05-09-04	7	Taiwan: (480 Hz + 620 Hz, 250ms on/off and 500ms on/off)
05-09-04	8	Indonesia: (500hz, 250ms on/off, 500ms on/off) (420hz, 250ms on/off, 500ms on/off) (1000hz, Continuous on)
05-09-04	9	Israel: (450-470Hz, 700 ms on/off)
05-09-04	d	Pakistan**:** (450Hz, on:240+-40ms off:340+-40ms)

05. Reserved

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 the operator overflow feature is enabled. 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. Operator Overflow (ACD-1) is enabled in Program 29-tk-02.

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
05-09-06	5	10	15	20	25	30	35	40	45	50	Sec.

07. ACD-1 Segment 2 Recall Time

This parameter sets the time an ACD-1 call which has been answered by the Overflow message will stay on hold in the ring queue before the system will play the second part of the ACD-1 message to apologize for the continuing delay. The call back time for the second message starts at 5 seconds and increases in 5 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.

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
05-09-07	Disable	5	10	15	20	25	30	40	50	60	Sec.

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 is used for incoming call clear down then this parameter should be disabled.

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
05-09-08	0	5	10	15	20	25	30	35	40	45	Mins

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

05-10-IP SYS PAR d d d d d d d d	IP =Item Pointer (01-08) Value for each Item

IP	Value	Default	Item Description
01	0-9,*,#,p,d	d= No Digit	Leading Digit 1 For Voice Mail Forwarding
02	0-9,*,#,p,d	d= No Digit	Leading Digit 2 For Voice Mail Forwarding
03	0-9,*,#,p,d	d= No Digit	Leading Digit 3 For Voice Mail Forwarding
04	0-9,*,#,p,d	d= No Digit	Leading Digit 4 For Voice Mail Forwarding
05	0-9,*,#,p,d	d= No Digit	Leading Digit 5 For Voice Mail Forwarding
06	0-9,*,#,p,d	d= No Digit	Leading Digit 6 For Voice Mail Forwarding
07	0-9,*,#,p,d	d= No Digit	Leading Digit 7 For Voice Mail Forwarding
08	0-9,*,#,p,d	d= No Digit	Leading Digit 8 For Voice Mail Forwarding

Description:

Important Note: This page is irrelevant when using the built-in Voice Mail in the Lynx. It is only used when Lynx is connected to an external Voice Mail device.

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 only 2 or 3 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).
The possible value for each leading digit is 0 to 9, *, #, Pause (enter by pressing HOLD key) and No Digit (enter by pressing DND key)

Example:

The system 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 34 is answered by the voice mail port after the pause time the digits 1134 will be sent to the port by the system. If station 34's voice mail box is 1134 then the mailbox number 1134 will be automatically opened by the tones.

There are 2 different Voice Mail Protocols available in the *TRANSTEL* series depending on the setting in Mode 05-12-05. If this mode 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 Mode 05-12-05 is set to 1 then the Enhanced Protocol shown on the following page will be used.

Enhanced Protocol

Voice Mail System Leading Digit Format

1+ extension number = CFWD All Calls
2+ extension number = CFWD Busy
3+ extension number = CFWD No Answer
4+ extension number = Direct Call to Voice Mail (Station)
5+ extension number = Call Record
6+ extension number = Recall to Voice Mail
7+ CO trunk number = Incoming CO Call

Answering Machine Operation:
When activated this function allows the caller to set call forward to the Voice Mail as usual but then monitor calls to the Voice Mail from his key phone (on hook) and if they wish can lift the handset and take the call back from the Voice Mail. To enable the user presses **[SPK] [7][7][3][1]** and to disable presses **[SPK] [7][7][3][0]**.

Record Function:

This function is dependant on the Recording Unit being capable of inserting the recording tone to alert the caller they are being recorded. To record it is necessary for the Key phone to have a **[RECORD]** key which is **FN 34 .** During a call the STN presses the [RECORD] button and the Voice Mail will answer if a port is available and the system will send the Protocol 15 + STN NO + STN No.

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

```
05-11-IP SYS PAR
0 0 1 2 0 2 5 0
```

IP =Item Pointer (01-08)
Value for each Item

IP	Value	Default	Item Description
01	0-4	0=None	DTMF Caller ID Leading Digit
02	0-1	0=1	DISA Password – 1 / 50 Sets
03	0-2	1=MOH	Select Music on Hold or Ring Back Tone
04	0-1	2=4 seconds	DISA & ECF Access Delay Time - Night
05	0-3	0=[8],[9],[*],[#]	DISA Special Function Access
06	0-9	6=8 Times	DISA Re-check Times To Busy Console
07	0-9	5=30 Sec.	Door Phone Ringing Time
08	0-8	0=Disable	DISA Single Digit Dialling

0.1 DTMF Caller ID Leading Digit

This parameter defines the start digit of DTMF caller ID signal. The system will omit the start digit for CLI (Caller ID) data on the display phone and CLI list.

02. Number of DISA Passwords

This parameter defines the total number of DISA passwords.
At the default setting of 0 the DISA password will be set in mode 13-02. If the parameter is set to 1, there are 50 passwords available to use and they are same as the forced account codes numbers (50-99). Refer to Program: 17 Forced Account Codes.

IP \ Value	0	1
05-11-02	1 Password	50 Passwords

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 for Australia to prevent the caller incorrectly recognizing the International Ring Back Tone as a disconnect or engaged signal and hanging up even though their call is still in progress.

IP \ Value	0	1	2
05-11-03	Ring Back Tone	Music On Hold	Silence

04. DISA & ECF Access Delay Time – Night

This parameter sets the timer that a DISA/ECF (External Call Forwarding) trunk will ring assigned stations (set by Program 01-tk-IP, 02-tk-IP) prior to being connected to Auto Attendant (DISA) or another Trunk (ECF) in Night mode. Stations can answer the incoming trunk before it is connected to Auto Attendant or another Trunk.

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-11-04	0	2	4	6	8	15	30	60	120	254	sec.

Note: 0 = Incoming trunk connects to Auto Attendant or another trunk without ring those assigned stations.

1-9 =Incoming trunk connects to Auto Attendant or another trunk after 2-254 seconds ringing.

Also see Program 05-01-04 for Day and Program 05-17-4 for Lunch delay.

05: DISA Special Function Access

This parameter defines which system functions are able to be accessed by external DISA callers.

IP	Value	Value description
05-11-05	0	DISA caller can access an outside line by [9] or [0] + Password. DISA caller can access mail box or VM from external call by [#]
05-11-05	1	DISA caller cannot access an outside line by [9] or [0] + Password. DISA caller can access mail box or VM from external call by [#]
05-11-05	2	DISA caller can access an outside line by [9] or [0] + Password. DISA caller cannot access mail box or VM from external call by [#]
05-11-05	3	DISA caller cannot access an outside line by [9] or [0] + Password DISA cannot access mail box or VM from external call by [#]

Note:

1. The password for DISA caller to make another outside is assigned at Program 13-02
2. Remote Access to retrieve messages outside the telephone system is assigned here.
3. The same applies for the system administrator who also may access the voice mail system remotely to change greetings and service settings.

06. DISA Re-check Times To Station/Console

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

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
05-11-06	2	3	4	5	6	7	8	9	10	Infinite	times

07. Door Phone Ringing Time

This timer sets the time duration that Door Phone Ring Assignment Stations will be rung after Bell button of Door Phone is pressed.

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
05-11-07	5	10	15	20	25	30	35	40	45	50	sec.

08. DISA Single Digit Dialling

This feature allows a DISA caller to dial stations by 1 digit (1-8) using the Hunt Groups (01-08) settings in Program 67(Pilot No. Ring), 68 (Day), and 69 (Night / Lunch). Program 05-16-03 to set second level menu for DISA Single Digit Dialing.

IP \ Value	0	1	2	3	4	5	6	7
05-11-08	Disable	Enable Day	Enable Night	Enable Day & Night	Enable Noon	Enable Noon & Day	Enable Noon & Night	Enable Noon & Night & Day

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

```
05-12-IP SYS PAR
0 0 0 2 7 0 0 0
```

IP = Item Pointer (01-08)
Value for each Item

IP	Value	Default	Item Description
01	0-1	0=Key Phone	Call Transfer Method – Key Telephone
02	0-	0=	Reserved
03	0-1	0=Yes	Exclusive hold capability
04	0-9	2=3 Sec.	Door Unlock Relay Activation Time
05	0-7	7=Enhanced	Voice Mail Call Forward Protocol Type / mute digits
06	0-1	0=Linear	Linear/Circular Trunk group access
07	0-9	0=Disable	LED indication of Check in / Check out on DSS console
08	0-	0=	Reserved

01. Call Transfer Method – Key Telephone

This parameter allows DK phone to transfer the call by normal Analog way. That is [Hold] [Station Number] [Hang up]. Normal DK phone way to transfer a call is pressing [Hold], then dial [Station Number], pressing [TRF] key.

It also adds the ability to transfer a trunk call to another trunk (External Call Transfer) using the Transfer key rather than the Unsupervised Conference facility.

IP	Value	Value Description
05-12-01	0	DK phone way
05-12-01	1	Analog phone way
05-12-01	2	Note 3
05-12-01	3	Note 4

Note:
1. DK phone way: [Hold] [Station Number] [TRF].
2. Analog phone way: [Hold] [Station Number] [Hang up].
3. DK phone could transfer a trunk to another trunk by [Hold] [DSS trunk] [TRF].
4. Use Analog way to transfer normal call and has the capability that mentioned in Note 3 above.

02. Reserved

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.

IP \ Value	0	1
05-12-03	Enabled	Disabled

04. Door Relay Activation Time

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

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
05-12-04	1	2	3	4	5	6	7	8	9	10	sec.

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 Program 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 VMS	No	Yes	No	Yes	No	No	Yes	No

"Short" type: Use the Leading Digit programmed in program 05-10.
"Long" type: Use **Enhanced Protocol**

"Mute Leading Digit": The caller will not hear the DTMF signal during the transmission of leading digits.

"Leading Digits for VMS":
Yes: When incoming caller call the voice mail directly, the system will send the Leading digits (7+ CO trunk number)
No: When incoming caller call the voice mail directly, the system will not send any leading digits.
Note: Refer to Mode 05-10 for the leading digits as follow:

Voice Mail System Leading Digit Format (TCI version only)
1+ extension number = CFWD All Calls
2+ extension number = CFWD Busy
3+ extension number = CFWD No Answer
4+ extension number = Direct Call to Voice Mail (Station)
5+ extension number = Call Record
6+ extension number = Recall to Voice Mail
7+ CO trunk number = Incoming CO Call

Related System Programming Mode: 05-10, 43-cn-03, 50-ST-05

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 with PSTN lines unless there is a very good reason as call collision will result.

IP \ Value	0	1
05-12-06	Linear	Circular

07. LED Indication of Check In / Check Out

This parameter disables or enables the LED indication for Check in/Check out features for the DSS consoles and DSS Keys of DK phones.

IP \ Value	0	1
05-12-07	Disable	Enable

The LED indications are as follows:

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

08. Reserved

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

05-13-IP SYS PAR 0 0 0 0 0 0 0 0	IP = Item Pointer (01-08) Value for each Item

IP	Value	Default	Item Description
01	0-1	1= Enable	Intercom Hot Key Dialling
02	0-1	0=Disable	Immediate SMDR output
03	0-1	0=52 Sets	Caller ID Buffer Block Size
04	0-9	0=	Reserved
05	0,1,5	1= Store CLI names	CLI Record Storing Method for LCD Phones
06	0-1	0= Disable	CTI-Trunk Status Report
07	0-7	0=Disable	Least Cost Routing(LCR) – Weekly Holiday 1
08	0-7	0=Disable	Least Cost Routing(LCR) – Weekly Holiday 2

01. Intercom Hot Key Dialling

This parameter when enabled allows stations to dial a call On Hook without having to lift the handset or press the **[SPK]** key.

IP \ Value	0	1
05-13-01	Disable	Enable

Note: 05-13-01 also controls the display upon plugging in a telephone system. If set to 0, the telephone will display the extension number as soon as the telephone set boots. If set to 1, the telephone will display the firmware version of the Lynx KSU when it is powered up.

02. Immediate SMDR Output

This parameter enables system to send out SMDR record when call is made or digit is dial out. In normal case, the SMDR record is only available when the call is completed. This feature allows external software to know who is dialling out with which digits or who is ringing into the system without waiting until the call is completed. The external software can then start to count the cost from the beginning of the call. If the credit is 1 hour and time is expired, the external software could release the connection by sending commands back to the KSU.

IP \ Value	0	1
05-13-02	Disable	Enable

03 Caller ID Buffer Block Size

This parameter sets the memory block size of Caller ID buffer:

IP	Value	Memory Block Size	Total Memory blocks
05-13-03	0	10 sets	52
05-13-03	1	20 sets	26
05-13-03	2	30 sets	17
05-13-03	3	40 sets	13

Refer to Program 83 to allocate the blocks for each DK phone.

04. Reserved

05. CLI Record Storing Method for LCD Phones

This parameter defines which information shall be stored into the Caller ID buffer in the DK phone.

IP \ Value	Value	Value Description
05-13-05	0	Store CLI telephone numbers.
05-13-05	1	Store CLI names
05-13-05	5	Store CLI telephone number and name.

If mode 05-13-05 = 1, pressing [CLI History] key, system will display CLI number and name. Pressing [MIC/AT] will display the date/time the call took place.

06. CTI-Trunk Status Report

Enabling this parameter will output the trunk status report for CTI applications. Currently 4 is the correct setting for Ct Star applications

IP \ Value	0	1	4	5
05-13-06	Disable	Enable	Enable Extension Status Report	Enable Trunk Status report

07. Least Cost Routing – Weekly Holiday 1

This parameter set the first weekly holiday for Least Cost Routing feature.

IP \ Value	0	1	2	3	4	5	6	7
05-13-07	No weekly holiday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

Related system Programming: 05-13-07. 05-13-08, 75, 76, 77, 78-st-01, 78-st-02

08. Least Cost Routing – Weekly Holiday 2

This parameter set the second weekly holiday for Least Cost Routing feature.

IP \ Value	0	1	2	3	4	5	6	7
05-13-08	No weekly holiday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

Related system programming: 05-13-07. 05-13-08, 75, 76, 77, 78-st-01, 78-st-02

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

05-14-IP SYS PAR 0 0 0 0 0 1 0 0	IP = Item Pointer (01-08) Value for each Item

IP	Value	Default	Item Description
01	0-1	0=Disable	SLT LCR Switch on Delay for PSTN
02	0-	0 =	Reserved
03	0-	0=	Reserved
04	0-	0=	Reserved
05	0-	0=Disable	DISA DTMF Detect Delay Time
06	0-1	1= 1	CLI Delay Ring Time
07	0-	0=	Reserved
08	0-	0=	Reserved

01. SLT LCR Switch on Delay for PSTN

This parameter delays the connection of SLT phones to PSTN (Public Switch Telephone Network) lines when LCR is in use to prevent the SLT dialling from conflicting with the LCR dialling.

IP \ Value	0	1	4
05-14-01	Disable	3 seconds delay	6 seconds delay

02. Reserved
03. Reserved
04. Reserved

05. DISA DTMF Detect Delay Time

This parameter defines the time delay for detecting DTMF signal on a DISA call after DISA answers.

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
05-14-05	0	1	2	3	4	5	6	7	8	9	sec.

06. CLI Delay Ring Time

This parameter delays the DISA transfer to ensure that CLI (Caller ID) information is available and can be sent to the ringing station with the transferred call. If Program 05-17-07 CLI Call Screening is enabled but it will not work unless this parameter is enabled.

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
05-14-06	Disable	1	2	3	4	5	6	7	8	9	sec.

07. Reserved
08. Reserved

Program 05-15-IP : System Timing Parameters – 15

05-15-IP SYS PAR 0 0 0 0 0 0 0 0	IP = Item Pointer (01-08) Value for each Item

IP	Value	Default	Item Description
01	0-7	0=	Company Greeting Time
02	0-1	0=	Reserved
03	0-	0=	Reserved
04	0-	0=	Reserved
05	1-	2=	Reserved
06	1-	0=	Reserved
07	0-	0=	Reserved
08	0-	0=	Reserved

Description:

01. Company Greeting Time

This parameter extends the company greeting (60 seconds) of Auto Attendant by adding the department greeting (60 seconds). Both greetings shall be recorded separately. The system will bundle them together and make a seamless voice message.

IP	0	4
05-15-01	Company Greeting = 60 seconds	Company + Department Greeting = 120 seconds

02. Reserved
03. Reserved

Program 05-16-IP : System Timing Parameters – 16

```
05-16-IP SYS PAR
0 0 0 0 0 0 0 0
```

IP = Item Pointer (01-08)
Value for each Item

IP	Value	Default	Item Description
01	0-1	0=Disable	Midnight Reset
02	0-1	0=	Reserved
03	0-8	0=One Level	DISA Single Digit Dialling Level
04	0-8	0=Disable	VMU language Service
05	0-9	0=	Reserved
06	0-1	0=	Reserved
07	0-3	0= CTI	ACP Data Output Format
08	0-3	0=	Reserved

01. Midnight Reset

When this parameter is set to enable, system will restart the system at midnight and clear all Ram data. If set to 2, system will also force all VM channels to be cleared

IP \ Value	0	1	2
05-16-01	Disable	Enable	Enable & Clear any VM channels that may be locked up.

02. Reserved

03. DISA Single Digit Dialing Level

IP	Value	Value Description
05-16-03	0	One level. System plays VMU standard greeting after DISA answers the incoming call. Users can dial either the extension number or the single digit service.
05-16-03	1	Two levels. When incoming call rings in to the system, the external party will hear the "Company Greeting to announce "Press **1** to access different department by single digit service".
05-16-03	2	Two levels. When incoming call rings in to the system, the external party will hear the "Company Greeting to announce "Press **2** to access different department by single digit service".
05-16-03	n	Two levels. When incoming call rings in to the system, the external party will hear the "Company Greeting to announce "Press **n** to access different department by single digit service".
05-16-03	8	Two levels. When incoming call rings in to the system, the external party will hear the "Company Greeting to announce "Press **8** to access different department by single digit service".

04. VMU Language Service

This parameter enables two language services for VMU.

IP	Value	alue Description
05-16-04	0	Feature is disabled
05-16-04	1	Press 1 to select second language service.
05-16-04	2	Press 2 to select second language service.
05-16-04	….	**……**
05-16-04	8	Press 8 to select second language service.
05-16-04	9	Play 1st Language then play 2nd Language service.

05. Reserved

06. Reserved

07. ACP Data Output Format

This parameter chooses the output format of ACP data. The format can be plain text or CTI format.

IP	value	Value Description
05-16-07	0	CTI format output to RS232.
05-16-07	1	ACP accessing data will be stored in system. (800 max. records)
05-16-07	2	CTI format output to RS232.
05-16-07	3	Text format output to RS232.

08. Reserved

Program 05-17-IP : System Timing Parameters – 17

```
05-17-IP SYS PAR
0 1 0 0 0 0 0 0
```

IP = Item Pointer (01-08)
Value for each Item

IP	Value	Default	Item Description
01	0-1	1=	Reserved
02	0-1	1=32K bps	Voice Compression
03	0-1	0=No	Extension Number Announcement for DISA
04	0-8	2=2 seconds	DISA & ECF Access Delay Time - Lunch
05	0-9	0= None	DTMF CLI Leading Digits
06	0-1	0= None	DTMF CLI Trailing Digits
07	0-2	0= No	CID Call Block or Transfer to Voicemail
08	0-3	4= Seconds	Minimum Mailbox Record Time

Description:

01. Reserved

02. Voice Compression

The default setting for the 256Mb VMU can be 32K or 16K bps compression rate. For customers who want to increase the recording capacity this parameter allows the compression rate to be 16 KBPS. That will double the available amount of storage time on the VMU while voice quality will be decreased. In the new version of 1GB VMU2, there is no voice compression, and message is 64K uncompressed.

