ISDN

Digital Set User's Guide

SRS-1050

AT&T 5ESS

Fujitsu

Delivering on the promise of ISDN

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ISDN

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Digital Set User's Guide

AT&T 5ESS

Fujitsu Network Communications, Inc.
4403 Bland Road, Somerset Park
Raleigh, NC 27609
U.S.A.

Part Number P-UG-1050V
Revision 1.5

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.

Cable Notice: The use of standard shielded cables to connect external data devices is required to ensure compliance with FCC Part 15 Rules for Class B devices.

FCC Notice

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, the FCC Registration Number and the following information must be provided to your telephone company.

If this telephone equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuous of service may be required. But, if advance notice is not 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 changes are made, you will be notified in advance to order to make necessary modifications to maintain uninterrupted service.

This equipment may not be used on coin service provided by the telephone company. Connection to party lines is subject to state tariffs.

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.
> 4403 Bland Road, Somerset Park
> Raleigh, NC 27609
> Phone: (919) 790-2211 or 800-228-4736

FCC Warning

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

Preface

This guide provides descriptions and procedures for using Fujitsu's Digital Set Feature Phone, called the SRS-1050, when it is attached to an AT&T 5ESS switch.

This guide is for anyone interested in using the SRS-1050 to gain the benefits of the combined voice and data network capabilities of ISDN technology.

Read the sections that follow for information on:

- Using this guide efficiently
- Special features of your ISDN telephone
- Background on ISDN technology

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.

Organization

This guide is organized in the following chapters:

Chapter 1	has illustrations to introduce the physical layout of the SRS-1050. It also describes the features and functions of its components.
Chapter 2	describes use of the basic voice services, such as placing and receiving calls and using the speaker/microphone (handsfree mode).
Chapter 3	explains how to set up SRS-1050 features such as one-touch buttons, unanswered call logging, and the calendar/clock.
Chapter 4	explains how to use the data terminal adapter to place or receive data calls.

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.

Menus or screen displays appear as text in boxes.

```
........................................................
..
12:55PM                        SAT          May 10
```
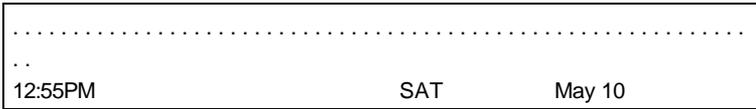
Helpful Tips About Your SRS-1050

Because ISDN technology is new, some features of your SRS-1050 may be unfamiliar. This section describes features you may find surprising.

Softkeys

The softkeys are the four keys located just below the display. When you press the KEY MENU button to their right, function labels appear on line 2 of the display.
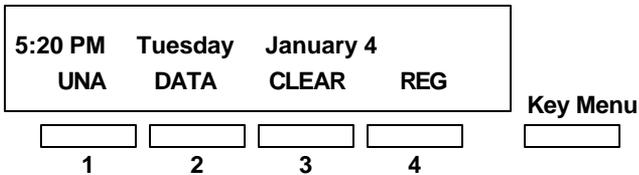
```
5:20 PM   Tuesday   January 4
   UNA      DATA     CLEAR     REG
                                        Key Menu
   ___      ___      ___       ___      ___
    1        2        3         4
```

Standard Softkey Layout

(The DATA softkey label appears only if you have the data model.)

> **Note:** Softkey 1 also serves as the ENTER key (for entering information as indicated in this User Guide).

Softkeys are a way of simplifying the phone and still supporting the richness of ISDN features. These keys assume different functions depending on the feature you are using, thus avoiding the need for a large number of permanent function keys.

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 fifteen 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 setting up a local feature in menu mode, you can always press REG, 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 and press an idle Call
Appearance button, or press the SPEAKER button for handsfree
mode, the phone initiates the call automatically.

ISDN CONCEPTS: INTEGRATED VOICE AND DATA

ISDN stands for Integrated Services Digital Network, which provides
many voice and communication features. (The SRS-1050 data
features, available with the data model, are described in Chapter 4,
"Data Operation".)

The basic ISDN service provides two 64,000 bits per second "B"
channels for voice or data communications. Each B-channel can
support circuit-switched or packet-switched data services. There is
also one "D" channel, at 16,000 bits per second, for network
signaling and packet-switched data service. 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:

- 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 to be displayed if it is
  available.

Data Features

The optional data features of the SRS-1050 include the following capabilities:

- Communication on the D channel using packet switching with an asynchronous RS-232 terminal at speeds up to 19,200 bits per second.

- Communication on the B-channel using circuit switching with an asynchronous RS-232C terminal at speeds up to 38,400 bits per second.

In order to do data communications, your phone needs to have a data terminal adapter installed. The supporting network data features must also be assigned to the line.

Multipoint configurations

In older phone installations, most phone connections are point-to-point. Each phone in a point-to-point configuration requires a separate line into your building. However, many service providers now offer multipoint configurations as a subscription option. ISDN supports both point-to-point and multipoint operation. In a multipoint configuration, up to eight devices (digital sets and/or terminal adapters) can be connected to a single line. For example, your company could connect two digital sets and two data terminal adapters to a single line. The two digital sets could each use one B-channel for voice communication, and the data terminal adapters could use the D-channel for packet-switched data calls.

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 SRS-1050 to work on a multipoint line, it must have a valid Service Profile Identifier (SPID). The SPID number is usually entered when the SRS-1050 is installed. So if your digital set already has a SPID number, you don't have to reenter it. If you do need to enter a SPID number, you can find out what it should be from your System Administrator or service provider. For the procedure to enter a service profile identifier, see Chapter 3.

CAUTION: Once the SPID number is entered, don't change it unless your System Administrator tells you to do so. Your SRS-1050 won't work without the correct SPID number. If the SPID number is wrong, the set displays the message SPID NG. (The message is redisplayed a second time if the data terminal adapter SPID is also invalid.) Enter the correct SPID number and you'll get the normal dial tone.

System Administrator

An important person for you to know is your System Administrator, who may be your phone company representative or a member of your telecommunications department.

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.

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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. Chapter 2 explains how to use the set for basic telephone functions.

Digital Set Components

Figures 1-1 and 1-2 show, respectively, the front panel and the rear of the digital set. The major components of the SRS-1050 are labeled and described in the accompanying text.
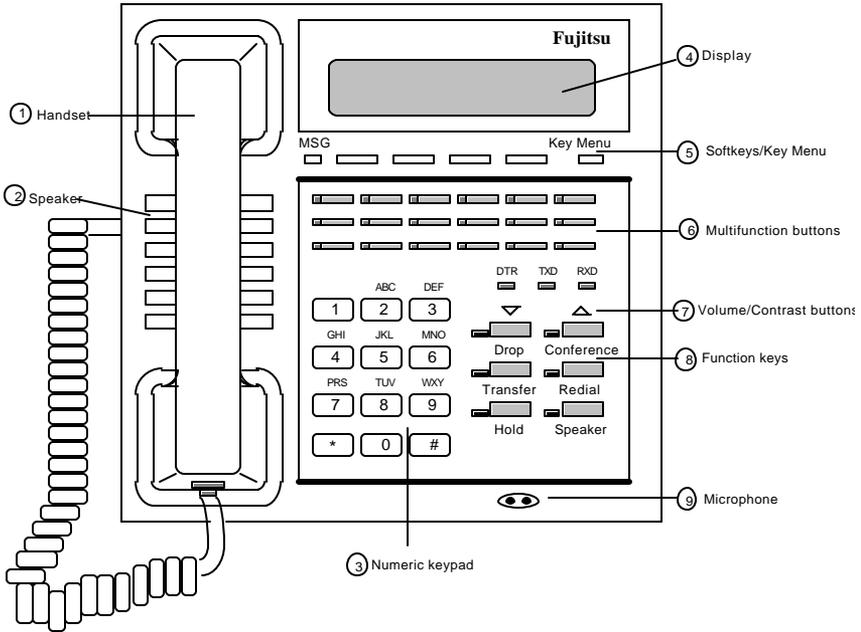
Figure 1-1: SRS-1050 Front Panel
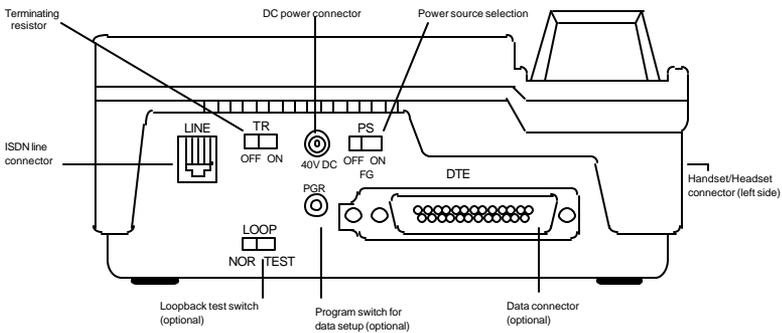
Figure 1-2: Digital Set Rear View

SRS-1050 Features

1) Handset/Headset. Use the familiar handset, the speaker and microphone, or a headset to make or answer calls.

2) 9) Speaker/Microphone. The speaker is located directly under the handset. In handsfree operation, it lets you hear the other parties in a telephone call. The microphone on the front edge of the front edge of the phone picks up your voice, unless switched off with the MIC-OFF key.

3) Numeric Keypad. You use these twelve keys to enter the number you are calling or the special characters *(asterisk) or #(pound sign).

4) Display. The display shows call information such as the telephone number of the other party, call duration, and time of day.

5) Softkeys/KEY MENU. Four buttons below the display with changeable functions. The KEY MENU key displays the current functions on line 2 of the display.

6) Multifunction buttons. These buttons are assigned to Call Appearances, one-touch numbers, or local features.

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

8) Function keys. Single-touch keys for ISDN features (see Function Keys).

Function Keys

SPEAKER	Enables/disables handsfree operation
HOLD	Holds an active call
REDIAL	Redials the last number you dialed
CONFERENCE	Adds parties to an existing call
DROP	Disconnects last party added to a conference call or disconnects a two-party call
TRANSFER	Transfers a call to a third party you dial or select

The multifunction button at the upper right usually serves as a MIC-OFF key, which turns the microphone on or off in handsfree or handset mode.

LED Indicators

Data Communications

   DTR   Data Terminal Ready

   TXD   Transmit Data

   RXD   Receive Data

Message Waiting

   An LED labeled MSG, located on the front panel in the upper-left corner next to the softkeys

Features

   An LED next to each function key or feature button that lights when the feature is activated.

For Calls

   An LED next to each button that flashes green for incoming calls, flashes red if a call is on hold, and remains steady red when a call is active.

The LEDs next to each button and function key have three possible states: red, green, or off. When lit red or green, these LEDs can be on steadily or can flash at varying speeds to signal certain conditions, such as call on hold or feature in use.

Controls and Connectors

The SRS-1050 has the following controls, connectors, switches, and indicators:

Terminating resistor. This built-in resistor, labeled "TR", provides a standard termination to the ISDN line.

DC power connector. This connector, labeled "40 V DC", provides an alternative to AC power delivered through the ISDN line.

Power source selection. This is a locking switch, labeled "PS".

ISDN line connector. Use this RJ-45 connector to plug in the telephone line. Normally, the line also provides AC power for the set.

Handset/Headset connector. This jack, located on the set's left side, allows you to connect either a handset or a headset.

Loopback test switch. This locking switch, labeled "LOOP", places the set in loopback mode. Loopback is a test for data transmission, so this switch is active only if the optional data terminal adapter is installed.

Program switch for data setup. This switch, labeled "PRG", places the set in programming mode when you are setting up parameters for the data terminal adapter.

