NI

AND

5E

CUSTOM

SRS-9924/9912

USER GUIDE

FUJITSU

Fujitsu **NI / 5E Custom**
Terminal Intro & Table of Contents

NI
AND
5E
CUSTOM

USER GUIDE

SRS-9924/9912

Fujitsu Network Communications, Inc.
1000 St. Albans Drive
Raleigh, NC 27609
U.S.A.

Part Number P-UG-99VO-A
Revision 1.1

Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference with radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with radio or television reception, which can be determined by unplugging the equipment to turn it off, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna of the affected receiver.
- Increase the separation between the equipment and the affected receiver.
- Connect the equipment to an outlet on a circuit different from the one to which the affected receiver is connected.
- Consult a dealer or experienced radio or television technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Notice

This telephone is hearing aid compatible.

This equipment complies with Part 68 of the FCC Rules. The FCC Part 68 Label is located on the bottom of the enclosure. This label contains the FCC Registration Number for this equipment. If requested, this information must be provided to your telephone company.

FCC Regulations require that connection of this telephone to the telephone network be made via an FCC registered NT-1 interface device.

Connection to the telephone network should be made via the NT-1 interface by using standard modular telephone jacks, type RJ-49. The plugs and/or jacks used must comply with FCC Part 68 Rules.

System Port Identification
Facility Interface & Service Order Codes

Mfgrs Port Identifier	Facilities Interface Code	Service Order Code	Network Jack
ISDN Line	02IS5	6.ON	RJ-49

If this telephone equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But, if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the proper functioning of your equipment. If this occurs, you will be notified in advance in order to make necessary modifications to maintain uninterrupted service.

Important Safety Information

The Fujitsu ISDN Terminal should be used according with all instructions and precautions provided in this guide.

- Read and understand all installation instructions.
- Install cords where they cannot be a hazard to anyone walking nearby.
- Use only a Class 2 power source or communication circuit power source. If you use a local power supply, use Model AD-3645U.
- Use only the line cable included with the terminal.
- Do not use this product near water, for example, near a bathtub, wash bowl, kitchen sink, laundry tub, in a wet basement, or in a swimming pool.
- Avoid using the terminal during an electrical storm. There may be a remote risk of electrical shock from lightning.
- Do not use the terminal to report a gas leak in the vicinity of the leak.
- Do not overhaul or open this product.
- Addition and exchanging of hardware options should be performed by authorized personnel.
- Use your one-touch numbers for storing emergency numbers.

Repairs

Repairs to this equipment can only be made by the manufacturer or its authorized agents. If this equipment is causing harm to the telephone network, the telephone company may request that it be unplugged from the modular outlet until the problem has been corrected. To obtain repair service or warranty information, contact:

> Technical Assistance Center
> Fujitsu Network Communications, Inc.
> 1000 St. Albans Drive
> Raleigh, NC 27609
> (919) 790-2211 or 1-800-228-4736

Electrical Safety Advisory

We recommend the installation of an AC surge arrestor in the AC outlet to which this equipment is connected. Telephone companies report that electrical surges, typically lightning transients, are very destructive to customer terminal equipment connected to AC power sources.

Preface

This guide provides descriptions and procedures for using Fujitsu's Digital Feature Phones (SRS-9924 and SRS-9912), when attached to a switch supporting ISDN (National ISDN, referred to as NI or 5E Custom versions).

For assistance ordering National ISDN service from your local service provider, see Appendix C.

The Fujitsu SRS-9924 and SRS-9912 are designed to optimize Centrex and other ISDN voice services.

HOW TO USE THIS GUIDE

This section can help you make the most efficient use of this guide. The section describes the overall organization, aids to finding information, and conventions.

Conventions and Layout

- In procedures, the required actions are noted, with the buttons you press in capital letters, such as HOLD or REDIAL.

- Other important words, such as messages that appear on the display, also appear in CAPITAL LETTERS.

- Some procedures use the following symbol to indicate which buttons to press. **ENTER**

- Call Appearance and Directory Number are abbreviated as CA and DN.

Menus or screen displays appear as text in boxes.

12:05PM	FRI	JAN 15	
UNA	L-DIR	CLEAR	OPTIONS

Actions that pertain to only a specific type of ISDN (either National or Custom) or to a particular phone system have the following format or symbols inserted. These symbols appear in the section heading when the information applies entirely to that system, or they appear adjacent to a command where only a specific action applies to that system.

5E Custom Only

National ISDN Only

Instructions pertaining to either NI only or 5E Custom only appear in a shaded area on the page.

For specific instructions for National ISDN, these symbols are used:

<5ESS> .... Required for Lucent Systems.
<DMS-100> .... Required for Nortel Systems.
<EWSD> .... Required for Siemens Systems.

Note: 5ESS, DMS-100, and EWSD are registered trademarks of Lucent, Nortel, and Siemens Information and Communication Networks respectively.
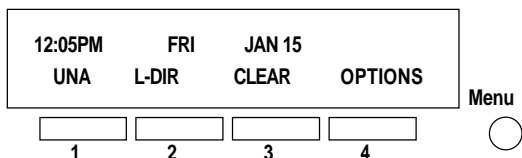
Features or instructions that pertain to only a specific terminal have the following symbols inserted.

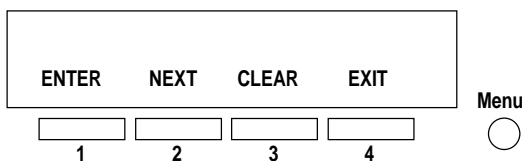**<SRS-9924>** .... Applies to SRS-9924 only
<SRS-9912> .... Applies to SRS-9912 only

Softkeys

The softkeys are the four keys located just below the display.

```
 ┌────────────────────────────────────────┐
 │  12:05PM      FRI      JAN 15           │
 │   UNA      L-DIR      CLEAR    OPTIONS  │
 │                                         │       Menu
 └────────────────────────────────────────┘
   ┌────┐  ┌────┐   ┌────┐   ┌────┐          ○
     1        2        3        4
```

Standard Softkey Layout

```
 ┌────────────────────────────────────────┐
 │                                         │
 │  ENTER     NEXT     CLEAR      EXIT     │
 │                                         │       Menu
 └────────────────────────────────────────┘
   ┌────┐  ┌────┐   ┌────┐   ┌────┐          ○
     1        2        3        4
```

Other Softkey Functions
(For entering information as indicated in this User's Guide.)

You can display the labels at any time without affecting the tasks you are performing. The labels do not, however, have to be displayed for these keys to work.

Timeouts

When you are setting up local features as described in Chapter 3, some of the data entry displays have built-in timers. If you do not enter information within six seconds, the display reverts to the menu for selecting the feature you were setting up. You must reselect the feature and start again.

Starting Over

If for any reason you become confused while in menu mode, you can always press OPTIONS, softkey number 4, to return to the setup menus and start over.

Phone Operation

The following two features of ISDN phones may be different from what you are used to:

Dialing 9. When you dial for an outside line (usually by pressing 9), you do not hear a pause and a second dial tone. You can begin dialing the telephone number immediately.

Onhook dialing. You can dial a number before you get a dial tone. The number you dial appears on the display and remains there for three minutes. When you lift the handset or press the SPEAKER button for handsfree mode, the phone initiates the call automatically.

System Administrator

ISDN is very flexible in allowing businesses to customize how it works to meet their specific needs. This User's Guide refers you to your System Administrator if a customized option may have been chosen during installation.

Your System Administrator may be your phone company representative or a member of your telecommunications department.

ISDN CONCEPTS

ISDN stands for Integrated Services Digital Network, which provides many voice features.

The basic ISDN service provides two 64,000 bits per second "B" channels for voice communications. There is also one "D" channel, at 16,000 bits per second, for network signalling. The combination is often referred to as "2B+D", or the Basic Rate Interface (BRI).

Voice Features

The voice features of an ISDN telephone have several advantages (especially in Centrex systems):

- They allow your telephone to **handle multiple calls** simultaneously, receiving calls while keeping others on hold.
- They also permit a call coming in to a single directory number to **ring more than one** physical telephone. This feature facilitates call handling within a group.
- They provide **easy-to-use-access** to powerful features such as call conferencing and call transfer, to enhance your productivity.

• They allow the incoming directory number and calling name to be displayed if it is available from your service provider.

Multipoint Configurations

In multipoint configurations, ISDN lines are shared by two or more terminals. Usually, two terminals will share a BRI, allowing one B-channel for each terminal.

Multipoint operation goes on behind the scenes. The only time you would be aware of it is if you get "blocked" from using a line. If more than two users bid for the two B-channels at the same time, the message B-CHANNEL BUSY appears. Talk to your System Administrator if you get this message frequently.

SPID

For your terminal to work, it must have a valid Service Profile IDentifier (SPID). The SPID number is usually selected and entered when the terminal is installed. If your digital set already has a SPID number, you don't have to reenter it. For the procedure to enter a SPID, see Chapter 5.

CAUTION: Once the SPID number is entered, don't change it unless your System Administrator tells you to do so. Your terminal won't work without the correct SPID number. If the SPID number is wrong, the set displays the message SPID NG. Enter the correct SPID number and you'll get the normal dial tone.

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Section   **Page**

CHAPTER 1
GETTING ACQUAINTED WITH YOUR DIGITAL SET

This introductory chapter describes the set's parts, connectors, switches, and screen displays. It also explains how the functions and features operate. The SRS-9924-ABM is described in Chapter 4.
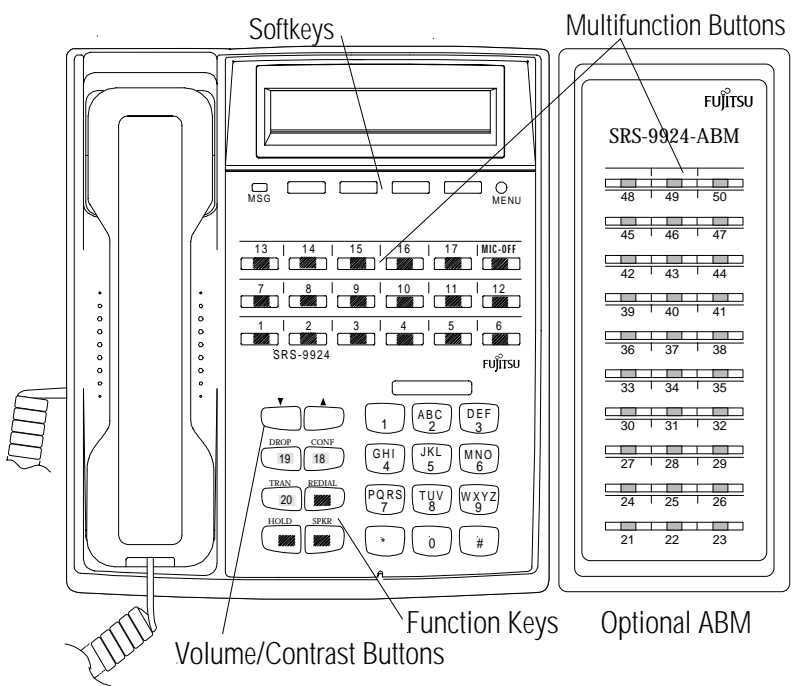
Figure 1-1: SRS-9924 National ISDN - Front Panel
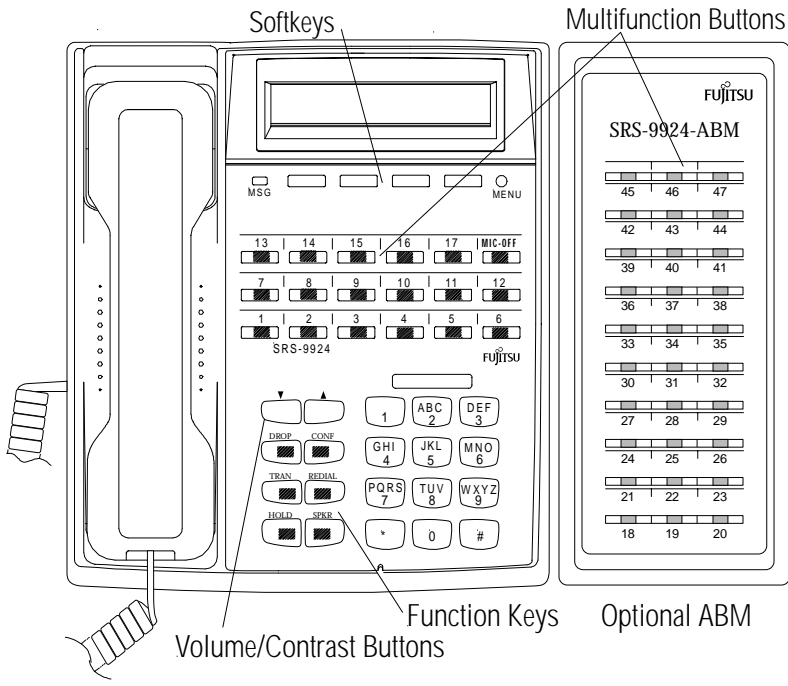
Figure 1-2: SRS-9924 5E Custom - Front Panel

Multifunction Buttons

Softkeys

Function Keys

Volume/Contrast Buttons
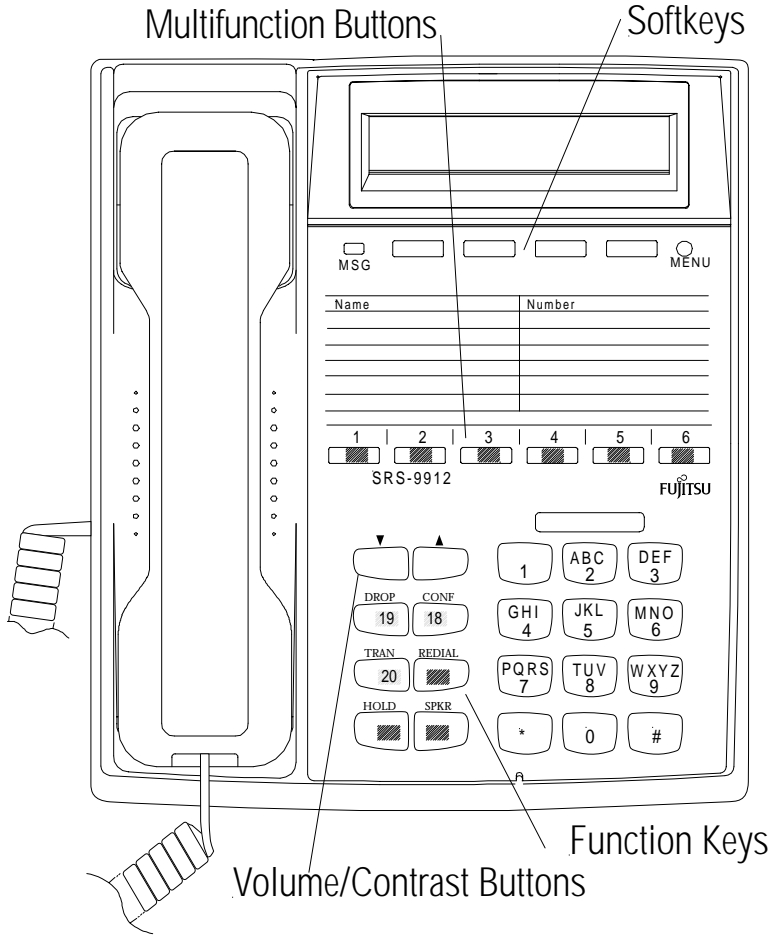
Figure 1-3: SRS-9912 National ISDN - Front Panel

Multifunction Buttons

Softkeys

Volume/Contrast Buttons
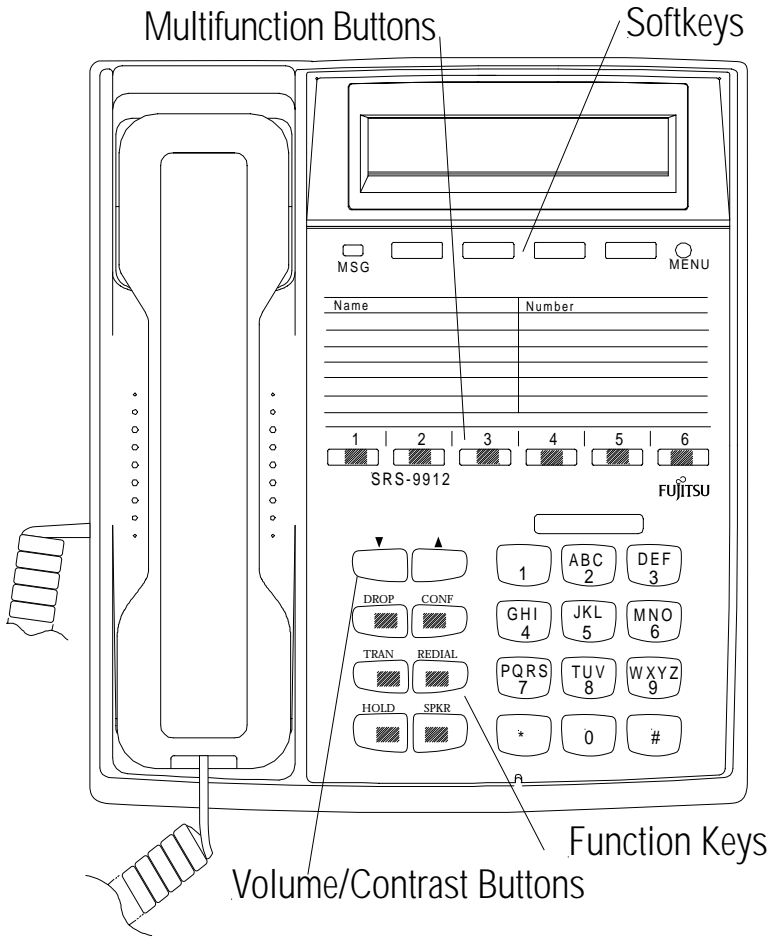
Function Keys

Figure 1-4: SRS-9912 5E Custom - Front Panel

LINE

TR
OFF ON

48V DC

PS
OFF ON

ISDN Line Connector

Terminating resistor

DC power connector

Handset/Headset connector located beneath terminal

Power Source selection
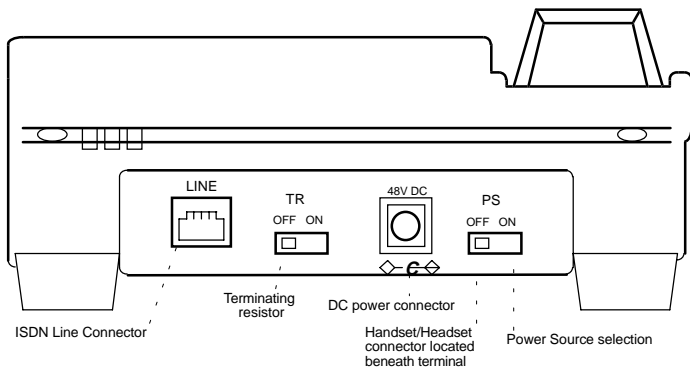
Figure 1-5: Digital Set Rear View