IP \ Value	0	1
05-17-02	16K bps	32K bps

03. Extension Number Announcement for DISA

The Auto Attendant has two ways of announcement for transferring the call. The stanadard announcement is “Please hold while I transfer the call.” Optional announcement is “ xxx, Please hold while I transfer the call”. The xxx is the extension number being transferred to. After the above announcement, the system will send the Ring-Back tone to external calling party.

IP \ Value	0	1
05-17-03	“ Please hold while I transfer the call”	“ xxx, Please hold while I transfer the call”

04. DISA & ECF Access Delay Time – Lunch

This parameter sets the timer that a DISA/ECF (External Call Forwarding) trunk will ring assigned stations (set by Program 01-tk-IP, 02-tk-IP) prior to being connected to Auto Attendant (DISA) or another Trunk (ECF) in Lunch mode. Stations can answer the incoming trunk before it is connected to the Auto Attendant or another Trunk.

IP \ Value	0	1	2	3	4	5	6	7	8	9	Unit
05-17-04	0	2	4	6	8	15	30	60	120	254	sec.

Note: 0 = Incoming trunk connects to Auto Attendant or another trunk without ringing assigned stations.

1-9 =Incoming trunk connects to Auto Attendant or another trunk after 2-254 seconds ringing.

Also see Program 05-01-04 for Day and Program 05-11-4 for Night mode.

05. DTMF CLI Leading Digits

This parameter enables/disables the display of Leading digits on DTMF Call ID

IP \ Value	0	1	2	3	4	5	6	7
05-17-05	No code	A	B	C	D	*	#	Note 1

Note:

1. Only display the normal digits (0,1,2,.., 9)
2. Example: D0289661356C
   Leading code =D
   Trailing code = C

06. DTMF CLI Trailing Digits

This parameter enables/disables the display of Trailing digits on DTMF Call ID

IP \ Value	0	1	2	3	4	5	6	7
05-17-05	No code	A	B	C	D	*	#	Note 1

Note:

3. Only display the normal digits (0,1,2,.., 9)
4. Example: D0289661356C
   Leading code =D
   Trailing code = C

07. Call Block or Transfer to Voice Mail according to CLI Message

This parameter allows the system to reject or send the call to a virtual Voicemail based on the CLI received. When a call is rejected the DSS LED for the line is flashing but there will be no audible ring. CLI numbers to be screened must be specified in Mode 09 system speed dial.
Mode 05-14-06 and 05-05-05 must also be enabled to make this feature happen.

Call blocking by CLI is to screen out unwanted callers. There are four different call blocking situations as follow:
Mode 05-17-07=0
There is no call blocking feature

Mode 05-17-07=1
If there is no CLI information from the incoming call, the LED of that CO line DSS key will be flashing, but no ringing signal to alert the operator.
If there is CLI information from the incoming call and the CLI is matching with the call blocking number that is assigned at Mode 09, the LED of that CO line DSS key will be flashing, but no ringing signal to alert the operator.

Mode 05-17-07=2
If there is no CLI information from the incoming call, the call will be transferred to the virtual voice mail -41.
If there is CLI information and the CLI is matching with the call blocking number that is assigned at Mode 09, the call will be transferred to the virtual voice mail – 41 or 42 or 43 or 40 that is LED flashing without ring.
Note
1) If the VMC is not installed, the call will not be transferred to the virtual mail -41. And the LED of that CO line DSS key will be flashing, but no ringing signal to alert the operator.

Mode 05-17-07=4
If there is no CLI information from the incoming call, there is no call blocking feature, the call will be ringing normally with LED flashing.
If there is CLI information and the CLI is matching with the call blocking number that is assigned at Mode 09, the call will be blocked. (LED of that CO line DSS key will be flashing, but no ringing signal to alert the operator)

Associated program modes 09, 05-05-05, 05-14-06, 43-51-05, 43-52-05, 43-53-05

08. Minimum Mail Box Record Time

Some callers will after hearing a personal greeting and then the Beep hang up after a short period. This will then leave a short message usually of silence followed by the sound of a handset being replaced. This parameter will allow messages that do not reach a certain length to be deleted.

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
05-17-08	Disable	1	2	3	4	5	6	7	8	9	sec.

Program 05-18-IP : System Timing Parameters – 18

05-18-IP SYS PAR 0 0 0 0 0 0 8 5	IP = Item Pointer (01-08) Value for each Item

IP	Value	Default	Item Description
01	0-	0=	Reserved
02	0-	0=	Hotel Alarm
03	0-1	1=Enable	Dial out History Feature
04	0-	0=	Reserved
05	0-	0=	Reserved
06	0-	0=	Play Transfer message for ECF
07	0-9	8= -9db	High Frequency Level of DTMF Generator
08	0-9	5= -11.4db	Low Frequency Level of DTMF Generator

01. Reserved

02. Hotel Alarm

This feature is designed for the Hotel environment but also could be used in other situations.
When the user presses an emergency button that provides a short circuit on the pair of an SLT extension line this will trigger an Alarm Ring signal to the console with the LCD message as follow:

Extension: xx
Shower Alarm

If a user lifts the handset to make an emergency call, but can't talk for some reason (usually health related), after 2 minutes, the console will receive an Alarm Ring with the LCD message as follows:

Extension: xx
Handset Alarm

IP \ Value	0	1
05-18-02	Disable this feature	Enable this feature

Note:
Extension that need this feature should be enabled in mode: 50-STN-08: Hotel Alarm.

03. Dial Out History Feature

This parameter enables a dial out history memory buffer. When this feature is enabled the user can press [Redial] and using the [Up/down] volume keys, scroll through the last 10 dialled out numbers and then pressing the [SPK] key to dial out the numbers.

IP \ Value	0	1
05-18-03	Disable	Enable

04. Caller ID Compatibility (Canada)

Most telco central offices have adopted the Bellcore/ETSI standard for MDMF (Name and Number) Caller ID. However, there are some central offices in Canada which still utilize an obsolete Canadian only standard called Stentor. This parameter alters the Caller ID reception to support Stentor. *10f*

IP \ Value	0	1
05-18-04	Bellcore/ETSI	Stentor

05. Reserved

06. Play Transfer message for ECF

This parameter enables the ECF (External Call Forwarding) voice announcement to an incoming caller when they are being transferred to an external telephone number by the system

IP \ Value	0	1
05-18-06	Disable	Enable

07. High Frequency Level of DTMF Generator

This parameter modifies the level of the High frequency DTMF Generator. **This should not be modified under any circumstances.**

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
05-18-07	-16.8	-2+	-14.8	-13.4	-12.4	-11.4	-10.2	-9	-8.8	-7.8	dBm

08. Low Frequency Level of DTMF Generator

This parameter modifies the level of the low frequency DTMF Generator. **This should not be modified under any circumstances.**

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
05-18-08	-16.8	-2+	-14.8	-13.4	-12.4	-11.4	-10.2	-9	-8.8	-7.8	dBm

Program 05-19-IP : System Timing Parameters – 19

05-19-IP SYS PAR 0 0 0 0 0 0 0 0	IP = Item Pointer (01-08) Value for each Item

IP	Value	Default	Item Description
01	0-	0=	Reserved
02	0-	0=	Reserved
03	0-	0=	Reserved
04	0-9	1=10 secs	Silence Detection for VMU
05	0-	1=NZ	Distinctive Ring Selection Australia or New Zealand
06	0-	0=	Reserved
07	0-	0=	Reserved
08	0-	0=	Reserved

01. Reserved

02. Reserved

03. Reserved

04. Silence Detection For VMU

This parameter enables Silence detection for the Voice Mail to disconnect a call after receiving this period of silence from the caller.

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
05-19-04	Disable	10	20	30	40	50	60	70	80	90	sec.

05. Reserved

06. Reserved

07. Reserved

08. Reserved

Program 05-20-IP : System Timing Parameters – 20

```
05-20-IP SYS PAR
0 0 0 0 0 0 0 0
```

IP = Item Pointer (01-08)
Value for each Item

IP	Value	Default	Item Description
01	0-1	0= Disable	VMU Mailbox Delete All Messages
02	0-6	0=	DISA No Digits Dialed Destination
03	0-1	1=20 Boxes	Number of Available Voice Mail Boxes
04	0-	0=	Reserved
05	0-	0=	Reserved
06	0-	0=	Reserved
07	0-	0=	Reserved
08	0-	0=	Reserved

01. VMU Mailbox Delete All Messages

This option enables or disables a message within the VMU that prompts a user to delete all messages within their own mailbox. When enabled, during a mailbox's main menu, the optional prompt "Press 5 to delete all messages," will be played. Pressing the digit 5 will clear all message, new and old that are present in the mailbox. If disabled, this prompt will not be played. U.S. Voice prompt version for the VMU must be 5116 or higher. Older versions do not have the prompt in the prompt library.

02. DISA No Digits Dialed (End of Message) Destination

This parameter controls how calls are handled if the caller dials no digits at the DISA main greeting.
A setting of 0 will cause the VMU to either disconnect the caller or transfer the caller to the appropriate operator as programmed on 05-07-04.
A setting of 1 through 6 will route the caller to one of the six virtual extensions in the system, so that the caller can leave a message.
Note: By default, only the first two Virtual extensions are configured with mailboxes.

1= Virtual mailbox 41 2= Virtual mailbox 42
3= Virtual mailbox 43 4= Virtual mailbox 44
5= Virtual mailbox 45 6= Virtual mailbox 46

03. Number of Available Voice Mail Boxes

(Added in software A20q. Not available in earlier versions)
Lynx will support either 8 mailboxes, with storage for 20 one minute messages or 20 mailboxes, with storage for 8 one minute messages. This parameter determines how mailboxes are partitioned for Lynx.
0 = 8 mailboxes, 20 messages of 1 minute per box.
1 = 20 mailboxes, 8 messages of 1 minute per box.
2 = 8 mailboxes, 10 messages of 2 minutes per box.

When configured with 8 mailboxes, the default locations for these mailboxes will be:
4 Electronic stations on main board (extensions 11~14) receive mailboxes, 01, 02, 03, 04.
2 SLT stations on main board (extension 19~20) receive mailboxes 05, 06.
2 Virtual stations (extensions 41~42) receive mailboxes 07, 08.

When configured with 20 mailboxes, the default locations for these mailboxes will be:
4 Electronic stations on main board (extensions 11~14) receive mailboxes, 01, 02, 03, 04.

4 SLT stations on main board (extension 19~22) receive mailboxes 05, 06, 07,08.
8 ports on expansion card (extension 15~18 and extensions 23~26)) receive mailboxes 09, 10, 11, 12, 13, 14, 15, 16
4 Virtual stations (extensions 41~42) receive mailboxes 17, 18, 19, 20.

04. Reserved

05. Reserved

06. Reserved

07. Reserved

08. Reserved

Program 05-23-IP : System Timing Parameters – 23

05-23-IP SYS PAR 0 0 0 0 0 0 0 1	IP = 01-08 System Default.

Item Pointer	Display Data	Programming Data Description	Timing Table	Default
01	0-	Reserved		0=
02	0-	Reserved		0=
03	0-	Reserved		0=
04	0-	Reserved		0=
05	0-	Reserved		0=
06	0-	Reserved		0=
07	0-	Reserved		0=
08	0-	DSP Reset (Reserved)		1=

Description:

01. Reserved:

02. Reserved:

03. Reserved:

04. Reserved

05. Reserved:

06. Reserved:

07. Reserved:

08. DSP Reset Reserved:

0 = Disable
1 = Enable

DSP in-act 480 m/s

Program 05-24-IP : System Timing Parameters – 24

```
05-24-IP SYS PAR
0 0 0 0 0 0 0 0
```
IP = 01-08
System Default.

Item Pointer	Display Data	Programming Data Description	Timing Table	Default
01	0-1			0=
02	0-1			0=
03	0-8			0=
04	0-8	LYNX Monitor System Tracking		0=Disable
05	0-9			0=
06	0-1	LYNX Monitor RS232 Output		0= Disable
07	0-1	LYNX Monitor DSP trace		0= Disable
08	0-3	LYNX Monitor VMC Trace		0= Disable

Description:

01. Reserved:

02.Reserved:

03. Reserved:

04. LYNX Monitor System Tracking

This parameter enables the LYNX monitor system and handset tracking features.

```
0= Disable
2 = enable monitor Tx to DK phone trace
3 = enable monitor Tx to DK phone trace
4 = enable monitor SWITCH ACTION trace
5 = enable monitor SWITCH ACTION trace
6 = enable monitor SWITCH ACTION trace & monitor Tx to DK phone trace
7 = enable monitor Tx to DK phone trace &monitor SWITCH ACTION trace
```

05. Reserved:

06. LYNX Monitor Output:

This parameter enables/disables the LYNX monitor RS232 output

0 = disable output monitor to RS-232 1 = enable output monitor to RS-232

07. LYNX Monitor DSP trace:

This parameter enables/disables the LYNX monitor DSP (Digital Signal Processor) Trace

0 = Disable
1 = enable monitor DSP trace
2 = monitor DSP Write Codec & download External program
3 = enable monitor DSP trace, monitor DSP Write Codec & download External program

08. LYNX Monitor VMC Trace:

This parameter enables /disables the LYNX monitor VMC (Voice Mail Card) trace.

0 = Disable 1 = enable monitor VMC trace
2 = enable monitor VMC R/W CF card pointer table & download External program
3 = enable monitor VMC trace enable monitor VMC R/W CF card pointer table & download External program

Program 06-IP : Relay Assignment

06-St-01 Relay 00	St= Station Number Value for each Item

St	Item Value	Relay Description
000	00-06, 10, 11-18	Relay of Motherboard (Optional)
xxx	00-06, 10, 11-18	Relay of ACP (extension: xxx)

Description:

Relays on the Motherboard and ACP are Dry-contact type relays. The relay provides no power only a switching function.
The maximum limit for the voltage and current for the relay contacts is 24Vdc or 90Vac at 1 A.
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.
When the St is 000, it means the relay on the motherboard. When the St is a valid station number, it is the relay on the ACP corresponding to that station number..

Assign the required Relays to one of the following functions.

Item Value	Function
00	No Operation
01	Music On Hold
02	Door open
03	Reserved for future use
04	Trunk loud bell
05	Station loud bell
06	System Alarm
10	All Paging [#0]
11	External zone page Group - 1 [#31]
12	External zone page Group - 2 [#32]
13	External zone page Group - 3 [#33]
14	External zone page Group - 4 [#34]
15	External zone page Group - 5 [#35]
16	External zone page Group - 6 [#36]
17	External zone page Group - 7 [#37]
18	External zone page Group - 8 [#38]

Program 07-Gp-IP : Flexible Key Group Assignment

07-Gp-IP KEY GRP TK: **nn**	Gp (Group)= 01-08, IP= (Item Pointer) 01-39 (DSS key number) □TK= Trunk number (nn)
07-Gp-IP KEY GRP **xx**	Gp (Group)= 01-08, IP= (Item Pointer) 01-39 (DSS key number) □xxx= Station number
07-Gp-IP KEY GRP FN: **ff**	Gp (Group)= 01-08, IP = (Item Pointer) 01-39 (DSS key number) □FN: Function Number (ff)

General:
This program assigns 8 groups of Flexible key plans for Key phones.
Each Key phone can be assigned two groups of functions. (Refer to Program 41-st-(02 & 03)).

Description:
Each key can be assigned as **Trunk**, **Station** or Special **Function**.
To change the assignment from TK to Station or to Function or vice versa, press the **{Change}** (MIC/AT) key before setting.

nn = 01-12 - Trunk Key (1 to 12)
xx = 10-69 - Station Key (2 digits)
xxx = 100-699 - Station Key (3 digits)
xxxx = 1000-6999 - Station Key (4 digits)
ff = 00-65 - Function Key (0 to 65)

The Function for each ff Code

ff Code	Function		ff Code	Function
00	One Touch DSS Speed Dial		01	Program
02	Do Not Disturb/Conference		03	Message Waiting/Pulse-Tone/Call VMU
04	Microphone/AUTO answer		05	Speed Dial
06	SAVE		07	Redial
08	Volume Up		09	Forced Account Code
10	Voice Set up		11	Personal Speed
12	Console Speed Setup		13	(Reserved)
14	Security Code Set up		15	(Reserved)
16	Temporary Security Code		17	Check In
18	Check Out		19	(Reserved)
20	All Paging (Internal)		21	All Paging (External)
22	All Paging (Internal/External)		23	Zone Paging (Internal)
24	1A2 Emulation Privacy		25	Voice Mail Transfer Key
26	Swap (Call Split) – Note 1		27	Answer Machine Emulation
28	Volume down		29	Headset Function key
30	Zone Paging (Internal) 7		31	Zone Paging (Internal) 8
32	CLI History		33	Zone Paging (External) 1
34	Voice Mail On Line Record		35	Pickup Own Group
36	Pickup All Groups		37	Pickup Group
38	Loop Key Group 1		39	Loop Key Group 2
40	Loop Key Group 3		41	Loop Key Group 4
42	Loop Key Group 5		43	Loop Key Group 6
44	Loop Key Group 7		45	Loop Key Group 8
46	Toll Password		47	Alarm Assign
48	User Alarm		49	Console User Alarm
50	Console- Set up System Time		51	(Reserved)
52	Day / Night		53	Call Forward
54	Forward Busy		55	Forward No Answer
56	Meet me Page		57	Shift Key
58	(Reserved)		59	Hotel/Motel Function
60	Door Phone		61	Security System
62	Directory key (for name search)		63	Pre-dial key
64	Day/Night/Lunch key		65	FWD Key
66				

Note:

1. **[MSG] key: Message**. It is assigned as default function key.
   When a message is left on your DK phone, this [MSG] key will be flashing.
   First situation (46-st-02 = 1~9):
   Extension call you and presses [MSG] on their phone when you are not available. Your [MSG] key will be flashing, pressing this flashing key will call back the caller automatically.
   Second situation (46-st-02 = 0):
   You have a voice message on your voice mail box, your [MSG] key will be flashing, pressing the flashing [MSG] key will let you log into your personal voice mail box automatically.
   When 46-st-02 is set to 0, pressing the MSG button will call the VMU. Its function is not dependent upon the status of the MSG light.

2. **[FN:25] key: Voice Mail Transfer**. It is assigned at Program mode 7, ff code is 25
   During the conversation with an outside caller transfer this call to another extension's voice mail box by:

   a. Conversation with an outside line
   b. Press [FN:25] key
   c. Enter the extension number that you want to transfer
   d. Press [TRF] key to transfer the outside caller to the voice mail box of that extension.

   Note:
   In the above step d. If you want to hang up instead of press [TRF] key to transfer the call, set the parameter in Program 05-12-01 to 2

   You may directly leave a message for a station:
   a. Lift the handset or press SPK.
   b. Press [FN:25] key
   c. Enter the extension number that you want to transfer. You will be connected directly to their mailbox and may leave a message.

3. **[FN:27] key: Answering Machine Emulation**. It is assigned at Program mode 7, ff code is 27
   The steps to activate this feature:
   a. Set Call Forward to station [86] (that is your voice mail box number) for your keyphone.
   b. Press [FN:27] key will enable the Answering machine Emulation feature.
   c. Press [FN:27] key again will disable the Answering Machine Emulation feature.