Data connector (optional) This 25-pin female connector (DB25) appears only on sets with the optional data terminal adapter installed. This connector, labeled "DTE", is the interface connector for data transmission.

Volume and Contrast Controls

Both volume and dis play contrast are controlled by two buttons just above the front panel functions keys, and marked with a down arrow and an up arrow.

Speaker/handset volume . Adjust when any Call Appearance is active, with a call or dial tone. The new volume is held until the set is reset.

Display contrast. Adjust any time the digital set is idle.

MULTIFUNCTION BUTTONS

There are three types of multifunction buttons. The purpose of each type is:

One-touch

Dial a number you stored there

Feature

Activate/deactivate a special network feature, such as call forwarding

Call Appearance (CA)

Handle incoming or outgoing calls

Using one-touch dialing buttons is described in Chapter 2. Chapter 3 shows how to set-up the buttons.

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.

You use Call Appearance (CA) buttons to handle your calls, as described in the next two sections. Pressing a Call Appearance button connects you to a phone line. This line can be idle with dial tone for making an outgoing call, a line containing an incoming call, or a call on hold.

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 have a private conversation.

See the section Activating the MIC-OFF key in Chapter 3 for the procedure to deactivate this feature. You can then reassign this button as a one-touch button.

If you are on an active call, pressing a Call Appearance button automatically puts the call on hold. This feature is called autohold.

Multiple Directory Number Appearances

Each SRS-1050 associates its primary Directory Number with multifunction button 1. Multiple appearances of the same Directory Number are always on adjacent Call Appearance buttons. (The button at the end of a row is "adjacent to" the button beginning the next row up.)

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

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

Figure 1-4 shows an SRS-1050 whose primary Directory Number is 747-3456, with two additional Call Appearance buttons assigned that same number. The telephone's secondary line is 747-7890, which has two appearances.

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

Figure 1-3: Multifunction Button Layout
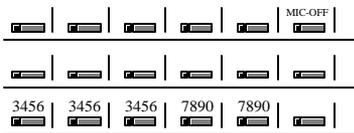
Figure 1-4: Example Line Assignment

Call Handling Example with Multifunction Buttons

Suppose your Directory Number is 747-3456, and the first three multifunction buttons on your SRS-1050 have been assigned that number.

What does it mean to have three Call Appearance buttons assigned to one Directory Number? It means you can have up to three calls at the same time using that single Directory Number, 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 Call Appearance button associated with 747-3456 flashes green. You can answer the call by pressing that Call Appearance button and picking up the handset. (The LED turns steady red.)

After answering the call, you can press the second 747-3456 Call Appearance button to originate another call. The first call is automatically put on hold. If another call comes in, you can press the third Call Appearance button representing 474-3456 to answer the third call. The second call is also placed on hold.

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

CALL INFORMATION DISPLAYS and SOFTKEYS

1=747-3456	(Line 1)
12:55PM TUE MAY 5	(Line 2)

When you make a call, the number you dialed, including any prefix, appears on line 1 of the display, along with an ISDN Call Identifier (ICI) code if provided at your installation. (See Appendix C for a partial list of ICI codes.) 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 end of line 2 shows call duration timing as minutes and seconds in the form mm:ss. 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".

Line 1
Line 2

SOFTKEYS AND KEY MENU

When you press KEY MENU, line 2 of the display changes to the names for the four keys directly below the display. These keys are called softkeys because the functions they control change as you use the menus to set up different features. When you press KEY MENU from the standard display screen, you see the following screen:
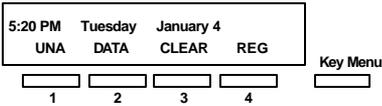
```
5:20 PM   Tuesday   January 4
     UNA    DATA    CLEAR    REG
                                         Key Menu
     ┌────┐  ┌────┐  ┌────┐  ┌────┐      ┌────┐
     └────┘  └────┘  └────┘  └────┘      └────┘
       1       2       3       4
```

Standard Softkey Layout

(The DATA softkey label appears only if you have the data model.)

Note: Softkey 1 also serves as the ENTER key (for entering information as indicated in this User Guide).

These softkey functions are explained in the following chapters:

UNA	Chapter 2
DATA	Chapter 4
CLEAR	Chapter 3
REG	Chapter 3
ENTER	Chapter 3

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

Notes

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Data Features

The SRS-1050 may also contain an optional terminal adapter. This enables desktop workstations and data terminals to use the ISDN circuit-switched or packet-switched facilities. Chapter 6 introduces the use of this optional adapter. The *Data User's Guide* provides detailed explanations for handling data calls on your phone.

LED Indicators

Message waiting
An LED labeled MSG, located on the front panel in the upper-left corner next to the softkeys

 Features
An LED next to each function key or feature button that lights when the feature is activated.

 For Calls:
 An LED next to each button that flashes green for incoming calls, flashes red if a call is on hold, and remains steady red when a call is active.

The LEDs next to each button and function key have three possible states: red, green, or off. When lit red or green, these LEDs can be on steadily or can flash at varying speeds to signal certain conditions, such as call on hold or feature in use.

When the MSG indicator is lit, you have either messages or call requests waiting to be picked up (see Chapter 4). The other three indicators relate to data transmission (see Chapter 5).

Each function button and multifunction button also has an indicator. These indicators serve one of two purposes:

The 18 multifunction buttons on your SRS-1050 are in three rows of 6 buttons each along the top of the front panel (excluding the button assigned to MIC-OFF), plus the three unassigned function buttons to the right of the numeric keypad. (The recommended feature assignments for these function buttons are CONFERENCE, DROP, and TRANSFER.) Figure 1-3 shows the numbering of the multifunction buttons. (The numbers in the figure are illustrative only. They do not appear on the phone.)

Note: This Guide uses the term Directory Number appearances to refer to Directory Numbers that appear on more than one Call Appearance button. The Northern Telecom term for Call Appearances that can handle more than one call is Additional Functional Calls.

CHAPTER 2

INTRODUCTION TO VOICE FEATURES

The Fujitsu SRS-1050 provides superior call-handling and simultaneous voice/data communications. It is one of the family of Fujitsu Integrated Services Digital Network (ISDN) terminals.

For the familiar tasks of dialing, holding, and answering calls, this phone operates like others you have used. However, it also includes the many custom features explained in later chapters. These include call forwarding, pickup, transfer, leaving and retrieving messages, and many others.

LINE PARAMETERS

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

The first choice, called preference, affects what happens when you have at least one idle Call Appearance (CA) and an incoming call flashing on another CA. When you pick up the handset or press SPEAKER, the phone can automatically connect you with the incoming call, based on the configuration choice recorded with your telephone service provider.

The second choice, called 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 service provider.

The third choice, called 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 provider.

The term "onetouch" used here refers to a network feature. The term "one-touch" used through the remainder of this guide refers to an SRS-1050 feature that stores a phone number for a button.

To simplify presentations in this guide, the text assumes that handsfree operation is automatic when you press an idle CA, that is that onetouch is "yes". If your installation is different, then to get a dial tone after pressing an idle CA you must either press SPEAKER for handsfree operation or lift the handset.

If you have any questions about your phone system setup, see your System Administrator.
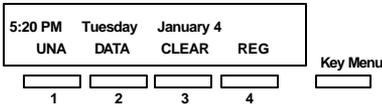
```
┌─────────────────────────────────┐
│ 5:20 PM   Tuesday   January 4    │
│    UNA      DATA    CLEAR    REG  │        Key Menu
│  ▭       ▭       ▭       ▭       ▭
│    1         2        3       4
```

Standard Softkey Layout

(The DATA softkey label appears only if you have the data model.)

Note: Softkey 1 also serves as the ENTER key (for entering information as indicated in this User Guide).

This section describes how to make and answer calls with your SRS-1050 using the handset, speaker, or a headset. (Headset setup is described in Chapter 3.) Each of the set of directions listed below has two subsections: what to do if you are not talking on another call, and what to do if you are talking on another call.

- Switching between handset and handsfree modes
- Placing a call using the handset
- Receiving a call using the handset
- Placing a handsfree call
- Receiving a handsfree call
- Placing a call using the headset
- Receiving a call using the headset

Following the final procedure listed above is a general procedure for placing calls to a leased network. You can place a call to a leased network in any of the above modes.

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. This feature is set active by default when you receive your SRS-1050. If for some reason this feature is not active, see the section Activating the MIC-OFF Key in Chapter 3 for the activation procedure.

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

Switching between Handset and Handsfree Modes

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

1. Press SPEAKER 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, 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. (You cannot turn off the microphone in the handset.)

Placing Handset Calls

If you are not talking on another call

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

  • If this connects you with a ringing call, follow the procedure described in the next section.

- If you want to place the call from a Call Appearance other than the one automatically selected, press its CA button.

2. Dial the desired number by pressing the keys on the numeric keypad.

3. If your call is not answered, you can hang up as follows:

   a. Replace the handset in its cradle.

   or

   b. Press another Call Appearance button, which will give you a dial tone again. It will also either hang up on the call you made or automatically place it on hold, depending on your installation. Your System Administrator can tell you which occurs.

   or

   c. Press DROP.

4. If your call is answered, converse with the called party.

5. When your conversation ends, hang up by replacing the handset in its cradle. Note the displayed call duration; it vanishes after about three seconds.

Note: *Onhook dialing*. In place of steps 1 and 2, you can dial the number first and then pick up the handset. The phone automatically dials the number. The number you enter remains available for dialing for about three minutes.

You can also use a one-touch button, which automatically selects an idle CA and dials the number. Steps 1 and 2 are therefore unnecessary when you use a one-touch button. Once the call is dialed, you can pick up the handset.

If you are already talking on another call

1. Handle the active call in one of the following ways:

   a. 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

   b. Retain the call by pressing an idle Call Appearance button to get a dial tone. (The call is automatically put on hold.)

   or

   continued

c. Press an idle Call Appearance button to get a dial tone. This will either hang up on the active call or automatically place it on hold, depending on your installation. Your System Administrator can tell you which occurs.

2. To make your call, dial the desired number by pressing the keys on the numeric keypad.

3. If your call is not answered, you can hang up as follows:

   a. Replace the handset in its cradle.

             or

   b. Press an idle Call Appearance button which will give you a dial tone.

             or

   c. Press DROP.

4. If your call is answered, converse with the called party.

5. When your conversation ends, you have these choices:

 Hang up by replacing the handset in its cradle. Note the displayed call duration; it vanishes after about three seconds.

If you put your original call on hold, pick up the call by pressing its red-flashing Call Appearance button.

 Note: You can also use a one-touch button after handling the active call. This automatically dials the number. Skip step 2.

Receiving Handset Calls

An incoming call makes the phone ring and the Call Appearance's LED flash green.

If you are not talking on another call

1. Pick up the handset. If this does not connect you with the incoming call, press the green-flashing Call Appearance button.

2. Converse with the calling party.

3. When your conversation ends, hang up by replacing the handset in its cradle. Note the displayed call duration; it vanishes after about three seconds.

If you are already talking on another call

1. Handle the active call in one of the following ways:

   a. End the call by pressing the button in the handset cradle. Then press the green-flashing Call Appearance button to answer the incoming call.

   or

   b. Retain the call by pressing the green-flashing Call Appearance button to answer the incoming call.

   or

   c. Press the green-flashing Call Appearance button to answer the incoming call. This will either hang up on the active call or automatically place it on hold, depending on your installation. Your System Administrator can tell you which occurs.

2. Converse with the calling party.

3. When your conversation ends, hang up by replacing the handset in its cradle. Note the displayed call duration; it vanishes after about three seconds.