Rear stand

Handset /Headset plug
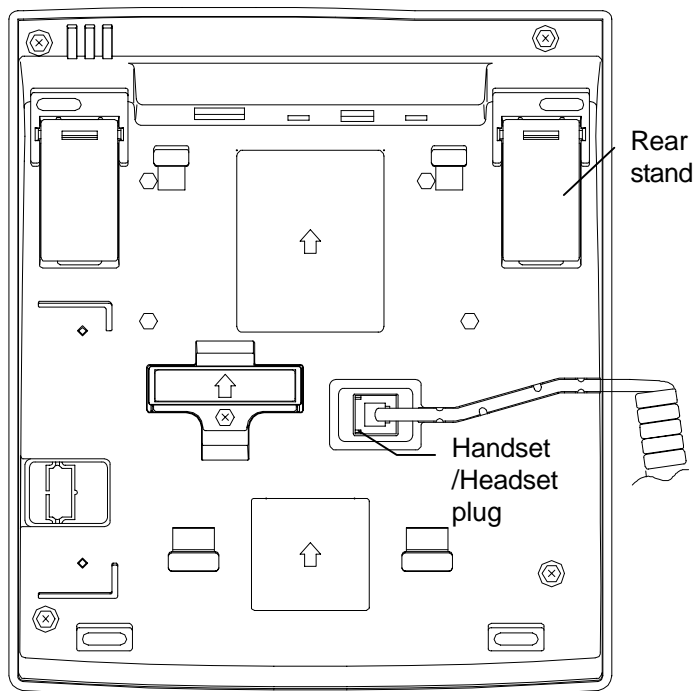
Figure 1-6: Digital Set Bottom View

Unique Components　　**Softkeys/MENU.** Four buttons below the display with changeable functions. The MENU key displays the current functions on line 2 of the display.

Multifunction buttons. These buttons are assigned to CAs, DNs, one-touch numbers, or network features. Dual assignments are not supported. (For example: One-Touch and Call Appearance)

Function keys. Single-touch keys for features, consisting of DROP, CONF, TRAN, REDIAL, HOLD, and SPKR.

Volume/Contrast buttons. Increase or decrease display contrast (when no call is active), or speaker volume (when a call is active).

Switches and Connectors　　**Terminating resistor.** This built-in resistor, labeled "TR", provides a standard termination to the ISDN line. The factory setting is OFF.

DC power connector. This connector, labeled "48 V DC", provides an alternative to power delivered through the ISDN line.

Power source selection. This switch may be used in multiple terminal installations. ON = AC adapter only; OFF = Power source 2 or AC adapter

ISDN line connector. Use this RJ-49 connector to plug in the telephone line. Normally, the connector also provides DC power for the set.

Handset/Headset connector. This jack, located on the bottom of the set, allows you to connect either a handset or a headset.

LED Indicators　　Message Waiting (labeled MSG)
Feature Activator 63 is utilized for Message Waiting.

The LED associated with each button may light when a feature is activated. (Feature dependent)

For Multifunction Keys:

An LED associated with each button slowly flashes green for incoming calls, flashes red if a call is on hold at your phone, and is steady red when a call is active on your phone.

MIC-OFF Button <SRS-9924>

The upper right button is normally used as a MIC-OFF function key, and is set this way when the unit is shipped. When pressed, the MIC-OFF key turns red and mutes the speaker or handset microphone, allowing you to hold a private conversation.

MIC-OFF is active by default when your digital set is delivered. Set-up for the MIC-OFF buttons described in Chapter 3.

Function Keys

The digital set has six function buttons. Three of these are permanently assigned to local functions: SPEAKER, HOLD, and REDIAL.

Permanent Functions

SPEAKER: (with LED indicator)
Enables/disables handsfree operation **<9924>**, or group listening function **<9912>.**
HOLD: Holds an active call
REDIAL: Redials the last number you dialed

User-Assigned Function Buttons
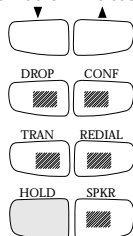
Figure 1-7: Function Button Layout

CONFERENCE: (with LED indicator) Adds parties to an existing call (Button 18)

NI utilizes Feature Activators 18 or 60

DROP: Disconnects last party added to a conference call or disconnects a two-party call (Button 19)

NI utilizes Feature Activators 19 or 62

TRANSFER: (with LED indicator) Transfers a call to a third party you dial or select (Button 20)

NI utilizes Feature Activators 20 or 61

Button assignments are identical between the SRS-9924 and the SRS-9912.

MULTIFUNCTION BUTTONS

Multifunction buttons have three uses:

One-touch: Dial a stored number.

Network Feature: Activate or deactivate a special network feature, such as call forwarding.

Call Appearance (CA) or Directory Number (DN): Handles incoming or outgoing calls.

Use and set-up of the multi-function buttons is covered in Chapters 2 and 3 respectively.

Special features such as call forwarding are provided by the ISDN network. These features are selected by your System Administrator and assigned to buttons on your phone during installation.

Appendix C describes frequently used assignments and ordering codes for **NI.**

Multiple Directory Number Appearances

Each digital set associates its primary DN with multifunction button 1. Multiple appearances of the same DN are always on adjacent CA buttons. (The button at the end of a row is "adjacent to" the button beginning the next row up.)

Note: This guide uses the term directory number appearances to refer to telephone numbers that appear on more than one CA button.

The Nortel term for CAs that can handle more than one call is Additional Functional Calls.

A telephone can also be assigned additional DNs. Each such number can then be assigned to adjacent buttons as well to allow multiple call handling on that line.

Any DN assigned to one phone can also appear on another phone, which can then share the use of that line.

Call Handling Example with Multifunction Buttons

Figure 1-8 shows a digital set whose primary DN is 747-3456, with two additional CA buttons assigned that same number. The telephone's secondary line is 747-7890, which has two appearances.

In the illustration, this set also has a button assigned to the number 747-3482. This could, for example, be a shared line using someone else's primary DN.

Figure 1-8: Example Line Assignment - SRS-9924
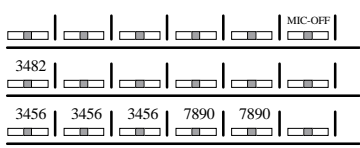
If your DN is 747-3456, and the first three multifunction buttons on your digital set have been assigned that number, you can have up to three calls at the same time using that single DN, though you can talk on only one at a time.

For example, if you have no calls in progress and someone dials 747-3456, your telephone rings and the LED for the first CA button associated with 747-3456 flashes green. You can answer the call by pressing that CA button and picking up the handset. (The LED turns steady red.)

After answering the call, you can press the second 747-3456 CA button to originate another call. The first call is automatically put on hold. If another call comes in, you can press the third CA button representing 747-3456 to answer the third call. The second call is also placed on hold.

You would then have three calls on your 747-3456 DN. Only then is your 3456 number "busy", that is, when all three assigned CA buttons are in use.

CALL INFORMATION DISPLAYS

> 747-3456

When you make a call, the number you dialed, including any prefix, appears on line 1 of the display.

In 5E Custom ISDN, an ISDN Call identifier may also appear. **See Appendix D**

NI / 5E Custom Terminal Overview

For an incoming call, the calling party's number appears if the network supplies the digital set with the Calling Line ID (CLID).

When your party answers, the call duration timing is shown as minutes and seconds. This timer will record for an hour, up to 59:59, and then it restarts at 00:00. If the call cannot go through, line 2 shows a message such as "BUSY" or "NOT ANSWERED".

NI ONLY

```
777-1111                        15m
                                15s
```

5E CUSTOM ONLY

```
1=777-1111
                                15:15
```

SOFTKEYS AND MENU

When you press MENU, line 2 of the display changes to the names for the four keys directly below the display (shown below). These keys are called softkeys because the functions they control change as you use the menus to set up different features.

```
┌──────────────────────────────────┐
│  UNA    L-DIR   CLEAR   OPTIONS   │  Menu
└──────────────────────────────────┘   ○
  ┌────┐ ┌────┐ ┌────┐ ┌────┐
  └─1──┘ └─2──┘ └─3──┘ └─4──┘
```
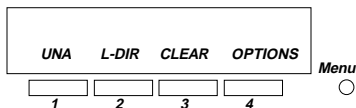
Standard Softkey Layout

Note: Softkey 1 also serves as the ENTER key, and Softkey 2 also serves as the NEXT key and allows you to scroll through the menu options.

These softkey functions are explained in the following chapters:

UNA	Chapter 2
L-DIR	Chapter 2
CLEAR	Chapter 3
OPTIONS	Chapter 3
ENTER	Chapter 3

Other names and functions for these keys are explained in various contexts throughout the text.

2

Using the Terminal

5E CUSTOM ONLY

LINE PARAMETERS

When your line was installed, choices were made on three important switch parameters that affect your call handling and the LEDs associated with your lines.

Ringing Preference

Ringing preference affects what happens when you have at least one idle Call Appearance and an incoming call flashing on another CA. When you pick up the handset or press SPKR, the phone can automatically connect you with an idle CA, giving dial tone, or with the incoming call. Your phone will consistently pick up an idle CA of the incoming call based on the configuration choice recorded with your telephone provider. When preference is "yes", the incoming call is chosen.

Ringing Preference Choices

If the set is programmed at the switch to pick the first ringing Call Appearance, picking up the handset connects you immediately with the incoming call. This preference setting is called RING preference.

If the set is programmed to pick the first idle Call Appearance, picking up the handset gives you a dial tone. In this case, you must press the flashing green Call Appearance button and pick up the handset or press SPKR to answer an incoming call. This setting is called IDLE preference.

Menu Mode Effects

During Menu Mode, you can answer any incoming call by pressing the appropriate Call Appearance button and picking up the handset. If your phone was installed with "ringing preference" as RING, then simply picking up the handset automatically connects you to the first incoming call.

If the ringing preference is IDLE, then picking up the handset or pressing SPKR connects you to an idle line (if there is one). You can then make an outgoing call or press a green-flashing Call Appearance button to pick up an incoming call.

(If your ringing preference was set to IDLE and there are no lines available, the terminal does not connect to a line until you press a Call Appearance button.)

AUTOHOLD

Autohold affects what happens when you are on an active call on one CA and then press another CA. The active call you were on can be dropped or held automatically. If it is dropped, the LED goes dark. If it is held, the LED flashes red. Your phone will consistently drop or hold your active call when you press another CA based on the configuration choice recorded with your telephone provider.

ONETOUCH

Onetouch affects whether handsfree operation is automatically selected when you press an idle CA, causing you to hear a dial tone through the speaker. Your phone will consistently remain in handset mode or automatically enter handsfree operation based on the configuration choice recorded with your telephone service provider. Please note this is different from One-Touch buttons for placing calls, which is described later in Chapter 2.

Guide Assumptions

This guide assumes that handsfree operation is automatic when you press an idle CA, that is onetouch is "yes". If your installation is different, then to get dial tone after pressing an idle CA, you must either press SPKR for handsfree operation or lift the handset.

5E CUSTOM ONLY

PLACING AND RECEIVING CALLS

The SRS-9924 has a speaker and microphone built-in to utilize handsfree operation. The SRS-9912 has a speaker without a microphone, which allows you to use "listen-only" functions such as onhook dialing, message retrieval, and group listening.

To make the best of handsfree mode, you should be sure that the MIC-OFF key feature is active on the button at the upper-right of the array. **<SRS-9924>**

**Placing
Handset Calls**

1. Pick up the handset. This should automatically give you a dial tone, if not, press the idle Call Appearance (CA) you wish to use.

2. Dial the desired number.

3. Converse with the called party, then hang up.

**If you are already
talking on another
call**

1. End the call by pressing the button in the handset cradle to get a dial tone. (You can also hang up the handset and pick it up again.) **Or** Retain the call by pressing an idle CA button to get a dial tone. (The call is automatically put on hold.)

2. Converse with the called party, then hang up. **Or** If you put your original call on hold, pick up the call by pressing its red-flashing CA button.

Notes:

• The displayed call duration vanishes after about three seconds after you hang up.
• **Onhook dialing** can be used to place calls. You can dial the number first, then pick up the handset. The phone automatically dials the number. The number you enter remains available for dialing for about three minutes.

**Receiving Handset
Calls**

The CAs LED flashes green.

1. Pick up the handset, and if necessary, press the green flashing CA. The LED changes to steady red.

2. Converse with the calling party.

3. When your conversation ends, hang up by replacing the handset in its cradle.

**Placing
Handsfree Calls
<SRS-9924>**
A handsfree call uses the integrated microphone and speaker instead of the handset.

1. Press the SPKR button. Its LED will light red (if not, press an idle CA) and you will hear a dial tone.

2. Dial the desired number.

3. Converse with the called party.

4. Hang up by pressing the SPKR key.

(See also "Handsfree, Handset, and Headset Modes", in Chapter 3, "Local Features".)

Using the Terminal

**Receiving
Handsfree Calls
<SRS-9924>**

1. Press SPKR and, if necessary, the green-flashing CA button.

2. Converse with the calling party.

3. Hang up by pressing SPKR.

**Group Listening
or Monitoring
<9912>**

Examples for using this function:

• Press SPKR to access and listen to voice mail messages.

• For onhook dialing - pick up the handset when your party answers.

**Placing
Headset Calls**

Check that headset mode is activated on your telephone. The handset, speaker, and microphone will be disabled. All dialing tones and telephone conversation will be audible only through the headset. Your voice and any other transmitted sounds will go through the headset microphone only. Refer to Chapter 3 for instructions on how to set-up headset mode.

1. Press SPKR. Its LED will light red and you will hear a dial tone.

2. Dial the desired number.

3. Converse with the called party, then hang up by pressing SPKR.

**Receiving
Headset Calls**

1. Press SPKR, and if necessary, press the green-flashing CA button.

2. Converse with the calling party.

3. Hang up by pressing SPKR.

Note: These procedures assume that the phone is set to ringing line preference or primary line preference.

Switching between Handset and Handsfree Modes
  <SRS-9924>

If you are using the handset and want to use handsfree mode

1. Press SPKR and then replace the handset in its cradle. You now hear the other parties on the call through the speaker.

2. If the MIC-OFF LED is red, the microphone has been turned off. Press MIC-OFF to turn it back on (the LED goes dark). The microphone now picks up your voice.

3. You can turn off the microphone by pressing MIC-OFF, allowing you to hold a private conversation with others in the room. Pressing MIC-OFF again turns the microphone back on.

   Note: If the MIC-OFF feature is not active on the upper right corner multifunction button, the microphone is always on.

If you are using handsfree mode and want to use the handset

Pick up the handset. Your call continues without interruption. The handsfree speaker and microphone are turned off.

Placing a Call to a Leased Network

To call someone in a leased network from outside the network, you must enter an access code. Also, you must have some way of indicating to the ISDN switch that the numbers you are entering represent a leased network access code. You accomplish this by entering a delimiter. See Chapter 3 regarding how to assign one of your multifunction buttons as the leased network access code delimiter key.

Method 1

Enter all numbers before you pick up the handset or press the SPKR button.

1. Dial the number of the person you want to call.

2. Press the access code delimiter button. A colon appears on the screen after the number.

3. Dial the leased network access code. The access code appears on the screen after the colon.

4. To start the call, pick up the handset or press the SPKR button. Your digital set automatically sends the entered numbers and code to connect to the leased network number.

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Using the Terminal

Method 2	Enter all numbers before you pick up the handset or press the SPKR button.

1. Press the access code delimiter button. A colon appears on the first line of the screen.

2. Dial the leased network access code. The access code appears on the screen after the colon.

3. Press the delimiter key again. Another colon appears on the screen after the access code.

4. Dial the number of the person you want to call. The number appears on the screen after the second colon.

5. To start the call, pick up the handset or press the SPKR button. Your digital set automatically sends the entered numbers and code to connect to the leased network number.

5E CUSTOM ONLY

FUNCTION BUTTONS	The terminal has six function buttons, located to the left of the numeric keypad.

Three buttons are permanently assigned to local functions (REDIAL, HOLD, and SPKR) and the other three buttons are usually assigned to CONFerence, DROP and TRANsfer.