   Note:
   1. When activated this function allows the caller to set call forward to the Voice Mail as usual but then monitor calls to the Voice Mail from his key phone (on hook) and if they wish can lift the handset and take the call back from the Voice Mail.
   2. Another Enable method:
      To enable the user presses **[SPK] [7][7][3][1]** and to disable presses **[SPK] [7][7][3][0]**.

4. **[FN:26] key: Swap**. It is assigned at Program mode 7, ff code is 26
   An extension during a call can press this function button to swap (Call Split) between two calls on separate trunks. Refer to Program: 44-st-03

5. **[FN:34] key: Voice Mail On Line Record**. It is assigned at Program mode 7, ff code is 34
   Record Function:
   This function is dependant on the Recording Unit being capable of inserting the recording tone to alert the caller they are being recorded. To record it is necessary for the Key phone to have a **[RECORD]** key which is [**FCN 34].**

Program 09-nnn-DP : System Speed Dial

09-nnn-DP TK:tt nn nnnnnnnnnnnnnnn	nnn = 100-199 DP = 01-30 tt = 01-12 nn = 40-43 Telephone number

General:
This program permits the assignment of up to 900 sets of system speed dialling codes. If Names are enabled (default) then only 500 Speed dials are available. If all 500 are allocated with names to System Speed dial then there are no Personal speed dials available for users. In default 100 System Speed dials are enabled (100-199)

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 = 01-12 = Pre-assigned CO line number.
nn=40 : CLI Call Blocking is enabled. It will not ring but trunk LED will be flashing.
nn=41 : CLI Call Blocking is enabled. The call will be transferred to the virtual voice mail (No. 141).
nn=42 : CLI Call Blocking is enabled. The call will be transferred to the virtual voice mail (No. 142).
nn=43 : CLI Call Blocking is enabled. The call will be transferred to the virtual voice mail (No. 143).

A VMC must be installed to allow Call Blocking transfer to Virtual Voice Mail to be enabled.
Call Blocking is enabled in Mode 05-17-07.
Press the **[MIC/AT]**{Change} key twice to change or clear the settings for CLI Call Blocking.

Pre-Assigned CO Line
Press the **[MIC/AT]**{Change} 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 **[TRF/FL]** key. -- F
"Pulse to DTMF" is represented by the **{P->T}** key. -- T

i) Pause:
During dial procedures on PSTN line, the dialling will wait for a programmable timer (Refer to Program 05-01-06).
During dial procedures on ISDN line, the dialling will wait for the called party to answer the call.

For example,

Store 29611356ppp506 in speed dial and use this speed dial on ISDN line to dial out. The system will dial 506 in DTMF after the called party answers the call (it could be the Auto Attendant or Voice Mail)

ii) Flash : This will make a loop disconnection of a pre-assigned duration. (Refer to Program 05-02-05).
iii) Pulse to DTMF : If the dialled signal is "pulse", it will change to "DTMF".

Note: Pressing **[DND]**{Don't Care} will erase the digit which the cursor is on.
Pressing **[REDIAL]**{CLR ALL} will erase all the assigned digits.

Associated program: 05-05-05, 05-04-06, 05-17-07, 43-51-05, 43-52-05, 43-53-05.

Program 10-GP-IP : Intercom Single Digit Assignment

10-Gp-IP S.D.I. 00 00 00 00 00	Gp = 01-08, IP = Item Pointer (01-05) Station number for single digit dialling (1 to 5)

General:

This program permits calling party to call one or more stations by dialling one digit only. The settings in this Program shall be enabled by Single Digit Intercom (Refer to Program 05-04-07).

Description:

When single digit intercom is enabled then the pre-fix digit (6) of station to station call must be dialled to call another extension.
If a particular group has no entries programmed, the stations in the same number station group will not have single digit dialling and will not have to use the station to station prefix.

Note: This information DOES NOT pertain to DISA Single Digit Dialing.

Program 11-IP : Date and Time Setting

11-IP Date/Time 08 27 06 18 16 4	IP =Item pointer (01-06) Value for each Item

IP	Value	Item Description
11-01	01-12	Month.....
11-02	01-31	Day.....
11-03	00-99	Year.....
11-04	00-23	Hour.....
11-05	00-59	Minute.....
11-06	1-7	Week day (Monday = 1, Tuesday = 2)..

General:

This program set up the system's Date & Time.

Description:

The Date & Time will be held during power failure of LYNX plus. There is no need to reset the Date & Time after power is restored.

Program 12-nn : System Alarm Clock

12-nn Alarm hh mm dd	nn = Alarm schedule (01-10) Setting Time

Location Pointer	Program Data	Program Data Description
hh	00-23	Hour.
mm	00-59	Minute.
dd	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 idle Key telephones. The time duration for alarm clock music is programmable (00 to 99 minutes.).

Program 13-nn : Password

13-nn Password ddddddddd	nn = Assigned Password Number (01-08) 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 be padded with **'d'.**

nn	Password Description
1	Programming Password. Default is None
2	DISA Password.
3	Toll Free. Default is 8655.
4	DISA Monitor. Default is 1234
5	Reserved
6	Silent Alarm password.
7	VMU Password. Default is 1234_ _ _ _
8	Reserved
9	Reserved

Note:

1. DISA Password:
   The password is for DISA caller to access another CO line by DISA. Refer to "Program 05-11-05 DISA Special Function Access" Default is 3472 (version of ATA, INT, Italy=_ _ _ _ means not available)

2. VMU Password: Default 1234. The password is used for user to access the voice mail features.

Program 14-01-IP : SMDR Specifications

14-01-IP S.M.D.R. 0 0 0 0 0 21 0 0	IP = Item Pointer (01-08) Value for each Item

IP	Value	Default	Item Description
01	0-9	0=00 Sec.	Call Duration Start Time
02	0/1	0=Record	Record Incoming Call
03	0/1	0=Record	Record Local Call
04	0/1	0=Record	Record Incoming Call No Answer
05	0/1	0=Yes	Print out the Title
06	00-99	21=21	Number of records between titles
07	0-	0=	Reserved
08	0-3	0=No	Polarity Reversal

General:

This program assigns the SMDR (Station Message Detail Recording) parameters.

01. Call Duration Start Time

This parameter defines the minimum access time to start recording the SMDR.

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
14-01-01	0	5	10	15	20	25	30	35	40	45	sec.

02. Record Incoming Calls

This parameter decides whether incoming calls are recorded or not.

IP \ Value	0	1
14-01-02	Record	Do not Record

03. Record Local Calls

The parameter decides whether local call are recorded or not.
The SMDR report defines whether a call is local or toll by Program 05-03-05.

IP \ Value	0	1
14-01-03	Record	Do not Record

04. Record Incoming Calls No Answer

This parameter decides whether unanswered incoming calls will be recorded or not.

IP \ Value	0	1
14-01-04	Record	Do not Record

05. Print out the Title

This parameter decides whether SMDR report contain the title at the head of each page or not.

IP \ Value	0	1
14-01-05	Print out the Title.	Do not print out the Title.

06. Number of Records between the Title

This parameter defines the number of records between each Title. It means the total lines of record per page,

07. Reserved

08. Polarity Reversal

If Polarity Reversal (PR) is disabled, the system will start counting the duration after accessing a CO line. If Polarity Reversal (PR) is enabled, the system will start counting the duration after the called party answers.

IP	Value	Value Description
14-01-08	0	No PR Detection / Normal SMDR format output
14-01-08	1	PR Detection / Normal SMDR format output
14-01-08	2	No PR Detection / Simple SMDR format output
14-01-08	3	PR Detection / Simple SMDR format output

SMDR OUTPUT DATA FORMAT

```
ST.   TK S TELEPHONE NUMBER          Account    MM/DD  START DURATION    RING   UNIT
 112  01   001188629645752          12345678   10/02  08:35 00:02'35"
 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"
 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"
 117  01 * 0294150100                          10/02  14:15 00:03'10"
 D3   05   0418220212                         10/02  21:01 00:02'30"
D-03  D    << D I S A   OFF >>                10/02  21:00 00:02'40"
 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                  10/02  12:35 00:00'05"  00'05"
      05  DDI NoAns:94150112                  10/02  12:37 00:00'00"  00'27"
```

TITLE DESCRIPTION:

ST = Station No.	11 to 6999, D = DISA
TK = Trunk No.	01 to 12,
S = Status	# = Hold, * = Answered the hold, X = Cut off by toll restrictions.
Telephone Number	First 24 digits
Account	8 digits in total of Forced Account Code
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.
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.
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.
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.
5	October 2, 12:30 P.M., Station 112 made a call by Forced Account Code but was denied because of a wrong code.
6	October 2, 12:35 P.M., Station 116 made a call, which was restricted.
7	Line 1 was used by station 121 for 55 seconds then put on hold. One meter pulse was recorded against this station for its section of the call
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 its section of the call.
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.
10	DISA is completed. The Duration time is for line 3.
11	Incoming call on an ISDN system. The number displayed is the In dial 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 In dial number dialled or the CLI information of the incoming caller
12	An incoming call rang for 35 seconds and no one answered. The CLI number of the calling station is displayed.
13	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 Transtel 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 In dial number dialled or the CLI information of the incoming caller. The number 94150100 is the pilot number of the In dial group.
14	An incoming call rang for 27 seconds and no one answered. The In dial number the calling station dialled is displayed.