4. You can pick up the call you were originally talking on, or if it was held, by pressing the button next to its red-flashing Call Appearance and picking up the handset.

Placing Handsfree Calls

A handsfree call uses the integrated microphone and speaker instead of the handset. The procedure below assumes that the MIC-OFF (mute) key feature is active. If not, the microphone is always on.

If you are not talking on another call

1. Press the SPEAKER button. Its LED will light red (if not, press an idle Call Appearance) and you will hear a dial tone. (If this connects you with a ringing call, follow the procedure "If you are already talking on another call".)

2. Dial the desired number by pressing the keys on the numeric keypad.

3. If your call is not answered, you can use either of the following methods to hang up:

   a. Press SPEAKER.

continued

or

b. Press DROP.

or

c. Press an idle Call
Appearance button, which
will normally give you a dial
tone.

4. If your call is answered,
converse with the called party.
(If the MIC-OFF LED is red, the
microphone has been turned off.
Press MIC-OFF to turn it back
on.)

You can turn off the microphone
by pressing the MIC-OFF button;
its LED will turn red. No sound
will then be transmitted to the
called party, allowing you to hold
a private conversation with others
in the room. To turn the
microphone back on, press MIC-
OFF again; its red LED will go
dark.

5. When the conversation is over,
hang up by pressing the
SPEAKER key. Note the call
duration; it vanishes after about
three seconds.

Note: *Onhook dialing.* In place
of steps 1 and 2, you can dial
the number first and then
press SPEAKER. The phone
automatically dials the
number. The number you
enter remains available for
dialing for about three
minutes.

You can also use a one-touch
button, which automatically
selects handsfree operation
on an idle CA and dials the
number. Steps 1 and 2 are
therefore unnecessary when
you use a one-touch button.

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

If you are already talking on another call

The procedure below assumes
that the MIC-OFF key feature is
active. If not, the microphone is
always on.

1. Handle the active call in one of
the following ways:

a. End the call by pressing
SPEAKER or DROP. Then
press SPEAKER again to get
a dial tone.

or

continued

b. Press HOLD to save the active call so you can return to it later. Then press SPEAKER again to get a dial tone.

or

c. Press an idle Call Appearance button to get a dial tone. This will either hang up on the active call or automatically place it on hold, depending on your installation. Your System Administrator can tell you which occurs.

2. Dial the desired number by pressing the buttons on the numeric keypad.

3. If your call is not answered, you can:

a. Press the SPEAKER button.

or

b. Press DROP.

or

c. Press an idle Call Appearance button, which will normally give you a dial tone.

4. If your call is answered, converse with the called party. (If the MIC-OFF LED is red, the microphone has been turned off. Press MIC-OFF to turn it back on.)

You can turn off the microphone by pressing the MIC-OFF button; its LED will turn red. No sound will then be transmitted to the called party, allowing you to have a private conversation with others in the room. To turn the microphone back on, press MIC-OFF again; its red LED will go dark.

5. When the conversation is over, hang up by pressing the SPEAKER button. Note the displayed call duration; it vanishes after about three seconds.

6. You can pick up the call you were originally talking on, if it was held, by pressing the button next to its red-flashing Call Appearance.

Note: *Onhook dialing.* In place of steps 1 and 2, you can dial the number first and then press SPEAKER. The phone automatically dials the number. The number you enter remains available for dialing for about three minutes.

You can also use a one-touch button, after handling the existing call. This automatically selects handsfree operation on an idle CA and dials the number. Skip step 2.

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

Receiving Handsfree Calls

A handsfree call uses the integrated microphone and speaker instead of the handset. An incoming call makes the phone ring and the Call Appearance's LED flash green.

The procedures described in this section assume that the MIC-OFF key feature is active. If not, the microphone is always on.

If you are not talking on another call

1. Press SPEAKER and, if necessary, the green-flashing Call Appearance button.

2. Converse with the calling party. (If the MIC-OFF LED is red, the microphone has been turned off. Press MIC-OFF to turn it back on.)

    You can turn off the microphone by pressing the MIC-OFF button; its LED will turn red. No sound will then be transmitted to the called party, allowing you to have a private conversation with others in the room.

To turn the microphone back on, press MIC-OFF again; its red LED will go dark.

3. When your conversation ends, hang up by pressing SPEAKER. Note the call duration; it vanishes after about three seconds.

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

If you are already talking on another call

1. Dispose of the active call in one of the following ways:

    a. Hang up by pressing the SPEAKER or DROP button, ending the currently active call. Then press the green-flashing Call Appearance button to answer the incoming call.

                    or

    b. Press HOLD to save the active call so you can return to it later. Then press the green-flashing Call Appearance button to answer the incoming call.

                    or

c. Press the green-flashing Call Appearance button to answer the incoming call. This will either hang up on the active call or automatically put it on hold, depending on your installation. Your System Administrator can tell you which occurs.

2. Converse with the calling party. (If the MIC-OFF LED is red, the microphone has been turned off. Press MIC-OFF to turn it back on.) You can turn off the microphone by pressing the MIC-OFF button; its LED will turn red. No sound will then be transmitted to the called party, allowing you to have a private conversation with others in the room. To turn the microphone back on, press MIC-OFF again; its red LED will go dark.

3. When your conversation ends, hang up by pressing SPEAKER. Note the displayed call duration; it vanishes after about three seconds.

4. You may then pick up the call you were originally talking on, if it was held, by pressing its red-flashing Call Appearance button and then pressing SPEAKER.

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

Placing Headset Calls

If you are not talking on another call

Place the headset on your head in a position comfortable for hearing and talking. If necessary, unplug the handset from the jack on the phone's left side. Plug the headset into the same jack. Also check that headset mode is activated. (See Chapter 3 for details.) 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.

1. Press SPEAKER. Its LED will light red and you will hear a dial tone. (If this connects you with a ringing call, follow the procedure described in Receiving Headset Calls.)

2. Dial the desired number by pressing the buttons on the numeric keypad.

3. If your call is not answered, you can hang up as follows:

a. Press the SPEAKER button.

or

b. Press DROP.

or

  c. Press an idle Call
     Appearance button, which
     will normally give you a dial
     tone.

4. If your call is answered,
  converse with the called party.

5. When your conversation ends,
  hang up by pressing SPEAKER.
  Note the call duration; it
  vanishes after about three
  seconds.

  Note: *Onhook dialing.* In place
    of steps 1 and 2, you can dial
    the number first and then
    press SPEAKER. The phone
    automatically dials the
    number. The number you
    enter remains available for
    dialing for about three
    minutes.

    You can also use a one-touch
    button, which automatically
    selects an idle CA and dials
    the number. Steps 1 and 2 are
    therefore unnecessary when
    you use a one-touch button.

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

If you are already using the headset and talking on another call

1. Handle the existing call in one of
  the following ways:

  a. End the call by pressing
    SPEAKER or DROP. Then
    press SPEAKER again to get
    a dial tone.

or

  b. Press an idle Call
    Appearance button to get a
    dial tone. This will either
    hang up on the active call or
    automatically place it on
    hold, depending on your
    installation. Your System
    Administrator can tell you
    which occurs.

or

  c. Press HOLD to save the
    active call so you can return
    to it later. Then press
    SPEAKER again to get a dial
    tone.

2. Dial the desired number by
  pressing the keys on the
  numeric keypad.

3. If your call is not answered,
 hang up as follows:

  a. Press the SPEAKER button.

or

  b. Press DROP.

continued

or

c. Press an idle Call
Appearance button, which
will normally give you a dial
tone.

4. If your call is answered,
converse with the called party.

5. When the conversation is over,
hang up by pressing SPEAKER.
Note the displayed call
duration; it vanishes after about
three seconds.

6. You can pick up the call you
were originally talking on, if it
was held, by pressing its red-
flashing Call Appearance
button.

Note: *Onhook dialing.* In place
of steps 1 and 2, you can dial
the number first and then
press SPEAKER. The phone
automatically dials the
number. The number you
enter remains available for
dialing for about three
minutes.

You can also use a one-touch
button after handling the
existing call. This
automatically selects an idle
CA and dials the number.
Skip step 2.

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

Receiving Headset Calls

An incoming call makes the Call
Appearance's LED flash green.

If you are not talking on another call

Place the headset on your head in
a position comfortable for hearing
and talking. If necessary, unplug
the handset from the jack on the
phone's left side. Plug the
headset into the same jack. Also
check that headset mode is
activated. (See Chapter 3 for
details.) 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.

1. Press the green-flashing Call
Appearance button. (In some
installations, pressing the
SPEAKER button will work
also.)

2. Converse with the calling party.

3. When your conversation ends,
hang up by pressing SPEAKER.
Note the displayed call
duration; it vanishes after about
three seconds.

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

If you are already using the headset and talking on another call

1. Dispose of the active call in one of the following ways:

    a. Hang up by pressing the SPEAKER or DROP button. Then press the green-flashing Call Appearance button to answer the incoming call.

    <div align="center">or</div>

    b. Press HOLD to save the active call so you can return to it later. Then press the green-flashing Call Appearance button to answer the incoming call.

    <div align="center">or</div>

    c. Press the green-flashing Call Appearance button to answer the incoming call. This will either hang up on the active call or automatically place it on hold, depending on your installation. Your System Administrator can tell you which occurs.

2. Converse with the calling party.

3. When your conversation ends, hang up by pressing SPEAKER. Note the displayed call duration; it vanishes after about three seconds.

4. You may then pick up the call you were originally talking on, if it was held, by pressing its red-flashing Call Appearance button and then pressing SPEAKER.

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

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.

Before you can perform these procedures, you must complete the procedure to assign one of your multifunction buttons as the leased network access code delimiter key. See Chapter 3 for this procedure.

You can use either of two methods to place a leased network call.

Method 1

Do not pick up the handset or press SPEAKER button to dial a leased network number. You must enter all numbers before you go off-hook.

1. Dial the number of the person you want to call. As always, the number you dial appears on the first line of the screen.

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 SPEAKER button. Your digital set automatically sends the entered numbers and code to connect to the leased network number.

Method 2

Do not pick up the handset or press SPEAKER button to dial a leased network number. You must enter all numbers before you go off-hook.

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 SPEAKER button. Your digital set automatically sends the entered numbers and code to connect to the leased network number.

FUNCTION BUTTONS

The SRS-1050 has six function buttons, located to the right of the numeric keypad and arranged as shown below.
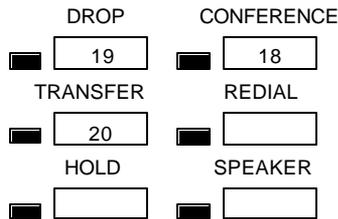
Figure 2-1: Function Buttons

As a brief overview, the keys do the following:

SPEAKER
  Enables/disables handsfree operation

REDIAL
  Redials the last number you dialed

HOLD
  Holds an active call

CONFERENCE   (button 18)
  Adds additional parties to an existing call

DROP   (button 19)
  Disconnects last party added to a conference call

TRANSFER   (button 20)
  Transfers a call to a third party you dial or select

  Another function key, MIC-OFF, (described later) is typically active on the key at the upper-right of the multifunction button array. This key turns the microphone on or off during handsfree or handset operation.

  The descriptions below briefly identify each function button. The following pages explain the buttons in more detail.

SPEAKER

Enables placing and receiving handsfree calls

These procedures assume that the MIC-OFF key feature is active. If not, the microphone is always on.

Making a call using the speaker and microphone

1. Press an idle CA or the SPEAKER button. The associated LED will light and you will hear a dial tone from the speaker.

2. Dial the desired number by pressing the numeric keys. You will hear the ringing tones through the speaker.

3. If your call is answered, converse with the calling party. You can turn off the microphone by pressing the MIC-OFF key; its LED will turn red. No sound will then be transmitted to the other party, allowing you to have a private conversation with others in the room.