On **NI,** Fujitsu supports two sets of telephone company assignments for network based features. On the labeled function buttons for CONF, DROP, and TRAN, Fujitsu sets accept the following values or feature activators:

CONFERENCE   Button 18
                    Activator 18 or 60

DROP   Button 19
                    Activator 19 or 62

TRANSFER   Button 20
                    Activator 20 or 61

NI ONLY

Note: The SRS-9924 and SRS-9912 use the same button numbers and Feature Activators for the user assigned function keys.

5E Custom ONLY

These assignments are not used for 5E Custom ISDN.

REDIAL
Dials the last number dialed on this phone

If there are no idle CAs available, pressing REDIAL brings the number to the screen but does not dial. When an idle CA later becomes available, pressing the CA button dials the number.

HOLD
Retains connection with an existing call until you can return to it

1. To use hold, press HOLD while you have an active call in progress. The CA LED changes from steady red to flashing red.

2. To reconnect with a call on hold, press its flashing CA button. Its LED changes from flashing red to steady red, and you are reconnected.

The autohold feature automatically puts an active call on hold whenever you press another CA.

CONFERENCE

Conference is a network-based feature that you must subscribe to from your telephone company.

Telephone conferences with multiple participants

The number of conference call participants allowed depends on the number specified when you subscribe to the feature. Ask your System Administrator how many participants are allowed.

Setting Up a Conference Call

After establishing the initial call, add participants to the conference call by following these steps:

1. Press CONF.

   The CONF button lights up. The initial call is placed on hold, and the next available CA is selected.

2. Dial the number of the person you want to add to the conference.

   or

   Select any CA that is ringing or on hold.

- If the person answers, you can talk privately before joining the conference.

- If the line is busy or the person does not answer, press DROP. Then press the flashing CA button to return to the initial call.

- To retain the second party without having a conference, press HOLD and then press the flashing CA. This allows you to speak to the initial caller while keeping the second call on hold. To make this a conference call, press the CONF button and go to step 3.

3. Press CONF.

The CONF button stays lit to indicate that a conference call is in progress.

If you have a conference feature for more than three parties, you may add more participants to the conference by repeating the preceding three steps as many times as required up to the maximum number of participants.

Dropping Out of the Conference Call

Some installations leave the other conference participants connected if you disconnect. Ask your System Administrator whether your conference feature works this way. Otherwise, when you disconnect, all other conference participants are disconnected also.

DROP

DROP is a network-based feature that you must subscribe to from your telephone company.

Pressing DROP at the end of a regular two party call does nothing. **<DMS-100>**

Pressing DROP at the end of a regular two-party call disconnects the call or cancels the connection with the last party added to a conference call. **<5ESS>**

During a conference call, the DROP feature allows the originator of the call to drop the last participant added. Other participants can drop out of the call simply by hanging up.

You can use the DROP button repeatedly until you have dropped everyone but the participant of the original two-party call. To end the call, hang up normally. **<DMS-100>**

> **Warning:** Pressing DROP at the end of a conference call drops both participants.

TRANSFER
<5E Custom, 5E NI, and DMS NI2>

Transfer is a network-based feature that you must subscribe to from your telephone company.

To transfer a call, follow these steps:

Transfers a call to another phone

1. Press TRAN while on an active call.

The LED of the CA in use flashes red; the called or calling party is automatically placed on hold.

An idle CA is selected. Its LED lights steady red and a dial tone sounds.

2. Dial the third party.

3. Once connected, announce the transfer to the person who answers and converse privately.

4. Press TRAN again, and hang up.

> The third party, just called, is connected to the party held for transfer. You are dropped from the call, and the other two parties remain connected.

> **Notes:** A "blind" transfer is one in which you do not talk to the person you are transferring the call to. To perform a blind transfer, wait for the person's phone to ring, press the TRAN key, and hang up.

> If no one answers the destination number, hang up. Press the SPKR button, the Switch Hook, or, on a 5ESS switch, press DROP. Then press the CA holding the original call. This cancels the attempted transfer and returns you to the call.

**TRANSFER
<DMS-100, NI1>**

**Transfers a call
to another
phone**

To transfer a call, follow these steps:

1. While still on the call, press CONF.

The CONF button indicator lights up. The call is put on hold and its CA indicator flashes red.

2. An idle CA/DN is selected. Dial the number of the person you want to transfer the call to.

    • If the person answers, you can talk privately before completing the transfer.

    • If the line is busy or the person does not answer, press the button in the handset cradle (press SPKR if you are using handsfree mode). Then press the flashing CA button to return to the original call.

    Note: To do a "blind" transfer, where you do not talk to the person you are transferring the call to, wait for the persons phone to ring, press the TRAN button, and hang up.

3. After announcing the transfer, press TRAN and hang up.

4. Hang up the handset, or, in handsfree mode, press SPKR.

You are disconnected from the call, leaving the other two parties connected.

    Note: The DMS-100 NI1, the transfer procedure is different. On NI1, press CONF as the first step, then follow the preceding instructions.

    Note: In Siemens installations, transferring calls is accomplished without a TRAN button.

**TRANSFER
<EWSD>**

**Transfers a call
to another
phone**

To transfer a call, follow these steps:

1. While on an active call, press CONF.

The CONF button indicator lights up. The call is put on hold, and its CA indicator flashes red.

2. An idle CA is selected. Dial the number of the person you want to transfer the call to.

    • If the person answers, you can talk privately before completing the transfer.

- If the line is busy or the person does not answer, press the button in the handset cradle (press SPKR if you are using handsfree mode). Then press the flashing CA button to return to the original call.

3. Press CONF then hang up to complete the transfer.

You are disconnected from the call, leaving the other two parties connected.

ONE-TOUCH CALLING

Pressing a one-touch button causes the phone to dial the stored number just as if you were pressing the keys on the numeric keypad. (Chapter 3 explains how to set up one-touch buttons.)

Just press it. If no other call is active, the terminal selects an idle Directory Number (DN), then dials the number.

Using a One Touch Button to Make a Call

If you already have a dial tone, then pressing the one-touch button plays back the stored number as if you were dialing.

Dialing Special Codes Using One-Touch Buttons

The one-touch feature provides two ways of supplying special codes such as credit card numbers, passwords, personal ID numbers, and voice mail access codes. You can store a code on its own one-touch button or you can include special codes as part of a single one-touch number. See Chapter 3 for instructions.

USING CALL ANNOUNCE INTERCOM

The Call Announce Intercom feature is a convenient way to screen incoming calls, then announce the call to the intended recipient. The screener places the incoming call on hold, uses a designated DN to announce the call to the recipient via intercom, and may then transfer the call. The screener can also use this feature to deliver a message.

Announcing a Call by Intercom

This procedure describes a typical sequence for announcing a call by intercom. The procedure addresses the call screener since the call recipient has little to do. The only action possibly required of the recipient is described in step 3.

The procedure also assumes that both the screener and the call recipient have a Fujitsu digital set, although only the recipient must have one. If the call screener has some other telephone set, the exact procedure may be different.

This procedure is by no means the only way that you can use Call Announce Intercom.

To announce a call by intercom, follow these steps:

1. Press the DN designated for Call Announce Intercom. The intercom DN indicator lights normally.

2. Dial the extension of the call recipient.

The recipient's terminal sounds an alert tone, immediately answers the call, and activates the intercom feature.

3. Talk to the recipient.

If the recipient is set up for one-way intercom, pause a few seconds to give the recipient time to press the MIC-OFF button and respond. With two-way intercom, the recipient can respond immediately just by speaking.

> **Note:** To transfer the call at the same time you announce it, use the conference call transfer procedure.

UNANSWERED CALL LOGGING (UNA)

If enabled, this feature records information about incoming calls that were not answered at this phone.

The UNA feature records information from the eight most recent unanswered calls, showing the date, the time, and the telephone number and name (if provided) of the calling party. The ninth and later unanswered calls replace the first, second, and so forth, in order, so that your UNA list always has the eight most recent calls. If the caller gets a busy signal, the call is not considered "unanswered". Multiple calls from the same number are listed only once.

Chapter 3 explains how to program your phone to support or suppress the UNA feature.

Using the UNA Feature

If you have unanswered calls, a black dot appears next to the word UNA. If the dot is blinking, there have been eight or more such calls, and the information from the next unanswered call will record over the oldest call in the list.

```
12:15PM      WED      APR 5
● UNA        L-DIR        CLEAR        OPTIONS
```
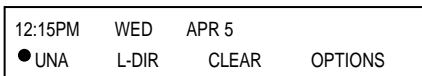
To see the data for each unanswered call, press UNA. The resulting screen looks something like this:

UNA
```
777-1111 ........ 4-05
NORM SMITH        12:15PM
```
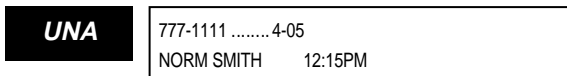
The 777-1111 is the number of the calling party. Norm Smith is the calling party identification.

Each time you press UNA, the data for the next unanswered call is displayed. The list cycles. The first display is information from the oldest call, then the next oldest call, and so forth. After the data for the most recent unanswered call is displayed, pressing UNA again shows the oldest call's data.

If a new unanswered call is from the same party as one already in the UNA list, only the new call's data is retained. This feature prevents filling all eight available positions with calls made from the same number.

Each record is retained until you follow the deletion procedure described below, or until another unanswered call stores new information over it.

If the UNA dot on the display is flashing, you should delete at least one entry to prevent the loss of the oldest entry.

Deleting a Record from the UNA-LIST

To delete a record, press UNA until the record is displayed, and then press # and CLEAR (softkey 3). To see or delete the next UNA record, you must press UNA again.

PERSONAL DIRECTORY

Your terminal has a Personal Directory feature that allows you to store up to 32 names and associated telephone numbers in the set.

Names may be up to 16 characters long, and telephone numbers may be up to 30 characters long.

1. Press L-DIR to access the directory.

Using the Personal Directory

L-DIR

>01=BILL HALEY
02=FUJITSU

2. Scroll to the name of the person you want to call, or enter the Directory Address (01, 02, etc.) for that person.

   Press the # key to scroll forward and * to scroll back.

3. Lift the handset or press SPKR to place your call.

**MENU MODE
OPERATIONS**

The terminal has a menu from which you select options to change local features.

Note: Setting up the SPID (option 8) is described in Chapter 5.

The procedures to set local features require the use of the softkeys located below the display. To see the names of the softkeys, press MENU. The names appear on the second line of the display above the keys. Press MENU again to redisplay the information displaced by the softkey labels. You can use the softkeys any time, whether or not the names are showing.

```
┌──────────────────────────────┐
│                              │
│  UNA   L-DIR  CLEAR  OPTIONS │
│                        Menu  │
│  ▭     ▭     ▭     ▭    ○    │
│  1     2     3     4         │
└──────────────────────────────┘
```
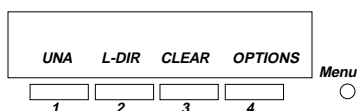
Standard Softkey Layout

Some of the data entry screens in menu mode procedures have built-in timers. If you do not enter information within six seconds, the display reverts back to the menu for selecting the feature you were using. You must reselect the feature and start over.

Once you access the menu, the softkeys are used as shown below for ENTER, NEXT, CLEAR and EXIT.

```
┌──────────────────────────────┐
│                              │
│  ENTER  NEXT  CLEAR  EXIT    │
│                        Menu  │
│  ▭     ▭     ▭     ▭    ○    │
│  1     2     3     4         │
└──────────────────────────────┘
```
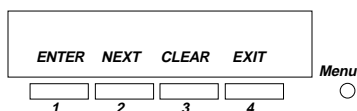
Selecting a Menu Option

You can display and choose among the menu options at any time, as follows:

| **OPTIONS** | 1:ONE-TOUCH   2:CALENDAR
3:INITIAL   (SELECT 1-13) |

| **NEXT** | 4:UNA   5:SPEAKER
6:HAND/HEAD   (SELECT 1-13) |

NI ONLY

| **NEXT** | 7:RINGER   8:SPID
9:KEY-ATTR   (SELECT 1-13) |

5E CUSTOM ONLY

| **NEXT** | 7:RINGER   8:SPID
9:U-CODE   (SELECT 1-11) |

<SRS-9912>

NI ONLY

| **NEXT** | 10:I-COM   11:PREF
(SELECT 1-11) |

5E CUSTOM ONLY

| **NEXT** | 10:I-COM
(SELECT 1-10) |

<SRS-9924>

NI ONLY

| **NEXT** | 10:I-COM   11:PREF
12:MIC-OFF   (SELECT 1-12) |

5E CUSTOM ONLY

| **NEXT** | 10:I-COM   11:MIC-OFF
(SELECT 1-11) |

Press NEXT repeatedly to cycle through the menus.

2. To select the option you want, press the appropriate key(s) on the numeric keypad, then press ENTER. If you notice a mistake after pressing ENTER and want to cancel the keypad entry, press asterisk (*). To clear an entry before pressing ENTER, press CLEAR.

3. To exit menu mode, press OPTIONS. Menu mode is automatically canceled after four minutes, or whenever you pick up the handset or press SPKR.

Whenever OPTIONS is pressed, it either enters or exits menu mode, no matter what else may be in progress.

Notes: If you enter menu mode during a call, special features such as Call Pickup and Call Forwarding are temporarily disabled. However, regular calling controls such as HOLD, SPKR, MIC-OFF, and call disconnection remain available.

Once you are familiar with the menu choice numbers, you can go directly to the one you want after pressing OPTIONS. For example, you can abbreviate the key sequence OPTIONS, NEXT, NEXT, 7, ENTER to OPTIONS, 7, ENTER, getting to the RINGER screen without displaying the other menus shown above.

Options for SPID and KEY-ATTR set-up are installation functions usually performed by your System Administrator or phone maintenance personnel. These options are explained in Chapter 5.

PROGRAMMING A BUTTON FOR ONE-TOUCH DIALING

Multifunction buttons can be set to automatically dial numbers you enter (up to 30 digits each).

The numbers you program can be any of the following:

- Standard telephone numbers, including the outside line access code (usually 9) if required.

- Special codes such as a personal ID number or a voice mail access code, including * and #.

- A combination of a standard telephone number plus one or more special codes, with pauses between the elements to allow for system response time.

Programming a One-Touch Button

To program a multifunction button for a one-touch number, follow these steps:

1. **OPTIONS**　**1**　**ENTER**

   ```
   ONE-TOUCH
   SELECT ASSIGN KEY
   ```

The indicators for previously assigned one-touch buttons will be green.

The indicators for buttons assigned to Directory Numbers (DNs), Call Appearances (CAs), and features will be red. You cannot program the buttons with red indicators for one-touch dialing.

In One-Touch mode, Call Appearances CAs, Directory Numbers DNs and Feature buttons are unlit.

2. Press the unassigned button you want as your one-touch button.

```
ENTER DIRECTORY NUMBER
DN=                    (12)
```

The multifunction button's number is at the far right of line 2. In this example it is 12.

3. To program a standard telephone number or a special code, press the keypad digits for the number you want recorded. Include the outside access code (such as 9) and area code for long distance. The digits show on the second line.

```
ENTER DIRECTORY NUMBER
DN=912229876543      (12)
```

To program a number that includes pauses and special codes, use the keypad to enter the digits and the HOLD button to enter pauses, which appear on the display as commas. The example shows a standard telephone number followed by a voice mail access code and a voice mail password.

```
ENTER DIRECTORY NUMBER
DN=8247629,99,,2502   (12)
```

Notes: If you enter a number with more than 16 digits, the 17th and subsequent digits appear in the 16th number position, and previously entered digits are shifted one column to the left. (The digit in the first number position disappears from the display, but is still recorded.) If you try to exceed the 30-digit limit, the set refuses the input and the display remains unchanged.

4. **ENTER**

```
DN=912229876543          (12)
  COMPLETED
```

The associated LED turns green, and the word COMPLETED appears, remaining for 6 seconds.

5. Press OPTIONS to return to the normal display. **Or** To program or change another one-touch number, press a multifunction button, then repeat steps 3 & 4. **Or** To return to the menu mode main menu, press asterisk (*).

Correcting Mistakes

How you correct a mistake depends on where you are in the programming procedure:

• Before pressing ENTER to record the number, press CLEAR to erase the number. Then enter the correct number.

• After pressing ENTER, if the number on the COMPLETED screen is incorrect, press the multifunction button again. The ENTER DIRECTORY NUMBER screen appears showing the incorrect number. Enter the correct number and then press ENTER. The correct number appears on the display as you enter it and replaces the incorrect number.

Using the **NI / 5E Custom** Terminal Set-Up

Including Codes in a One-touch Number

You can code both telephone numbers and one or more special code numbers on a single one-touch button, with appropriate pauses between numbers to allow for system response. You can code up to 30 digits, with each pause character counting as one digit.

The following example illustrates the sequence for accessing voice mail. The terminal sends the numbers up to the first pause, represented by a comma, as an out-of-band, D-channel call request. When the call connects, the digital set waits one second and then begins sending the additional numbers as tones on the B-channel, with a two-second pause for each comma.

In the example, the digital set sends the voice mail access code, pauses for two seconds while the system switches to voice mail, and then sends the caller's voice mail password.

8 2 4 7 6 2 9 , 9 9 , , 2 5 0 2

Calling Number _____
2 second pause _____
Voice mail access _____
Voice mail password _____
4 second pause _____
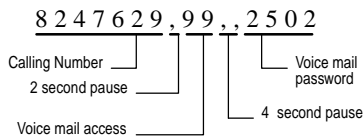
Use this feature for any call requiring multiple number entry. For example, use the feature to:

• Connect to an alternative public network using the access number and then send the number of the person you want to call
• Send the sequence of numbers needed to connect to a private network number
• Navigate your way through a call answering system that requires you to respond to a number of voice menu options

Changing or Canceling the Number Stored in a One-Touch Button

To change or cancel the one-touch number currently stored on a one-touch button, follow these steps:

1. **OPTIONS** **1** **ENTER**

ONE-TOUCH
SELECT ASSIGN KEY

The indicators for previously assigned one-touch buttons will be green.