SMDR OUTPUT DATA FORMAT - With CLI Output

```
ST.   TK S TELEPHONE NUMBER     Account   MM/DD   START  DURATION    RING     UNIT
 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           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.
2	Incoming call on an ISDN system. The number displayed is the In dial 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 In dial number dialled or the CLI information of the incoming caller
3	An incoming call rang for 35 seconds and no one answered. The CLI number of the calling station is displayed.
4	An incoming call on line 5 (ISDN) was answered by station 111. The SMDR displayed the CLI number (294150100) of the calling party. The system can be programmed on a station by station basis to select whether calls to that station will display the In dial number dialled or the CLI information of the incoming caller. The number 94150100 is the pilot number of the In dial group.
5	An incoming call rang for 27 seconds and no one answered. The In dial number the calling station dialled is displayed.

Note: Maximum of 25 SMDR records can be stored in the system temporarily.

Program 17-nn : Forced Account Code

17-nn FAC CODE _____ dd	nn = Forced Account Code (01-99) FAC code (8 digits max.) Toll class: d(Day) d(Night)

General:

This program creates **99** Forced Account codes.

Description:

The use of forced account codes allows a station user to temporarily bypass the toll restrictions. If a Forced Account Code is assigned to a station during system programming, it becomes the only code capable of bypassing that station's default toll restriction.
The forced account code can be up to eight digits in length. 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 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 "d" is keyed in by **[DND/CN]** button and means "Any digit " ("don't care").

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

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

The last two digits dd are for toll class selection – Day and Night. The forced account code will open the call from the stations normal class to the Class set for Day and Night.
First d: for Day time Toll Class.
Second d: for Night time Toll Class.

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

Forced Account codes are also used by the ACP (Access Control Phone) to unlock the door relay of the ACP or system.

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. Forced Account Codes 50 to 99 can be used for this purpose. This feature will need to be enabled in Mode 05-11-02.

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

18-nn-tk Toll 0000000000	nn = Toll Plan number (00-09), tk = Trunk No. (01-12) Toll class for each trunk (class 0-9)

General:

Toll Plan allows the assignment of dialling capabilities dependent upon specific CO lines as well as individual stations. This can be used to restrict dialling capabilities from some stations and to limit specific types of calls to certain special purpose telephone lines.
The Toll Plans are written in Program 51 to 59 and 61 to 66.

Description:

There are total of 10 toll plans can be used.

Each Toll Plan points to a Toll Class depending on the CO line used. It is possible to allow a toll class to have different restriction level on a line by line basis.

A station can have a Day Service toll plan and a Night Service toll plan.

Example 1: Program Mode 18-00 is set to 0000dddddd. 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 10.

Example 2: Program Mode 18-01 is set to 111100dddd. 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 10.

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

Toll Classes:

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

Program 20-nn- : Set Day – Time / Lunch Time Schedule

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

General:

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

Description:

The system is capable of switching automatically between Day / Lunch break / Night settings using the time parameters set in this program. To change from manual to automatic night switching the console presses **[PRG] [TRF/FL] [*]**. Pressing **[*]** toggles between the 3 modes.
If a Function key has been set to function 52 then pressing this key will change from Day to Night by one touch button but will not change between Automatic and Manual switching. The meaning of nn as follow:

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

Example

20-01 Day Time 08 30 17 00 12

20-01 Day Time 30 13 30

On Monday the system will switch from Night time to Daytime start at 8:30 in the morning, will switch to lunchtime start at 12:30, switch back to daytime at 13:30 and switch to Night time at 17:00. To program no lunchtime, enter 00 from items 05 to 08.

Example:

Items: 01 02 (hh : mm) = the time switching from Night Time to Daytime
Items: 03 04 (hh : mm) = the time switching from Daytime to night Time
Items: 05 06 (hh : mm) = the time switching to Lunch Time
Items: 07 08 (hh : mm) = the time switching to Daytime

During Lunch Mode the system will change to night ring assignment and Auto Attendant or ACD settings but will play a different Lunch time message.

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

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 Mode, it is necessary to reprogram the Console and any Administration phones in Mode 44-st-02 to allow them to place calls on hold.

4 = For all Stations

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 cross talk. In some software versions these settings are 0 in default. All other system programming information remains unchanged when using 3 or 4.

8 = Reset all Voice mail Box message

This parameter will clear voice message that stored in all voice mail box

9 = Reset DSP

Activate the DSP circuit in the motherboard of LYNX+ and keep the rest of system still working normally.

It is used when DSP stop working and user doesn't wish to reset the entire system.

= update the loader, LCD displays "Update Loader SW", Press [1] to update loader.

Program 29-tk-IP : Trunk Specifications – 2

29-tk-IP TK SPEC 0 0 0 2 0 0 0 0	Tk=Trunk No. (01-12), IP = Item Pointer (01-08) Value for each Item

IP	Value	Default	Item Description
01	0-1	0= 0 db	Trunk Receive Gain
02	0-8	0=Disable	ACD-1 Function Enable
03	0~9	0= 0db	Trunk Transmit Gain
04	0-8	0= User Set	Set Ring Frequency (DK Handsets)
05	0-9	0=All Stations	Allow Audible Ring for Incoming Calls
06	0-1	0=Disable	Polarity Reverse Detection. Individual Trunk-outgoing.
07	0-9	0=Disable	CO Delayed Ring Timer to Hunting Group
08	0-9	0=The 1st Hunting Group	CO Delayed Ring Overflow Hunting Group

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

0.1 Trunk Receive Gain

This parameter adjusts the TKU interface's receive gain to adapt to different CO loop resistance. For long loop situation where the receive audio may be low. This parameter will allow Receive loudness to be boosted.

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
29-01-01	0	1	2	3	4	5	6	7	8	9	db

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.

IP	Value	Day Time	Night Time
29-tk-02	0	Disable ACD function	Disable ACD function
29-tk-02	1	Disable ACD function	Enable ACD function (Note 1)
29-tk-02	2	Disable ACD function	Enable ACD function (Note 2)
29-tk-02	3	Enable ACD function (Note 1)	Disable ACD function
29-tk-02	4	Enable ACD function (Note 1)	Enable ACD function (Note 1)
29-tk-02	5	Enable ACD function (Note 1)	Enable ACD function (Note 2)
29-tk-02	6	Enable ACD function (Note 2)	Disable ACD function
29-tk-02	7	Enable ACD function (Note 2)	Enable ACD function (Note 1)
29-tk-02	8	Enable ACD function (Note 2)	Enable ACD function (Note 2)

Note
1: Enable ACD-1 function only when all ring assigned stations are busy.
2: Enable ACD-1 function when Program 05-09-06 timer has elapsed even if ring assigned stations are idle.

03. Trunk Transmit Gain

This parameter adjusts the TKU interface's transmit gain to adapt to different CO loop resistance. For long loop situation where the transmit audio may be low. This parameter will allow send loudness to be boosted.

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
29-01-03	0	1	2	3	4	5	6	7	8	9	db

04. Set Ring Frequency (DK Handsets)

This feature allows each trunk to ring at DK handsets with its own individual ring frequency and override the frequency set by the user for all calls. These values are valid for DK-6 and DK-7 telephone sets.

IP \ Value	0	1-8
29-01-03	As per the key phone's ring setting.	Use the ringing frequency 1~8 of key phone as the trunk's ring.

Note: In addition to the 8 available ring tones, the system also ***supports up to 6 tunes on DK-6 telephone sets only.*** These settings ***will not provide melodies on DK-7 telephone sets***. The valid settings for those are:

d = Song 1	p [HOLD] = Song 4
* = Song 2	T [MSG] = Song 5
# = Song 3	_ [TRF] = Song 6

05. Allow Audible Ring for Incoming Calls

This feature allows either some or all stations which are ring assigned in Program Mode 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 Program Mode 01 or 02

0 = All stations assigned in Mode 01 & 02 will receive audible signal for an incoming call
1 = Only the first station assigned in Mode 01 & 02 will receive audible signal for an incoming call. Other ring assigned stations will still be able to answer a call by lifting the handset only
2 = The first 2 stations assigned in Mode 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.
3 to 8.....
9 = The first 9 stations assigned in Mode 01 & 02 will receive audible signal for an incoming call. Other ring assigned stations will still be able to answer a call by lifting the handset only.

06. 1A2 Emulation

When an extension is connected to a trunk, another extension can make a conference by press the busy trunk button if 1A2 Emulation is available. The actual operation of this parameter is dependant upon interaction with Form 78-ST-03, described elsewhere in this manual.

IP \ Value	0	1
29-01-06	No Trunk Access	Access Conditional upon 78-STN-03

07. CO Delayed Ring Timer to Hunting Group

This parameter sets the delayed ring time for an incoming call to the hunting group. If the stations in the Ring Assignment (Mode 01/02) do not answer the incoming call within below timing, the call will overflow to the pre-assigned hunting group (Mode 29-TK-08). The Ring assigned stations will continue to ring.

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
29-01-07	Disable this feature	8	16	24	32	40	48	56	64	72	sec.

Related System Programming Mode: 29-Tk-07, 29-Tk-08, 67, 68, 69

08. CO Delayed Ring Overflow Hunting Group

This parameter sets the pre-assigned overflow Hunting Group for an incoming call. If the stations in the Ringing Line Preference Assignment (Mode 01/02) do not answer the incoming call within the pre-assigned timing (Mode 29-TK-07), the call will overflow to the pre-assigned hunting group.

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
29-01-08	1	2	3	4	5	6	7	8	9	10	Hunting Group

Related System Programming Mode: 29-Tk-07, 29-Tk-08, 67, 68, 69

Program 35-tk-IP : Trunk Specifications – 1

35-tk-IP TK SPEC 0 1 0 0 3 0 0 0	tk =Trunk No. (01-12), IP = Item Pointer (01-08) Value for each Item

IP	Value	Default	Item Description
01	0-1	0=CO	Trunk Type
02	0-1	1=DTMF	Dialling Signal
03	0-8	0=No	External Call Forward
04	0-8	0=No	DISA
05	0-3	3=Yes	Pick Up
06	0-9	0=No	Loud Bell
07	0-5	4=Private	Inward Line Ringing Type - Day
08	0-5	4=Private	Inward Line Ringing Type - Night

General:

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

Description:

01. Trunk Type (CO / PABX)

IP	Value	Value Description
35-tk-01	0	Trunk line is Central Office line.
35-tk-01	1	Trunk line is installed behind a PABX or Centrex.

When user makes a Redial Call, system will automatically add (if trunk line is installed behind PBX) or delete (If trunk line is Central Office line) a leading digit (0 or 9 that is assigned at mode 05-03-04 PBX Outgoing code).
This setting will also force the CLI Delay Ring Time (Mode 05-14-06) for this trunk to 0.

02. Trunk Signal (Pulse / DTMF)

IP	Value	Value Description
35-tk-02	0	Trunk dialling signal is Dial Pulse.
35-tk-02	1	Trunk dialling signal is DTMF (Touch-Tone).

03. External Call Forward – ECF

External Call Forwarding allows an incoming CO line to be re-directed to another location through the use of another CO line. When a CO line senses incoming ringing, it answers the call and accesses another CO line. It then selects a pre-programmed system speed dial number, dials the call and connects the two CO lines together.
External forwarded calls are subject to a call duration limit set in Mode 05-06-06.
Valid settings for this option are listed below:

IP	Value	Value Description
35-tk-03	0	No ECF.
35-tk-03	1	ECF to system speed dial 101
35-tk-03	2	ECF to system speed dial 102
35-tk-03	3	ECF to system speed dial 103
35-tk-03	4	ECF to system speed dial 104
35-tk-03	5	ECF to system speed dial 105
35-tk-03	6	ECF to system speed dial 106
35-tk-03	7	ECF to system speed dial 107
35-tk-03	8	ECF to system speed dial 108

04. DISA / ECF (Direct Inward System Access / External Call Forward)

DISA & ECF must be enabled during the time period to be utilized. They may be enabled during day service only or night service only or both day and night service or may be disabled at all times.
The table below shows the valid setting and the resulting status:

IP	Value	Day	Night
35-tk-04	0	DISA & ECF Disable	DISA & ECF Disable
35-tk-04	1	DISA & ECF Disable	DISA Enable
35-tk-04	2	DISA Enable	DISA & ECF Disable
35-tk-04	3	DISA Enable	DISA Enable
35-tk-04	4	DISA & ECF Disable	ECF Enable
35-tk-04	5	ECF Enable	DISA & ECF Disable
35-tk-04	6	ECF Enable	ECF Enable
35-tk-04	7	DISA Enable	ECF Enable
35-tk-04	8	ECF Enable	DISA Enable

05. Pick Up

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.

IP	Value	Day	Night
35-tk-05	0	can not	can not
35-tk-05	1	can not	can
35-tk-05	2	can	can not
35-tk-05	3	can	can

Note:
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.

06. Loud Bell

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

IP	Value	Value Description
35-tk-06	0	No Operation.
35-tk-06	1	Relay on Motherboard / ACP will be activated when the trunk is ringing.

Note:
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

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 RINGING
Ring all assigned Extensions simultaneously.

LINEAR RINGING
Attempt to ring the first available Extension in order of the Extensions assigned in **Program 01-tk** if in Day Service or **Program 02-tk** if in Night Service**.**

CIRCULAR RINGING
The first incoming call on each trunk rings the first assigned extension, the 2nd incoming call on that trunk rings the next assigned extension, etc.

HUNT
Provide the ability to route calls to a main answering position and provide an overflow capability so that backup answering stations can be automatically added as necessary. If an incoming line rings an extension which is busy or does not answer within the assigned Hunt Time (Program **05-08-01**,) the call will ring the next available extension assigned in the hunt group (Up to 16). 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 call forward (All, Busy, No Answer) for this private line to the Voice Mail Port (See Program **43- ST-02**) or off premises.

IP	Value	Value Description
35-tk-07	0	Day - COMMON AUDIBLE
35-tk-07	1	Day - LINEAR
35-tk-07	2	Day - CIRCULAR
35-tk-07	3	Day - HUNT
35-tk-07	4	Day – PRIVATE

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.

IP	Value	Value Description
35-tk-08	0	Night - COMMON AUDIBLE
35-tk-08	1	Night - LINEAR
35-tk-08	2	Night - CIRCULAR
35-tk-08	3	Night - HUNT
35-tk-08	4	Night - PRIVATE

To set a trunk name -

1. Enter system programming Mode 35.
2. Pressing **[MIC] {Change}** to enter the Name mode.
3. Input the name for the related trunk by the following function keys.

Key Pad	***Depress 1 time***	***Depress 2 times***	***Depress 3 times***	***Depress 4 Times***	***Depress 5 Times***
1	,	.	:	1	Space
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	Q	R	S	7
8	T	U	V	8	+
9	W	X	Y	Z	9
0	ä	ü	ñ	ö	0
*****	%	^	&	*	(
#	$	!	@	#	)

4. Press **{SAVE}** to store the data.
5. The next trunk port will be appeared to be set its names.

Program 36-gp-tk : Trunk Group Assignments

36-gp-IP TK GRP 03 02 01 00 00	gp = Group (01-08), IP = Item Pointer (01-12) 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 (01-12) 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 using PSTN trunks. An additional 8 groups are available by utilizing the groups available in Mode 38 for the dial 87 trunk groups. If a station is allocated no dial 9/0 group in Mode 41-st-04 but is then allocated a Dial 87 group in mode 46-st-01 then this station will use that group as its dial 9/0 group giving a total of 16 groups available.

There are 7 trunk positions in each trunk group.

This parameter will work with the following features:

. Dial 9 or 0 access to trunk group.
. Tenant service.

Related System Programming Mode: 36, 38, 41-ST-04, 46-ST-01

Program 37-tk : Busy Out Trunks

37-tk Busy Out 0000000000	tk = Trunk No. (01-12) Busy out Type

General:

This program permits the trunk 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.

Value	Item Description
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 Assignments

38-gp-IP TK GRP 01 02 03 04 05	gp = Group (01-08), IP = Item Pointer (01-12) Trunks to be included

General:

This program permits each trunk line to be assigned to different Trunk groups which can be accessed by dialling [87]. There are 8 groups in total. This group will be available to a station in addition to or instead of it's 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 program is different from Program Mode 36-gp-tk. This program is used for dialling [87] or [9] to access a Trunk Line.

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

Related System Programming Mode: 36, 38, 41-ST-04, 46-ST-01

I

Program 39-IP : Sensor Assignments

39-STN-IP Sensor FN S	STN = Station No. (00 / 000 / 0000) 2/3/4 digits sensor on the motherboard

39-STN-IP Sensor FN S	STN = ACP station number Sensor on the ACP

IP	Value	Item Description
39-STN-01	00-18	Function No.
39-STN-02	0-2	Sensor Type

Description:

The LYNX-MBU and each ACP provides 1 Sensor.

FN= Function No. S=Sensor Type
Each Sensor can be assigned to one of the following 18 functions.

FN	Function
00	No Operation
01	Fire Alarm
02	Break Alarm
03	Door Phone 1
04	Reserved for future use
05	Security feature
06-18	Reserved for future use

The valid sensor types for sensor on the motherboard:

S	Item Description
0	Disable Sensor function
1	Normally Open for night
2	Normally Closed for night
3	Normally Open day
4	Normally Closed Day
5	Normally open Day/Night
6	Normally Closed Day/night

The valid sensor types for sensor on the ACP:

Value	Item Description
0	Disable Sensor function
1	Normally Open
2	Normally Closed

Program 40-stn-IP : Station Class of Service – 1

40-stn-IP STCOS 0 0 0 0 0 0 0 00	stn = Station No.(2-4 digits), IP = Item Pointer (01-08) Value for each Item

IP	Value	Default	Item Description
01	0-9	0= Not allowed	Override Level
02	0-9	0= Not allowed	Monitor Level
03	0-9	0=No	Limit Call Duration
04	0-3	0=No	Station Loud Bell
05	0-1	0=Yes	Access Paging
06	0-1	0=Yes	Receive Paging
07	0-1	0=None	Security Code Status
08	00-99	00=All	Forced Account Code

General:

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

Description:

01. Override Level

Higher level stations can override lower level stations, equal levels may override each other, and lowest levels may not override each other.

IP \ Value	0	1	2 to 8	9
40-stn-01	Disable	Lowest level		Highest level

02. Monitor Level

Higher level stations can monitor lower level stations, equal levels can not monitor each other.

IP \ Value	0	1	2 to 8	9
40-stn-02	Disable	Lowest level		Highest level

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. (Refer to Mode 05-04-03 to set call limiting action)

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
40-stn-01	No limit	3	5	10	15	20	30	40	50	60	min.

Related System Programming Mode: 05-04-03, 40-st-03

04. Station Loud Bell

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

IP	Value	Default
40-stn-04	0	No operation
40-stn-04	1	Operate relay on the motherboard when calls are received on this station.

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.

05. Access Paging

IP	Value	Default
40-stn-05	0	The "All Page" signal can be broadcast by this station.
40-stn-05	1	The "All Page" signal can not be broadcast by this station.

06. Receive Paging

IP	Value	Default
40-stn-06	0	The "All Page" signal can be received by this station.
40-stn-06	1	The "All Page" signal can not be received by this station.

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

07. Security Code Status

IP	Value	Default
40-stn-07	0	The station is unlocked. (Can make outgoing calls.)
40-stn-07	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.

08. Forced Account Code

We can assign one of Forced Account Code for this station at this item. 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 00-99, the user can key **[PRG][4]** and the force account code to override toll restrictions for one call only.
If the setting is from 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 Mode 17: Create Forced Account Code

Program 41-stn-IP : Station Specifications

41-stn-IP STSPE 1 1 0 1 0 0 SN	stn = Station No.(2-4 digits), IP = Item Pointer (01-07) Value for each Item

IP	Value	Default	Item Description
01	1-8	1=1	Station Group
02	1-8	1=1	Key Group For Key phone
03	1-8	0=None	Shift Key Group For Key phone
04	1-8	1=1	Dial 9 trunk group
05	0-9	0=0	Toll plan - Day
06	0-9	0=0	Toll plan - Night
07	SN		Port Number

General:

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

Description:

01. Station group

This parameter will work together with the following features:
- Call Pickup Group.
- Single Digit Intercom Group
- Paging Group

IP	Value	Value Description
41-stn-01	0	Disable
41-stn-01	1-8	Group 1 to 8

To select the station group for this station.

02. Flexible key group assignments for Key phone

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

IP	Value	Value Description
41-stn-02	0	Disable
41-stn-02	1-8	Key Group 1 to 8

See Mode 07: Flexible key group assignment for key phone.

03. Shift Key Group for Key phone

Each station can have access to a second soft key group accessed by the **[SHIFT]** key (refer to mode 07). 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 override any function assigned to it in the second group.

IP	Value	Value Description
41-stn-03	0	Disable
41-stn-03	1-8	Key Group 1 to 8

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

04. Dial 9 trunk group/ SLT Port as MOH Source

When a station selects a trunk line by dialling 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.

IP	Value	Value Description
41-stn-04	0	use "Dial [87] trunk group" as "Dial 9 trunk group". (see mode 46-ST-01). That is, Dial 9 can access the "Dial [87] trunk group". Using this setting can extend Dial 9 trunk groups from 8 to 16.
41-stn-04	1	search in the 1st tk group
41-stn-04	2	search in the 2nd tk group
	..	……
41-stn-04	8	search in the 8th tk group

If the Extension is an SLT port, it can be used as an additional MOH input allowing individual tenants to each have their own Message on Hold. The port is set to type 7 in Mode 43-port-02 then in Mode 41-slt-04 user can allocate which trunk group will use this port as a MOH source. The current drawn from the SLT port MUST be limited to no more than 10ma to prevent damage. A line isolator will achieve this.

IP	Value	Value Description
41-stn-04	0	All Trunk groups
41-stn-04	1-8	Trunk group 1 to 8

Related System Programming Mode: 36, 38, 41-ST-04, 46-ST-01

05. Toll plan - Day

This parameter assigns the toll plan to be used by the station in day mode.
Refer to Mode 18 for Toll plan details.

06. Toll plan - Night

This parameter assigns the toll plan to be used by the station in night mode.
Refer to Mode 18 for Toll plan details.

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 LYNX, the port number consists of 2 digits

IP	Value	Value Description
41-stn-07	11~18	station ports on the LYNX-MBU
41-stn-07	21~28	station ports on the 1st LYNX-STU or LYNX-SLU card
41-stn-07	31~38	station ports on the 2nd LYNX-STU or LYNX-SLU card
41-stn-07	41~44	SLT station ports on MBU

Program 42-stn-IP : Register Memory Blocks for Individual Speed Dial

42-stn-IP SPD-T b1 b2	st = Station No. (2-4 digits) IP = Item Pointer (01-02) blocks (2 max.) for a Station

b1: Block 1 of Individual Speed Dial Codes (00-09 or DSS11~DSS20)
b2: Block 2 of Individual Speed Dial Codes (DSS1-10**)** (Digital phone only)

General:

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

Description:
The total number of available personal speed dial numbers is determined through system programming.

- If in program **05-04-06,** the Individual Speed Dial Codes are assigned:
  500 sets**,** the maximum blocks in this program are **50** blocks.
  400 sets, the maximum blocks in this program are **40** blocks.
  300 sets**,** the maximum blocks in this program are **30** blocks.
- Each block has 10 sets of Individual Speed Dial.
- Each set has up to 30 digits.
- Speed Dial Codes 00~09 shares the same memory block with DSS11~DSS20.
- Each Station can use up to 2 blocks (20 sets of Individual Speed Dial.)
- If names are enabled then the number of blocks available is half.

Example:

42-1**3**-IP SPD-T **01 02**	**13**: Station No. (2-4 digits) **01 02**: Station 553 can use block **01** and **02** for Individual Speed Dial (20 sets)

42-**15**-IP SPD-T **04 00**	**15**: Station No. (2-4 digits) **04 00**: Station 105 can use block **04** (10 sets) for Individual Speed Dial (00-09 or DSS11~20), **00** : for no block.

42-18-IP SPD-T **00 03**	**18**: 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.
Refer to Program Mode: 05-04-06, 05-04-05

Program 43-cn-IP : Port Specifications

43-pn-IP Port nnnn 0 1 0 00 02	pn = Port No. (2 digits) IP = Item Pointer (01-06) Value for each Item

pn = Port Number (11-56)
11~14: station port on LYNX-MBU
21~24: station port on the 1st LYNX-STU card.
31~34: station port on the 2nd LYNX-STU or LYNX-SLU card.
51~54: SLT ports on LYNX-MBU.

IP	Value	Default	Item Description
01	nnnn	System	Station Number (2 to 4 digits)
02	0-9	System	Equipment Type
03	1-9	1=1	DSS Soft key Plan
04	0	0=	Reserved
05	00-50	00= disabled	Voice Mail Box Capacity
06	00-90	01=1 Minute	Maximum Voice Mail Message Length

General:

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

Description:

01. Station Number

Use this setting to assign station numbers for the Flexible Numbering Plan. The allowed number range is 10-69, 100-699. 1000-6999. If it is necessary to use digits 7 or 8 as part of the station numbering scheme then Mode 05-08-05 must first be set to 8 to prevent confusion between control codes/programming digits and Station numbers.

02. Equipment Type

IP	Value	Value Description
43-pn-02	0	None connected
43-pn-02	1	Digital Phone without LCD
43-pn-02	2	Digital Phone with LCD
43-pn-02	3	Not used
43-pn-02	4	Single Line Telephone
43-pn-02	5	DSS
43-pn-02	6	Dual port
43-pn-02	7	SLT Port used as MOH input.
43-pn-02	8	Voice Mail Port
43-pn-02	9	ISDN Device
43-pn-02	D	Door phone/ACP
43-pn-02	-	SLT Paging port (press [FLASH] for entering -
43-pn-02	T	Fax Port (press [MSG] for entering T)

1) Types 0 to 5 and d are recognized by the system automatically.

2) Type 6 allows an SLT port to be paired to a Digital Extension providing a pseudo Hybrid port. Once set the SLT phone can be given the same extension number as a Digital Extension and when the number is called both Phones will ring. Either phone can answer or once one answers then a call to the same number will show busy. The call can be placed on hold by one of the extensions and retrieved from the other or can be transferred to other extensions by the normal method. The Station COS of the digital phone will be allocated to the SLT automatically.
3) Type 7 allows an SLT port to be used as an additional MOH input allowing tenanted systems to have different messages played to different trunk groups during Call Hold. Once an SLT port is set to MOH then in Mode 41-slt-04 the port can be allocated to all or individual trunks groups as a hold source.
4) Type – allows the SLT port to be used for an External Paging Port. **Both SLT Music Port and SLT Paging port MUST have a line isolator unit fitted.**
5) 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.
6) Type 9 allows the ISDN Basic Rate to be made an "S" bus
51~52: the 1st Internal ISDN port of the 1st LYNX-SIU card, and the default extension number is 141~142
53~54: the 2nd Internal ISDN port of the st LYNX-SIU card, and the default extension number is 143~144
55~56: the 3rd Internal ISDN port of the 1st LYNX-SIU card, and the default extension number is 145~146
51~56: Virtual Station Port, and the default extension number is 141~146.
(Virtual station port pool same port with SIU S-interface)

7) Type T is Fax port that will receive calls that transferred from trunks that are set to be Fax trunks in Mode 95-Tk-01 if a Fax CNG tone is present when DISA answers the incoming call. One fax station port is allowed.

The way to set up Fax Tone detection is below:
1. Enable DISA feature to answer the call (Mode 35-TK-04 = 3)
2. Enable detect fax tone feature by trunk (Mode 95-TK-01= 1)
3. Set Fax machine number (Mode 43-port-02= T, Pressing [MSG] for T)

03. Flexible DSS Key Group Assignments for DSS Console

This parameter assigns stations to be one of two flexible DSS console key groups.

IP	Value	Value Description
43-pn-03	0	Disable
43-pn-03	1-2	DSS Key Group 1 to 2

See Mode 08: Flexible DSS console key group assignment for DSS Console.

04. Reserved

05. Voice Mail Box Assignment

There are a total of 8 mailboxes in the Lynx system, numbered 01 through 08. By default the first 4 mailboxes are assigned to the digital extensions 11 through 14 (ports 11 through 14). Mailboxes 5 and 6 are assigned to extensions 15 and16 (ports 21 and 22). Mailboxes 7 and 8 are assigned to virtual extensions 41 and 42 (ports 51 and 52). You may re-assign mailboxes within the system, but cannot exceed 8 mailboxes in the system.

Note: Since all mailboxes are assigned in the default database, in order to re-assign a mailbox, you must remove it from its existing assignment and save the entry before you can re-assign it to another station.

06. Reserved:

Name Entry for Extensions

To assign station names to individual telephone sets, you must access Mode 43-port and then press the [MIC] key to change from the numeric data entry mode to the alpha entry mode. When you first enter the Mode, you will see a display similar to the example below:

Example

```
43-11-06 Port
11  2  1  0  01  00
```

This confirms that you are programming extension 11 (port 11) as shown by the two digits in the lower left hand portion of the display.

When you press the MIC key, the lower portion of the display disappears and you may now enter the name, using the letters associated with the keys.