   To turn the microphone back on, press MIC-OFF again; the associated red LED will go dark.

Receiving a call using the speaker and microphone

1. Press the button next to the green-flashing Call Appearance.

2. Converse with the calling party. You can turn off the microphone by pressing the MIC-OFF key; its LED will turn red. No sound will then be transmitted to the other party, allowing you to have a private conversation with others in the room. To turn the microphone back on, press MIC-OFF again; the associated red LED will go dark.

Ending a handsfree call using the speaker and microphone

You can hang up as follows:

a. Press SPEAKER. The call duration vanishes after about three seconds.

or

b. Press and idle Call Appearance button. This gives you a dial tone again and ends or holds the original call.

Switching from handsfree to handset use

Pick up the handset from its cradle. The use of the speaker and microphone ends, and all sounds go through the handset only. (If the handset remained out of the cradle during your handsfree call, you must press SPEAKER to switch back to handset use.)

Switching from handset use to handsfree

Press the SPEAKER button and replace the handset in its cradle. You may now converse with the called or calling party using the speaker and microphone.

MIC-OFF

Lets you mute the handsfree or handset microphone, or reactivate it

To use this feature, MIC-OFF must be active. If it is not, see Activating the MIC-OFF Key in Chapter 3 for the activation procedure.

The microphone built into the SRS-1050 is automatically turned on when you enter handsfree mode, for example by pressing SPEAKER. It stays on throughout all of your handsfree calls unless you press MIC-OFF, as described below.

To mute the microphone while in handsfree operation, press MIC-OFF.

The associated LED will turn red. You can still hear the called or calling party, but no sound will be transmitted from your phone. This allows you to have a private conversation with others in the room. Once turned off, the microphone stays off, even after you start a new handsfree call, until you press MIC-OFF again.

To turn the microphone on again and resume your conversation, press MIC-OFF again.

The MIC-OFF key LED goes out. You can now continue the conversation. Once turned on, the microphone stays on until you press MIC-OFF again, or pick up the handset.

The MIC-OFF key may be used in the same way to mute the microphone on a handset call or reactivate the microphone as needed.

REDIAL

Dials the last number dialed on this phone

REDIAL lets you redial the last number dialed with the phone. This feature is useful if you need to call someone back a second time, perhaps because their line was busy the first time.

Using REDIAL before lifting the handset or pressing SPEAKER

1. Press REDIAL. The last number dialed appears on the display and is redialed automatically in handsfree mode. Pick up the handset if you want this to be a handset call.

2. If there are no idle Call Appearances available, pressing REDIAL brings the number to the screen but does not dial. When an idle Call Appearance later becomes available, pressing the CA button dials the number in handsfree mode. (Lift the handset, if you prefer.)

Using REDIAL after lifting the handset or pressing SPEAKER

1. If you don't hear a tone, press an idle Call Appearance button.

2. Press REDIAL. The last number dialed appears on the display and is dialed automatically.

HOLD

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

HOLD lets you keep a call active even though you are no longer directly connected with it. This feature is useful if you need to perform some action away from your phone, such as looking up some information.

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

2. To use another Call Appearance or feature button, press it. The phone retains each call you place on hold until you reconnect with it (or the other party hangs up). You are now free to take other actions, including making and receiving other calls.

3. To reconnect with a call on hold, press its flashing Call Appearance button. Its LED will changes from flashing red to steady red, and you are reconnected in handsfree mode. (You can use the handset, if you prefer, by lifting it.)

CONFERENCE   3 parties

Adds a third party to an existing Call

To use CONFERENC1E (after first establishing an initial call):

1. Press CONFERENCE. The first party is automatically placed on hold, and that Call Appearance's LED flashes red.

   An idle Call Appearance for the holding Directory Number is automatically selected, if available. Its LED turns steady red and a dial tone sounds.

   If that Directory Number has no idle Call Appearance, press a Call Appearance of another Directory Number.

2. Dial the third party, or press any Call Appearance that is ringing or on hold except the conference hold. Converse privately with the party on that line.

3. Press CONFERENCE again. All three parties are now connected. The display shows the number of parties on the call (3) as follows:

```
1= CONFERENCE   3
12:55AM  SUN  MAY 26    02:23
```

Disconnecting the last party added

Press DROP. Your connection with the original party is retained.

Your installation may subscribe to six-party conferencing. Check with your System Administrator for details.

DROP

Cancels connection with the last party called or added to a call

Using DROP on a Two-party Call that you originated

Pressing DROP at the end of a regular two-party call disconnects the call. The display of the call's duration remains for about three seconds.

Using DROP on a Multi-party Call

Press the DROP key. This ends your connection with the last party you added to the call, but any others on the call stay connected. The display of the call's duration continues until the call is over. If you press DROP to end the last connection, the duration is displayed for about three seconds past the end of the call.

> **Note:** When the person who originates the conference call presses DROP, the last party added is dropped from the call. When any called party presses DROP, it terminates that party's connection with the conference call.

TRANSFER

Connects the caller with a different party

You can transfer an active call to another party and hang up. The called or calling parties remain connected.

To transfer a call, follow these steps:

1. Press TRANSFER while on an active call.

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

An idle Call Appearance for the holding Directory Number is automatically selected, if available. Its LED lights steady red and a dial tone sounds.

If that directory number has no idle Call Appearance, you must select a Call Appearance of another directory number.

2. Dial the third party, or press any Call Appearance that is ringing or on hold (except the one held for transfer.)

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

4. Press TRANSFER 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.

Questions, Details, or Alternatives

If no one answers the destination number, press the Call Appearance button holding the original call. This cancels the attempted transfer and returns you to the call.

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.)

Using a One touch Button to Make a Call

Just press it. If no other call is active, the SRS-1050 selects an idle Directory Number, turns on the speaker and microphone, and dials the number. (If the MIC-OFF LED is red, the microphone has been turned off, so press MIC-OFF to turn it back on.)

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

If there are no idle Directory Numbers available, pressing the one-touch button brings the number to the screen but does not dial. When an idle Directory Number later becomes available, pressing the DN button dials the number in handsfree mode. (Lift the handset, if you prefer.)

When the call is answered, you can pick up the handset or continue to use the speaker and microphone.

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.

Storing a Code on a One-touch Button

You can store a special code on its own one-touch button just as you do an ordinary telephone number. Once you establish an active call, you can press the one-touch button to send the special code. These numbers are sent using the standard DTMF tones that these systems normally require.

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 SRS-1050 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 one-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 —
1st pause (1 second) —
Voice mail access —
Voice mail password
2 second pause
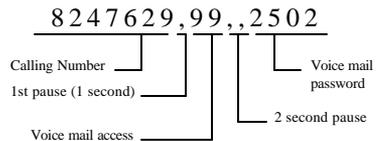
Use this feature for any call requiring multiple number entry. For example, use the feature to:

• Connect to an alternative public network using the access number and then send the number of the person you want to call

• Send the sometimes complicated 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

Programming a One-touch Button for Leased Network Access

To call someone in a leased network from outside the network, the number must include a leased network access code. You can program a single one-touch button for both the access code and the telephone number. See the One-touch section in Chapter 3 for details.

Before you can program a one-touch button for a leased access number, you must complete the procedure to assign a multifunction button as a leased network access code delimiter key. This procedure is also in Chapter 3.

UNANSWERED CALL LOGGING (UNA)

Once 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 on line 1 of your SRS-1050 display. If the dot is blinking, there have been eight or more such calls, and the information form the next unanswered call will record over the oldest call in the list.

```
●   UNA
12:15PM WED APR 5
```

To see the data for each unanswered call, press UNA (softkey 1). The resulting screen looks something like this :

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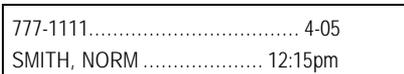
The 777-1111 is the number of the calling party. Norm Smith is the calling party identification.

Each time you press UNA (softkey 1), 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.

Returning a Call

To return a call displayed by unanswered call logging, follow these steps:

1. Press any idle Call Appearance button. (Handsfree mode is automatic. For handset use, lift the handset.)

   You can also dial the number while onhook, and then lift the handset or press SPEAKER after dialing all the digits.

2. Dial the number shown on the UNA display.

   As soon as you go offhook or begin dialing the number while onhook, the unanswered call number shifts to the second line for reference. The first line shows the digits you are dialing.

If the call is answered, you can converse with the party reached. If not, hang up by replacing the handset in its cradle or, in handsfree mode, hang up by pressing the SPEAKER button.

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 (softkey 1) 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.

Notes

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CHAPTER 3

LOCAL FEATURES

This chapter explains how to use the display and softkeys to set the features controlled by the SRS-1050. The first section describes menu mode, from which you make all changes to local features. Subsequent sections describe how to set each feature, in the following order

- Setting ringer volume, tone, and operating modes
- Programming one-touch buttons
- Setting the calendar/clock
- Reinitializing the phone
- Enabling unanswered call logging (UNA)
- Selecting handsfree (speaker), handset, or headset operation
- Using call announce intercom
- Using Q.931 message logging
- Activating or deactivating the MIC-OFF button

Examples of mistake correction while setting local options in menu mode are shown.

> **Note:** Option 8 (SPID/TEI) in menu mode is an installation function usually performed by your System Administrator or phone maintenance personnel.
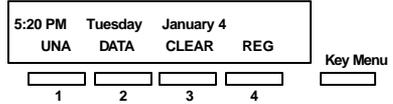
```
5:20 PM    Tuesday    January 4
   UNA       DATA      CLEAR      REG
                                             Key Menu
   ▭         ▭         ▭          ▭          ▭
   1         2         3          4
```

Standard Softkey Layout

(The DATA softkey label appears only if you have the data model.)

> **Note:** Softkey 1 also serves as the ENTER key (for entering information as indicated in this User Guide).

MENU MODE OPERATIONS

The SRS-1050 has a menu from which you select options to change SRS-1050 local features.

> **Note:** The procedures to set local features require extensive use of the softkeys located below the display. To see the names of the softkeys, press KEY MENU. The names appear on the second line of the display above the keys. Press KEY 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.

```
 ┌─────────────────────────────────┐
 │   12:55PM    TUE     MAY 5       │
 └─────────────────────────────────┘

Key Menu                   Key Menu
     ┌────┐  ▽   △  ┌────┐
     │    │         │    │
 ┌───┴────┴─────────┴────┴───┐
 │  UNA    DATA   CLEAR   REG │
 └───────────────────────────┘
```
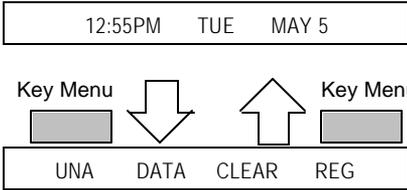
Some of the data entry screens in menu mode procedures have built-in timers. If you do not enter information within 15 seconds, the display reverts back to the menu for selecting the feature you were using. You must reselect the feature and start over.

If for any reason you become confused while working in menu mode, you can always press REG (softkey 4) to return to the menus and start over.