2. Press the one-touch button whose number you wish to change or cancel. The ENTER DIRECTORY NUMBER screen appears showing the currently assigned number:

```
ENTER DIRECTORY NUMBER
DN=8247629,99,,2502      (12)
```

If the number stored on the one-touch button is more than 16 digits, a right arrow (➔) appears at the end of the line of numbers, indicating that additional numbers exist. To see the additional numbers, press NEXT. Pressing NEXT repeatedly alternates between the two displays.

```
ENTER DIRECTORY NUMBER
DN=94783664,1994,,7    ➔(14)
```

```
ENTER DIRECTORY NUMBER
DN= ➔437709        (14)
```

3. Complete the procedure in one of these ways:

• To change the number, enter a new number. Then press ENTER.

    The new number appears on the display as you enter it, and replaces the old number.

• To cancel the number, press CLEAR and then ENTER. The button is canceled as a one-touch button, and the green indicator goes dark.

• To leave the number unchanged, press OPTIONS to return to the normal display.

The normal display includes the date, time, and day of the week.

To set the calendar/clock, follow these steps:

1. **OPTIONS**   **2**   **ENTER**

```
ENTER CALENDAR/CLOCK
  8:06PM   SUN    APR 30
```

2. **ENTER**

```
INPUT HOUR        ->
  8:06PM    '99   APR 30
```

3. Enter the present hour and then press ENTER.

The screen changes to reflect your entry and to prompt for the minute. In this example, assume you entered 12.

```
INPUT MINUTE      ->
12:06PM    '99   APR 30
```

Notes: If you enter #, *, or too large a value, such as 33, for the hour, it is ignored, and you must supply a valid entry.

4. Enter the present minute and then press ENTER.

The screen changes to reflect your entry and to prompt for AM or PM. In this example, assume you entered 55.

```
INPUT 0:AM 1:PM ->
12:55PM    '99   APR 30
```

5. Press keypad 0 for AM or 1 for PM and then press ENTER.

The screen changes to reflect your entry and to prompt for the year. In this example, assume you entered 1 for PM.

```
INPUT YEAR        ->
12:55PM    '99   APR 30
```

6. To accept the year displayed, '99, press ENTER. Or To change the year, press two numbers for the year you want and then press ENTER.

The screen changes to reflect your entry and to prompt for the month. In this example, assume you accepted the displayed year.

```
INPUT MONTH    ->
12:55PM    '99   APR 30
```

7. Enter the present month (1 to 12) and then press ENTER.

The screen changes to reflect your entry and to prompt for the date. In this example, assume you entered 5 for May.

```
INPUT DAY         ->
12:55PM    '99   MAY 30
```

8. Enter the present date (1 to 31) and then press ENTER.

The screen changes to reflect your entry and to display the message COMPLETED. In this example, assume you entered 1 for the date.

```
COMPLETED
12:55PM    SAT      MAY 1
```

REINITIALIZING THE PHONE

This is useful when the phone is assigned to a new user.

Removes all your one-touch numbers and network-determined key assignments

Warning: If you reinitialize your phone accidentally, see Chapter 5 for the network or manual key assignment download procedure, or ask your System Administrator for help.

To reinitialize your phone, complete the following steps:

Using the **NI / 5E Custom** Terminal Set-Up

1. **OPTIONS** **3** **ENTER**

> PRIVATE DATA CLEAR
> (1:YES 2:NO) ->

2. Press 1, then ENTER to clear all data, **Or**

   Press 2, then ENTER to retain all data.

If you choose 1, this screen appears:

> PRIVATE DATA CLEAR
> COMPLETED

To return to normal operation, press OPTIONS.

UNANSWERED CALL LOGGING (UNA)

If enabled, this feature records information about incoming calls that were not answered at this phone.

For each unanswered call (up to eight), the set records the date and time of the call plus the telephone number of the calling party. The ninth and later unanswered calls replace the first, second, and so forth, in order, so your UNA list always has the most recent eight. (If the caller gets a busy signal, the call is not considered "unanswered".)

If the set receives a call from a number already on the UNA list, the latest call is recorded and the earlier call is dropped from the list. The set can be configured to record unanswered calls for all lines, designated lines, or no lines (Not Activated).

Enabling the UNA Feature

To enable unanswered call logging and select the type of UNA to be used, follow these steps:

1. **OPTIONS** **4** **ENTER**

If the following screen appears, the UNA feature is disabled:

> UNA SERVICE MODE
> NON SUPPORTED

To leave it as is, press OPTIONS again.

2. To enable UNA, press ENTER. This screen appears:

```
1: ALL          2: SELECT
3: NO SUPPORT            SELECT ITEM  (1-3)
```

Note: If the following screen appears, press ENTER to go to the selection screen.

```
UNA SERVICE MODE
    SUPPORTED  (SELECT)
```

UNA on All Call Appearances

To support UNA on all CAs, follow these steps:

1. [**1**] [**ENTER**]

```
SUPPORTED  (ALL)
 COMPLETED
```

After about 6 seconds, or if you press asterisk (*), the display returns to the second menu mode screen:

```
4: UNA          5: SPEAKER
6: HAND/HEAD            SELECT ITEM  (1-3)
```

2. You can now select a different menu function, or press OPTIONS to return to the normal display:

```
. . . . . . . . . . . . . . . . . . . . . . . . . . .
12:55PM   TUE    MAY 1
```

UNA on Selected Call Appearances

To support UNA on selected CAs, follow these steps:

1. [**2**] [**ENTER**]

```
SUPPORTED  (SELECT)
SELECT ASSIGN KEY
```

If ALL (default) was previously set, all feature buttons light green.

Only CAs with lit LEDs will log unanswered calls. Press the buttons to turn the LEDs on or off to select the CAs for which you want to log unanswered calls.

Using the **NI / 5E Custom** Terminal Set-Up

2. Press ENTER when done, and this screen appears:

```
SUPPORTED  (SELECT)
  COMPLETED
```

After about 6 seconds, or if you press asterisk (*), the display returns to the second menu mode screen:

```
4: UNA              5: SPEAKER
6: HAND/HEAD    SELECT ITEM      (1-3)
```

3. You can now select a different menu function, or press OPTIONS to return to the normal display.

Disabling the UNA Feature

To disable unanswered call logging, follow these steps:

1. **OPTIONS**   **4**   **ENTER**

If the following screen appears, the feature is enabled:

```
UNA SERVICE MODE
  SUPPORTED  (ALL)
```

To leave it as is, press OPTIONS again.

2. To disable UNA, press ENTER. This screen appears:

```
1: ALL              2: SELECT
3: NO SUPPORT    SELECT ITEM      (1-3)
```

3. **3**   **ENTER**

```
NON SUPPORTED
  COMPLETED
```

After about 6 seconds, or if you press asterisk (*), the display returns to the second menu mode screen:

```
4: UNA              5: SPEAKER
6: HAND/HEAD    SELECT ITEM      (1-3)
```

4. You can then select a different menu function, or press OPTIONS to return to the normal display.

ENABLING AND DISABLING THE SPEAKER FUNCTION

This feature enables and disables the speakerphone on the SRS-9924, and the listen-only function on the SRS-9912.

1. **OPTIONS** **5** **ENTER**

    ```
    SPEAKER SERVICE MODE
        SUPPORTED
    ```

2. **ENTER**

    ```
    1: SUPPORT    2: NO SUPPORT
                         (SELECT 1-2)
    ```

3. Press 1 or 2 to select your choice.

4. Press ENTER. This screen appears:

    ```
    SUPPORTED  or  NO SUPPORT
     COMPLETED
    ```

HANDSFREE, HANDSET, AND HEADSET MODES

You can set up the Digital Set to use the handset, the speaker <**SRS-9924**>, or a headset by selecting from the following modes:

Headset Mode

Enables use as a headset-only phone. You must disconnect the handset from the jack on the phones left side and plug the headset into the same jack. Calls are connected and disconnected only by your pressing the SPKR button. In headset mode, the handsfree mode, including the speaker/microphone, is not supported.

Handset Mode

Enables normal use as a handset phone. While in this mode, the speaker can be enabled or disabled as follows:

Handsfree Supported

Allows speaker use, controlled by SPKR button. <**SRS-9924**>

| Handsfree Non Supported | Disallows speaker use. The SPKR button is disabled. Call pickup and hanging up on calls is by handset only. |

Using the Handset or a Headset

1. **OPTIONS**   **6**   **ENTER**

> HAND-SET/HEAD-SET MODE
>   HAND-SET

2. Press ENTER, and this screen appears:

> 1: HAND-SET   2: HEAD-SET
>   (SELECT 1-2)

3. Press 1 or 2 to select your choice.

4. Press ENTER. This screen appears:

> HEAD-SET *or* HAND-SET
>   COMPLETED

You can now operate the terminal using only your headset. The SPKR button controls picking up and hanging up calls, and the MIC-OFF button is not operational **<SRS-9924>**. The sounds that are usually audible through the speaker, such as the key tones, are now audible only through the headset.

CHANGING RINGER MODE

This local feature allows you to:

•   Change the volume and tone of the ringer.

•   Select the ringer mode, either normal ring or silent ring.

•   Select the ringing sound you will hear when you are conversing on another line.

Setting Ringer Volume

To set the ringer volume, follow these steps:

1. **OPTIONS**   **7**   **ENTER**

> RINGER SERVICE MODE
> . . . .

3-14

2. **ENTER**

```
1: VOLUME    2: TONE
3: RINGING   (SELECT 1-4)
```

NEXT

```
4: ONE RING
            (SELECT 1-4)
```

3. **1** **ENTER**

```
RINGER VOLUME MODE
 MEDIUM
```

4. **ENTER**

```
1: SOFT      2: MEDIUM
3: HIGH                  (SELECT 1-4)
```

NEXT

```
4: EXTRA HIGH
            (SELECT 1-4)
```

5. Press the desired volume number. The phone rings once at the selected volume.

6. When you hear a volume you like, press ENTER.

```
MEDIUM
 COMPLETED
```

To change another setting, you can press asterisk (*) to return to the menu mode options.

Setting Ringer Tone

To set the ringer tone, enter Ringer Service Mode then choose option 2:

1. **2** **ENTER**

```
RINGER TONE MODE
 MEDIUM
```

Using the **NI / 5E Custom** Terminal Set-Up

2. **ENTER**

1: LOW	2: MEDIUM
3: HIGH	(SELECT 1-3)

3. Press the desired tone number. The phone rings once at the selected tone.

4. When you hear a tone you like, press ENTER. The following screen is shown:

| LOW |
| COMPLETED |

Selecting Ringer Pattern

Select either normal ring or silent ring. Silent ring flashes the LED of the receiving DN or CA button without ringing the bell.

To set the ringer mode, enter Ringer Service Mode then choose option 3:

1. **3** **ENTER**

| RINGING MODE |
| BELL |

2. **ENTER**

1: BELL	2: SILENT
	(SELECT 1-2)

3. Press the ringing option, then ENTER. The following screen is shown:

| SILENT |
| COMPLETED |

To change another setting, you can press asterisk (*) to return to the menu mode options.

Selecting Ringer Pattern Mode

This selection determines the type of ring that announces incoming calls when you are talking on another line.

To select the ringer mode, enter Ringer Service Mode then choose option 4.

1. **4**   **ENTER**

> RINGER PATTERN MODE
>   MUTE RING

2. **ENTER**

> 1: MUTE RING   2: ONE RING
>   (SELECT 1-2)

3. Press the desired option, then ENTER. The following screen is shown:

> MUTE RING
>   COMPLETED

Assigning a Leased Network Access Code Delimiter

Before you can dial a leased network number, or program a one-touch button to dial such a number, you must assign one of your multifunction button as a leased network access code delimiter key.

To assign one of the multifunction buttons as the delimiter key for entering leased network access codes, follow these steps:

1. **OPTIONS**   **9**   **ENTER**

> USER CODE MODE
> SELECT ASSIGN KEY

The indicator of any one-touch buttons you have assigned, and the MIC-OFF key if activated, turn red.

2. Press the multifunction button you have chosen to be the delimiter key and then press ENTER.

The indicator for the button you have chosen turns green and its number appears on the display.

If you have previously assigned a button as the delimiter key, its indicator turns green when you complete step 2. You have two choices at this point:

- If you press a different button and press ENTER, the indicator of the previously assigned button goes off and the indicator of the new button turns green. The number of the new button appears on the display.

- If you press the previously assigned delimiter button and press ENTER, you cancel the button as the delimiter key. Its indicator goes out.

After you assign (or cancel) a button, the screen looks like this:

```
DELIMITER KEY = (17)
   COMPLETED
```

If you have canceled a button, the end of line 1 includes the word CANCEL.

5E CUSTOM ONLY

CALL ANNOUNCE INTERCOM

Note: The SRS-9924 utilizes either two-way or one-way intercom. The SRS-9912 utilizes one-way intercom.

The Call Announce Intercom feature is a convenient way to screen incoming calls, then announce the call to the intended recipient. The screener places the incoming call on hold, uses a designated DN to announce the call to the recipient via intercom, and may then transfer the call. The screener can also use this feature to deliver a message.

The Call Announce Intercom operates in one of two modes, two-way or one-way intercom. Two-way intercom immediately activates the speaker and microphone of the called digital set, allowing two-way communication.

One-way intercom activates only the speaker, leaving the microphone of the recipient's digital set turned off in the interest of privacy. The recipient must press the MIC-OFF button to respond to the call screener.

Call Announce Intercom allows you to specify which call buttons are activated by Call Announce Intercom Call Screeners, and allows you to select up to three Call Screeners.

> **Note:** Call Announce Intercom is distinct from Network (Switch provided) intercom.

Ringer Always On

The Call Announce feature utilizes a Ringer Always On mode. Ringer Always On sends a tone to users each time a Call Screener activates Call Announce Intercom (regardless of the ringer mode).

Call Screeners   Call Recipient

Figure 3-1: Call Announce Intercom Application
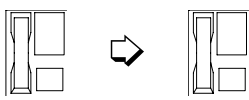
Directory Numbers	Call Announce Intercom setup:
9199263110	Activating Directory
9199263111	Number = 919*926*3112
9199263112*	Intercom mode = 1-way or 2-way

*Designated for intercom

This section describes the requirements for setting up Call Announce Intercom followed by the procedures to use Call Announce Intercom to announce a call.

Call Announce Intercom on Selected Buttons

Before selecting DNs for call screeners, you may specify the CA buttons that are to be answered automatically. You may select "ALL" buttons or select the desired CAs.

To enable or disable Call Announce Intercom on selected buttons, follow these steps:

1. **OPTIONS**   **10**   **ENTER**

> INTERCOM FEATURE
> NON SUPPORTED

2. **ENTER**

```
1: ALL    2: SELECT
3: NO SUPPORT      (SELECT 1-3)
```

3. Press 1 or 2, then ENTER. If you selected 2, the following screen appears:

```
SUPPORTED (SELECT)
  SELECT ASSIGN KEY
```

4. All LEDs will light green if "All" was previously selected. Only CAs with lit LEDs will activate on Call Announce. Press the buttons to turn the LEDs on or off to select the desired CA button(s).

5. **ENTER**

```
SUPPORTED  (SELECT/ALL)
  COMPLETED
```

After selecting the CA buttons that are to be auto answered, you may proceed to select DNs for Call Screeners.

Specifying the Directory Number for Intercom

When enabling the feature, you must specify a DN, to be used by the screener to activate the recipient's intercom. All recipients can specify the same DN, for all CA Intercom calls.

Normal calls can still be made from this DN to numbers not set up for intercom. Up to three DNs may be programmed.

When specifying the DN for intercom, you must enter all ten digits of the call screener number. For example, for a call screener at 926-3112, you could enter:

919 926 3112
or
919*926*3112

Entering the full number negates the possibility that an outside call with the same last four digits in the calling number (for example, 302 422-3112) could activate the intercom.

The asterisks in the number 919*926*3112 are wild cards. The digital set accepts any character in this position. You need the wild card to represent the dash (-) if a dash is included in the number delivered with an incoming call. **To assure proper operation, have the person who will be screening calls call you, and note the number displayed on the first line of the LCD. Input the number exactly as it is displayed.**

The set supports up to three numbers for screeners. To have more than three screeners, use * as a wild card. For example, entering 919*926*311* allows both the DNs 3112 and 3115 to activate the intercom. Remember however, that all other DNs from 3110 to 3119 would also activate the intercom.

Required Support from Your System Administrator

To guarantee that DNs are always available for Call Announce Intercom, the System Administrator should:

•   Allocate one DN on the digital sets of both recipients and screener for outgoing calls.

Specifying the Directory Numbers of Call Screeners

At the conclusion of selecting buttons for Call Announce Intercom, this screen appears:

> SUPPORTED (SELECT/ALL)
> COMPLETED

1. Press ENTER. If one or two way intercom is enabled, the screen displays the enabled mode plus the authorized DN, as shown below:

> TWO WAY TURNED ON
> 919*926*3112

Using the **NI / 5E Custom** Terminal Set-Up

If no telephone numbers have been programmed in, the Call Announce Intercom feature is disabled, and the screen displays NON SUPPORTED:

```
INTERCOM FEATURE    (1)
NON SUPPORTED
```

To program the first number and enable Call Announce Intercom, go to step 2.