```
43-11-06 Port
```

1. Enter system programming Mode 43.
2. Press **[MIC]** to enter into the Name mode.
3. Input the name for the related extension by the following function keys.
4. As each letter is satisfactorily entered, press DSS button 4 to move the cursor position to the right.
5. If you need to back up to replace an incorrect entry, press DSS button 3, which moves the cursor position to the let.

Key Pad	***Depress 1 time***	***Depress 2 times***	***Depress 3 times***	***Depress 4 Times***	***Depress 5 Times***
1	,	.	:	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	Q	R	S	7
8	T	U	V	8	
9	W	X	Y	Z	9
0	ä	ü	□	0	
*****	%	^	&	*	(
#	$	!	$	#	)

6. When the entry is to your satisfaction, press **[SAVE]** to store the data.
7. The next extension port will appear and ready to set its names.

Program 44-stn-IP : Station Class of Service – 2

44-stn-IP STCOS 0 0 0 0 1 0 0 0	stn = Station No. (2-4 digits), IP = Item Pointer (01-08) Value for each Item

IP	Value	Default	Item Description
01	0-1	0=Enable	System Alarm
02	0-1	0=Enable	Hold feature
03	0-1	0=Enable	Call Split
04	0-1	0=No	Manual Line
05	0-1	1=Enable	Headset Feature
06	0-1	0=Enable	Use Engineering Password
07	0-1	0=	Reserved
08	0-1	0=Music	Station Alarm Signal

General:

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

Description:

01. System Alarm

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

IP	Value	Value Description
44-stn-01	0	The "System Alarm" signal will be received on this station.
44-stn-01	1	The "System Alarm" signal will not be received on this station

02. Hold Feature

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

IP	Value	Value Description
44-stn-02	0	Hold function allowed
44-stn-02	1	Hold function not allowed

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. Dialling 9 (or 0) or 72 will retrieve the held call.

IP	Value	Value Description
44-stn-03	0	Call Splitting function allowed
44-stn-03	1	Call Splitting function not allowed

Related System Programming Mode: 07(code 26), 44-st-03

04. Manual Line

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

IP \ Value	0	1
44-stn-04	Disable	Enable

05. Headset Feature

When headset feature is enabled by the user (code is [SPK] [775]) they can then use the **[SPK]** key to go on or off hook. If this programming mode is disabled the user cannot switch between handset and headset mode.

IP \ Value	0	1
44-stn-05	Disable	Enable

06. Use Engineering Password

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

IP \ Value	0	1
44-stn-06	Disable	Enable

07. Reserved

08. Station Alarm Signal

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

IP	Value	Value Description
44-stn-08	0	(set in Mode 05-05-01) default Back Ground Music
44-stn-08	1	Busy tone

Program 45-stn-IP : Station Class of Service – 3

45-stn-IP STCOS 0 0 0 0 0 0 0 0	Stn=Station No. (2-4 digits), IP = Item Pointer (01-08) Value for each Item

IP	Value	Default	Item Description
01	0-1	0=Disable	Intercom Call Limitation
02	0-	0=No	LMS hear BGM at idle state
03	0-	0=No	Ringing volume increase
04	0-1	0=Yes	Allow Trunk Access
05	0-1	0=Yes	Intercom Calls To Different Station Groups
06	0-1	0=Yes	Receive Break Alarm
07	0-1	0=Yes	Allow Unrestricted Speed Dial
8	0-1	0=Yes	Record Station's SMDR Data

General:

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

Description:

01. Intercom Call Limitation

If this setting is enabled, the station can not make an intercom call by dialling 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 Analog phones can call a station using the "Single Digit" feature.

IP \ Value	0	1
45-stn-01	Disable	Enable

02. ACP Hear BGM at idle state

IP \ Value	0	1
45-stn-02	Disable	Enable

03. Incremental Increase Ringing Volume

This parameter enables the incremental increase of Ringing Volume of an incoming trunk if called extension is not answered.

IP \ Value	0	1
45-stn-03	Disable	Enable

04. Allow Trunk Access

If this function is disabled then the station can not access any trunks for incoming or outgoing calls.

IP \ Value	0	1
45-stn-04	Enable	Disable

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 (Mode 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.

IP \ Value	0	1
45-stn-05	Enable	Disable

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 Mode 39.

IP \ Value	0	1
45-stn-06	Enable	Disable

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 Mode 05-05-03/04 if they conflict with the stations toll restrictions.

IP \ Value	0	1
45-stn-07	Enable	Disable

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 for the Mini Call Accounting feature. When the Mini Call Accounting feature is enabled (see Mode 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.

IP \ Value	0	1
45-stn-08	Record	Do not Record

Program 46-stn-IP : Station Class of Service – 4

46-stn-IP STCOS
1 1 0 3 0 7 d 0

stn= Station No. (2-4 digits), IP = Item Pointer (01-08)
Value for each Item

IP	Value	Default	Item Description
01	0-8	0= None	Dial [87] Trunk Group
02	0-9	0= 0	Send Message Wait Signal Level
03	0-2	2= MIC will switch on for Intercom calls	Automatic Answer Capability / Internal CLIP
04	0-7	3= Recall	DISA/ISDN In dial Recall Capability
05	0-9	0= No Limit	Maximum Number Of Transfer Times Allowed
06	0-7	7= Yes	Door Unlock/DND/CFWD Access
07	0-9	0= d	ACP Door Phone Hunt Grp./Permanent C/FW Grp.
08	0-7	0= Normal	SLT Ring Cadence Settings

General:

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

Description:

01. Dial [87] Trunk Group

If this setting is from 1 to 8, after the station dials [87] (or dials [9]), the system will automatically search for a free line which is assigned in group 1 to 8 in Program Mode 38.
If the setting is 0, then no dial 87 group is available to this station.

Related System Programming Mode: 36, 38, 41-ST-04, 46-ST-01

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). Stations which are set to 0 can not send a message waiting information but only receive a message waiting from the voice mail unit.

IP	Value	Value Description
46-stn-02	9	Can do Message Waiting to Stations that are assigned level 0-9
46-stn-02	8	Can do Message Waiting to Stations that are assigned level 1-8
46-stn-02	n	Can do Message Waiting to Stations that are assigned level 1-n
46-stn-02	1	Only receive Message from Stations whose assigned level is > 2.
46-stn-02	0	Can only receive Messages from Voice Mail.

For Hotel / Lodging applications, it is recommended that you assign a message waiting level so that guest telephones cannot leave a message for another station in the system. If you set the guest room to 1 then the room phone cannot leave a message for another station and can ONLY get a message waiting indication from the console operator or the voice mail system.
Message levels of the same value above 0 can leave messages for one another. Lower message levels cannot leave messages for higher levels.
Message level 0 allows messages to be left on a station only by the system Voice Mail Card. When selected for a station, pressing the MSG key (FN:3) will always call the Voice Mail.

03. Automatic Answer Capability (Keyphone) / Internal CLIP (Caller ID) Function

For Digital Key Telephone

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 signalling for intercom calls.

IP	Value	Value Description
46-stn-03	0	No
46-stn-03	1	MIC permanently on
46-stn-03	2	MIC will switch on for Intercom calls

For Single Line Telephone (Connected to LYNX-SLU or SLT port on MBU):

This enables system to send internal and external CLIP(Caller ID) signals to the single line telephone

IP	Value	Value Description
46-stn-03	0	Disable CLIP sending to SLT
46-stn-03	1	Enable SDMF (number without name) CLIP sending to SLT

04. DISA/ISDN In Dial Recall Capability

If this parameter is enabled then when a DISA or ISDN In dial call rings an 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 this settings 1 to 3 the called station will continue to ring until the console answers the call. Using this Settings 5 to 7 the call will ring the station for 1 cycle (Mode 05-08-06) and then recall to the console 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. If the extension is a Fax or Modem on ISDN DID then the setting must be 4 to prevent Fax or Modem calls being sent to an operator if the extension is busy.

IP	Value	Value Description
46-stn-04	0	No Recall to Operator
46-stn-04	1	Recall to Operator when called station is No Answer.
46-stn-04	2	Recall to Operator when called station is Busy. Camp on called station.
46-stn-04	3	Recall to Operator when called station is No Answer/Busy. Camp on called station.
46-stn-04	4	ISDN In dial calls ringing a busy station will receive busy signal.
46-stn-04	5	Recall to Operator when called station is No Answer. No Camp on function.
46-stn-04	6	Recall to Operator when called station is Busy. No Camp on function.
46-stn-04	7	Recall to Operator when called station is No Answer/Busy. No Camp on function.
46-stn-04	8	ISDN In dial calls, recall to Operator when called station is busy.

05. Maximum Re-Transferred 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.

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
46-stn-05	No limit	6	7	8	9	10	11	12	13	14	times

06. Door Unlock / DND / CFWD Access

This parameter allows or disallows the station from accessing the Door Unlock, Do Not Disturb (DND) and Call Forward (CFWD) features as per the table.

IP \ Value	0	1	2	3	4	5	6	7
Door Unlock	Disallow	Allow	Disallow	Allow	Disallow	Allow	Disallow	Allow
DND	Disallow	Disallow	Allow	Allow	Disallow	Disallow	Allow	Allow
CFWD	Disallow	Disallow	Disallow	Disallow	Allow	Allow	Allow	Allow

07. ACP Door Phone Hunt Group / Permanent Call Forward Group – No Answer

IP \ Value	0	1	2	n	9	d
46-st-07	Group 1	Group 2	Group 3	Group n+1	10	Program 3

This parameter allocates the Station Hunt Group that the ACP will call if it is programmed as a Door Phone and the Call button is pressed. When setting is d; the ACP will call the extension according to the assignment in Program 3: Door Phone Ring Assignment

If the Extension is not an ACP then this parameter sets the Permanent Call Forward destination Hunt Group on No Answer. If the Station user sets a Call Forward manually then it will override this setting but after cancelling the manual Call forward then this setting will be enabled again.
See also Mode 78-st-04: Call Forward Group - Busy.

08. SLT Ring Cadence Settings

If the Station is an SLT then this parameter will set the ring Cadence for calls as follows.

IP \ Value	0	1	2	3	4
46-stn-08	Normal	Always Trunk ring pattern	Always Intercom ring pattern	Special Ring	Fax Ring

Program 47-stn-IP : Hot Line Assignment

47-stn HOT LINE 000	St = Station No. (2-4 digits) Data. (Extension Mode)

47-stn 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 dialling any digits.

* Pressing **[SPK]** on a Keyphone allows the Hot line to be override.

Description:

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

Example:

47-**115** HOT LINE SPD:101	**115** = Station No. (3 digits) Speed Dial 101 (for example: 94150100)

When the user lifts the handset, the System will automatically call 9425010 through System Speed Dial 101.

2. Press **{MIC}** to select a hot line Intercom. (Press again to go back to SPD assignment), the display shows:

47-115 HOT LINE 00	● Enter an Extension number **118**
47-115 HOT LINE **118**	● The system calls Extension **118** when the handset is lifted.

The Hot Line is the recommended method of connecting a Fax machine to the system. Use a spare analog 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-stn-IP : Station Class of Service – 5

48-stn-IP STCOS
0 0 0 0 0 0 0 0

stn=Station No. (2-4 digits), IP= Item Pointer (01-08)
Value for each Item

IP	Value	Default	Item Description
01	0-	0= 0	Reserved
02	0-	0= 0	Reserved
03	0-	0= Enable	Group Listen Feature
04	0-	0= 0	Reserved
05	0-	0= 0	Reserved
06	0-	0= 0	Reserved
07	0-	0= 0	Reserved
8	0-	0= 0	Reserved

General:

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

Description:

01. Reserved

02. Reserved

03. Group Listen Feature

This parameter enables/disables the Group listen feature that is available on some versions of DK2 and DK6 handsets. When DK phone is operated on Group Listen feature, user places the handset back to the cradle, user may hear the oscillation noise on the speaker. Pressing [MIC] key twice to mute the handset's microphone will eliminate this noise.

Definition of Parameter:

IP \ Value	0	1
48-stn-03	Enable Group Listen	Disable Group Listen

04. Reserved

05. Reserved

06. Reserved

07. Reserved

08. Reserved

Program 50-stn-IP : Station Class of Service – 6

50-stn-IP STCOS 0 0 0 0 0 0 0 0	Stn=Station No. (2-4 digits), IP = Item Pointer (01-08) Value for each Item

IP	Value	Default	Item Description
01	0-1	0=Disable	ACP Warning Signals
02	0-1	0=Enabled	Call Forward Indication
03	0-1	0=	Reserved
04	0-1	0=Disable	CTI-Extension Status Report
05	0-1	0=Enable	VMS Leading Digits for Intercom Calls
06	0-1	0=ACP Relay	ACP Door Unlock Relay
07	0-1	0=Card or P/Word	ACP Door Open Control
08	0-1	0=Door Phone / Disable	ACP Phone Operation / Hotel Alarm Type

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

Description:

01. ACP Warning Signals

This Parameter enables the warning signals for the ACP/RFID unit. The warning signals are ACP's Case Breaking Alarm and Unplug Alarm.

IP \ Value	0	1
50-stn-01	Disable	Enable

02. Call Forward Indication:

This feature will disable the flashing SPK key on a handset that has enabled Call Forward.

IP \ Value	0	1
50-stn-02	Disable	Enable

03. Reserved:

04. CTI-Extension Status Report

Enabling this parameter will output the extensions status report for CTI applications. This parameter will need to be enabled before CTI will work with this station.

IP \ Value	0	1
50-stn-04	Disable	Enable

05. VMS Leading Digits For Intercom Calls

Enabling (disabling) this parameter allows the system to send (not send) the leading digit information of the extension when making an intercom call to the voice mail. This allows the operator to transfer someone's call directly to the selected Voice mail box.

IP \ Value	0	1
50-stn-05	Enable	Disable

Related System Programming Mode: 05-12-05

06. ACP Door Unlock Relay

This parameter can select MBU's relay or ACP relay as Door unlock relay. If the MBU's relay is enabled then both the ACP relay and the MBU's relay will operate for that door phone. This will allow a more secure door opening method when multiple ACP and Door unlocking are used.

IP	Value	Value Description
50-stn-06	0	Use ACP relay
50-stn-06	1	Use LYNX-MBU's (Mode 06-00 needs to be assign to '2') and ACP relay

Related System Programming Mode: 05-12-04, 06

07. ACP Door Open Control

This parameter sets what action is required to open the door lock from an ACP / RFID phone.

IP	Value	Value Description
50-stn-07	0	RF Proximity card OR Password
50-stn-07	1	RF Proximity Card AND Password

08. ACP Phone Operation / Hotel Alarm Type

This parameter offers two features:
When the extension is an ACP phone, the Phone Operation Type is as follow:

IP	Value	Value Description
50-stn-08	0	Door Phone
50-stn-08	1	Wall Mounted Phone

Description:

1. Door Phone:
   Pressing [Bell] button on the ACP will call assigned extension according to Program 3.

2. Wall Mount Phone:
   Pressing [Bell] button on the ACP will present dial tone and allow user to enter the dialing digits to make intercom calls or outside line calls. The ACP works as a handsfree key phone.

When the extension is an SLT phone, this paramateri enables the Hotel Alarm as follows:

IP	Value	Value Description
50-stn-08	0	Disable Hotel Alarm
50-stn-08	1	Enable Hotel Alarm

Description:

Hotel Alarm:

When the Hotel guest lifts up his SLT phone without dialing for more than 2 minutes; the hotel console will be rung and the LCD display will show “Hotel Alarm”. It is used for the guest who might have some health problems and cannot complete the call to the Console for help.

A Panic button which short circuits the pair of wires of an SLT phone will also trigger this Hotel Alarm feature.

Program (51 to 59)-code-IP : Toll Plans – Allowed Digits – Class 1 to 9

51-code-01 Allow - - - - - - - - - - - - -	Code=Code No. (01-16), IP = Item Pointer (01-12) Value for the Item

General:

This program sets allowed exception numbers for Toll Class 1. These Modes should be read in conjunction with Modes 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 Modes are programmed.

Allowed entries in this Mode 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.

Modes 51 to 56 are used in conjunction with Modes 61 to 66 and Modes 57 to 59 are used independently.

Toll Classes:

Class	Function	Prog. Mode
0	Unrestricted	Default
1	Use Mode 51 for the Unrestricted numbers. Use Mode 61 for the Restricted numbers	Mode **51,61**
2	Use Mode 52 for the Unrestricted numbers. Use Mode 62 for the Restricted numbers	Mode **52,62**
3	Use Mode 53 for the Unrestricted numbers. Use Mode 63 for the Restricted numbers	Mode **53,63**
4	Use Mode 54 for the Unrestricted numbers. Use Mode 64 for the Restricted numbers	Mode **54,64**
5	Use Mode 55 for the Unrestricted numbers. Use Mode 65 for the Restricted numbers	Mode **55,65**
6	Use Mode 56 for the Unrestricted numbers. Use Mode 66 for the Restricted numbers	Mode **56,66**
7	Use Mode 57 for the Unrestricted numbers.	Mode **57**
8	Use Mode 58 for the Unrestricted numbers.	Mode **58**
9	Use Mode 59 for the Unrestricted numbers.	Mode **59**
*	Use Mode 51-56 for unrestricted numbers. Use Mode 61-66 for all restricted numbers	000
D	**Cannot access the trunk line.**	

Note 1: Default numbers in Mode 61, 62, 63, 65, 66 are: ddddddd
Note 2: Default numbers in Mode 51, 52, 53, 55, 56, 57, 58, 59 are:----------
Note 3: d: Don't care: any digit is allowed in this position.
Note 4: _: The system does not allow any digits dialled after this symbol.
Default : 59-01=000ddddddddd

Note:
Default Settings:
COS1 = Allow 0800 and 0508

Program (61 to 66)-code-IP : Toll Plans – Restricted Digits – Class 1 to 6

61-code-01 Restrict ddddddddddd	code= Code No. (01-16), IP =Item Pointer (01-12) Value for the Item

General:

This program sets Restricted numbers for Toll Class 1. These Modes should be read in conjunction with Modes 51 to 56.

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 Modes are programmed.

Allowed entries in this Mode 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.

Modes 51 to 56 are used in conjunction with Modes 61 to 66 and Modes 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.

Mode 51 and 61 combine to produce Toll Plan 1, Mode 52 and 62 combine to produce Toll Plan 2 and so on up to Mode 56 and 66 for Toll Plan 6. Toll Plans 7, 8 and 9 are associated with Mode 57, 58 and 59.

The principle of these Toll Plans up to Plan 6 is to deny unwanted digits in Mode 61 to 66 and then allow any exceptions for these digits in Mode 51 to 56. If 0ddddddd is entered in Mode 61 and 04ddddddddddd_and 01ddddddd are entered in Mode 51 then a station allocated to Toll Plan 1 will be able to dial any local number plus 04 anything (Australian Digital and CDMA Mobile phones) . Any other number beginning with 0 will be disallowed.

Note
Default Settings
COS1 = Restrict 0
COS 2 = Restrict 00