Selecting a Menu Option

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

1. Press REG (softkey 4) to display the menu options. The Screen looks like this:

```
┌─────────────────────────────────┐
│ 1:ONE-TOUCH      2:CALENDAR      │
│ 3:INITIAL        (SELECT 1-12)   │
└─────────────────────────────────┘
```

To see the next menu screen, press NEXT (softkey 2):

```
┌─────────────────────────────────┐
│ 4:UNA            5:H-FREE        │
│ 6:HAND/HEAD   (SELECT 1-12)      │
└─────────────────────────────────┘
```

Press NEXT again to see the third menu:

```
┌─────────────────────────────────┐
│ 7:RINGER         8:SPID/TEI      │
│ 9:MSG-LOG     (SELECT 1-12)      │
└─────────────────────────────────┘
```

Press NEXT again to see the fourth menu.

```
┌─────────────────────────────────┐
│ 10:U-CODE        11:I-COM        │
│ 12:MIC-OFF       (SELECT 1-12)   │
└─────────────────────────────────┘
```

Press NEXT repeatedly to cycle through these menus.

2. To select the option you want, press the appropriate key(s) on the numeric keypad to dial 1 to 12 (do not press one of the four buttons under the screen), and then press ENTER (softkey 1). 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 (softkey 3).

3. To exit menu mode, press REG (softkey 4). If you forget to exit, menu mode is automatically canceled after four minutes, or whenever you pick up the handset or press SPEAKER.

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

Note: 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, SPEAKER, 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 REG. For example, you can abbreviate the key sequence REG NEXT 7 ENTER to REG 7 ENTER, getting to the RINGER screen without displaying the other menus shown above.

Notes on Entering Information

When the displayed entry is acceptable, press ENTER to retain it and display the next parameter screen.

To change a numerical entry (not including menu selections) before you press ENTER, press CLEAR (softkey 3) and enter the desired value.

To change a menu selection or a numerical entry after you press ENTER, press asterisk (*). In some cases, this returns you to the preceding data entry screen, where you can enter the correct information. In other cases, you return to the menu mode main menu and must redo the procedure from there.

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. Silent ring causes the LED to flash green the LED of the receiving Call Appearance button without any ringing sound

*   Select the ringing pattern you will hear when you are conversing on another line

All settings are made from item 7, RINGER, in menu mode. After completing a setting, you can press asterisk (*) to return to the menu mode options and change another setting, or you can press REG (softkey 4) to return to the normal display.

Setting Ringer Volume

To set the ringer volume, follow these steps:

1. Press REG (softkey 4), 7, ENTER (softkey 1). This screen appears:

```
RINGER SERVICE MODE
. . . . . . . . . . . . . . . . . . . . . . . . . .
```

2. Press ENTER again and this menu appears:

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

3. Press 1, ENTER. A screen appears showing you the current volume setting:

```
RINGER VOLUME MODE
 MEDIUM
```

4. Press ENTER again and this menu appears:

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

5. Press the number for the desired volume.

The phone rings once at the selected volume. If the volume is too loud or too soft, try a different option.

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

The screen shows your selection plus the word COMPLETED:

```
MEDIUM
 COMPLETED
```

7. To return to the normal display, press REG (softkey 4).

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

Setting Ringer Tone

To set the ringer tone, follow these steps:

1. Press REG (softkey 4), 7, ENTER (softkey 1). This screen appears:

```
RINGER SERVICE MODE
. . . . . . . . . . . . . . . . . . . . . . . . . .
```

2. Press ENTER again and this menu appears:

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

3. Press 2, ENTER. A screen appears showing you the current tone setting:

```
RINGER TONE MODE
 MEDIUM
```

4. Press ENTER again and this
   menu appears:

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

5. Press the number for the desired
   tone.

   The phone rings once at the
   selected tone. If you don't like
   the tone, try a different option.

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

   The screen shows your selection
   plus the word COMPLETED:

```
LOW
 COMPLETED
```

7. To return to the normal display,
   press REG (softkey 4).

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

Selecting Ringer Mode

   Select either normal ring or silent
   ring. Silent ring flashes the LED
   of the receiving Directory Number
   or Call Appearance button
   without ringing the bell.

1. Press REG (softkey 4), 7, ENTER
   (softkey 1). This screen
   appears:

```
RINGER SERVICE MODE
. . . . . . . . . . . . . . . . . . . . . . . . . . .
```

2. Press ENTER again and this
   menu appears:

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

3. Press 3, ENTER. A screen
   appears showing the current
   ringer mode setting:

```
RINGING MODE
 BELL
```

4. Press ENTER again and this
   menu appears:

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

5. Select 1 for a normal ring or 2 for
   a silent ring and then press
   ENTER. The screen shows your
   selection plus the word
   COMPLETED:

```
SILENT
 COMPLETED
```

6. To return to the normal display,
   press REG (softkey 4).

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

Selecting Ringer Pattern

This selection determines the type of ring that announces an incoming call when you are conversing on another line.

1. Press REG (softkey 4), 7, ENTER (softkey 1). This screen appears:

```
RINGER SERVICE MODE
. . . . . . . . . . . . . . . . . . . . . . . . . . . .
```

2. Press ENTER again and this menu appears:

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

The selection you want appears on the second screen of the menu, which you can see by pressing NEXT (softkey 2).

3. Press 4, ENTER. A screen appears showing you the current ringer pattern setting:

```
RINGER PATTERN MODE
 MUTE RING
```

4. Press ENTER again and this menu appears:

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

5. Select 1 for a mute ring, a normal ring pattern at reduced volume, or 2 for one ring, which rings once at normal volume. Then press ENTER. The screen shows your selection plus the word COMPLETED:

```
ONE RING
 COMPLETED
```

6. To return to the normal display, press REG (softkey 4).

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

PROGRAMMING A BUTTON FOR ONE-TOUCH DIALING

You can program up to 17 buttons to play back 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 if required

- Special codes such as a personal ID number or a voice mail access code, or a network access code

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

- A leased network number, including the access code and access code delimiter

The one-touch feature overview in Chapter 2 discusses these possibilities in greater detail and explains how to dial using a one-touch button.

Before you can program a one-touch button for a leased network number, you must complete the procedure to assign a multifunction button as the leased network access code delimiter key. The procedure is described later in this chapter.

Programming a One-touch Button

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

1. Press REG (softkey 4), 1, ENTER (softkey 1). This screen appears:

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

The indicators for previously assigned one-touch buttons will be green. The MIC-OFF key, if active, and the delimiter key, if assigned, will be red. Other buttons will all be dark, regardless of their other uses.

2. Press the idle (unassigned) button you want as your one-touch button. This screen appears:

```
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 line 2.

```
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)
```

Note: 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.

To program a leased network number, use the keypad to enter the telephone number and access code and the assigned multifunction button to enter the access code delimiter. Enter the number in either of these two sequences:

Dial the number of the person you are calling; press the access code delimiter button; then dial the access code.

                  or

Press the access code delimiter button; dial the access code; press the delimiter button again; then dial the number of the person you are calling.

The example illustrates the first sequence. The access code delimiter appears as a colon.

```
ENTER DIRECTORY NUMBER
DN=8247629:33827    (12)
```

4. Press ENTER (softkey 1). The associated LED turns green, and the word COMPLETED appears, remaining for 15 seconds.

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

5. Complete the procedure in one of these ways:

To return to the normal display, press REG (softkey 4).

To program another one-touch number, press an unassigned multifunction button, then repeat steps 3 & 4. (You can also press a currently assigned one-touch button to change or cancel its one-touch number.)

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 (softkey 3) 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.

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. Press the assigned one-touch button (it shows a green indicator), and then press the replacement numbers on the keypad, or clear the Directory Number by pressing CLEAR (softkey 3). You can also leave the button as it was, by pressing another button or REG (softkey 4).

If you press CLEAR, you can then choose one of the following:

   a. Enter new keypad numbers, followed by ENTER (softkey 1). The button then has the new number stored.

                    or

   b. Select another button to become one-touch, then do steps 3 & 4 from Programming a One-Touch Button. This leaves the original button with its old number.

                    or

   c. Cancel the preset button by pressing ENTER. Its LED turns off. It is no longer a one-touch button. The following screen appears:

```
DN=                    (12)
 COMPLETED
```
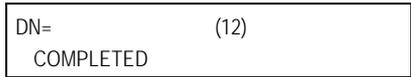
The word COMPLETED remains for 15 seconds.

 2. You can then select another button to make one-touch and do steps 3 & 4 from Programming a One-Touch Button.

 3. To return to the menu screen after the word COMPLETED appears, press asterisk (*).

4. To leave menu mode and return to normal operation, press REG (softkey 4).

The use of one-touch buttons for dialing is described in Chapter 2.

SETTING THE CALENDAR/CLOCK

The normal SRS-1050 display includes the date, time, and day of the week. You can set the date and time by using the procedure described below.

Notes on Entering Information

If the value you have entered is acceptable, press ENTER to record it and display the next parameter screen.

To change a numerical entry (not including menu selections) before you press ENTER, press CLEAR (softkey 3) and enter the desired value.

To change a menu selection or a numerical entry after you press ENTER, press asterisk (*). This returns you to the preceding data entry screen, where you can enter the correct information.

Setting Calendar and Clock Values

To set the calendar/clock, follow these steps:

1. Press REG (softkey 4), 2, ENTER (softkey 1). This screen appears:

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

2. Press ENTER. The first input screen appears:

```
INPUT HOUR         ->
 8:06PM    '93    APR 30
```

3. Enter the present hour using the numeric keypad 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    '93    APR 30
```

Note: 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 using the numeric keypad and then press ENTER (softkey 1).

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    '93    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    '93    APR 30
```

6. To accept the year displayed, '93, press ENTER.

                     or

To change the year, press two numbers on the numeric keypad 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    '93    APR 30
```

7. Enter the present mo nth (1 to 12) using the numeric keypad 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    '93    MAY 30
```

8. Enter the present date (1 to 31) using the numeric keypad 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    '93    MAY 1
```

Note: If you enter 31 for a month having only 30 days, the display shows ILLEGAL. Press * to enter a valid date. This also applies to entering 29 (except for leap year) or 30 for February.

9. Press REG (softkey 4) to return to the normal display.

The phone automatically inserts the correct day (in this case Tue) for the date you entered in the procedure.

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

REINITIALIZING THE PHONE

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

Clearing all your one-touch numbers and key assignments is useful when the phone is assigned to a new user.

To reinitialize your phone, complete the following steps:

1. Press REG (softkey 4), 3, ENTER (softkey 1). This screen appears:

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

2. You can choose one of the following options:

   a. To clear all data, press 1 and ENTER.

                or

   b. To retain all data, press 2 and ENTER.

   This screen appears:

```
PRIVATE DATA CLEAR
 COMPLETED
```

                or

   c. To retain all data and display the main menu, press *. This screen appears:

```
1: ONE-TOUCH    2: CALENDAR
3: INITIAL         (SELECT 1-12)
```

                or

   d. To retain all data and return to the normal display, press REG (softkey 4).

UNANSWERED CALL LOGGING (UNA)

Once 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).

Some of the data entry displays have built-in timers. If you do not enter information within fifteen seconds, the display reverts to the menu for selecting the feature you were setting up. You must reselect the feature and start again.

If for any reason you become confused, you can always press REG (softkey 4) to return to the menus and start over.

Enabling the UNA Feature

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

1. Press SERVICE, then REG (softkey 4), 4, ENTER (softkey 1).

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

```
UNA SERVICE MODE
 NON SUPPORTED
```

To leave it as is, press REG again.

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

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

3. Press the number shown beside the mode you want to select, then press ENTER. The following sections describe each mode.