2. **ENTER**

```
1: ONE WAY    2: TWO WAY INTERCOM
3: TURN OFF    (SELECT 1-3)
```

3. Press 1 or 2, then ENTER. A screen appears showing your choice and prompting for an authorized DN:

```
TWO WAY SELECTED    (1)
ENTER TELEPHONE NUMBER
```

To disable the intercom feature, dial 3 and press ENTER. When the screen displays the message INTERCOM TURNED OFF, press OPTIONS to return to normal operation.

4. Dial a telephone number of up to ten digits (including wild cards) and press ENTER. When you press ENTER, a screen appears announcing ONE (or TWO) WAY TURNED ON and showing the number you entered:

```
TWO WAY TURNED ON
   919*926*3112
```

If a Call Screener has DNs identified by three, four, or five digit extension numbers, you can dial either the extension number only or the full number. You can also dial an asterisk as a wild card character. See the section introduction for a complete explanation of these choices.

Three Call Screeners can be entered. To program the second or third number, see step 5.

5.   *****   **10**   **ENTER**

Repeat steps 2, 3, and 4 as needed until this screen appears:

```
INTERCOM FEATURE   (1)
(ONE OR TWO WAY)     919*926*3112
```

6. **NEXT**

```
INTERCOM FEATURE   (2)
NON SUPPORTED
```

Note the number (2) on the first line indicating you are about to program your second call screener number. Pressing NEXT repeatedly at this prompt will cycle you through all three call screener selections to the one you want to program or change.

CALL APPEARANCE PREFERENCE

The preference options determine which CA button is selected when you go offhook (lift the receiver or press SPKR). You have four choices.

- **Primary line preference**. Selects button number 1, the CA associated with your primary DN.

  If you have an incoming call on button number 1, you are immediately connected to the call. If button number 1 is idle, you get a dial tone. If you are going offhook to retrieve a call on hold on button number 1, you must press the button to reconnect to the call.

  To be connected to an incoming call on another button, or to get a dial tone on an idle button, press the button either before or after you go offhook.

- **No preference.** Does not automatically select any CA button when you go offhook. You must press the button you wish to be connected to either before or after you go offhook.

NI ONLY

• **Ringing line preference.** Selects the CA button that is ringing with an incoming call. If you have more than one incoming call, the terminal selects any ringing Intercom or Intercom Group feature button first, and then selects the button with the call that has been ringing the longest. You are immediately connected to the call.

• **Idle preference.** Selects a CA button that is idle, if one is available.

If you have no incoming calls, the terminal selects the idle CA with the lowest button number and gives you a dial tone.

Selecting CA Preference

To select a CA preference, follow these steps:

1. **OPTIONS**   **11**   **ENTER**

CURRENT MODE IS
PRIMARY

2. **ENTER**

1: RINGING   2: IDLE
3: PRIMARY   (SELECT 1-4)

NEXT

4: NO PREF
             (SELECT 1-4)

3. Press the desired preference number, then ENTER.

SUPPORTED

**MIC-OFF
<SRS-9924>**

If you deactivate MIC-OFF, assign the upper right button as a one-touch button, and then try to reactivate MIC-OFF, the button's LED turns red as a warning. You must quit the procedure (press * to return to the menu mode main menus) and cancel the one-touch number before you can reactivate MIC-OFF.

If you try to reactivate MIC-OFF without doing this, the message INVALID SELECTION appears and your attempt fails.

If you are deactivating the MIC-OFF button, make sure the function is turned off (the LED is unlit) before beginning the procedure.

5E CUSTOM ONLY

This is option 11 in the 5E Custom OPTIONS Menu, but the later steps to deactivate MIC OFF are the same.

1. **OPTIONS** **12** **ENTER**

```
MIC-OFF KEY MODE
   NON SUPPORTED
```

2. **ENTER**

```
1: SUPPORT     2: NO SUPPORT
                    (SELECT 1-2)
```

The LED in the upper right button indicates its current state:

- **Off:**   Unassigned
- **Green:** Active as MIC-OFF
- **Red:**   Assigned as a one-touch button

If you wish to reactivate MIC-OFF, you must first cancel the one-touch assignment on the upper right button.

3. Press 1, then ENTER to activate MIC-OFF **Or**

   Press 2, then ENTER to deactivate MIC-OFF:

```
SUPPORTED
   COMPLETED
```

1. Press L-DIR to access the directory.

   L-DIR

   > 01= BILL HALEY
   02= FUJITSU

2. Press L-DIR repeatedly to either go to the directory entry to change, or to get to the next available number for a new entry, then press MENU.

   Use the # key to scroll forward, and the * key to scroll backward.

   > BILL HALEY
   EDIT   NUM   EXIT

3. **EDIT**

   ENTER DIRECTORY NUMBER
   01=

4. Enter the number, then press ENTER.

   ENTER DIRECTORY NUMBER
   >01= 0123456789

   ENTER NAME

5. Enter the name, then press ENTER.

   ENTER NAME
   JOHN SMITH

   COMPLETED

Letters   Press the keypad numbers corresponding to the
                               letters in the name.

                               The first press of a keypad digit displays the first
                               letter from the group of letters represented by that
                               key, such as 2 for ABC, 3 for DEF, etc. The first
                               letter of the group appears on the display.   The
                               second press of that key displays the second letter,
                               such as B or E. The third press shows the third
                               letter.

                               Since alphabetic entries can require multiple key-
                               presses, you must press the # key when the display
                               shows the letter you want. Alpha entries are not
                               recorded until you press the # key. After pressing
                               the # key, the next press applies to the name's next
                               display position.

                               For each space you want, press * followed by #.

Numbers   Numeric entries are recorded immediately, and the
                               next key press applies to the number's next character
                               position.

                               To insert pauses in the telephone number, press
                               the HOLD key. A "," indicates a pause while dialing
                               the telephone number.   For example,
                               99198503481,*4250.

```
ENTER NAME
01 = 8501055
```

Press ENTER to display this screen:

```
COMPLETED
01 = 8501055      John Smith
```

Press EXIT to return to the initial screen.

Using the **NI / 5E Custom** Terminal Set-Up

USING NETWORK DATA IN THE PERSONAL DIRECTORY

When you receive an incoming call, and the "Caller ID" or other caller information is displayed, you may use this as an entry in your Personal Directory.

Note: If the directory is full, the message DIRECTORY FULL will be displayed. The directory will store 32 entries. Numbers may be up to 30 digits, and names may be up to 16 digits.

The following table shows the correspondences.

Key Label	First	Second	Third	Fourth
ABC 2	A	B	C	A
DEF 3	D	E	F	D
GHI 4	G	H	I	G
JKL 5	J	K	L	J
MNO 6	M	N	O	M
PQRS 7	P	Q	R	S
TUV 8	T	U	V	T
WXYZ 9	W	X	Y	Z

This SRS-9924 is available with an optional Add-On Button Module (ABM) which provides thirty additional multifunction buttons.

These multifunction buttons may be used for call buttons (CAs or DNs), ISDN features, or One-Touch numbers. The additional buttons are ideal for users requiring a large number of One-Touch keys, many ISDN features, or who need access to multiple CAs.

The ABM is connected to the SRS-9924 by a cable which plugs in beneath both units, as well as by a metal plate.

Figure 4-1
SRS-9924-ABM

NI ABM button number Assignments

FUJITSU

SRS-9924-ABM

48	49	50
45	46	47
42	43	44
39	40	41
36	37	38
33	34	35
30	31	32
27	28	29
24	25	26
21	22	23

Using the **NI / 5E Custom** SRS-9924-ABM
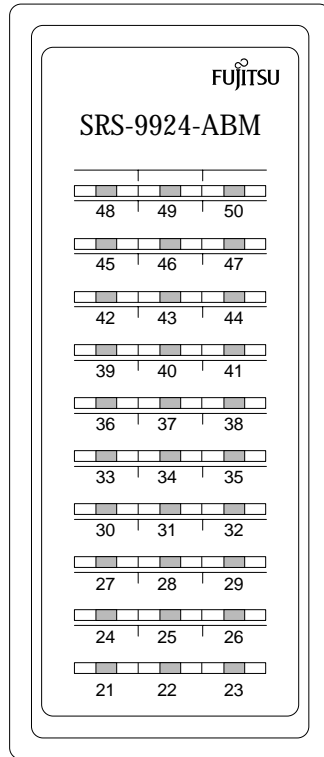
Figure 4-2

SRS 9924 ABM

**5E Custom ABM
button
number
Assignments**

FUJITSU

SRS-9924-ABM

45	46	47
42	43	44
39	40	41
36	37	38
33	34	35
30	31	32
27	28	29
24	25	26
21	22	23
18	19	20

Using the **NI / 5E Custom** SRS-9924-ABM
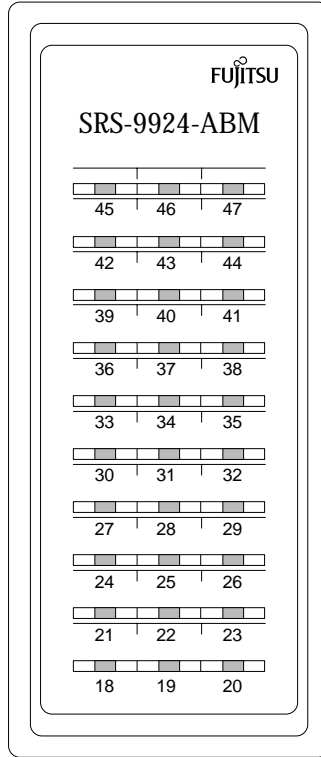
The module attaches on the right side of the terminal as shown in Figure 4-2.

To attach the ABM:

1. Use a sharp object, remove the cover from the ABM jack on the bottom of the terminal, then plug in the ABM cable.

2. Place the ABM and the terminal side-by-side to position the connector plate.

3. Insert and tighten the four screws to connect the two units.
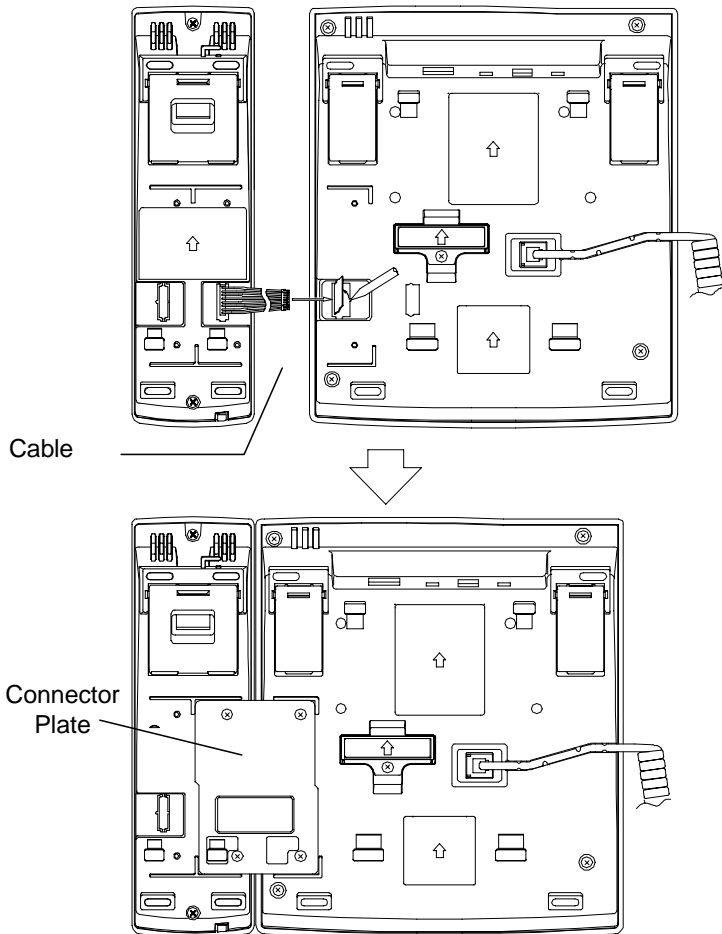
Figure 4-3: SRS-9924-ABM Bottom View

Notes

These instructions are intended mainly for System Administrators, service personnel or end users who are installing the terminal.

Required Steps

Installation involves four main steps:

• Connecting the set to the network.

   Its necessary to determine the type of Telephone Company switching equipment in use for proper connection to the Telephone Company network. Implementation procedures vary from one manufacturer to another.

   Switch   Manufacturer

Switch	Manufacturer	
DMS-100	Nortel	
5ESS	Lucent	— National ISDN
EWSD	Siemens	
5E Custom	Lucent	

• Setting-up Service Profile IDentifiers (SPIDs).

NI ONLY

• Loading network data. This may be accomplished by two methods: 1) The most common method is downloading of features from the switch, or 2) In unusual situations, manual configuration of multifunction buttons.

• Programming and labeling the set. (Labeling the set is described in Chapter 6.)

```
 _____
|                                    |
|  UNA    L-DIR   CLEAR   OPTIONS     |   Menu
|  ____   ____    ____    ____        |    ○
|  [    ] [    ]  [    ]  [    ]       |
|    1      2       3       4         |
```

Standard Softkey Layout

5
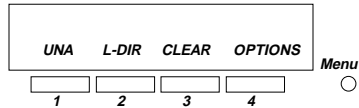
INSTALLING THE TERMINAL

ISDN equipment may be installed in a number of configurations. In most installations, the supplementary equipment (NT1 and power) is located in a wire closet in your building. If this is the case in your installation, please skip to the section "Connecting to the network".

In some installations, the NT1 and power are located at the user's desk.

Two drawings are included that illustrate the connections you may need to make when the power and NT1 are located at the user's desk.

Figure 5-1 illustrates the connections when one power supply is used for both the NT1 and the terminal and also indicates the position of the power switch on the terminal.
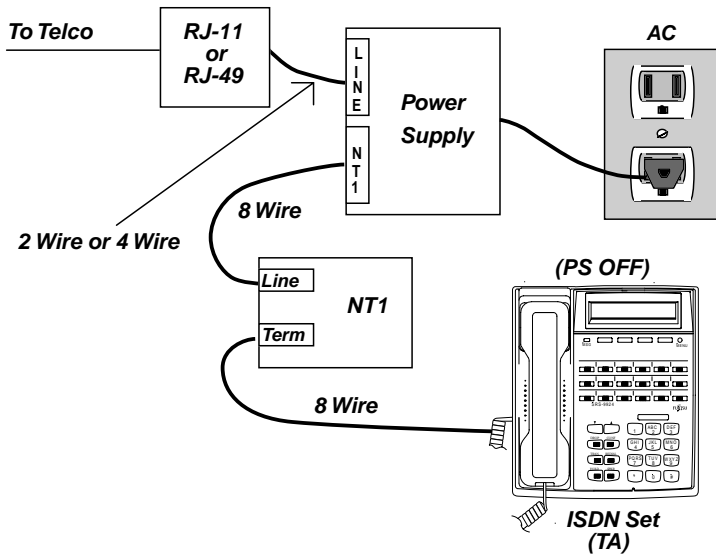

Figure 5-1: Power Connections

Figure 5-2 illustrates the connections when a power supply is needed for the NT1 and another is needed for the terminal and also indicates the position of the power source selection switch on the terminal.

To Telco

RJ-11 or RJ-49

(Low Wattage Supply)

AC

LINE

Power Supply

NT1

2 Wire or 4 Wire

8 Wire

FNC Power Supply
AC Adapter (optional)
AD-3645U

Line

NT1

Term

8 Wire

(PS ON)

Line | 48 V DC

ISDN Set (TA)
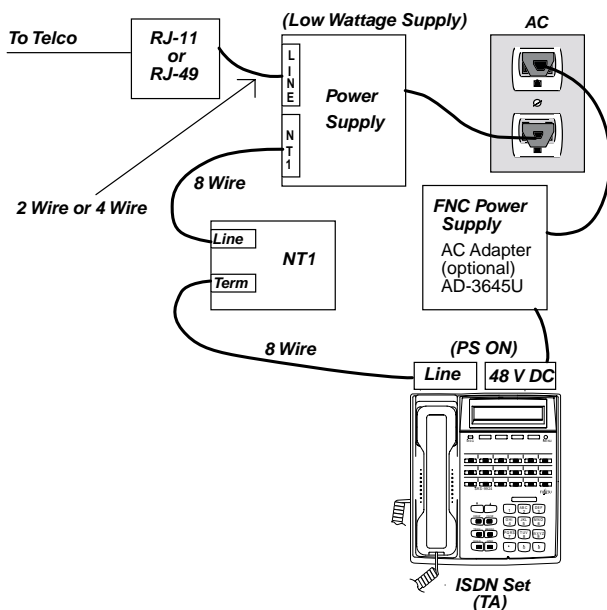
Figure 5-2: Power Connections

CONNECTING TO THE NETWORK

When using bulk power and NT1s

When you receive your terminal, plug the telephone line from the wall into the LINE jack on the back of the set. If the display shows a date and time, you have power. If the display does not light up, you may need assistance from your System Administrator to complete the installation.

In order to assure proper operation, it is recommended (not required) that you depress key pad keys 1 and 6, while connecting the telephone to the power source (either the wall jack or the AC Adapter). Depress the keys for 10 seconds, until the display goes blank. Then release the keys.

The set will go through its self test; you are ready to complete installation when the default date, time and the "?" appear on the display.

SETTING-UP SPIDS

The Service Profile IDentifier (SPID) identifies your set to the network. Your SPID may be supplied to you by your service provider, or it may be supplied automatically by the switch at installation. The second option is called "Auto SPID".