This example is based on the Australian network for the city of Sydney (area code 02, local calls start with the digits 8 and 9) where an 8 digit local numbering scheme is in place and allows local calls plus mobiles (04x)

Set Mode 41-11-05/06 = 7

When this mode is set and Mode 57 is still at default then station 11 will be totally restricted.

Set Mode 57 to the following,

Mode 57-01 = 8ddddddddddd
Mode 57-02 = 9ddddddddddd

Station 11 will now be only able to dial numbers beginning with 8 and 9 .
To allow mobiles program Mode 51 to the following.

Mode 57-03 = 04ddddddddddd

Example 2: All calls except ISD and 19 numbers.

Set Mode 41-11-05/06 = 1

When this mode is set and Mode 51 and 61are still at default then station 11 will be unrestricted.

Set Mode 61 to the following,

Mode 61-01 = 00ddddddddddd
Mode 61-02 =19ddddddddddd
Mode 61-03 =14ddddddddddd

Station 11 will now be only able to dial numbers beginning with digits 2 to 8 plus service calls.

To allow mobiles (04X) free calls (1800xxxxxx) program Mode 51 to the following.

Mode 52-01 = 1800ddddddddd
Mode 52-02 = 04ddddddddddd

Program 67-gp-IP : Hunt Group Pilot Number

67-Gp HUNT NO - - - 0	Gp = Group No. (01-10) Value for each Item

IP	Value	Default	Item Description
01	00-10	_ _ _	Hunting Group Pilot Number
02	0-9	0 = Common	Hunting Group Ring Method

This program sets Pilot Numbers for Hunting Groups 1 to 10 and their ringing method.

01. Hunting Group Pilot Number

There are 10 Hunt Groups available in the LYNX. Each Hunt Group is assigned a Pilot Number in this Mode. The pilot number can be any valid unused station number and will have the same number of digits as the station-numbering scheme used in the system (2, 3 or 4). On the LYNX Hunt group pilots can be assigned to be rung from Single Digit DISA.

02. Hunting Group Ringing Method

Assign one of 3 ringing methods for each hunting group.

IP	Value	Item Description
67-gp-02	0	Common Ringing
67-gp-02	1	Linear Ringing
67-gp-02	2	Circular Ringing
67-gp-02	4	Common enable CFW
67-gp-02	5	Linear ring enable CFW
67-gp-02	6	Circular ring enable CFW

Once Hunting Ring Type is set here or in Mode 05-06-08 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 Mode 68 (Day) and Mode 69 (Night). Each Hunt Group can be from 1 to 16 stations. There are 3 types of Ring available, Common, Linear and Circular.

If **Common Ring** is enabled then calling the pilot number will always ring all available stations in which they are programmed in Mode 68 or 69.

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 Mode 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.

Rules for Call Forward of calls to Hunt group
Intercom calls to the Hunt group will call forward to an extension, but not to a SPD Dial.
DISA call Hunt group only the first extension in Hunt group can make all call forward to SPD dial .
Stations can remove themselves from receiving Hunt calls by using the DND key but this will also prevent them from receiving direct calls.
It is still possible to call each station in the Hunting group directly by dialling 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 for settings 0,1,2 but will follow CFW setting of first station if set to 4,5,6

Related System Programming Modes: 05-06-08, 67, 68, 69

Program 68-gp-IP : Hunt Group Assignment – Day

68-Gp-IP HUNT DA 00 00 00 00	Gp = Group No. (01-10), IP = Item Pointer (01-16) Value for each Item

General:

This program sets Stations into Hunting Groups 1 to 10 for the LYNX and assigns the order in which they will be accessed during Daytime.

Description:

There are 10 Hunt Groups available and 16 stations can be assigned into each group for Day and Night time.

There are 3 types of Ring available, Common audible ,Linear and Circular.
If Common Audible is enabled then all stations will ring simultaneously.
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 Mode 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 dialling its own individual station number.

Related System Programming Mode: 05-06-08, 67, 68, 69

Program 69-gp-IP : Station Hunt Group Assignment – Night

69-Gp-IP HUNT NI 00 00 00 00	Gp = Group No. (01-10), IP= Item Pointer (01-16) Value for each Item

General:

This program sets Stations into Hunting Groups 1 to 10 for the LYNX assigns the order in which they will be accessed during Night time.

Description:

There are 10 Hunt Groups available and 16 stations can be assigned into each group for Day and Night time.

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 Mode 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 dialling its own individual station number.

Related System Programming Mode: 05-06-08, 67, 68, 69

Program 75-Num-IP : LCR - Analysis Table

75-Num-IP Dg Tab ---------- 00	Num = Number (001-500) Value for each Item

IP	Value	Default	Item Description
01-10	0~9, *,#,_,d	_,_,..,_	Number of routing analysis
11-12	01~20	00	Routing Table

General:

This program assigns the routing table for the specific dialled number.

Description:

500 specified dialled numbers can be assigned.
20 routing tables can be used.
Each specified dialled numbers must be assigned to a routing table (routing tables are in Mode 76).
The dialled digits could be 0~9, *, #. 'd' is the wildcards. '-' means no digit.
When a number is analysed and entered into mode 75 the entry must be complete to the end of the entry.
If the digit 1 is entered for example it must be followed by ddddddddd to the end of the entry.

Related system Programming: 05-13-07. 05-13-08, 75, 76, 77, 78-st-01, 78-st-02

All numbers that need to be dialled have to be analysed in Mode 75 and allocated to a route in Mode 76 to allow the digits to be dialled correctly. Do not forget to allocate a route to 000 as a priority to make certain that this route is not blocked.

Even if a number is not to be modified or rerouted in any way it should be allocated in Mode 75 to go to a route table in Mode 76 which will allow it to select a trunk and dial out using default settings.

Call flow is as follows.
A call is analysed in mode 75 and sent to mode 76.
In mode 76 if the call is to be handled the same 24 hours a day then it should be assigned in part C which has no start or finish time.
The call is assigned a dial 9 group and then sent to a modify table in mode 77 if required.
If the call is to be assigned to a route that has a limited number of available trunks the call can be programmed to a second route if all available trunks in the first route are in use. The second (and third and fourth) routes can assign a trunk group and a modify table each.
If a call is assigned to a Modify table in mode 77 the modify table can if needed remove a specified number of digits from the leading edge of the number and then insert up to 12 digits in their place or it can leave the number intact and insert the digits in the leading edge.
When the LCR programming is complete the feature should be enabled station by station in mode 78-stn-01/02

Program 76-Num-Tm : LCR – Routing Table

76-Num-Tm Rou Ta 00 00 0 00 0 00	Num = 01~60 Tm = Time Schedule (A, B, C) Setting Value

IP	Value	Default	Item Description
01,02	00~23	00	Start Hour of this Route Table
03,04	00~23	00	End Hour of this Route Table
05	0~8	0	1st priority trunk group for dialling
06,07	00~99	00	Modify table for the 1st priority trunk group
08	0~8	0	2nd priority trunk group for dialling
09,10	00~99	00	Modify table for the 2nd priority trunk group
11	0~8	0	3rd priority trunk group for dialling
12,13	00~99	00	Modify table for the 3rd priority trunk group
14	0~8	0	4th priority trunk group for dialling
15,16	00~99	00	Modify table for the 4th priority trunk group

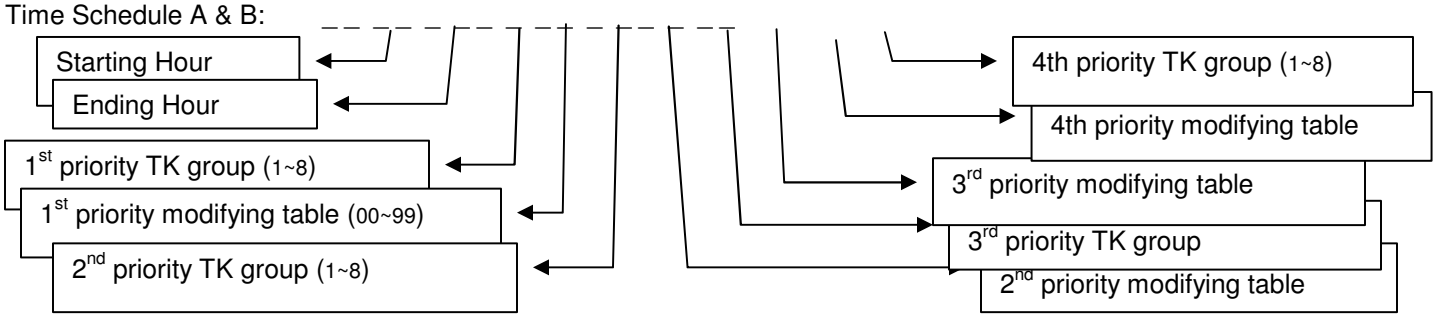
General:

This program assigns different time schedules, the priority to select different trunk groups and the modifying tables for the routing tables.

Description:

20 routing tables can be used for normal operation plus 20 for the first holiday and another 20 for the second holiday.
3 time schedules can be assigned for each routing table.
4 priority trunk groups can be assigned for each routing table. (If there is no trunk group assigned here, system will use Dial 9 trunk group instead.)
4 modifying tables can be assigned for each routing table.
For weekly holiday 1, system will refer to 76-(21~40).
For weekly holiday 2, system will refer to 76-(41~60).

Time Schedule A & B:



Time schedule C does not have the Starting/Ending hour setting. Only priority trunk groups and modifying tables need to be assigned. . If only 1 Time Zone is to be used then use Time Schedule C which will automatically cover 24 hours if Schedule A and B are blank.

Related system Programming: 05-13-07. 05-13-08, 36, 41-ST-04, 75, 76, 77, 78-st-01, 78-st-02

Program 77-Num : LCR – Modifying Table

77-Num-IP Mo Tab
00 ddddddddddd

Num = Number (01~99)
Value for each item

IP	Value	Default	Item Description
01-02	00~10	00	Deleted Digit Length
03-12	0~9, *,#, -, d, T, p	ddddddddddd	Added Digits

General:

This program designs the rules for changing the dialled number to the routed number.

Description:

The system will delete the first nn digits (if required) and then add the assigned digits in front of the dialled numbers. Up to 10 digits can be assigned to be inserted.

The added digits can be 0~9, *, #, p, T.

'd' is the wildcard.

'-' is no digit.

'p' is the pause character.

'T' = means to chain to next modifying table with current one for long digit strings.

Related system Programming: 05-13-07. 05-13-08, 75, 76, 77, 78-st-01, 78-st-02

Program 78-stn-IP : Station Class of Service – 6

78-stn-IP STCOS 0 0 0 0 0 0 0 0	stn= Station No. (2-4 digits), IP=Item Pointer (01-08) Value for each item

IP	Value	Default	Item Description
01	0-5	0= Disable LCR	LCR - Routing Level
02	0-1	0= Not Allowed	LCR – Direct Access a Trunk
03	0-1	0= No Access	1A2 Emulation - Intrusion
04	0-9	0= None	Call Forward Busy Transfer Group
05	0-1	0=Disable	External Notification – Voicemail
06	0-9	0=Mode 72	Calling Line Identification Presentation
07	0-1	0=Disable	Ring Line Preference
08	0-	0=	Reserved

Description:

01. LCR Routing Level

This parameter assigns the LCR routing level for each station.

IP	Value	Value Description
78-stn-01	0	Disable LCR
78-stn-01	1	Allow this station to use the 1st priority trunk group only.
78-stn-01	2	Allow this station to use the 1st and the 2nd priority trunk groups only.
78-stn-01	3	Allow this station to use the 1st~3rd priority trunk groups only.
78-stn-01	4	Allow this station to use the 1st~4th priority trunk groups.
78-stn-01	5	Allow this station to use the 1st~4th priority trunk groups. If there are no available trunks in the 1st~4th priority trunk groups, the system will allow this station to use normal dialling.

Related system Programming: 05-13-07. 05-13-08, 75, 76, 77, 78-st-01, 78-st-02

02. LCR – Direct Access a Trunk

This parameter assigns the right of the station to select a trunk directly when LCR is enabled.

IP	Value	Value Description
78-stn-02	0	Do not allow to access a trunk direct (need to dial 9 or 0 first).
78-stn-02	1	Allow this station to access a trunk direct (by pressing line key button). System will assign any pre-assigned idle trunk for this extension.
78-stn-02	2	Allow this station to access a trunk direct (by pressing line key button). System will assign any dedicated idle trunk for this extension. Stations which have this facility enabled can only, access trunks, which are in their own trunk group set in 41-STN-04. LCR Routing will still apply for the calls but if the LCR route (mode 76) has the trunk group set to 0 which means use station trunk group.

Related system Programming: 05-13-07. 05-13-08, 75, 76, 77, 78-st-01, 78-st-02

03. 1A2 Emulation (Station Programming)

When extension talks with a trunk, the other extension can make a conference by pressing this Trunk's button if the 1A2 Emulation is allowed.

Form 78-ext-03 - 1A2 Emulation (Station Programming):	
0=No Access	1 = Access with intrusion tone.

04. Call Forward Busy Transfer Group

This parameter sets the Permanent Call Forward on Busy to destination Hunt Group for the Station. If the Station user sets a Call Forward manually then it will override this setting but after cancelling the manual Call forward then this setting will be enabled again.
See also Mode 46-st-07: Call Forward Group – No Answer.

IP \ Value	0	1	2	3	4	5	6	7	8	9	unit
78-stn-04	Disable	1	2	3	4	5	6	7	8	9	Group

05. External Notification – Voicemail

The system will check stations every 30 seconds looking for new mail messages. If yes, the system will select an idle CO line to dial out xx times according to the setting in mode 78-st-05. After the number is dialled, system will announce “you have x new message, please enter your password” four times. If the entered password is correct and all new messages are heard, system will stop dialling. System will only use one CO line to activate the notification function at a time.

IP	Value	Value Description
78-stn-05	0	Disable the notification.
78-stn-05	1	Dial the specified number 3 times to notify the user.
78-stn-05	2	Dial the specified number 6 times to notify the user.
78-stn-05		
78-stn-05	9	Dial the specified number until the user answers and enters correct password

Note:

1. The telephone number that is to be called for notification is assigned when accessing the personal mailbox menu . The Steps are:
   1) Lift handset, dial [86], [password=1234]
   2) [4] for message notification, [2] to enable notification
   3) Once external notification is enabled, enter the telephone number that is to be called.
   4) [#] to finish

06. Calling Line Identification Presentation

This parameter selects what CLIP information will be presented to the Exchange when a Station makes an outgoing call. Not all exchanges will accept and pass on this information and if A CLIP is entered in mode 71 that is not a valid number in the assigned range of the customer the exchange will ignore this information also. Special CLIP information can be entered in mode 71 which contains 6 different tables.

IP	Value	Value Description
78-stn-06	0	Caller party number follow MODE-72-st to dial
78-stn-06	1-6	Refer to Mode-71 (01-06)
78-stn-06	7-9	CLIR (Calling Line Identification Restriction)

07. Ring Line Preference

This parameter sets whether an extension will answer a trunk ringing at that extension by lifting the handset or will need to press the DSS key of the ringing trunk or use pickup if the trunk is not displayed.

IP \ Value	0	1
78-stn-04	Auto Answer	Manual Answer

08. Reserved

Program 83-st-IP : Register Memory Block for CLI history buffer

83-stn-IP CLI-T b1 b2	Stn=Station No. (2-4 digits), IP =Item Pointer (01-02) blocks (2 max.) for a Station

b1/**b2** : Block 1/2 of CLI buffer for each extension

General:

This program divides sets of **CLI history buffer** into blocks for use by extensions.

Description:

- Program **05-13-03,** the Individual CLI history buffers are assigned:

05-13-03	Memory Block Size	Max. Memory blocks
0	10 sets/Block	52 Blocks
1	20 sets/Block	26 Blocks
2	30 sets/Block	17 Blocks
3	40 sets/Block	13 Blocks

- Each station can use up to 2 blocks.
- The next assigned block must be null or continuous after the first assigned block number for each extension. That means if the first assigned block number is “n” then the next assigned block must be “0 = null” or “n+1”.

Example:
Mode 05-13-03=0

83-**113**-IP CLI-T **01 02**	**13**: Station No. (2-4 digits) **01 02**: Station 113 can use block **01** and **02** for CLI history buffer and it could store 20 sets (=10 + 10).

Mode 05-13-03=1

83-**115**-IP CLI-T **04 00**	**15**: Station No. (2-4 digits) **04 00**: Station 115 can use block **04** (20 sets) for CLI history buffer. **00**: for no block.

Mode 05-13-03=3

83-118-IP CLI-T **03 00**	**18**: Station No. (2-4 digits) **03 00**: Station 118 can use block **03** for CLI history buffer and it could store 40 sets, **00**: for no block.

Related System Programming Mode: 05-13-03, 83

Program 84-IP : Home Area Code

84-01-01 NNN	NNN = Assigned home area code (3 digits maximum)

General:

This program assigns the home area code for the CLI redial feature.

Description:

- 3-digit input maximum for this entry.
- The home area code can include the toll access code prefix.

Example:

For example, LYNX is located in Taipei.
Toll access code in Taiwan is '0'
Taipei area code is '2'
Set mode 84 to '02d'.

- When ISDN rings in to LYNX system, the received number is 2-80710002. If you have set mode 84 as above, system will delete '2' and dial 80710002 for smart redial.
- When analog PSTN line rings in to LYNX system, the received number is 02-29645752. If you have set mode 84 as above, system will delete "02" and dial 9645752 for smart redial.
- When ISDN rings in to LYNX system, the received number is 3-80710001. If you have set mode 84 as above, system will add "0" and dial 03-80710001 for smart redial.
- When analog PSTN line rings in to LYNX system, the received number is 03-22489202. If you have set mode 84 as above, system will dial 03-22489202 for smart redial.
- If you set 'ddd' in mode 84, system will dial back the original received number direct.

Program 85-nn-IP : Overlay Area Code

85-nn-01 NNN	nn = 01~05 NNN = Assigned overlay area code (3 digits)

General:

Some larger cities in the United States have exhausted an entire area code. Instead of separating portions and assigning unique area codes to different geographic regions, the Telco has instead introduced an overlay area code. This program assigns 5 sets of overlay area code for CLI redial feature.

Description:

- The overlay area code is 3-digit format.
- 5 sets of overlay area code can be assigned for the CLI redial feature.

Program 86-nnn-IP : Office Code Redial Pattern

86-nnn N	nnn = office code N = Redial Pattern

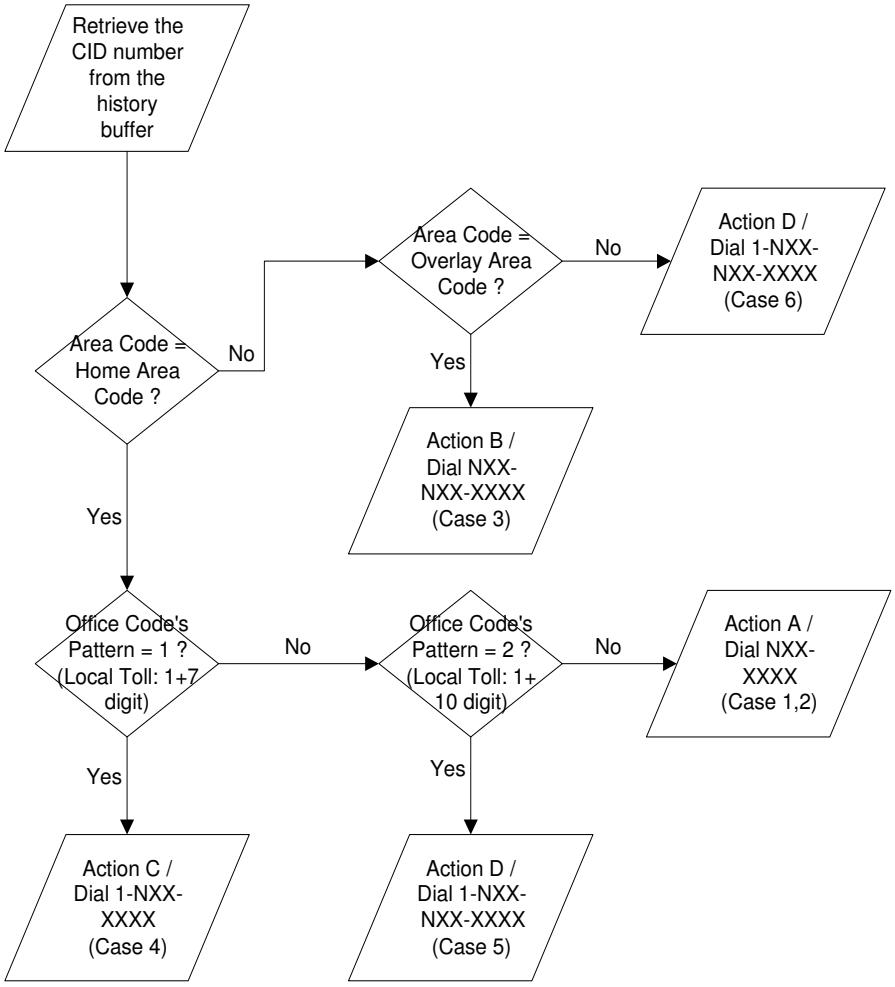
General:

This program assigns the redial pattern for different office codes.

Description:

N	Item Description
0	Redial pattern is NXX-XXXX (Local call: 7 Digit)
1	Redial pattern is 1-NXX-XXXX (Local Toll: 1 + 7 Digit)
2	Redial pattern is 1-NXX-NXX-XXXX (Local Toll: 1 + 10 Digit)

CID Redial Feature for USA Market



Program 87-CN-IP : ASSIGN DOOR PHONE FOR KEY CARD

87-nn-01 Card In 000000000000000	nn=Key card Number (01~99), IP=Item Pointer (01-24) Setting for each ACP

General:
This program assigns which Key cards (RFID) can be used on which ACP port to unlock a door.

Description:
Before a key card can be used to operate a door relay it must be set to be allowed in this program mode. A key card can be enabled to unlock more than one door if multiple ACP's are fitted.

IP Value	Value Description
0	Denied entry
1	Allowed entry

Location	MBU	STU 1	STU 2
Extension port No.	11-18	21-28	31-38
ACP port No.	1-8	9-16	17-24

Program 88-DP : REGISTER KEY CARD

Register Card ST:___

Station number of ACP

This program registers key cards for use.

Description:
Before a key card can be used with an ACP it must first be registered to it. Once the key card is registered then it will be necessary to proceed to mode 87 to allow the key card to open the door relay associated with the ACP.

To register a key card enter the station number of the ACP

Register Card ST:115

Press **SAVE**

Wait Registering Slide please

Place the Key Card over the Speaker position on the ACP and when the ACP beeps remove the Key card and press **SAVE.**