UNA on All Call Appearances

To support UNA on all Call Appearances, follow these steps:

1. Press 1, ENTER, and this screen appears:

```
SUPPORTED (ALL)
 COMPLETED
```

After about 15 seconds, or if you press asterisk (*), the display returns to the second Service Mode screen:

```
4: UNA              5: H-FREE
6: HAND/HEAD     SELECT ITEM  (1-12)
```

2. You can now select a different menu function, or press REG (softkey 4) to return to the normal display:

UNA on Selected Call Appearances

To support UNA on selected Call Appearances, follow these steps:

1. Press REG, then ENTER (two times).

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

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

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

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

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

```
SUPPORTED  (SELECT)
 COMPLETED
```

After about 15 seconds, or if you press asterisk (*), the display returns to the second Service Mode screen:

```
4: UNA              5: H-FREE
6: HAND/HEAD    SELECT ITEM     (1-12)
```

4. You can now select a different menu function, or press REG (softkey 4) to return to the normal display.

Disabling the UNA Feature

To disable unanswered call logging, follow these steps:

1. Press REG (softkey 4), 4, ENTER (softkey 1).

If the following screen appears, the feature is enabled:

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

To leave it as is, press REG again.

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

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

3. Now press 3, ENTER, and this screen appears:

```
NON SUPPORTED
 COMPLETED
```

After about 15 seconds, or if you press asterisk (*), the display returns to the second Service Mode screen:

```
4: UNA              5: H-FREE
6: HAND/HEAD    SELECT ITEM     (1-
12)
```

4. You can then select a different menu function, or press REG (softkey 4) to return to the normal display.

HANDSFREE, HANDSET, AND HEADSET MODES

You can set up the Digital Set to use the handset, the speaker, 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 phone's left side and plug the headset into the same jack. Calls are connected and disconnected only by your pressing the SPEAKER 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 SPEAKER button.

Handsfree Non Supported

Disallows speaker use. The SPEAKER button is disabled. Call pickup by handset only; hang-up by handset or by pressing the DROP key.

Operating the Set with a Headset

To operate the set with a headset, follow these steps:

1. Press REG (softkey 4), 6, ENTER (softkey 1). This screen appears:

```
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 2. Line 2 changes to (SELECT=2).

4. Press ENTER. This screen appears:

```
HEAD-SET
 COMPLETED
```

You can now operate the SRS-1050 using only your headset. The SPEAKER button controls picking up and hanging up calls, and the MIC-OFF button is not operational. The sounds that are usually audible through the speaker, such as the key tones, are now audible only through the headset.

Switching from Headset Back to Handset Mode

Do steps 1 through 4 above, but in step 3, press 1 instead of 2. The final screen will look like this instead:

```
HAND-SET
 COMPLETED
```

When the display shows the selection you prefer, press REG (softkey 4) to return to the normal display.

Selecting Handsfree Operation (using the speaker and microphone)

To select handsfree operation while in handset mode, follow these steps:

1. Press REG (softkey 4), 5, ENTER (softkey 1). This screen appears:

```
HANDS-FREE SERVICE MODE
 NON SUPPORTED
```

2. Press ENTER, and this screen appears:

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

3. Press 1. Line 2 changes to (SELECT=1).

4. Press ENTER. This screen
   appears:

```
SUPPORTED
 COMPLETED
```

You can now use the speaker.
The SPEAKER button can control
call pickup or hang-up if the
handset is in its cradle. The MIC-
OFF button (if active) controls the
microphone if the speaker is in
use. If MIC-OFF is pressed, key
tones can be heard, but no other
sounds are transmitted until MIC-
OFF is pressed again.

Switching Back to Handset-only Operation

Do steps 1 through 4 (from the
previous section), but in steps 3,
press 2 instead of 1. The final
screen will look like this instead:

```
NON SUPPORTED
 COMPLETED
```

When the display shows the
selection you prefer, press REG
(softkey 4) to return to the normal
display.

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.

The procedure to dial a leased
network number is the last
procedure in the Placing and
Receiving Calls section of
Chapter 2.

The section Programming a
Button for One-touch Dialing
earlier in this chapter tells you
how to program a one-touch
button for a leased network
number.

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

1. Press REG (softkey 4), 10,
   ENTER (softkey 1). This screen
   appears:

```
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.

3. To complete the procedure, press REG (softkey 4). The standard display screen reappears.

CALL ANNOUNCE INTERCOM

The Call Announce Intercom feature is a convenient way for a person screening incoming calls to announce the call to the intended recipient. The screener places the incoming call on hold, uses a designated Directory Number 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.

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).

The Call Announce Intercom is distinct from the network-based intercom feature. Call Announce Intercom activates automatically. With the network-based intercom, the recipient must answer the intercom call. You could, however, use the network-based feature to simplify dialing for Call Announce Intercom, allowing the call screener to dial one or two digits rather than the recipient's full extension number. You could also eliminate dialing entirely with dedicated intercom, another network-based feature.

Figure 3-1 shows a typical application of Call Announce Intercom.

Call Screeners   Call Recipient
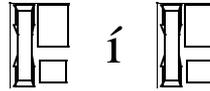
í

Directory Numbers	Call Announce
	Intercom setup:
3110	Activating Directory
3111	Number = 3112
3112*	Intercom mode =
	1-way or 2-way

*Designated for intercom

Figure 3-1 Call Announce Intercom Application

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

Enabling or Disabling Call Announce Intercom

To enable or disable call announce intercom, follow these steps:

1. Press REG (softkey 4), 11, ENTER (softkey 1).

A screen appears showing the current status of the intercom feature. If one- or two-way intercom is enabled, the screen displays the enabled mode plus the authorized Directory Number (see step 4 below). If the intercom is disabled, the screen displays NON SUPPORTED.

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

To program the first number, go to step 2. To program the second or third number, press NEXT (softkey 2) to display (2) or (3) on the screen.

2. Press ENTER.

The call announce intercom selection screen appears:

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

3. To enable the intercom feature, dial 1 or 2 and press ENTER. A screen appears showing your choice and prompting for an authorized Directory Number (see step 4).

To disable the intercom feature, dial 3 and press ENTER. When the screen displays the message INTERCOM TURNED OFF, press REG (softkey 4) to return to normal operation.

Call Announce Intercom on Selected Buttons

```
TWO WAY SELECTED
ENTER TELEPHONE NUMBER
```

4. Dial a telephone number of up to ten digits (including wild cards) and press ENTER (softkey 1).

If the call screener has Directory Numbers 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.

When you press ENTER, a screen appears announcing ONE (or TWO) WAY TURNED ON and showing the number you entered.

```
TWO WAY TURNED ON
985*3112
```

5. Press REG (softkey 4) to return to normal operations.

Before selecting Directory Numbers for call screeners, you may specify the Call Appearance buttons that are to be answered automatically. You may select "ALL" buttons or select the desired Call Appearances.

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

1. Press REG (softkey 4), 11, ENTER (softkey 1). A screen appears showing the current status of the intercom feature:

```
INTERCOM FEATURE
 SUPPORTED (ALL, SELECT,
NONSUPPORTED)
```

2. Press ENTER.

The Call Announce Intercom button selection screen appears:

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

To make your choice, dial 1 or 2 and press ENTER. If you selected 2, the following screen appears:

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

3. All LEDs will light green if "All"
   was previously selected. Only
   Call Appearances with lit LEDs
   will activate on Call Announce.
   Press the buttons to turn the
   LEDs on or off to select the
   desired Call Appearance button.

4. Press ENTER. The following
   screen appears:

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

After selecting the Call
Appearance buttons that are to
be auto answered, you may
proceed to select Directory
Numbers for Call Screeners.

Specifying the Directory Number for Intercom

When enabling the feature you
must specify a Directory Number,
which when used by the screener
to call the recipient, activates the
intercom automatically. All
recipients can specify the same
Directory Number, for all Call
Appearance Intercom calls.
Normal calls can still be made
from this Directory Number to
numbers not set up for intercom.
Up to three Directory Numbers
may be programmed.

When specifying the Directory Number for intercom, you can enter just the extension number of the call screener or the complete number. For example, for a call screener at 926-3112, you could enter 3112 *or* 926*3112.

The extension number alone works because the recipient digital set matches the specified and incoming numbers from right to left, stopping after the number of digits entered during the setup. Entering the full number negates the possibility that an outside call with the same last four digits in the calling number (for example, 422-3112) could activate the intercom. The asterisk in the number 926*3112 is a wild card. 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. If you are in doubt, have the person who will be screening calls call you, and note the number displayed on the first line of the LCD.

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

Required Support from Your System Administrator

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

• Allocate one Directory Number 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 Directory Number, as shown below:

```
ENTER AUTHORIZED TELEPHONE
NUMBER
```

```
INTERCOM FEATURE  (1)
TWO WAY INTERCOM SUPPORTED
985*3112
```

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

```
INTERCOM FEATURE   (1)
NONSUPPORTED
```

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

2. Press ENTER. The Call Announce Intercom selection screen appears:

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

3. To enable the intercom feature, dial 1 or 2 and press ENTER. A screen appears showing your choice and prompting for an authorized Directory Number:

```
TWO WAY SELECTED   (1)
```

To disable the intercom feature, dial 3 and press ENTER. When the screen displays the message INTERCOM TURNED OFF, press REG (softkey 4) to return to normal operation.

4. Dial a telephone number of up to ten digits (including wild cards) and press ENTER (softkey 1). When you press ENTER, a screen appears announcing ONE (or TWO) WAY TURNED ON and showing the number you entered:

```
TWO WAY TURNED ON
 985*3112
```

If a Call Screener has Directory Numbers 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. Press (*), 11, ENTER, repeat steps 2,3, and 4 as needed until this screen appears:

```
INTERCOM FEATURE   (1)
(ONE OR TWO WAY)  2345
```

6. Press NEXT (softkey 2) and this screen appears:

```
INTERCOM FEATURE   (2)
NONSUPPORTED
```

Follow steps starting at # 2 to program the last two numbers.

7. Press REG (softkey 4) to return to normal operation.

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 an SRS-1050 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, but it is the simplest and fastest.

To announce a call by intercom, follow these steps:

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

2. Dial the extension of the call recipient.

The recipient's SRS-1050 immediately answers the call, sounds an alert tone, 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.

ENTERING A SERVICE PROFILE IDENTIFIER

You need to perform this procedure only if you are connected to a multipoint configuration. Usually, though, the SPID is entered at the time of installation and no action is required of you. If you have questions, ask your System Administrator.

   Warning: Once the SPID number is entered, don't change it unless your system administrator tells you to. Digital sets in a multipoint configuration won't work without the correct SPID number. If the SPID number is wrong, you'll hear a broken tone ("stutter dial tone") before the normal dial tone. Enter the correct SPID number and you'll get the normal dial tone.

If you need to enter a service profile identifier, follow these steps:

1. Press REG (softkey 4), 8, ENTER (softkey 1). The message ENTER SPID appears, with the current SPID number (if any) shown below it:

```
ENTER SPID
ID=0000000000
```

2. Dial your SPID number and press ENTER. The message SPID ASSIGNMENT END appears:

```
SPID  ASSIGNMENT  END
ID=0135908640
```

3. Press REG (softkey 4) to return to normal operations. The standard display screen appears.

USING Q.931 MESSAGE LOGGING

Q.931 message logging is an SRS-1050 feature that lets you store and retrieve call control messages sent and received by your digital set. These messages can help the System Administrator or service technician verify the operation of the digital set and phone lines. The average user would use the message logging feature only to collect messages for a service person in case of phone problems.

Message logging works in two modes:

• The Logging mode, which stores messages in a history file without displaying them

• The History mode, which displays messages stored in the history file. The history file can hold up to 24 messages at a time.

This section covers the procedures to:

• Start and stop message logging

• Review logged messages

  Note: When you stop message logging, all messages stored in the history file are saved and can be reviewed at a later time.

Appendix D provides the System Administrator or service technician with information useful in decoding messages. (Because of the limited space on your display, messages appear as a set of codes and abbreviations.)