Auto-SPID

If your switch supports Auto SPID, this function starts when either the terminal is powered-on and a SPID is not present, or when the SPID has been manually cleared.

Auto-SPID displays the following screens:

```
AUTO SPID REQUESTING
```

If only one SPID available, the SPID is assigned, and this screen is displayed:

```
SPID SELECTION COMPLETED
50555512120101
```

If two or more SPIDS are available, you must select a SPID.

Scroll through the available SPIDS. Press ENTER when the ">" is indicating the correct SPID.

```
1>50555512120101              SP/AU/PB
  50555512130101
```

Press the # key to scroll forward through the SPID numbers, (use the * key to scroll backward) then press ENTER to select a number.

```
SPID SELECTION COMPLETED
50555512120101
```

After SPID selection is complete, an automatic download is requested from the switch. You should be able to begin using your phone after the download is complete.

NI ONLY

Manual SPID Entry (For 5E Custom and for NI)

To enter Service Profile IDentifiers manually, follow these steps:

1. **OPTIONS** **8** **ENTER**

The message ENTER VOICE SPID appears, with the current SPID number (if any) shown below it.

```
ENTER SPID
ID=000000000000
```

2. Dial your voice SPID number and press ENTER.

```
SPID ASSIGNMENT END
COMPLETED
```

NI ONLY

Note: For first time installations, download will occur without plugging and unplugging the set.

At initial installation, when you press ENTER to confirm the SPID, the terminal automatically requests a download from the switch. This downloading function will work on switches that support parameter downloading and on early versions of the DMS that supports Service Profile Management downloading (SPM). On other switches, manual configuration of features and lines may be necessary.

Although each service provider can decide the number of characters and format of the SPID, most have agreed on a simple format. This format, referred to as generic SPID format, is likely the format used by your service provider.

Note:

The generic SPID format consists of 14 digits: (10 digit DN) + 4 digits (usually "0101".)

The first component is the main telephone number of the terminal, including the area code. For example, 9197962000.

The most frequently assigned SPID will be the following: NPA NXX XXXX 0101.

On the DMS NI 1, at initial installation, and after the SPM download, it may be necessary to change the settings in the terminal to allow proper installation. Please read the section on

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NI / 5E Custom Terminal Installation

configuration types (CACH or EKTS) and the instructions on how to change the terminal settings for proper operation.

If your service provider has not supplied a SPID to you, try this format shown above. If it does not work, contact your service provider or System Administrator.

Occasionally, if the switch is very busy, the download may be delayed for a short time. The terminal will continue to request a download until it is successful, or until it receives a message from the switch indicating that a manual configuration is needed.

The terminal also supports two other functions associated with parameter downloading.

1) Service Profile Change Notification. If you request a change to your ISDN service configuration, when that change is completed in the central office, the switch typically notifies the terminal that a change has occurred. The terminal then requests a download from the switch to update its configuration. This occurs automatically.

   If you have used manual configuration to reassign features, the settings that differ from the downloaded settings will be lost.

Note: On a DMS-100 NI 1 which supports SPM instead of parameter downloading, if a Service Profile change is made in the switch, it is necessary to manually request a download in order for a download of the new configuration to occur.

2) The terminal provides a manual download function that allows you to request a download if you suspect that the information in the terminal may be corrupt. Instructions for manual download are in the Key Attribute section.

NI ONLY

Note: Do not change your SPID unless told to do so by your service provider. In most cases, digital sets will not work without the correct SPID number. If the SPID number is wrong, the set displays the message SPID NG. Enter the correct SPID number, then disconnect and reconnect power to make the set function normally.

LOADING OR MODIFYING NETWORK DATA (after entering the SPID)

This section explains how to use the KEY-ATTR feature in menu mode to load or modify network data. You must load network data with KEY-ATTR if the set is connected to a switch that does not support the terminal downloading function.

If your set is connected to a DMS switch and uses SPM to download data, you may need to modify the data according to instructions from your system administrator.

If the switch has downloaded network data automatically, you can use these procedures to modify the set configuration to conform to your personal preferences. In these procedures, you select a button on your terminal and assign the button a Directory Number, Call Appearance Number, Intercom or Group Intercom Number, or a Feature Number recognized by the network. In a power failure, data on a reconfigured terminal may be lost.

Configuration Types: EKTS and CACH

National ISDN (NISDN) supports two configurations on multiple line sets. The configurations are Electronic Key Telephone Systems (EKTS or ACO) and Call Appearance Call Handling (CACH). If SPM has downloaded network data, you need to know which configuration is used so that you can modify the configuration if required. Additionally, you must know which configuration is used if you are entering network data manually.

EKTS and ACO use Directory Numbers for telephone lines and feature numbers for features. You enter these numbers with options 2 and 3 of KEY-ATTR.

NI ONLY

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CACH uses Call Appearances for telephone numbers and feature numbers for features. You enter these numbers with options 1 and 2 of KEY-ATTR.

Key Attribute Configuration

Before attempting to load or modify network data, obtain the current configuration from your service provider. This configuration information should show the Directory Numbers/Call Appearances, the features (with their feature numbers), and the terminal button to which each Directory Number/ Call Appearance or feature is assigned.

Button assignments fall into three categories: Directory Numbers, Call Appearances, and Features. If you must manually configure your set, or if you want to rearrange the button assignments on your set, you must use the following method.

If you plan to change a button assignment from one category to another (e.g. Call Appearance to Directory Number) you must first cancel the current assignment and add the new assignment. For changes within a category (call forwarding to call pick-up), simply replace the old data with the new data.

To load, modify, or update your set's network data, begin with these steps:

1. **OPTIONS** **9** **ENTER**

   KEY ATTRIBUTE MODE
   . . . .

2. **ENTER**

   1: DL   2: MANUAL
                         SELECT ITEM (1-2)

Download

You can either automatically download the configuration or set-up each item manually. Each method is described in the following sections.

Key Attribute selection 1, "Downloading", may be used to request a download after initial installation.

1. To automatically download the configuration, press 1, ENTER. The following displays are shown:

```
DL EXECUTING
UNA       L-DIR        CLEAR       OPTIONS
```

```
DL COMPLETED
UNA       L-DIR        CLEAR       OPTIONS
```

Manual Configuration

The menu items in the manual configuration mode serve the functions listed below. However, in most cases, the default settings of the terminal should be adequate for user needs. If it is necessary to reassign keys, please consult the instructions in the following sections.

1. Assigns buttons to Call Appearances in CACH.
2. Assigns buttons to network-provided features in both CACH and EKTS/ACO.
3. Assigns buttons to Directory Numbers in EKTS, ACO/AFC.
4. Assigns buttons to network-provided intercom and Group Intercom.
5. Assigns the network conference feature button.
6. Assigns the transfer key.
7. Assigns the originating directory number key.
8. Assigns the reservation status to a call button.
9. Assigns the designated call appearance.

Manual Download

1. **OPTIONS   9   ENTER**

```
1: DL                    2: MANUAL
                         SELECT ITEM (1-2)
```

2. Press 2 to display the options for manual download.

```
1: CA           2: FA
3: DN           (SELECT 1-9)
```

NEXT

4: ICM/GIC	5: CONF
6: TRANS	(SELECT 1-9)

NEXT

7: ORIG DN	8: CA RESV
9: DSGN CA	(SELECT 1-9)

Note: The following descriptions begin with selections from these nine items.

Selection 1: Call Appearance (CACH Call Buttons)

Your NISDN terminal's first button is set at the factory as CA=1. There is no need to change this when using the CACH mode of managing calls.

On a DMS NI1, it may be necessary to reset button 1 to be a DN. See instructions under Selection 3, in this section.

Your service provider will provide you with Call Appearance Numbers and associated Telephone Numbers. Example: Telephone Number 555-1212 is your Primary Directory Number and occupies CA 1, 2, and 3. Telephone Number 555-3333 is a secondary or shared Telephone Number and occupies CA 4, 5, and 6. Note that CA numbers are always distinctive.

1. **1** **ENTER**

| CALL APPEARANCE MODE |
|---|
| SELECT ASSIGN KEY |

The set's indicators show button status as follows:

• **Green** indicates a button already assigned to a Call Appearance.

• **Red** indicates a button already assigned to a DN, to a network feature, or to a local feature such as one-touch.

• **Unlit** indicates an unassigned button.

2. Press the button to which you want to assign a Call Appearance.

You can press any unlit or green multifunction button. If you press a red button, the display shows the message INVALID SELECTION, and the set waits for you to press a valid button.

• If you press a green button, the display shows the current number assigned to that multifunction button. You can either enter a new number to replace the current number or cancel the current number.

• If you press an unlit button, the screen looks like this:

```
CA=                (XX)
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
```
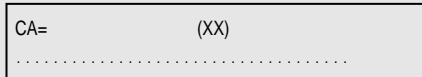
XX is the number of the multifunction button you pressed. If you pressed a green-lit button, the current feature number appears after CA=. The new number you enter replaces this number.

3. You now have two choices:

• To add or change the CA number, enter the new number and press ENTER.

or

• To cancel the CA number, press CLEAR (softkey 3) and then ENTER.

The final screen looks like this:

```
CA=XX              (XX)
 COMPLETED
```
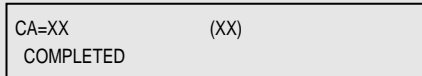
If you canceled the CA number, no numbers appear after CA= and the button indicator goes dark.
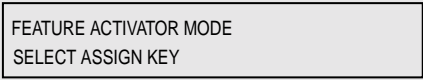
4. With your Call Appearance assignment complete, you have these choices:

5

- To assign another CA, press the desired button and repeat steps 2 and 3.

- To return to normal operation, press OPTIONS.

- To make additional button assignments, press asterisk (*). This returns you to the menu mode main menu.

This completes programming of CAs. If you have programmed your SPID, correctly completed this procedure and your ISDN line is properly plugged in you should now be ready to place and receive voice calls. If you encounter problems, review these items for accuracy.

Selection 2: Feature Activator

1. **2** **ENTER**

> FEATURE ACTIVATOR MODE
> SELECT ASSIGN KEY

The set's indicators show button status as follows:

- **Green** indicates a button already assigned to a network feature.

- **Red** indicates a button already assigned to a DN, CA or to Intercom or Intercom Group, or to a local feature such as one-touch.

- **Unlit** indicates an unassigned button.

2. Press the button to which you want to assign the network feature.

You can press any unlit or green multifunction button. If you press a red button, the display shows the message INVALID SELECTION, and the set waits for you to press a valid button.

- If you press a green button, the display shows the current feature number assigned to that multifunction button. You can either enter a new feature number to replace the current number or cancel the current number.

- If you select an unlit button, the screen looks like this:

```
FEATURE ACTIVATOR MODE
FA=              (XX)
```

XX is the number of the multifunction button you pressed. If you pressed a green-lit button, the current feature number appears after FA=. The new number you enter replaces this number.

3. You now have two choices:

- To add or change the feature assignment, enter the feature number you received from the telephone company and then press ENTER.

- To cancel the feature assignment, press CLEAR (softkey 3) and then press ENTER.

The final screen looks like this:

```
FA=XX                  (XX)
 COMPLETED
```

If you canceled the current assignment, no numbers appear after FA= and the button indicator goes dark.

4. With your Feature Activator assignment complete, you have these choices:

- To assign another FA, press the desired button and repeat steps 2 and 3.

- To return to normal operation, press OPTIONS.

- To make additional button assignments, press asterisk (*). This returns you to the menu mode main menu.

5

This completes programming of FAs. If you encounter problems accessing features, review these items for accuracy and check with your service provider.

Caution: If you manually reassign the CONF button, conference may not work in all cases. If you wish to reassign this button, talk to your System Administrator or service provider.

Selection 3: Directory Number

Your NISDN terminal's first button is set at the factory as CA=1. If you subscribe to EKTS or Basic ISDN on a DMS NI1, it is necessary to first clear the CA setting. Then you can enter DNs.

1. **3** **ENTER**

> CALL APPEARANCE MODE
>   SELECT ASSIGN KEY

The first button lower left, lights green. This is the factory default CA=1.

2. Press multifunction button 1.

3. **CLEAR** **ENTER**

> CA=
>   COMPLETED

Now that you have cleared CA=1 from your first call button, you are ready to program Directory Numbers. If COMPLETED still appears on the display, press keypad *, 9, ENTER (softkey 1), 3, ENTER.

This screen appears:

> DIRECTORY NUMBER MODE
> SELECT ASSIGN KEY

The sets indicators show button status as follows:

- **Green** indicates a button already assigned to a Directory Number.

- **Red** indicates a button already assigned to a network feature or to a local feature such as one-touch.

- **Unlit** indicates an unassigned button.

4. Press the button to which you want to assign the Directory Number.

You can press any unlit or green multifunction button. If you press a red button, the display shows the message INVALID SELECTION and the set waits for you to press a valid button.

- If you press a green button, the display shows the current Directory Number assigned to that multifunction button. You can either enter a new Directory Number to replace the current number or cancel the current number.

- If you press an unlit button, the screen looks like this:

```
DIRECTORY NUMBER MODE
DN=                    (XX)
```
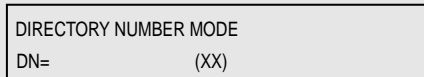
XX is the number of the multifunction button you pressed. If you pressed a green-lit button, the current Directory Number appears after DN=. The new number you enter replaces this number.

5. You now have two choices:

- To add or change the DN assignment, enter the Directory Number and then press ENTER.

- To cancel a DN assignment, press CLEAR (softkey 3) and then press ENTER.

The final screen looks like this:

```
DN=XXXXXXX          (XX)
  COMPLETED
```

If you canceled the current assignment, no numbers appear after DN= and the button indicator goes dark.

Note: If you are assigning multifunction button 1, you must enter the set's primary Directory Number.

6. With your Directory Number assignment complete, you have these choices:

• To assign another DN button, press the desired button and repeat steps 4 and 5.

• To return to normal operation, press OPTIONS.

• To make additional button assignments, press any red-lit button and then press asterisk (*). This returns you to the menu mode main menu.

This completes the programming of Directory Numbers. If you have programmed your SPID correctly, completed this procedure, and your ISDN line is properly plugged in, you should now be ready to place and receive voice calls. If you encounter problems, review these procedures for accuracy.

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Selection 4: Intercom/Group Intercom

| **4** | **ENTER** |

```
ICM/GIC MODE
SELECT ASSIGN KEY
```

From this point, you may assign Intercom and Group Intercom keys using the same process used for Call Appearances.

Selection 5:
Conference

It is necessary to assign the CONF feature to a key using the following process.

> **Note:** This step is not necessary if CONF is assigned to Button 18, using Feature Activator 18 or 60.

1. Assign CONF as you would any feature activator.

2. In the KEY ATTR MODE, press 5, CONF, then press ENTER:

```
CONF APPEARANCE
   SELECT ASSIGN KEY
```

3. Press selected CONF button. This screen appears:

```
CONFKEY = (XX)              FA = (XX)
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
```

4. Press ENTER. The selected button's LED turns green.

```
CONFKEY = 16               FA = 18 or 61
   COMPLETED
```

Selection 6:
Transfer Key

> **Note:** This step is not necessary if TRAN is assigned to Button 20, using Feature Activator 20 or 61.

1. To manually assign the TRAN key for your terminal, press 6, ENTER to view the following display:

```
TRANSFER REGISTRATION
  SELECT ASSIGN KEY
```

2. Press TRAN (Multi-assign key #20), the following display is shown:

```
TRANSFER REGISTRATION
TRANS KEY = (20)        FA=20 or 61
```

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3. **ENTER**

```
TRANS KEY = (20)          FA=20 or 61
   COMPLETED
```

Note: If the user selects a key that cannot be used for TRAN, the following display is shown:

```
SELECT ASSIGN KEY
INVALID SELECTION
```

Note: The terminal supports certain new capabilities of National ISDN 97/98. If you wish to assign the following features, the necessary steps are shown below. The terminal will operate using default values, if you do not make assignments.

Selection 7: Originating DN

The terminal supports new ISDN features that allow you to designate a line for originating calls. This feature works with a complementary switch feature that you can order from your telephone company. It is called Call Appearance Reservation.

For these features to work properly, both the terminal and the switch must be properly configured.

The categories, described as "call appearance reservation status" that you may select are listed below.

Originating only: allows certain Directory numbers or call appearances of Directory Numbers to be used for outgoing calls only.

Terminating only: allows certain Directory numbers or call appearances of Directory Numbers to be used for incoming calls only.

Originating only/Priority Incoming only: allows certain Directory numbers or call appearances of Directory Numbers to be used for outgoing calls and for incoming priority calls only.

Non-reserved: may be assigned to lines that have no reservation status.

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The first step is to designate the CA or Directory Number that you will typically use for outgoing calls. This is called the Originating DN. If you do not subscribe to Call Appearance Reservation, you do not need to follow the steps in Selection 7 or Selection 8.

1. To manually assign the Originating Directory Number key for your terminal, press 7, ENTER to view the following display:

   ```
   ORIGINATING DN MODE
     SELECT ASSIGN KEY
   ```

2. Press the selected Multi-assign key.

   ```
   ORIGINATING DN MODE
   ORIGINATING DN = ON          (1)
   ```

3. Press ENTER. The following display is shown. You have the option to turn the selected key ON or OFF.

   ```
   1:ON            2:OFF
                   SELECT ITEM (1-2)
   ```

4. Press 1 or 2 to change the current status, or press ENTER to accept the current status.

   ```
   ORIGINATING DN = ON          (1)
     COMPLETED
   ```

Note: If an invalid key is selected for the originating Directory Number, the following display is shown.