Register Store Card:01

Press **SAVE**

Registration ok! Card:01

Program 89-CN-IP : DELETE KEY CARD

89-nn-01 Serial FFFFFFFF

nn = card number

General:
This program assigns allows the De-registration of the key cards from a system.

Description:
Enter the number (01-99) of the key card to de-register

De-Register Card Card:01

Press **SAVE**

89-01-01 Serial FFFFFFFF

Press **REDIAL** to clear the digits

89-01-01 Serial 00000000

Press **SAVE** and the LCD display will move on to the next Key card number.

89-02-01 Serial 00000000

FFFFFFFF: Means Card was registered.
00000000: Means Card was deregistered.

Program 91-TM : ACP TIME LOCK – Assign Time

91-TM Table 00 00 00 00

TM = Time Schedule (00~15)

General:
This program assigns different time schedules for the ACP time lock. Cards assigned in such programmed period can be used to open the ACP door.

Description:
The first 4 digits are starting time and the last 4 digits are stopping time. There are a total of 16 schedules which can be assigned.

91-00 Table 08 30 17 30

Press **SAVE**, means time schedule 00 is from 08:30 to 17:30.

91-01 Table 21 00 22 00

Press **SAVE**, means time schedule 01 is from 21:00 to 22:00.

Program 92-CN : ACP TIME LOCK – Assign Card

92-CN-01 Card In TM

CN = Card Number (01~99)

General:
This program assigns different ACP time lock schedule for ACP. Cards assigned in such programmed period can be used to open the ACP door.
TM= 00~15 (Mode 91)

Description:

92-06-01 Card In 02

Press **SAVE**, means card 06 use ACP time lock schedule 02 (mode 91-02).

Program 93 : MINI CALL ACCOUNTING AOC ADDITIONAL NUMBER CHARGING

93-01 Table 01 ------ 00 00

01 = Table (01~20)

General:

This program assigns additional charging for numbers dialled under Mini Call Accounting that is not provided by the Central Office.

Description:

Telstra's ISDN service has a feature known as Advice of Charge which provides charging information to ISDN lines as data which can be displayed and used by the Telephone system for Mini Call Accounting or SMDR
Output. Not all calls are provided with charging information in particular mobiles and this mode allows an estimated mobile charge to be added to the Mini Call Accounting charging for numbers that are specified here.
Up to 20 numbers of 5 digits each can be programmed. If the whole 5 digits are not specified the Don't Care symbol must be entered to the end of the line as usual.

Mode 93 = 123456 AA BB
Hotel+4 = CC DD
The formula of Call Charge is:
If BB is not set to 0
Call Charge = Round(TT/BB) x AA x CC x DD
If BB is set to 0
Call Charge = AA x CC x DD

Where:
AA= Cost per Unit
BB= Seconds per Unit
CC= Server Rate
DD= Decimal point is 2 digits (0=0.01) or 5 digits (5=0.00001)
TT = Talking Time (by second)

Example C: (Australia local Call with fixed charge rate)
- The setting for Hotel 4 and Mode 93 are as follows:
  - ✧ Mode 93 = 8ddddd 22 **00** (AA = 22, **BB = 00**)
  - ✧ [HOTEL][4] = 04 00 (CC = 04, DD = 00)
- One call is 1'18"

The Call Charge will be:
Call Charge = AA x CC x DD = 22 x 04 x 0.01 = 0.88

Example C: (Australia Internet Call)
- The setting for Hotel 4 and Mode 93 are as follows:
  - ✧ Mode 93 = 0918dd 25 60 (AA = 25, BB = 60)
  - ✧ [HOTEL][4] = 04 00 (CC = 04, DD = 00)
- One call is 3'50" (TT= 230 seconds)

The Call Charge will be:

Call Charge = Round (TT/BB) x AA x CC x DD = Round(230/60) x 25 x 4 x 0.01 = 4.00

Example E: (Australia Mobile Call)

- The setting for Hotel 4 and Mode 93 are as follows:
  - ✧ Mode 93 = 412ddd 01 06 (AA = 01, BB = 06)
  - ✧ [HOTEL][4] = 04 00 (CC = 04, DD = 00)
- One call is 3'50" (TT= 230 seconds)

The Call Charge will be:

Call Charge = Round (TT/BB) x AA x CC x DD = Round(230/06) x 01 x 4 x 0.01 = 1.56

The Mini-Call-Accounting output will be:

07.09 05:38 ROOM 11

TK	DATE	TIME	DURATION	TELEPHONE NUMBER	UNITS	COSTS
01	07.09	05:36	00:00'07"	812345678	000022	000000.88
01	07.09	05:37	00:01'18"	823456789	000022	000000.88
01	07.09	05:40	00:03'50"	0918123456	000100	000004.00
01	07.09	05:27	00:01'12"	0918654321	000050	000002.00
01	07.09	05:31	00:03'50"	412345678	000039	000001.56
TOTAL					000233	000009.32

Note:

1. The maximum units for each record is 65535.
2. The maximum total units is 999999.
3. Related System Programming Modes: 14-01-08=4 07-GP-Item=FN:59

Program 94-tk-IP : Lunchtime Ringing And Ringing Line Preference Assignment

95-tk-IP FLX DAY 11 12 13 14 15	Tk =Trunk No. (01-12), IP=Item Pointer (01-26) Assigned station number

General:

This program assigns each incoming line to ring the programmed stations during Lunch Time. The ringing methods can be LINEAR (ring the first available station), CIRCULAR (Ring the next station following the last station who just answered an incoming call), HUNT (Ring the first assigned station for a set period of time (program mode 05-08-01) then if no answer ring the next ring assigned station then the next etc.) or COMMON AUDIBLE (All stations will ring simultaneously). See Program Mode: 35-tk-08 to assign. The LYNX Lunchtime ring type will follow the night ring type. An overflow Ring Hunt Group can be assigned to make additional stations ring after a time interval in addition to this ring assignment. See program Mode 29-07/08. The ringing stations will be the night members programmed in mode 69.

Description:

1. This program sets Lunch Time ringing.
2. The station number can be 2,3,4 digits.
3. A total of 26 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]**.
6. Day and Night ring assignment are set in Mode 01 and 02.

Program 95-tk-IP : Trunk Specifications – 3

95-tk-IP TK SPEC
0 0 0 0 0 0 0 0

Tk=Trunk No. (01-12), IP=Item Pointer (01-08)
Value for each Item

IP	Value	Default	Item Description
01	0-1	0=Disable	Detect Fax Signal
02	0-1	0=	Reserved
03	0-8	0=	Reserved
04	0-8	0=No	DISA & ECF Lunch Time Enable
05	0-3	0=	Reserved
06	0-9	6=	Duet (Faxibility) Setting
07	0-5	0=	Reserved
08	0-5	0=	Reserved

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

01. Detect Fax signal

This parameter is used to enhance Fax Auto Detection Switch. Our system will detect incoming FAX CNG tone and transfer it to an assigned FAX SLT port.
Frequently, incoming FAX calls mistakenly detect human voice as FAX tone and start transmitting prior to being transferred to a FAX machine. In other cases, The sound of an auto attendant greeting may mask the CNG tone of an incoming FAX call, so the Lynx does not accurately recognize the call as an incoming FAX.

If set to 0, there will be no attempts to recognize FAX tone on incoming calls.
If set to 1, the trunk will detect FAX tone, but the Auto Attendant message will play immediately.
If set to 2 (or higher), the system will delay playback of Auto attendant greeting to give the FAX detection "clean audio" to allow detection of incoming CNG tone.
If set to >0 and no FAX tone is detected, the call will proceed according to system programming to processing of a voice call.
Definition of parameter:

IP	Value	Value Description
95-tk-01	0	The trunk won't detect the fax signal.
95-tk-01	1	Trunk will detect the FAX CNG tone during company greeting and route the FAX call automatically if CNG is detected.
95-tk-01	2	Delay the company greeting 5 seconds to allow detection of FAX CNG tone.
95-tk-01	3	Delay the company greeting 6 seconds to allow detection of FAX CNG tone.
	..	…..
95-tk-01	9	Delay the company greeting 12 seconds to allow detection of FAX CNG tone.

If the programmed trunk detects FAX CNG tone, the system will automatically transfer this call to the assigned FAX extension (refer to Program Mode 43-CN-02=T). If the programmed trunk does not detect CNG tone during the above setting timer, the company greeting will then play for a voice call.

Other programming modes related to this setting:
a. 43-CN-02 = T (Fax port) => press [MSG] ---- (SLT Port)
b. 95-TK-01 = 0/1 => disable/enable Fax Tone Detection
c. 35-TK-04= 3 Enable DISA feature
d. 46-ST-08= 1 SLT Ring Cadence Settings
e. 05-01-04= 0 DISA answer delay time

02. Reserved

03. Reserved

04. DISA & ECF Lunch Time Enable

This parameter will enable the DISA or ECF during the lunch time or not. As to the setting for Day will be assigned at Program 35-tk-03. Night is Program 35-tk-04 respectively.

IP \ Value	0	1	2
95-tk-04	Disable	DISA	ECF

05. Reserved

06. DUET (Faxibility) Setting

This feature is to enable the Lynx to detect different ring cadences and direct incoming calls to different ring assigned stations depending on ring cadence in System Program: 01-tk or 02-tk when different rings are received. For example if this parameter is set to 7 than if the standard ring is received then the system will ring stations assigned in 01/02-tk-(01 to 12) and when the 2nd Ring Type is received then the system will ring stations assigned in Program: 01/02-tk-(13 to 26)

As ring cadences vary between Australia and New Zealand so it is necessary to select the correct country settings in Program: 05-19-05. The default setting is for New Zealand

IP	Value	Normal Ring is detected, ring the following extensions	2nd Ring Type is detected, ring the following extensions
95-tk-06	0	Program: 01-tk-01 to 16 02-tk-01 to 16	Program: 01-tk-01 to 16, 02-tk-01 to 16
95-tk-06	1	Program: 01-tk-01 to 14, 02-tk-01 to 14	Program: 01-tk-15 to 16, 02-tk-15 to 16
95-tk-06	2	Program: 01-tk-01 to 12, 02-tk-01 to 12	Program: 01-tk-13 to 16, 02-tk-13 to 16
95-tk-06	3	Program: 01-tk-01 to 10, 02-tk-01 to 10	Program: 01-tk-11 to 16, 02-tk-11 to 16
95-tk-06	4	Program: 01-tk-01 to 8, 02-tk-01 to 8	Program: 01-tk-9 to 16, 02-tk-9 to 16
95-tk-06	5	Program: 01-tk-01 to 6, 02-tk-01 to 6	Program: 01-tk-7 to 16, 02-tk-7 to 16
95-tk-06	6	Program: 01-tk-01 to 4, 02-tk-01 to 4	Program: 01-tk-5 to 16, 02-tk-5 to 16
95-tk-06	7	Program: 01-tk-01 to 2, 02-tk-01 to 2	Program: 01-tk-3 to 16, 02-tk-3 to 16
95-tk-06	8	Program: 01-tk-01 to 2, 02-tk-01 to 2	Program: 01-tk-3 to 16, 02-tk-3 to 16
95-tk-06	9	Program: 01-tk-01 to 2, 02-tk-01 to 2	Program: 01-tk-3 to 16, 02-tk-3 to 16

07. Reserved

08. Reserved

Programming Cross Reference

Incoming Calls

Ringing Assignment

IP	Item Description
01-tk-stn	Day Ringing And Ringing Line Preference Assignment
02-tk-stn	Night Ringing And Ringing Line Preference Assignment
05-01-05	Busy Reminder Tone Interval (Off-Hook Ringing / Busy - Camp-On)
05-02-07	Ring On Timer (Minimum ring to be detected)
05-02-08	Ring Off Timer (Time to hold signal during silent period)
05-08-01	CO Hunt Interval
05-19-05	DUET Ring Select (Aust/NZ)
20-nn	Day/Night Service Schedule
29-tk-07	CO Delayed Ring Timer to Hunt Group
29-tk-08	CO Delayed Ring Overflow Hunt Group
35-tk-07	Day Ring Type
35-tk-08	Night Ring Type
94-tk-Stn	Lunch ring assignment
95-tk-06	DUET Ring Select and Assignment

Outgoing Calls

Dial '9'

IP	Item Description
05-04-02	Dial '9' Enable/Disable
05-06-05	Operator Code 9/0
36-grp-tk	Dial '9/0' Group Assignment
38-grp-tk	Dial 87 Group assignment
41-stn-04	Stations Dial '9/0' Group Assignment
46-stn-01	Stations Dial '87' Group Assignment

PABX Outgoing Code

05-03-04 Code for outside line in PABX (If trunk/trunks are served by PABX)

Trunk Specifications

IP	Item Description
05-01-06	Pause Time Duration (For Speed Dial Pauses)
05-01-07	DTMF Generation Time
05-02-05	Flash Time to CO (For Special CO Features or Centrex)
05-02-07	Ring On Time (Minimum ring signal detected)
05-02-08	Ring Off Time (Time to hold signal during silent period)
05-03-01	Make/Break Ratio
29-tk-01	Trunk Receive Gain
29-tk-03	Trunk Send Gain
29-tk-04	Trunk Ring Frequency
35-trk-01	Trunk Type (PABX/CO)
35-trk-02	Trunk Signalling Type (dial pulse/DTMF)

Speed Dial

IP	Item Description
05-01-06	Pause Duration for Speed Dial pauses
05-03-02	Automatic Trunk Search During Speed Dial, Auto Redial, Saved Redial, etc.
05-04-06	Speed Dial Distribution
05-05-03/04	Speed Dial Unrestricted / system
09-spd-xx	System Speed Dial Locations
42-stn-01/02	Register Memory Block for Personal Speed Dial
45-st-07	Speed Dial Unrestricted / Station

Auto-Redial

IP	Item Description
05-02-03	Auto-Redial Off Hook (wait for answer) Timer
05-03-02	Automatic Trunk Search
05-05-07	Auto-Redial Attempts (Quantity)
05-05-08	Auto-Redial Time (Inter-Call) between attempts

Intercom Calls

Intercom Call Signalling

5.3.3 Intercom call signalling to electronic telephone sets
46-st-03 Automatic MIC switching

Step Call

05-07-01 Intercom Step Call Type
41-stn-01 Station Group Assignment

Dial Tone Pattern

05-03-07 SLT Dial Tone Pattern Options
05-04-07 Intercom Single Digit Dialling

Single Digit Intercom

10-grp-xx Single Digit Dialling Assignment
41-stn-01 Station Group Assignment

Direct Station Select

07-grp-key Flexible Key Group Assignment
41-stn-02 Keyphone Flexible Key Group Assignment

Dial 0 (Call Operator)

05-06-05 Operator/CO access codes
44-stn-04 Manual Line

Intercom Dialling Restriction

45-stn-01 Intercom Dialling Restriction

Busy/During Conversation

Hold and Hold Recall

IP	Item Description
05-01-01	Hold Recall Timer (Time until station is warned of hold call)
05-01-02	Exclusive Hold Recall Timer (Same operation as hold recall)
05-01-03	Hold Recall Time out (Time before call is rerouted to Operator - After Hold Recall Timer has expired.)
05-07-04	DISA Recall Capability
05-12-03	Station ability to place call on Exclusive Hold
44-stn-02	Station ability to hold a call

Busy Remind / Camp-On

5.1.5 Busy Reminder Interval (Time between notifications)
5.8.3 SLT Camp On tone

Call Split

44-stn-03 Call Split

Transfer

05-06-01 Transfer Recall Timer Blind transfer (Camp-On / Busy)
05-06-02 Transfer Recall Timer blind transfer (No Answer)
05-08-06 DISA No Answer Recall (To Message) Timer
05-08-07 DISA Transfer Time (No Digits Dialled)

Message Waiting Level

46-stn-02 Message Waiting Level

Override

40-stn-01 Override Level

DISA

IP	Item Description
05-01-04	Delayed DISA Access Time - Day
05-07-04	DISA Recall Capability
05-08-04	DISA Operator Recall Location (No Answer)
05-08-06	DISA No Answer Recall Timer
05-08-07	DISA Transfer Timer - No digits dialled
05-11-04	DISA Access Delay Time - Night
05-11-06	DISA Transfer Count - Console busy
05-11-02	DISA Password - Optional extra passwords
05-11-05	DISA Special Digit Acceptance
05-17-04	DISA Access Delay Time - Lunchtime
35-tk-04	DISA / External Call Forward Status
46-stn-04	DISA Recall Capability (No Answer/Busy)
95-tk-04	DISA / ECF Lunchtime

DISA SINGLE DIGIT DIALLING

IP	Item Description
05-11-08	DISA Single Digit Dialling
20-nn	Day/Night Service Schedule

Night Service

IP	Item Description
02	Night Ringing And Ringing Line Preference Assignment
09-spd-nn	System Speed Dial 101~109 for ECF
20-nn	Day/Night Service Schedule
35-tk-03	External Call Forward Location (Speed Dial Assignment)
35-tk-04	DISA/ECF, Day/Night Status

Group Assignments

Console Assignment

04-grp-stn Assign Stations to be consoles by group

Flexible Key Group Assignments

07-grp-key Key Group Layout Assignment
41-stn-02 Assign stations to Key Groups
41-stn-03 Assign Shift key group to stations

Dial '9/0' Trunk Groups

36-grp-trk Assign trunks to groups for Dial '9/0'
41-stn-04 Assign stations a Dial '9' group

Dial '87' Trunk Groups

38-grp-trk Assign trunks to groups for Dial '87'
46-stn-01 Assign stations a Dial '87' group

Group Assignment for stations (Page Zone, Pick up, Single digit)

41-stn-01 Assign stations to station groups

Call Control

Toll Restriction

IP	Item Description
05-05-03	Set a portion of system speed dial for no restriction (Hundreds)
05-05-04	Set a portion of system speed dial for no restriction (Tens)
05-03-05	Toll Access Code (Usually a '0') for SMDR only
18-pln-trk	Assigning Toll Class by Toll Plan/Trunk used
41-stn-05	Station Day Toll Plan Assignment
41-stn-06	Station Night Toll Plan Assignment
51~59	Allowed (Exception) Tables for Toll classes 1~9

59	Common Permitted Code
61~66	Restrict (Deny) Tables for Toll classes 1~6

Forced Account Codes

17-nn Creating Account Codes
40-stn-08 Assigning Account Codes to Stations

Call Limit

05-04-03 Call Limit Type
40-stn-03 Call Limit Duration (Class of Service - per station)

Passwords

IP	Value	Item Description
13	01	System Programming Password (default=none)
13	02	DISA Password (for using a trunk on DISA call)
13	03	Toll Override Password
13	04	Password for Monitoring over DISA (default=none)
13	07	VMU Password
13	09	LCR Password

Station Lock/Unlock

40-stn-07 Station Lock/Unlock Status

Busy out a trunk

37-tk-x Taking a trunk out of service

Intercom Dialling restrictions

45-stn-01 Restrict station to station intercom dialling

System Clock

Date and Time Setup

05-04-04 12/24 hour time format
11- Set system time
20-nn Day/Night schedule Definition

System Alarm

12-nn System Alarm Clock
44-stn-01 Stations to include (notify) in system alarms

Wake Up calls

05-05-01 Wake up signalling type

Station Numbering

05-03-06 Digit length selection (2, 3, or 4 digits)
43-port-01 Station number (extension) Assignment

Single Line Telephone

IP	Item Description
05-02-01	Dial Tone Timeout
05-02-02	Interdigit Timeout
05-02-04	Hook switch Disconnect Timer
05-02-06	Minimum Flash Timer (used to recognize a hook switch flash for hold)
05-04-08	Message Waiting Status Setup
05-06-07	Single Line Telephone Hold Procedure
05-07-02	Toll fraud Protection (Calling Proof)
05-08-03	SLT Busy Remind Tone Timer
05-08-05	SLT Feature Programming Access Code
45-stn-02	Setting Single line type (VM port, Dual Port)

Miscellaneous

Monitor

40-stn-02 Station Monitor Level

Paging

40-stn-05 Station Paging Access
40-stn-06 Receive Page Over Speaker
41-stn-01 Station Page Group

Call Forward No Answer Transfer Time

05-01-08 Call Forward-No Answer Timer

Hot Line

09-spd-nn System Speed Dial number for Hot Line use
47-stn-xx Hot Line destination for a station

Optional Services

Door phone & Door switch

03-01-ext Stations to ring upon Door Phone Activation
05-12-04 Door Relay Activation Timer
06-01-fn Relay Assignment (for Door Phone latch release)

Voice Mail Integration

IP	Item Description
01	Day Ringing Assignment
02	Night Ringing Assignment
05-02-04	Single Line Telephone Release (Disconnect) Timer
05-02-06	Single Line Telephone Minimum Flash Timer
05-06-07	Single Line Telephone Hold Procedure
05-10	Voice Mail Leading Digits
05-12-05	Voice Mail Integration Type

ACD-1 operation

ACD-1 operation is best described as Operator Overflow handling for incoming calls. It operates on any inwards ringing trunk except for Direct In dial calls ringing their assigned station. It does not allow the caller to dial a destination it is purely a Call Queuing system. If the customer requires callers to be able to dial a destination then the system should be set for Auto Attendant (DISA) operation rather than ACD-1.

ACD-1 is standard on the LYNX and operates on the built in voice messages The DSP has 4 channels available to handle incoming calls simultaneously but as it releases the call after playing the message a 4 channel VSC can handle many more trunks in ACD-1 operation.

ACD-1 when enabled answers incoming calls after a programmable time interval, plays a message to the caller and place the call on hold in a queue for the ring assigned stations. A second message can be programmed to play after a programmed time interval to apologise for the continuing delay. This message will repeat at the time interval specified until the caller is answered. A third message can be programmed to operate at a minimum 5 minute time to announce that there is no one available to take the call and disconnect the caller.