Starting or Stopping Message Logging

You go through the same sequence of menus to start or stop message logging.

1. Press REG (softkey 4), 9, ENTER (softkey 1).

The following screen appears:

```
MESSAGE LOGGING MODE
. . . . . . . . . . . . . . . . . . . . . . . . . . .
```

2. Press ENTER. This menu of message logging options appears:

```
1:LOG-START     2:LOG-STOP
3:HISTORY          (SELECT 1-3)
```

3. Make your selection:

To start message logging, dial 1 and press ENTER.

The message MESSAGE LOGGING START appears.

To stop message logging, dial 2 and press ENTER.

The message MESSAGE LOGGING STOP appears.

4. To return to normal operations, press REG.

The standard display screen reappears.

Reviewing Logged Messages

To review messages in History mode, complete the following steps:

1. Press REG (softkey 4), 9, ENTER (softkey 1). This screen appears:

```
MESSAGE LOGGING MODE
. . . . . . . . . . . . . . . . . . . . . . . . .
```

2. Press ENTER. This menu of message logging options appears:

```
1:LOG-START     2:LOG-STOP
3:HISTORY          (SELECT 1-3)
```

3. To select the History mode, press 3, ENTER (softkey 1).

The messages appear on a screen like this:

```
1T>N:SETUP        CR=01
  HEX   R-UP   R-DOWN   EXIT
```

The history file holds up to 24 messages. Scroll through messages by pressing R-UP (softkey 2) or R-DOWN (softkey 3).

4. To display the full message text in hexadecimal:

• Press R-UP or R-DOWN to select a message.
• Press HEX.

The message appears on a screen like this:

```
08   01   CR:01   SETUP:05
NORMAL  R-UP  R-DOWN  EXIT
```

The hexadecimal message may take up more than one screen. Scroll through the rest of the message by pressing R-UP or R-DOWN. To return to a normal display (non-hexadecimal), press NORMAL.

5. To quit the History mode, press
   EXIT.

The menu of message logging
options appears again.

To stop message logging and
save all messages in the his tory
file before returning to normal
operations, dial 2 and press
ENTER. The screen displays the
message MESSAGE LOGGING
STOP.

6. To return to normal operations,
   press REG (softkey 4).

The standard display screen
reappears.

ACTIVATING AND DEACTIVATING THE MIC-OFF BUTTON

The MIC-OFF button (the button
at the upper right of the
multifunction button array)
controls the microphone during
handset or handsfree operation.
With this button activated as the
MIC-0FF button, you can turn off
the microphone while on a call to
talk privately to people around
you, and then press MIC-OFF
again to continue your phone
conversation.

If you deactivate MIC-OFF,
assign button 18 as a one-touch
button or a delimiter 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 or
delimiter assignment on button 18
before you can reactivate MIC-
OFF.

To activate or deactivate MIC-
OFF, follow these steps:

1. Press REG (softkey 4), 12,
   ENTER (softkey 1). A screen
   appears showing you the
   current status of MIC-OFF.

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

2. Press ENTER again and this
   menu appears:

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

The LED next to button 18
indicates its current state:

- *Off*:   Unassigned
- *Green*: Already active as
           MIC-OFF
- *Red*:   Assigned as a one-
           touch or delimiter
           button

If you wish to reactivate MIC-OFF, you must first cancel the one-touch assignment on button 18.

3. To activate MIC-OFF, press 1, ENTER.

   To deactivate MIC-OFF, press 2, ENTER.

The screen shows your choice:

```
SUPPORTED
  COMPLETED
```

4. To return to normal operations, press REG (softkey 4). The standard display screen appears.

CORRECTING MISTAKES

This section gives an example of correcting errors while setting a local feature of the SRS-1050.

Notes on Entering Information

When the displayed entry is acceptable, press ENTER to retain it and display the next parameter screen.

To change a numerical entry (not including menu selections) before you press ENTER, press CLEAR (softkey 3) and enter the desired value.

To change a menu selection or a numerical entry after you press ENTER, press asterisk (*) to return to the menu and then enter the correct value.

Example: Correcting calendar/clock errors

Suppose, just before entering the number for the day, you discovered a couple of errors; you had set AM instead of PM and APRIL instead of MAY. Here's what you do:

1. The screen shows the following:

```
INPUT DAY          ->
12:55AM   '93   APRIL 30
```

2. Press asterisk (*). The prior screen appears:

```
INPUT MONTH        ->
12:55AM   '93   APRIL 30
```

3. Press * again. The prior screen appears:

```
INPUT YEAR         ->
12:55AM   '93   APRIL 30
```

4. Press * again. The prior screen appears:

```
INPUT  0:AM   1:PM    ->
12:55AM   '93   APRIL 30
```

5. Press 1, ENTER to correct the time of day. This screen appears:

```
INPUT YEAR        ->
12:55PM   '93   APRIL 30
```

6. Press ENTER, accepting '93 as the year. This screen appears:

```
INPUT MONTH     ->
12:55PM   '93   APRIL 30
```

7. Press 5, ENTER, changing month to May. This screen appears:

```
INPUT DAY        ->
12:55PM   '93   MAY 30
```

You have now returned to the point where you realized your mistakes. Say you want to set the 4th as the date.

8. Press 4, ENTER, changing the date to the 4th. This screen appears:

```
COMPLETED
12:55PM   '93   MAY 4
```

9. Press REG (softkey 4) to return to the normal display, which shows the corrected entries:

```
. . . . . . . . . . . . . . . . . . . . . . . . . . .
12:55PM     SAT    MAY 4
```

Notes

Notes

SRS-1050 multifunction buttons can be set to automatically dial numbers you enter (up to 30 digits each). The number of buttons you can use is equal to 17 minus the number of buttons used for Directory Numbers and features. For example, if you had 6 numbers assigned to Directory Numbers, you would have 11 buttons available for one-touch dialing.

1. Press REG (softkey 4), 1, ENTER (softkey 1). This screen appears:

```
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 (softkey 2). Pressing NEXT additional times alternates between the two displays.

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


Softkeys

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

3. Complete the procedure in one of these ways:

- To change the number, enter a new number. Then press ENTER (softkey 1).

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

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

- The button is canceled as a one-touch button, and the green indicator goes dark.

- To leave the number unchanged, press REG (softkey 4) to return to the normal display.

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).

Some of the data entry displays have built-in timers. If you do not enter information within fifteen seconds, the display reverts to the menu for selecting the feature you were setting up. You must reselect the feature and start again.

If for any reason you become confused, you can always press REG (softkey 4) to return to the menus and start over.

Enabling the UNA Feature

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

1. Press REG (softkey 4), 4, ENTER (softkey 1).

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

```
UNA SERVICE MODE
 NON SUPPORTED
```

To leave it as is, press REG again.

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

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

To support UNA on all Call Appearances, follow these steps:

1. Press 1, ENTER, and this screen appears:

```
SUPPORTED (ALL)
 COMPLETED
```

After about 15 seconds, or if you press asterisk (*), the display returns to the second menu mode screen:

```
4:UNA    5:H-FREE
6:HAND/HEAD   (SELECT 1-14)
```

2. You can now select a different menu function, or press REG (softkey 4) to return to the normal display:

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

To support UNA on selected Call Appearances, follow these steps:

1. Press 2, ENTER, and this screen appears:

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

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

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

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

```
SUPPORTED  (SELECT)
COMPLETED
```

After about 15 seconds, or if you press asterisk (*), the display returns to the second menu mode screen:

```
4:UNA          5:H-FREE
6:HAND/HEAD  (SELECT 1-14)
```

3. You can now select a different menu function, or press REG (softkey 4) to return to the normal display:

```
12:55PM  WED  MAY 1
```

Disabling the UNA Feature

To disable unanswered call logging, follow these steps:

1. Press REG (softkey 4), 4, ENTER (softkey 1).

If the following screen appears, the feature is enabled:

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

To leave it as is, press REG again.

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

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

3. Now press 3, ENTER, and this screen appears:

```
NON SUPPORTED
COMPLETED
```

After about 15 seconds, or if you press asterisk (*), the display returns to the second menu mode screen:

```
4:UNA          5:H-FREE
6:HAND/HEAD  (SELECT 1-14)
```

4. You can then select a different menu function, or press REG (softkey 4) to return to the normal display:

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

The call announce intercom feature is a convenient way for a person screening incoming calls to announce the call to the intended recipient. The screener places the incoming call on hold, uses a designated Directory Number 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 feature 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.

The call announce intercom is distinct from the network-based intercom feature. Call announce intercom activates automatically. With the network-based intercom, the recipient must answer the intercom call. You could, however, use the network-based feature to simplify dialing for call announce intercom, allowing the call screener to dial one or two digits rather than the recipient's full extension number. You could also eliminate dialing entirely with dedicated intercom, another network-based feature.

Figure 3-1 below shows a typical application of call announce intercom.

Call Screener   Call Recipient

DIAGRAM

Directory Numbers   Call announce intercom setup:
3110   Activating Directory
3111   Number = 3112
3112*   Intercom mode = 1-way or 2-way
  *Designated for intercom
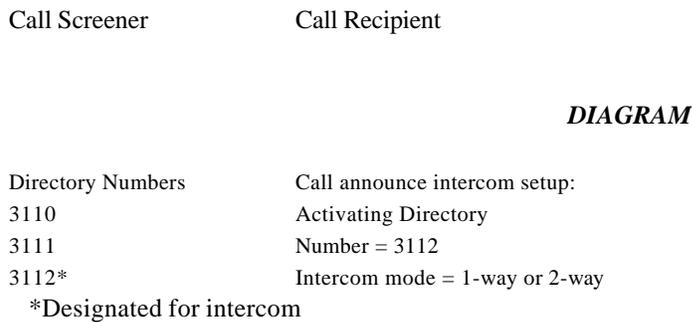
Figure 3-1: Call announce intercom application

This section discusses requirements for setting up call announce intercom followed by the procedures to:

Enable or disable call announce intercom

Use call announce intercom to announce a call

Setting up for call announce intercom

To be used, this feature must be enabled on the digital sets of call recipients; no setup is necessary on the screener's digital set. In fact, the screener can have any kind of telephone, even a non-ISDN unit. Any number of digital sets can be enabled, allowing a central screener to screen calls for several people.

Specifying the Directory Number for Intercom

When enabling the feature, you must specify a Directory Number, which, when used by the screener to call the recipient, activates the intercom automatically. All recipients can specify the same Directory Number, giving the screener a single Directory Number for all call announce intercom calls. Normal calls can still be made from this Directory Number to numbers not set up for intercom. Up to three Directory Numbers may be programmed.

When specifying the Directory Number for intercom, you can enter just the extension number of the call screener or the complete number. For example, for a call screener at 926-3112, you could enter

   3112

or

926*3112 (the asterisk is explained below)

The extension number alone works because the recipient digital set matches the specified and incoming numbers from right to left, stopping after the number of digits entered during the setup. Entering the full number negates the possibility that an outside call with the same last four digits in the calling number (for example, 422-3112) could activate the intercom.

The asterisk in the number 926*3112 is a wild card. 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. If you are in doubt, have the person who will be screening calls call you, and note the number displayed on the first line of the LCD.

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

Required support from your System Administrator

To guarantee that Directory Numbers are always available for call announce intercom, the System Administrator should:

- Set one Directory Number on the digital sets of both recipients and screener as outgoing only

- Assign a Priority feature button on the call screener's digital set to override the outgoing-only Directory Number on the recipient's digital set.

Recipients should mark the outgoing-only Directory Number for intercom use and avoid using it for calls. The outgoing-only Directory Number on the screener's digital set should be the one authorized for intercom use when recipients enable the feature. Any backup positions for the call screener should duplicate the attributes of the screener's digital set.

Notes:

- Some of the data entry displays have built-in timers. If you do not enter information within fifteen seconds, the display reverts to the menu for selecting the feature you were setting up. You must reselect the feature and start again.

- If for any reason you become confused, ;you can always press REG (softkey 4) to return to the menus and start over.

Enabling or Disabling Call Announce Intercom

To enable or disable call announce intercom, follow these steps:

1. Press REG (softkey 4), 11, ENTER (softkey 1).

A screen appears showing the current status of the intercom feature. If one- or two-way intercom is enabled, the screen displays the enabled mode plus the authorized Directory Number (see step 4 below). If the intercom is disabled, the screen displays NON SUPPORTED.

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

To program the first number, go to step 2. To program the second or third number, press NEXT (softkey 2) to display (2) or (3) on the screen.

2. Press ENTER.

The call announce intercom selection screen appears:

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

3. To enable the intercom feature, dial 1 or 2 and press ENTER. A screen appears showing your choice and prompting for an authorized Directory Number (see step 4).

To disable the intercom feature, dial 3 and press ENTER. When the screen displays the message INTERCOM TURNED OFF, press REG (softkey 4) to return to normal operation.