   ```
   ORIGINATING DN REGISTRATION    (XX)
   INVALID SELECTION
   ```

5

Selection 8: Call Appearance Reservation

If you have subscribed to Call Appearance reservation as a feature on your ISDN line, this will be assigned in the automatic switch download. An assignment in the telephone, without subscribing to the switch feature, is not possible. To confirm that Call Appearance reservation has been included in subscribed features, follow the procedure below.

1. To verify the Call Appearance Reservation key press 8, then ENTER to view the following display:

   ```
   CA RESV MODE
     SELECT ASSIGN KEY
   ```

2. Press the selected Multi-assign key.

   ```
   CA RESV MODE
   CA RESV = ORG          (1)
   ```

3. Press ENTER. The following display is shown. You have the option to verify the CA Reservation mode.

TRM =   Terminating Only
ORG =   Originating Only
ORGIP = Originating and
           Priority Incoming Only
OFF =   Non reserved

```
1:TRM      2:ORG
3:ORGIP    (SELECT 1-4)
```

Press NEXT to see the following display.

```
4:OFF
       (SELECT 1-4)
```

NI ONLY

Note: The terminal supports certain new capabilities of National ISDN 97/98. If you wish to assign the following features, the necessary steps are shown below. The terminal will operate using default value, if you do not make assignments.

**Selection 9:
Designated Call
Appearance**

In Selection 5 and Selection 6, you assigned CONF and TRAN. The terminal automatically selects the call button you want to use for the third connection of a conference or transfer. This button is called the Designated Call Appearance (DCA).

If you do not assign a DCA, the terminal will automatically select a default call button.

1. To manually assign the Designated Call Appearance key for your terminal, press 9, ENTER to view the following display:

   ```
   DESIGNATED CA MODE
     SELECT ASSIGN KEY
   ```

2. Press the selected Multi-assign key.

   ```
   DESIGNATED CA REGISTRATION
   DSGN CA = ON              (1)
   ```

3. Press ENTER. The following display is shown. You have the option to turn the selected key ON or OFF.

   ```
   1:ON          2:OFF
                 SELECT ITEM (1-2)
   ```

4. Press 1 or 2 to change the current status, or press ENTER to accept the current status.

   ```
   DSGN CA=ON                (1)
     COMPLETED
   ```

Note: If an invalid key is selected for the Designated Call Appearance, the following display is shown.

   ```
   DESIGNATED CA REGISTRATION     (XX)
   INVALID SELECTION
   ```

5

PROGRAMMING THE SET

Refer to Chapter 3 for procedures to:

- Enable headset use and turn off handsfree mode, if desired.

- Set operating parameters such as ringer volume and tone.

- Program the calendar/clock and other local features.

  Note: Refer to Chapter 6, Accessories, for instructions on labeling the set.

Feature Activator and Button Placement

Subscribed Feature	Assigned FA/FI	SRS-9924	SRS-9912
3 way conference	FA 18/FI 18	18	18
	FA 60/FI 60	18	18
Drop	FA 19/FI 19	19	19
	FA 62/FI 62	19	19
Transfer	FA 20/FI 20	20	20
	FA 61/FI 61	20	20
Message Waiting	FA 63/FI 63	LED	LED
Bridge Call Exclusion	FA XX/FI XX	XX	XX
	FA 59/FI 59	15	4
Privacy (Bridged Call Exclusion)	FA XX/FI XX	XX	XX
	FA 58/FI 58	16	5
Call Forwarding Variable	FA XX/FI XX	XX	XX
	FA 57/FI 57	17	6

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Note: On the DMS NI-1, feature activators 57, 58, 59, 60, 61 and 62 are not supported for an SPM download.

Feature activator 63 is supported for an SPM download.

For SPM, feature activators 18, 19 and 20 should be used.

Fujitsu Terminal Equipment Terminating Resistors (TR)

Fujitsu ISDN phones have a Terminating Resistor (TR) switch on the back of the set. The options are ON and OFF.

> **Note:** The default setting for the Fujitsu TR switch is the OFF position.

Fujitsu TR's are equivalent to 100 Ohms in the ON position. Refer to the following sections for TR setting recommendations.

NT1 Settings

Termination

Many NT1's have settings available to turn Termination ON or OFF. If the setting is ON they may also have settings to select either 50 or 100 Ohms.

Sometimes these settings are accomplished via switches, other times they are done with jumpers.

Follow the NT1 manufacturer instructions to set the Termination to ON or OFF as needed.

Timing

NT1's may also have a timing setting with the options FIXED or ADAPTIVE.

On some NT1's the options may be labeled PB or PTP. PB is equivalent to FIXED and PTP is equivalent to ADAPTIVE. Timing settings in the following discussions are based on NT1 manufacturer recommendations. Use these settings if your NT1 has a timing option.

Single Unit Installations

Distance between the NT1 and the terminal is up to 230 ft.

The TR switch on the Terminal Equipment should be OFF. The TR switches on the NT1 should be set at On at 50 Ohms. NT1 timing should be set to ADAPTIVE (or PTP).

NT1 (TR = 50 Ohms)

Terminal Equipment (TR = OFF)

NI / 5E **Custom** Terminal Installation

Single Unit Installations

Distance between the NT1 and the terminal is greater than 230 ft. and less than 500 ft.

The TR switch on the Terminal Equipment should be ON. The TR switches on the NT1 should be set at On at 100 Ohms. NT1 timing should be set to ADAPTIVE (or PTP).
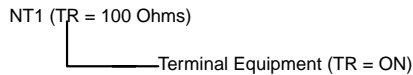
NT1 (TR = 100 Ohms)
Terminal Equipment (TR = ON)

Two Unit Installations

Bridging at the NT1 - Maximum Distance Between NT1 and Units is 230 ft.

The TR switch on both Terminal Equipment Units should be OFF. The TR switches on the NT1 should be set to ON at 50 Ohms. NT1 timing switches should be set to ADAPTIVE (or PTP).

NT1 (TR = 50 Ohms)
Terminal Equipment (TR = OFF)
Terminal Equipment (TR = OFF)

Two Unit Installations

Bridging at the NT1 - Distance Between NT1 and Units is Greater Than 230 ft. and Less Than 400 ft.

The TR switches on both Terminal Equipment Units should be ON. The TR switched on the NT1 should be set to OFF. NT1 timing switches should be set to ADAPTIVE (or PTP).

NT1 (TR = OFF)
Terminal Equipment (TR = ON)
Terminal Equipment (TR = ON)

Multiple Unit Installations

Bridging at the NT1

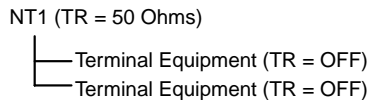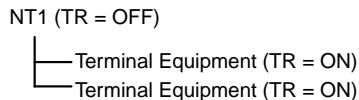The TR switch on the Terminal Equipment farthest from the NT1 should be ON. The TR switches on all other Terminal Equipment should be OFF. The TR switches on the NT1 should be set to ON at 100 Ohms. NT1 timing switches should be set to ADAPTIVE (or PTP).

NT1 (TR = ON 100 Ohms)
Terminal Equipment (TR = OFF)
Terminal Equipment (TR = OFF)
Terminal Equipment (TR = ON)
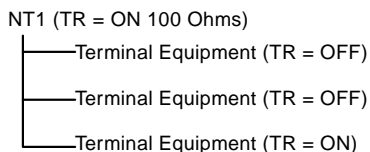
Labeling the Set

To label the buttons on the set, you must first remove the plastic cover over the front panel. Insert a pointed object into the semi-circular notch at the bottom middle of the plastic cover and lift the cover upward. (Shown in Figure 6-1.)

Below the cover is a template. Write button labels on this template to show the directory numbers or features assigned to each button. Then lay the template back on the front panel. Reinsert the plastic cover.

Note: A template printing accessory is available via the Fujitsu web site. It is described on the following page.

**Figure 6-1:
Digital Set
Cover Removal**
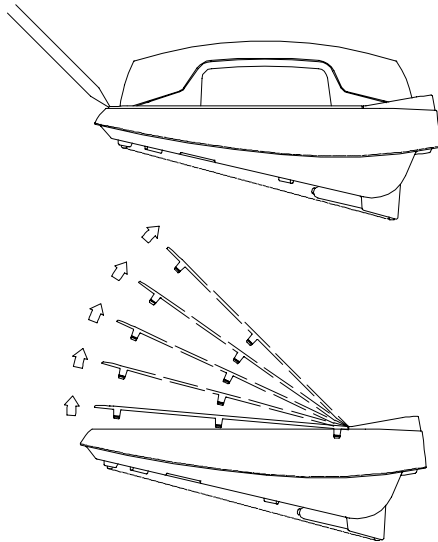
Fujitsu has developed an application file using Microsoft Excel for Windows and Macintosh to assist you in printing the templates. These files are available for no charge via our World Wide Web site at http://www.fnc.fujitsu.com.

The template that is shipped on the set is not designed for use with the printing program. For use with the printing application, Fujitsu has included one sheet of laser printer compatible paper templates in the box with Digital Set. Do not separate the templates until printing is complete.

As an alternative to printing, you may print, type, or write in the needed designation on the template. Additional templates may be purchased from your distributor or from Fujitsu.

Any loose materials must be removed before placing the template in the laser printer. Failure to remove loose materials may result in a paper jam in the printer. Templates are fed via the automatic or manual feed trays.

Please address questions about the program to FNC TAC, at 1-800-228-ISDN.

Handset

The handset modular plug is located beneath a cover. Insert a pointed object into the notch and pry the cover off to remove the plug. The opposite end of the handset cord plugs in beneath the terminal.

Figure 6-2: Handset Features
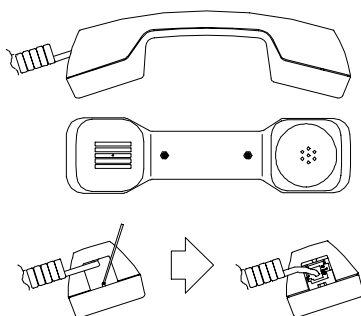
Wall Kit

The terminal is attached to the wall by:

1. Attaching the mounting kit to the wall as shown in the illustration. Three screws hold the terminal mount, and two screws hold the optional ABM mount.

2. Connecting the lower hook of the wall kit to the bottom of the terminal.

3. Connecting the upper hook of the wall kit into the slot on the bottom of the terminal.

**Figure 6-3:
Mounting Kit**

ABM Mounting kit

Mounting kit

Upper hook

Lower hook

6
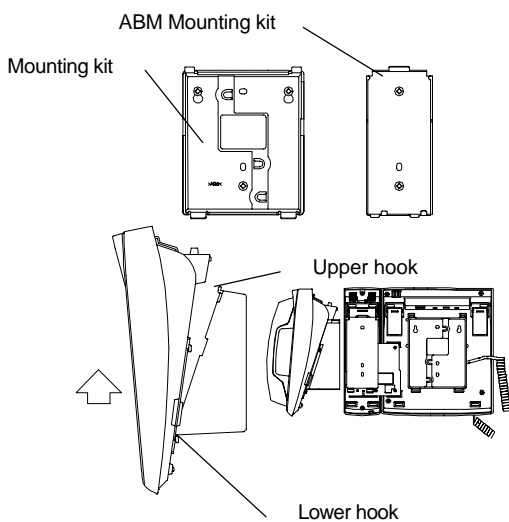
ROM Cartridge

The ROM cartridge is located on the bottom of the terminal.

To replace the cartridge:

1. Remove the screw holding the cartridge.
2. Pull the cartridge from the housing. Be sure to note the orientation of the cartridge.
3. Place a new cartridge in the receptacle, and replace the screw.

Figure 6-4:
ROM Cartridge

ROM Cartridge
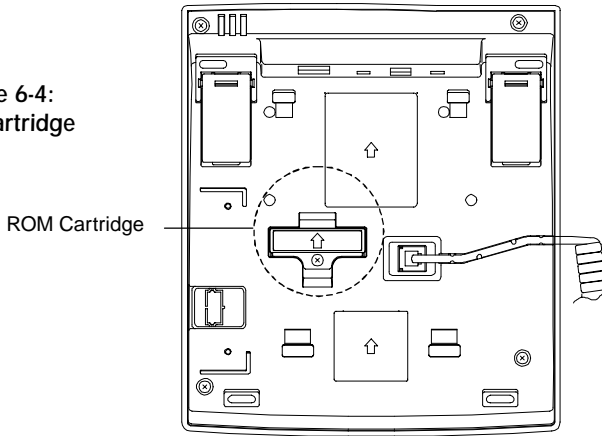
The terminal has a self-test mode that performs tests, which include the following:

- LED test
- Key test
- Tone test
- LCD test
- Memory tests
- NT1 line test

ENTERING TEST MODE

To enter test mode, follow these steps:

1. Unplug the ISDN line from the LINE jack or the power plug from the 48 V DC jack if you are using the DC power supply.

2. Press and hold down both 1 and 4 on the numeric keypad as you reapply power. Keep them down until the automatic LED test begins.

The LED test is described in the next section. While the test is running, this screen is displayed:

```
SELF TEST (LED)
...................................
```

When the LED test is complete, this screen appears:

```
SELF TEST (KEY TEST)
....................................
```

The set cannot originate or receive a call during the self-test.

You exit test mode by removing power and then reapplying it.

NI / 5E Custom Appendix - Terminal Testing

A

PERFORMING TESTS	The following sections summarize the self-tests that you can perform.	
LED Test	The LED test is done first automatically. It turns all LEDs red for the duration of the test. Observe the LEDs for malfunctions.	

When the LED test is complete, you can start any of these tests:

- Press 1 to start the Tone test.
- Press 3 to start the LCD tests.
- Press 4 to start the Memory/Line test.

These tests are described in the sections below. Tests 1, 2, 3, and 4 can be started and interrupted at will to change the test under way, but test 4 cannot be interrupted by pressing any key.

Key Test — Pressing any button other than 1 through 4, and 6 through 9, which are reserved for test selection, sounds its associated confirmation tone, turns its LED red (if it has one), and displays the following information on the LCD:

For the keys:	This information is displayed:	With the range and meaning shown here:
Soft keys	SOFTWARE Key X	X = 1:SOFT1 2:SOFT2 3:SOFT3 4:SOFT4
Menu Key	Menu	Menu Key MSG LED turns red
Multifunction buttons	MULTI ASSIGN KEY nn	**NI** Key Number (nn:) 1-6: SRS-9912 1-17: SRS-9924 21-50: SRS-9924-ABM 51: Mic-Off Display **5E Custom** Key Number (nn:) 1-6: SRS-9912 1-17: SRS-9924 18-47: SRS-9924-ABM 48: Mic-Off Display

For the keys:	This information is displayed:	With the range and meaning shown here:
Fixed function buttons	FUNCTION KEY 1	Multi Assign Key (DROP)
	FUNCTION KEY 2	Multi Assign Key (TRANSFER)
	FUNCTION KEY 3	HOLD
	FUNCTION KEY 4	Multi Assign Key (CONF)
	FUNCTION KEY 5	REDIAL
	FUNCTION KEY 6	SPEAKER

(DTMF keys 1, 2, 3, and 4 are reserved for test selection and not displayed on the LCD.)

Tone Test

When you press 7 on the DTMF keypad, the speaker sounds a Ringer Tone. Each time you press the # key, the tone changes. If you pick up the handset, the ringing stops and a Busy tone is sent to the handset.

The LCD shows the following display:

```
SELF TEST (RINGER TONE)
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
```
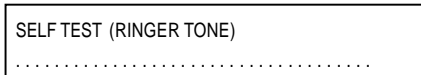
LCD Test

When you press the 2 on the DTMF keypad, the LCD displays a pattern of dark characters. Missing dots, if any, will be evident.
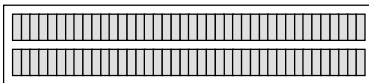
When you press the 3 on the DTMF keypad, the LCD displays the first set of display characters supported by the set. Press 3 again to display the rest of the supported display characters.

To exit from either test, press any multifunction key, softkey, or DTMF key.

A

Memory Tests

Pressing 4 on the numeric keypad starts an automatic sequence of tests, performing memory and line tests in order.

The first of these tests writes to and reads from all RAM locations. If any error is detected, the test sequence stops at that point and reports by displaying an error code on the display; for example,

```
SELF TEST (MEMORY/LINE TEST)
ERROR CODE (06)
```

(06) is only one example. Other codes may appear in its place if different errors are discovered.

Exiting Test Mode

Any error code display reflects an error condition to be handled by your System Administrator.

No other test requests are allowed during this test. If any error is detected, the test sequence stops at that point and reports by displaying an error code.

If all tests terminate successfully, the following display shows on the LCD:

```
SELF TEST (MEMORY/LINE)
  VOICE ALL GOOD
```

To exit test mode, remove power and reapply it.

Table B-1 Self-Test Result Codes

Display Message	Test Result	Action
VOICE ALL GOOD	Normal	
ERROR CODE (06)	Line, NT , or terminal is not operational	1) Check ISDN line connection. 2) Call Fujitsu Technical Assistance
All Other Codes	Terminal is not operational	Call Fujitsu Technical Assistance

ERROR MESSAGES

Various messages are displayed to describe connection or command status. Tables B-1 (circuit-switched) and B-2 (packet-switched) show connection status messages.