A trunk which is answered by ACD-1 will always indicate that it is ringing on the trunk DSS key and by an audible ring signal even after being answered by ACD-1. If the ring assigned stations become free or are free and pick up the phone while the call is being queued then they will automatically answer the call following the normal Ring Line Preference rules. If however the caller is being played a Voice message then they will not be automatically answered until the message is complete and they are returned to the ringing queue. As the DSS button is still indicating incoming ring the operator can manually press the DSS button of the trunk and pull the call back from the Voice message and answer this way.

ACD-1 can be configured to answer in 2 ways, firstly when ALL the ring assigned stations are busy (or DND) after the programmed time interval or to always answer at the programmed time irrespective of the status of these stations.
When the second option is used it is recommended that the ACD-1 be enabled only for day time operation and that the system be set to Automatic day / night switching to prevent callers being answered after hours and queued even though the premises are unattended.

Clear down of unanswered calls.

Once a call has been answered by the system then there is an issue of what happens if the caller hangs up before being answered. In default this call will continue to ring until answered by an operator or being cut off by the Timer in mode 05-09-08. This will become annoying to operators if they are continually answering calls and hearing busy tone. The VMU card has Busy Tone Detection capability and in most cases enabling this will clear down calls once busy tone is heard.
It is also possible to enable either Polarity reversal for incoming calls or Clear Forward depending on the country. These are features that are provide by the Central Office and will need to be enabled by them. In some cases there will be charges involved.

Related programming modes

IP	Item Description
05-06-04	Polarity Reversal for Incoming calls (Australia)
05-09-03	Clear Forward Signal detection (NZ, USA and other markets)
05-09-04	DISA Busy Tone Detect
05-09-06	ACD-1 Answer Delay time
05-09-07	ACD-1 Message 2 Delay time
05-09-07	ACD-1 Disconnect Message Delay Time
29-tk-02	ACD enable

Auto Attendant and DISA operation

DISA operation includes the Auto Attendant for handling Caller selected routing for incoming calls and the option to dial through the system utilizing system trunks to dial to another destination. It operates on any inwards ringing trunk except for Direct In dial calls ringing their assigned station. If the customer requires callers to be able to dial a destination then the system should be set for Auto Attendant (DISA) operation. Incoming callers can be given the option of dialling a full extension number, a single digit to a multiple number of destinations or selecting an outside trunk, entering a password and dialling back into the network to another destination.

DISA when enabled answers incoming calls after a programmable time interval, plays a message to the caller giving them the dialling options, waiting a period of time to allow dialling to take place and then if nothing is dialed or an invalid number is dialed it will play the invalid number dialled message and then normally transfer the call to the operator(s). It is also possible to program the system to disconnect these calls.

Several pre-recorded messages are programmed for DISA operation to play after a programmed time interval to indicate the progress of the call including Console Busy, extension busy, extension no answer even a call cut off message if absolutely necessary. Messages will repeat at the time intervals specified until the caller is answered if full supervision is available when the caller hangs up..

A trunk which is answered by DISA will indicate solid red on the trunk DSS key after being answered by DISA. Until answered it will ring on ring assigned stations and can be answered by these stations until the DISA cuts in. If however the caller is being played a Voice message then they will not be automatically answered until the message is complete and they are returned to the ringing state.

Enabling Auto Attendant/DISA Answer of Incoming Calls

In order to have incoming calls answered by DISA, the most important item which must be programmed is the actual option that tells DISA which trunks to answer and when. DISA is enabled on a trunk by trunk basis in Mode 35-tk-04. The options are as follows:

IP	Day Time	Night Time
0	Disable	Disable
1	Disable	DISA Enable
2	DISA Enable	Disable
3	DISA Enable	DISA Enable
4	Disable	ECF Enable
5	ECF Enable	Disable
6	ECF Enable	ECF Enable
7	DISA Enable	ECF Enable
8	ECF Enable	DISA Enable

Any option that indicates DISA Enable will result in the Auto Attendant/DISA answering the call.

DISA Answer Delay Time

Options 05-01-04 (DISA & ECF Access Delay Time – Day Service) causes Auto Attendant/DISA to postpone answering incoming calls for the time period selected by this parameter. This option is designed so that incoming calls can be presented to “live” operators and have the option of being answered by

humans. When the delay is enabled, the Auto Attendant/DISA becomes the backup answering position. When 05-01-04 is programmed at a value other than "0," incoming calls will ring according to the assignments present in Form 01 (Day Service Ringing) for each CO trunk, and by 35-tk-07, which controls the type of ringing in the system.

Options 05-11-04 (DISA & ECF Access Delay Time – Night Service) causes Auto Attendant/DISA to postpone answering incoming calls for the time period selected by this parameter. This option is designed so that incoming calls can be presented to "live" operators and have the option of being answered by humans. When the delay is enabled, the Auto Attendant/DISA becomes the backup answering position. When 05-11-04 is programmed at a value other than "0," incoming calls will ring according to the assignments present in Form 02 (Night Service Ringing) for each CO trunk, and by 35-tk-08, which controls the type of ringing in the system.

Clear down of unanswered calls.

Once a call has been answered by the system then there is an issue of what happens if the caller hangs up before being answered. In default this call will continue to ring until answered by an operator or being cut off by the Timers in mode 05-08-06 and the number of retries allowed in Mode 05-11-06. This will become annoying to operators if they are continually answering calls and hearing busy tone. There are 3 options to clear down calls. The first and most desirable option is to use DISA busy tone detect which will set the VMU to listen for busy tone received when the incoming caller hangs up and clear down the call. Also available are the Polarity reversal for incoming calls or Clear Forward depending on the country. These are features that are provide by the Central Office and will need to be enabled by them.

Related programming modes

05-01-04	DISA answer delay time – Day
05-11-04	DISA answer delay time – Night
05-06-04	Polarity Reversal for Incoming calls (Australia)
05-06-06	Unsupervised conference and ECF setting.
05-07-04	DISA transfer to console – no dialling.
05-08-06	DISA Transfer time – Busy/No Answer
05-08-07	DISA Transfer time no dialling
05-09-04	Clear Forward Signal detection (NZ, USA and other markets)
05-09-03	DISA busy tone detect
05-11-04	DISA Special function access
05-11-06	DISA retry times
05-11-08	DISA Single digit dialling enable
05-15-01	Extended VMU service
05-16-04	DISA Single Digit Dialling level
05-16-04	VMU Language service
05-17-04	DISA Access delay time – lunch
05-19-04	Silence Detection Interval for VMU
10-gp	DISA Single digit destination
13-02	DISA password setting
35-tk-04	DISA enable
46-st-04	DISA action for unsuccessful call for each station

Recording the DISA Messages

A Console must be used to record messages. In default the Console station is 11. From the console dial 89 and follow the voice prompts to record Company Greeting messages. Full instructions for recording greetings are given by the Voice prompts. The VMU also contains default greeting messages for each mode but that message says only "x greeting message not recorded"

All prompts except the initial greeting message are already recorded on the MBU. The user should only need to program Day, Night, Lunch Time, Holiday and extended greetings as required.

Programming Standard DISA

This assumes that you have followed the previous instructions to record DISA messages.

Set the timers in Mode 05-01-04 and 05-11-04, 05-17-04 to select answer time for Day, Night and Lunch

Set in mode 05-07-04 whether unsuccessful or no dial calls will revert to the operator or be disconnected.

Set in Mode 05-08-06 the time interval between retries when the call is attempting to connect to a station. It is important that the DISA timer is set to longer than the Call forward no Answer timer or DISA calls may not go to the VM when required.

Set in Mode 05-08-07 the time interval that is left for the customer to complete dialing after hearing the greeting message.

If Polarity reversal or Clear Forward are used then set the appropriate mode to suit your network.
It is preferable to use DISA busy tone detect to clear down calls as no input is required from the Exchange and no additional charges can be incurred.

If callers are to access an outside line after DISA answer then this must be enabled in Mode 05-11-05. Calls through the system using this feature will be controlled by mode 05-06-06 which is a timer to make certain that calls do clear down when 2 trunks are tied together. When a timer is set the parties to the call will receive a tone just prior to the time elapsing and can send a DTMF digit to the system to extend the call for another time period before again alerting the parties to the next timeout period.

Set Mode 05-11-06 to the number of retries that an unanswered call or a call to a busy station will make before cutting the call. If supervision is available to clear down when the caller hangs up or DISA Busy tone detect is used then this should be set to 9 which means that it will retry until the caller hangs up.

Mode 05-15-01 sets the date stamp setup whether it is US order or English order.
Mode 05-16-03/04 Enables / Disables dual language service and selects which digit to dial to access the second language service after DISA answer.

If Callers are allowed to access an outside line then a password must be set in Mode 13-02

Programming Single Digit DISA

Set mode 05-11-08 to enable single digit DISA and select which time periods single Digit DISA will be activated (Day/Night etc)

In DISA Single Digit Dialing the digit "1" points to Hunt Group 1. Digit "2" points to Hunt Group 2 and so on. Any SDD you want to do from DISA will require you to create a hunt group.

Single Digit 1 = Hunt Group 1 (67-01, 68-01, 69-01)
Single Digit 2 = Hunt Group 2 (67-02, 68-02, 69-02)
Single Digit 3 = Hunt Group 3 (67-03, 68-03, 69-03)
Single Digit 4 = Hunt Group 4 (67-04, 68-04, 69-04)
Single Digit 5 = Hunt Group 5 (67-05, 68-05, 69-05)

The digit "1" is hunt group 1. So your pilot number and hunting type must first be assigned in 67-01. Then assign the stations you want to ring during day service in 68-01. Then, if you're using the system in Night Mode, you will also need to assign stations into the Hunt Group for Night service on form 69-01.

The same rules apply for any other Single Digit dialing you wish to enable. If you enable the digit “2,” Hunt Group Pilot Number 67-02 must be programmed and one or more stations must be entered in 68-02 as the Day Ring members of the hunt Group. If night service is used, 69-02 must also have one or more stations assigned.

If a Hunt Group Pilot is not programmed (67-0x), then that Single Digit is not active.

Installing ACP’s

The ACP is similar in appearance to a normal door phone with a numeric keypad, 2 extra keys(Call and PRG) and a 4 character LED display. The ACP has a built in relay, a sensor output and a case alarm for security.
The ACP phone can be connected to any Digital port up to the maximum number of ports available minus One. It is recommended that one Digital phone be provide for programming so that changes can be made and registration of cards done easily on site.
It is not weatherproof and must be mounted in a sheltered location. For better weather resistance without the security features there is also available a digital door phone with a metallic case, a single button and no LED display.
Available also is a PC program to track access to areas controlled by the ACP. A standalone program called ACP3 is for customers who are not using CT Star and there is also a tracking program in CT Star for the ACP. Read the Access Control Help file for details of these programs.

About security

The ACP has a built in relay which can be used to unlock the associated door however where security is an issue the system can be programmed to use the relay on the optional MSU card . Because the ACP could be opened by unauthorized users to short out the relay contacts there is also a case alarm which is an Opto coupler on the PCB with a plastic moulding on the case which keeps the Opto coupler permanently open. Even a small movement of the case compared to the mounting bracket will send an alarm to the system.

ACP Applications

Simple door phone with door unlock from internal extensions only
A door phone with door unlocking by code from the door phone.
A door phone with unlocking by proximity card from the door phone.
A door phone with unlocking by proximity card AND/OR code from the door phone.
A wall mounted Handsfree phone with access to external lines if required and all of the unlocking and access features.
Security feature where, when the door phone is pressed the system can call an external phone number, connect the called number to the Door phone and allow the called party to unlock the door if required.

Relevant programming modes

Mode 03 Door phone Ring assignment

Mode 05-03-08 Door phone Ring frequency
This parameter allows for different ring patterns for the Door Phone and ACP

IP \ Value	0	1-8	9
05-03-08	Handset frequency	Frequency 1 - 8	Background Music

Mode 05-11-07 Door phone Ring time
The time that the Door Phone will ring assigned stations when the Door Phone button is pressed.

Mode 05-12-04 Door Relay unlock time
The time that the door relay will remain closed after the Unlock function is activated.

Mode 17 Forced Account Codes
Used as a code to allow users to unlock the door from the ACP

Mode 46-st-07 ACP/Door phone Hunt Group assignment
Selects which Hunt Group will ring when the button of this door phone is pressed. If set to a “d” the door phone will ring stations set in Mode 03

Mode 50-st-08 ACP warning Signals
Deactivates Case Open Alarm and ACP unplug Alarm

Mode 50-st-06 ACP Door Unlock relay
Selects whether the internal or the system relay will be used by the ACP/ Door phone

Mode 50-st=07 ACP Door Open Control Type
Selects whether to open the door by Code, Swipe Card or Code plus Swipe card

Mode 50-st-08 ACP Phone operation type
Selects whether the ACP phone is able to act as a normal phone.

Mode 67-68-69 Hunt Group programming for Ring assignment.

How to set up as a door phone.

The door phone can be connected to any Digital port on the system. There is an A/B jumper on the PCB to select Port 1 or Port 2. When the phone is installed if the Call button is pushed without any programming then the user will hear an error tone. This is because the default is to ring Hunt Group number 1 and this will have no members hence the error tone. To use the default hunt group create a Pilot number and assign members to the Hunt Group for Day and Night in mode 67(01)-68(01)-69(01) or set Mode 46-st-07=d and the Door phone will ring the stations assigned in Mode 03. If the Door phone is to unlock the door then select which relay to use in Mode 50-st-06 and wire the door mechanism to this relay. Once the relay is set up then the internal station while talking to the door phone presses 0 to open the door. Adjust the door phone ring time in Mode 05-11-07 to suit the customer and the Relay unlock time in Mode 05-12-04 to allow enough time for access through the door.

How to unlock the door from the ACP using Forced Account Codes

The ACP can be used to unlock the door to allow access by staff to a building or to a secured area of the building by using Forced Account Codes. 48 Forced Account codes can be programmed and used in the Lynx. When programming a FAC remember that all 8 digits must be programmed so if a code of 12343 is needed then it is programmed 1234dddd and then 1234 will work as a code. To unlock the door on the ACP press PRG (Left Control Key) 7, FAC, #

For details of the Access Control Feature using swipe Cards see the Access Control Help File. For details of the Security feature see the Security feature Help File.

Setting Up DUET Ring Detect

Duet ring is a feature provided from the exchange where a single telephone line will have 2 separate numbers. The line will ring for each number but with a different cadence for each number. Fax machines are readily available that will detect the difference in cadence and if the number rung is allocated as a fax number then the fax will answer but if the other number cadence is detected the fax will not ring and users can answer a telephone connected in parallel with the fax.

The first number cadence is the same as a standard telephone line that is 2 bursts of ring 400ms long separated by 200ms followed by a 2 second silence then repeated.

The second number cadence is 3 bursts of ring about 250ms long followed by a 1600ms silence period. The LYNX software will detect the different Cadences and direct them to different ring assignment positions.
Relevant Programming Modes
Mode 01 Day Ring assignment
Mode 02 Night Ring Assignment
Mode 05-19-05 Select Australia or New Zealand Detection
Mode 95-Tk-06 Select Ring positions for each Ring Cadence in Mode 01/02.
Mode 05-19-05 default is set to Australia and there is no need to touch.
Mode 95-tk-06 selects which of the Item Pointers in Mode 01 and 02 will ring for the first cadence and which will ring for the second cadence. For example the following setting will allow all calls that are rung with the first cadence to ring any of the 22 phones set in Mode 01-tk-01 to 01-tk-22. Any calls that ring with the second cadence will ring the stations set in Mode 01-tk-23 to mode 01-tk-26. Mode 94-tk-06 contains a table that allows the number of stations for each cadence to be varied as to the number of stations that will ring for each cadence.

Set Data	When Normal Ring type is received	When the 2nd type ring is received
2	Ring extensions in mode 01-tk-**01** to 01-tk-**22** or mode 02-tk-**01** to 02-tk-**22**	Ring extensions in mode 01-tk-**23** to 01-tk-**26** or mode 02-tk-**23** to 02-tk-**26**

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