Table B-1
Connection Status Messages   **BCS (Circuit-Switched)**

Cause #	Message Displayed	Description
001	INVALID NUMBER	Unassigned number
002	NO ROUTE	No route to specific network
003	NO ROUTE	No route to destination
006	CHANNEL UNACCEPTABLE	Not acceptable for use by switch
07	....	Call awarded and being delivered in an established protocol
016	....	Normal; clearing
017	BUSY	Called user busy
018	NOT ANSWERED	Called user not responding
019	NOT ACCEPTED	User alerted; no answer
021	CALL REJECTED	Call rejected
022	NUMBER CHANGED	Number called has been changed
026	NOT SELECTED	Non-selected user clearing
027	OUT OF ORDER	Destination out of order
028	INVALID NUMBER	Format invalid or number incomplete
029	FACILITY REJECTED	Requested facility rejected
030	....	Response to station inquiry
031	....	Normal; unspecified
034	B-CHANNEL BUSY	No B-channel available
035	....	Call queued

NI / 5E Custom Appendix - Error Messages

B

Table B-1 Connection Status Messages (continued)

Cause #	Message Displayed	Description
038	OUT OF ORDER	Network Out of Order
041	....	Temporary failure
042	NETWORK BUSY	Network congested
043	ACCESS INFORMATION .... DISCARDED	User information discarded
044	REQUESTED CHANNEL .... NOT AVAILABLE	Exclusive channel cannot be used
047	RESOURCE UNAVAILABLE, ... UNSPECIFIED	Downloading facility not available
050	FACILITY N/A	Requested facility not subscribed
051	SERVICE NG	Service request incompatible
052	....	Outgoing calls barred
053	SERVICE NG	Service operation violated
054	CALLED BARRED	Incoming calls barred
057	BEARER TYPE NOT AUTHORIZED	
058	BEARER TYPE NOT .... PRESENTLY AVAILABLE	Bearer capability not presently available; try again
063	....	Service or option not available
065	BEARER TYPE NG	Bearer service not implemented
066	....	Channel type not implemented
069	REQUESTED FACILITY .... NOT IMPLEMENTED	Network cannot support requested facility
079	....	Service or option not implemented, unspecified

Cause #	Message Displayed	Description
081	INVALID CALL REFERENCE VALUE	Call reference not currently in use
082		Identified channel does not exist
085	INVALID NUMBER	Invalid digit value for number
088	INCOMPATIBLE	Incompatible destination
091		Transit network does not exist
096	MANDATORY INFORMATION ELEMENT IS MISSING	
097	MESSAGE TYPE NON-EXISTENT OR NOT IMPLEMENTED	Message not recognized by switch
099	INFORMATION ELEMENT NON-EXISTENT OR NOT IMPLEMENTED	Message not recognized by switch
100	INVALID INFORMATION ELEMENT CONTENTS	Coding structure not implemented
101	MESSAGE NOT COMPATIBLE WITH CALL STATE	
102	RECOVERY ON TIMER EXPIRY	Procedure underway due to timer expiration
111		Protocol error, unspecified
127	INTERWORKING, UNSPECIFIED	Message meaning unknown to switch

NI / 5E Custom Appendix - Error Messages

B

Table B-2 National Standardized Cause Values

Cause #	Message Displayed	Description
004	VACANT CODE	Unused area or central office code
008	PREFIX 0 DIALED IN ERROR	
009	PREFIX 1 DIALED IN ERROR	
010	PREFIX 1 NOT DIALED	
011	EXCESSIVE DIGITS RECEIVED, ... CALL IS PROCEEDING	Switch has truncated excessive digits and call is proceeding
26	MISROUTED CALL TO A PORTED NUMBER	
051	CALL TYPE INCOMPATIBLE WITH SERVICE REQUEST	
053	SERVICE OPERATION VIOLATED	
101	PROTOCOL ERROR, ... THRESHOLD EXCEEDED	Call cleared due to excessive protocol errors

Table B-3 Network Specific Cause Values

Cause #	Message Displayed	Description
008	CALL IS PROCEEDING	Call cannot be cleared due to other users
013	SERVICE DENIED	
028	SPECIAL INTERCEPT ANNOUNCEMENT	
029	SPECIAL INTERCEPT .... ANNOUNCEMENT: UNDEFINED CODE	Announcement that access code is not defined
030	SPECIAL INTERCEPT .... ANNOUNCEMENT: NUMBER UNASSIGNED	Announcement that number is unassigned
031	SPECIAL INTERCEPT .... ANNOUNCEMENT: CALL BLOCKED DUE TO GROUP RESTRICTION	Announcement that call is blocked due to group restriction
090	SEGMENTATION ERROR	Parameter downloading message error
091	REASSEMBLY ERROR..................	Parameter downloading error
101	PROTOCOL ERROR, ... THRESHOLD EXCEEDED	Call cleared due to excessive protocol errors

NI / 5E Custom Appendix - Error Messages

B

Table B-4 Uniform Cause Values

Cause #	Message Displayed
003	NO ROUTE TO DESTINATION
016	NORMAL CLEARING
017	USER BUSY
018	NO USER RESPONDING
019	USER ALERTING, NO ANSWER
021	CALL REJECTED
022	NUMBER CHANGED
027	DESTINATION OUT OF ORDER
034	CIRCUIT/CHANNEL CONGESTION
057	BEARER CAPABILITY NOT AUTHORIZED
065	BEARER CAPABILITY NOT IMPLEMENTED

**About Ordering
ISDN Service**

Fujitsu supports the participates in the North American ISDN Users Forum (NIUF) ISDN Ordering Codes (IOCs). These IOCs inform the telephone company about number of telephone numbers or call appearances, the ISDN features and the voice capabilities in the package. Essentially, it is a recipe for the telephone company to follow when installing your ISDN service.

The solution packages outlined here were designed to meet the needs of many users. One or more of them may meet your needs. On the other hand, your needs may be unique and require a fully customized design of your ISDN service. The IOCs are not often used for Centrex Services.

To achieve the goal of easy ordering, Fujitsu has developed compatibility with generic ISDN Ordering Code Feature Activators. This means that the terminal can accept both Fujitsu specific feature activators and a selected set of generic feature activators.

Fujitsu sets support the E-Z ISDN Ordering Codes, (described at the end of this appendix).

Using IOCs

The first step in using IOCs is to become familiar with your equipment. You should decide what features and capabilities are needed for your telephone system. On the following pages, a number of commonly used features are described, along with a number of generic ordering codes. Please select and order your ISDN service using these codes. Remember that each telephone company has an individual billing structure for ISDN lines and features.

You will find definitions of the terms used in each configuration listed below. Following the definitions, you will see a terminal template for each solution package. The template shows the features and call buttons that will appear on your set if you select that solution package.

Depending on your needs, one or more of these packages may be suitable. If you do not find a solution set that meets your needs exactly, please select the one that meets most of your needs and discuss the other options you need with your telephone company representative when you order service.

Be sure to reference the correct ISDN Ordering Code in your discussion with the telephone company.

If you have any questions about the Fujitsu ISDN Ordering Codes, please call your equipment supplier. Assistance is also available at the Fujitsu Technical Support number, 1 800 228-ISDN.

Definitions

DN   Directory number or telephone number

CA   Call appearance of a telephone number

Call button
> A button available for a voice call

CFD/CFB
> Call forwards incoming calls to a preassigned destination number when you "don't answer" or when your line is "busy;" set up at service subscription

CFV   Call forwards incoming calls to a number you select; activated by user when needed

MSG
> Message Waiting in your telephone company provided voice mail

Conference
> Allows you to make a three way call

Drop
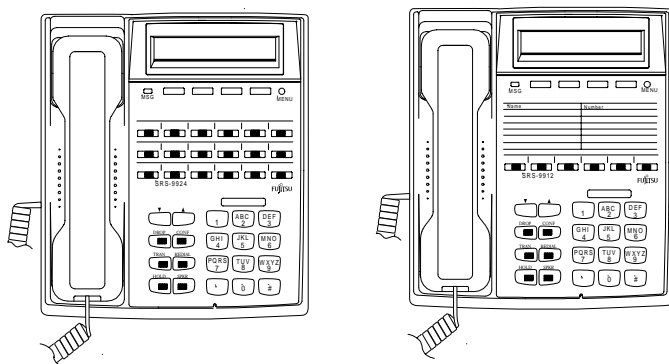> Allows you to drop the last party added to a three way call

Transfer
> Allows you to transfer a call to another telephone number

Hold
> Allows you to put an active call on "hold"

CNI   Provides the incoming calling line number if available

C

E-Z ISDN

The Fujitsu terminals support the E-Z ISDN Ordering Codes. The E-Z Codes may be ordered from a number of the service providers. Two of the E-Z Code configurations are shown below.

Package EZ 1

- Non-EKTS
- Primary Directory Number
- Additional Call Offering
- HOLD
- CONFERENCE (Button/FA = 60)
- DROP (Button/FA 62)
- TRANSFER (Button/FA = 61)
- CALL FORWARDING VARIABLE (FA = 57)

Package EZ 1A

- Circuit Switched voice on one B-channel
- Non-EKTS
- Primary Directory Number
- Additional Call Offering for CSV (CRBL = 3)
- HOLD
- CONFERENCE (Button/FA = 60)
- DROP (Button/FA 62)
- TRANSFER (Button/FA = 61)
- CALL FORWARDING VARIABLE (FA = 57)
- CALL FORWARDING BUSY/DON'T ANSWER
- VISUAL MESSAGE WAITING INDICATOR (FA/FI = 63)

Note: When downloading features, CALL FWD VAR will be automatically assigned to button 6 on the SRS-9912, and button 12 on the SRS-9924.

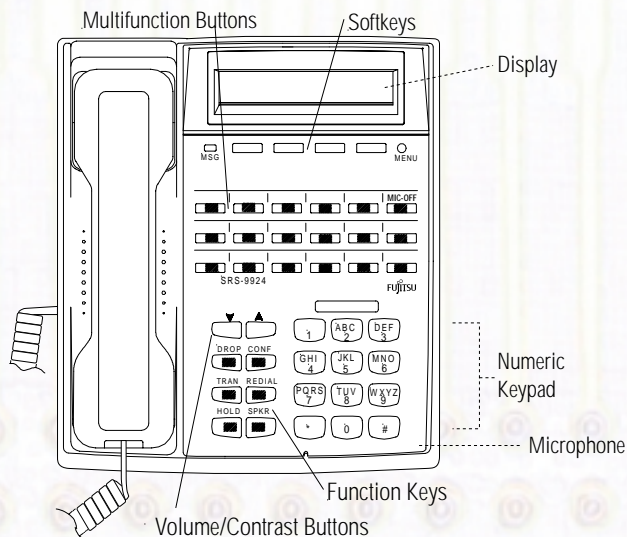# ISDN CALL IDENTIFICATION (ICI) DISPLAYS FOR 5E CUSTOM

ACB(*) .... Automatic callback

Brg(*) .... Call barged in on

CFA(*) .... Call forwarding all calls

CFB(*) .... Call forwarded because busy

CFN(*) .... Call forwarded because no answer

DCDL(*) .... Direct connect line

Emr(*) .... Emergency call

Err(*) .... Error

FXn(*) .... Foreign exchange trunk, where n = 1 to 8

Hld(*) .... Call on hold

Icm(*) .... Intercom call

InI(*) .... Incoming call internal

InX(*) .... Incoming call external

LNn(*) .... Listed directory number, where n = 1 to 8

OnL(*) .... On another line call; unanswered call forwarded because called party was on another CA

OuI(*) .... Outgoing call internal

OuX(*) ...... Outgoing call external

Pck(*) .... Call picked up

PNw(*) ...... Private network

Pri(*) .... Priority call

RbQ(*) .... Ringback queuing call

Spl(*) .... Split

Tin(*) .... Tie trunk n, where n = 1 to 8

WTn(*) ...... WATS band n, where n = 1 to 5

(*) An asterisk in the display means this call's Directory Number appearance is shared with another ISDN station, at which this Directory Number is primary. The primary user of this Directory Number may be busy on another call that you do not see on this station.

Appendix - **5E Custom** Terminal ICI Displays

NOTES

ISDN
SRS-9912 and SRS-9924
QUICK REFERENCE CARD

Multifunction Buttons — Softkeys

Display

MSG — MENU

MIC-OFF

SRS-9924 — FUJITSU

DROP CONF

TRAN REDIAL

HOLD SPKR

Numeric Keypad

Microphone

Function Keys

Volume/Contrast Buttons

Function Buttons

Volume/Contrast Buttons - - - - - - - -

(Fujitsu recommended FA/FI assignments) - - - - -

DROP   CONF

TRAN   REDIAL

HOLD   SPKR

Permanent - - - - - - - - - - - -
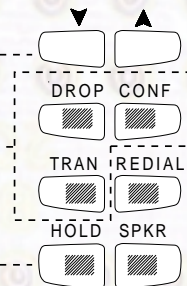
Message Waiting LED - FA/FI 63

Call Forwarding Variable
SRS 9912 - FA/FI 57 on Key 6
SRS 9924 - FA/FI 57 on Key 17

Fujitsu Network Communications, Inc.
1000 St. Albans Drive
Raleigh, NC 27609
1.800.228.4736

P-QR 99-A

FUJITSU

This card is intended as a quick reference. For additional information, see the **User's Guide.**

ISDN
SRS-9912 and SRS-9924
QUICK REFERENCE CARD

To Make a Call

1. Press idle CA (Call Appearance) and pick up the handset. (For handsfree mode, press SPEAKER.)
2. Dial the number.

To Place One-Touch Calls

Press a one-touch button. (If no idle CA LED lights, press any idle CA.)

To Answer a Call

1. Press the green-flashing CA.
2. Pick up the handset. (For handsfree mode, press SPEAKER.)

To Put a Call on HOLD

1. Press HOLD.
2. To get a dial tone, press an idle CA; to connect with another call press a lit or blinking CA.
3. To reconnect with call on hold, press its CA.

To Set Up a CONFERENCE Call

1. While on an active call, press CONFERENCE.
2. Another CA/DN will be selected automatically and you will hear the dial tone.
3. Dial the third party.
   OR
4. Press any CA/DN that is ringing or on HOLD.
5. Press CONFERENCE.

Repeat steps 1-3 to add more calls. To disconnect last call added, press DROP. Other participants can drop out by hanging up. At some installations if you drop out, the entire conference is disconnected. Ask your Systems Administrator.

To Use Call Pickup

1. Get a dial tone.
2. Press CALL PICKUP feature button.

To Review Unanswered Call List (UNA)

1. When a ●UNA appears on the displays, press UNA (softkey 1). Information from the oldest unanswered call appears.
2. Press UNA again. Information from the next-to-oldest unanswered call appears. After displaying most recent call, display returns to the oldest call.
3. To delete displayed call information, press # on the keypad, then CLEAR (softkey 3).

To Use Personal Directory

1. Press L-DIR.
2. Scroll to the name and number you want to call, using the * key to scroll up and the # to scroll down. The > should be next to the Name you want to call. **You may also dial the two-digit code (e.g. 02) associated with the name or number.**
3. Lift the handset or press the speaker button.

To Switch To/From Handsfree

To switch to handsfree, press SPEAKER and replace handset in cradle. (If multifunction button 30 is active as MIC-OFF, its LED must be dark to talk; if its LED is lit, press MIC-OFF.)

To switch to handset, pick up handset.

To Change Call Volume

With a CA active (LED on), press ▲ repeatedly to increase volume, press ▼ repeatedly to decrease volume. Volume is held until reset.

To Adjust Display (When No Call is Active)

Press ▲ repeatedly to increase contrast.
Press ▼ repeatedly to decrease contrast.

To Use MIC-OFF (9924 only)

To mute handset or the handsfree microphone, press MIC-OFF (LED lights). Press again to turn microphone on (LED goes dark).

To Program a One-Touch Button

1. Press OPTIONS (softkey 4), 1 on the keypad, then ENTER (softkey 1).
2. Press the button you want to make a one-touch. (Do not reuse CA FA keys. Or press an existing one-touch button to change its recorded number.)
3. Dial the numbers you want that button to send.*
4. Press ENTER. (COMPLETED appears on display.)
5. To exit, press OPTIONS.

*Use the HOLD button to insert pauses.

NI

CUSTOM COMMANDS FOR NI SYSTEM ONLY

To TRANSFER a Call

If your phone lacks a TRANSFER button, ask your Systems Administrator how to transfer a call.

Lucent:

1. Press TRANSFER.
2. Another CA/DN will be selected automatically and you will hear the dial tone.
3. Dial third party.
4. Press TRANSFER and hang up.

Nortel:

1. Press CONFERENCE (NI 1) or TRANSFER (NI 2).
2. Another CA/DN will be selected automatically and you will hear the dial tone.
3. Dial the third party.
4. Once connected, talk privately.
5. To complete the transfer, press TRANSFER and hang up.

Siemens:

1. Press CONFERENCE.
2. Another CA/DN will be selected automatically and you will hear dial tone.
3. Dial the third party.
4. Once connected, talk privately.
5. To complete the transfer, press TRANSFER and hang up.

5ESS

CUSTOM COMMANDS FOR 5ESS SYSTEM ONLY

To TRANSFER a Call

1. Press TRANSFER. (If no dial tone, press any idle CA.)
2. Dial third party, or press any CA that is ringing or on hold.
3. One connected, talk privately.
4. Press TRANSFER and hang up.

To DROP a Call

To disconnect the last party called, press DROP. For a 2-party call, pressing DROP hangs up the call and provides new dial tone on the same CA.

To Forward Calls

(Call Forward Variable, Busy Line Forwarding, or Don't Answer Call Forwarding)

1. Press the feature button or dial the access code for the forwarding option that you want.
2. To cancel, press that feature button or dial the cancellation code.

To Use INSPECT

1. Press INSPECT feature button.
2. To view call information, press CA (idle CA displays NO CALL.)
3. To view function assigned to feature button, press the feature button.
4. To stop, press INSPECT again.