```
TWO WAY SELECTED
ENTER TELEPHONE NUMBER
```

4. Dial a telephone number of up to ten digits (including wild cards) and press ENTER (softkey 1).

If the call screener has Directory Numbers 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.

When you press ENTER, a screen appears announcing ONE (or TWO) WAY TURNED ON and showing the number you entered.

```
TWO WAY TURNED ON
985*3112
```

5. Press REG (softkey 4) to return to normal operations.

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 5.

The procedure also assumes that both the screener and the call recipient have an SRS-1050 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, but it is the simplest and fastest..

To announce a call by intercom, follow these steps:

1. Press the Directory Number designated for call announce intercom.

The intercom Directory Number indicator lights normally.

2. Dial the extension of the call recipient.

The recipient's SRS-1050 immediately answers the call, sounds an alert tone, 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.

   Notes:

   - To transfer the call at the same time you announce it, use the conference call transfer procedure.

   - To use Call Announce Intercom to deliver a message, dial the recipient's number and start talking. With two-way intercom, the recipient can answer immediately; with one-way intercom, you may have to wait a few seconds for the recipient to press the MIC-OFF key. To turn off the intercom after delivering the message, hang-up.

SELECTING CALL APPEARANCE PREFERENCE

The preference options determine which Call Appearance button the SRS-1050 selects when you go offhook (lift the receiver or press SPEAKER). You have three choices.

- *Primary line preference.* The SRS-1050 always selects button number 1, the Call Appearance associated with your primary Directory Number. If you have an incoming call on button number j1, 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.* The SRS-1050 does not automatically select any Call Appearance button when you go offhook. You must press the button you wish to be connected to either before or after you go offhook.

- *Ringing line preference.* The SRS-1050 selects the Call Appearance button that is ringing with an incoming call. If you have more than one incoming call, the SRS-1050 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.

If you have no incoming calls, the SRS-1050 selects the idle Call Appearance with the lowest button number and gives you a dial tone.

To select a Call Appearance preference, follow these steps:

1. Press REG (softkey 4), 14, and ENTER (softkey 1). A screen appears showing you the current preference.

```
CURRENT MODE IS
PRIMARY
```

2. Press ENTER to display the preference menu.

```
1:PRIMARY  2:NO PREF
3:RINGING  (SELECT 1-3)
```

3. Press the number of the preference option you want and then press ENTER. A screen appears showing your selection and the message COMPLETED.

```
RINGING PREFERENCE
  COMPLETED
```

4. To return to normal operations, press REG (softkey 4).

The standard display screen appears.

UNANSWERED CALL LOGGING (UNA)

Once enabled, this feature records information about incoming calls that we re 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 on line 4 of your SRS-1050 display. 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-LIST     DATA      CLEAR      DIR-LIST
```

To see the data for each unanswered call, press UNA (softkey 1). The resulting screen looks something like this:

```
777-1111
4-05.........................................................................12:15PM
11:10AM ................................................................Saturday  March 2
UNA-LIST     DATA      CLEAR      DIR-LIST
```

The 777-1111 is the number of the calling party.

 Note: The call time indication is based on the phone's calendar/clock. To ensure accurate reporting, be sure the
    calendar/clock is set properly (see Chapter 3).

Each time you press UNA (softkey 1), 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 phone.

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

Returning a Call

To return a call displayed by unanswered call logging, follow these steps:

1. Press any idle Call Appearance button. (Handsfree mode is automatic. For handset use, lift the handset.)

   You can also dial the number while onhook, and then lift the handset or press SPEAKER after dialing all the digits.

2. Dial the number shown on the UNA display.

   As soon as you go offhook or begin dialing the number while onhook, the unanswered call number shifts to the
   second line for reference. The first line shows the digits you are dialing.

   If the call is answered, you can converse with the party reached. If not, hang up by replacing the handset in its
   cradle or, in handsfree mode, hang up by pressing the SPEAKER button.

   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 (softkey 1) 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.

SETTING INITIAL SPEAKER VOLUME

The initial speaker volume setting determines the initial volume for each new call in handsfree mode. That is, if you change speaker volume using the front panel volume control buttons, the change affects the call you are on but not future calls. This menu mode feature allows you to change the basic speaker volume for all calls.

If the factory-set normal speaker volume is too low for your environment, the menu mode options allow you to increase the factory setting by two or four dB. You can also return to the normal setting.

The default volume you set in this procedure remains effective even if you remove and reconnect power. Only if you reinitialize the phone does the default volume return to the normal setting.

To change the initial speaker volume, follow these steps:

1. Press REG (softkey 4), 13, ENTER (softkey 1). A screen appears showing the current speaker volume setting:

```
SPEAKER VOLUME
 NORMAL
```

2. Press ENTER again and this menu appears:

```
1:NORMAL     2:VOL-UP1
3:VOL-UP2    (SELECT 1-3)
```

3. Press ENTER again and this menu appears:

```
1:NORMAL     2:VOL-UP1
3:VOL-UP2    (SELECT 1-3)
```

4. Press the number of the desired setting and then press ENTER. The screen shows your selection and the word COMPLETED.

```
VOL-UP1
 COMPLETED
```

5. To return to the normal display, press REG.

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

CHAPTER 4

DATA OPERATION

The SRS-1050 Digital Set is available in a voice/data model that allows you to use the set for data applications. Please refer to the *Fujitsu ISDN Data User's Guide* for information on how to set up and configure the Terminal Adapter for proper operation.

```
┌─────────────────────────────────┐
│ 5:20 PM  Tuesday  January 4      │
│   UNA    DATA    CLEAR    REG    │          ┌──────┐
│                                  │ Key Menu │      │
│  ┌───┐  ┌───┐  ┌───┐  ┌───┐      │          └──────┘
│    1      2      3      4        │
└─────────────────────────────────┘
```
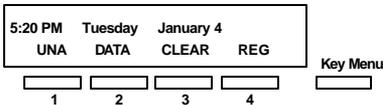
Standard Softkey Layout

(The DATA softkey label appears only if you have a data terminal.)

Note: Softkey 1 also serves as the ENTER key (for entering information as indicated in this User Guide).

USING THE DATA TERMINAL ADAPTER

This chapter describes three ways to make a data call using the integrated Terminal Adapter (TA) in your Digital Set.

- Using the DATA softkey (second button from the left under the display)

- Using AT commands at your terminal

- Using the X.28 commands at your terminal

Following these procedures is a section on placing a call to a leased network number.

There are three LEDs below the multifunction buttons of the SRS-1050. DTR (Data Terminal Ready) must be steady green to establish a connection.

Transmitting data from your terminal causes the TXD (Transmit Data) LED to flash, and receiving data causes the RXD (Receive Data) LED to flash.

MAKING AND TERMINATING A DATA CALL

You can start or end a data call either manually or by using commands at your terminal, as described in the following sections.

Using the DATA Key

To make a data call using the digital set DATA key, follow these steps:

1. Press DATA (softkey 2).

To display the softkey names, press KEY MENU.

Next to the word DATA on the display, a blinking terminal symbol appears, and to its left the word SEND appears for about six seconds.

```
. . . . . . . . . . . . . . . . . . . . . . . . . . . . .
SEND        ⊐⊏ DATA      CLEAR
```

2. Use the keypad to enter the number you wish to dial (or press a one-touch button), and press SEND (softkey 1).

   Note: The SEND key tells the Digital Set to dial the number. If you don't press SEND, the Digital Set will dial the number after a six second delay.

As you dial, the number you are dialing appears on the display. When you press SEND, the display returns to its normal state, with the terminal symbol to the right of the time and date.

```
. . . . . . . . . . . . . . . . . . . . . . . . . . . . .
12:55      SUN       MAY 14 ⊐⊏
```

If the terminal symbol continues to blink for more than a minute, the remote PAD (Packet Assembler/Dissembler) isn't answering the call. Press DATA again to clear the call.

Once the call connects, the terminal symbol stops blinking.

3. To disconnect a data call manually, press DATA (softkey 2). The terminal symbol on the display disappears.

Using AT Commands

To make a data call using AT commands from an asynchronous terminal, follow these steps:

1. From your terminal, enter the AT dial command (ATD) and the number you wish to dial (2345678 for example), ending with a carriage return (shown here as <CR>):

   ATD2345678 <CR>

   The letters AT stand for Attention, D for Dial. (Either ATD or atd will work; mixing upper and lower-case letters, as in Atd or aTD, will not work.) A blinking terminal symbol appears on the phone's display next to the word DATA.

2. When the call connects, the word CONNECT or COM appears on the terminal screen. The phone's display returns to normal, except that a steady terminal symbol continues to be shown after the time and date on line 2.

3. If the call cannot be completed (the called terminal was busy or did not answer), the message NO CARRIER appears on your terminal screen.

4. To disconnect the call, use the following procedure:

- Enter +++ from your terminal. OK appears on the terminal screen.

- Enter ATH <CR> from the terminal. The call disconnects, and the terminal symbol on the phone's display disappears.

 Note: When you use the AT commands, the message ERROR will appear on the terminal screen if the command is entered incorrectly. Please refer to the *ISDN Data User's Guide* for more information on using the AT commands.

Using X.28 Commands

The procedure for making the connection with X.28 is similar to the above but requires no explicit command:

1. Enter the number to be dialed, and then press <CR>. A blinking terminal symbol appears on the phone's display next to the word DATA.

When the connection is made, the display returns to normal, except that a steady terminal symbol continues to be shown after the time and date on line 2.

2. To disconnect, hold down CTRL as you press P. Wait for the * prompt to appear, and then enter the command CLR and press <CR>. The call disconnects, the words CLR CONF appear on your screen, and the steady terminal symbol disappears.

For instructions on viewing parameters or using off-line commands, or for additional information on other communication parameters and considerations, please refer to the *ISDN Data User's Guide*.

 Note: The AT and X.28 escape sequences shown above (+++ and CTRL-P) are the default values. If these have been changed on your terminal, see the *ISDN Data User's Guide* for more information.

PLACING A CALL TO A LEASED NETWORK

A call to a leased network number follows the same basic procedures given in the preceding sections, with two differences:

- Terminal calls can only be made using AT commands

- When you enter the number, you must enter a leased network access code, including the access code delimiter.

Using the Data Key

Before you can dial a leased network number with the DATA key, you must assign one of your multifunction buttons as a leased network access code delimiter key. See Chapter 3 for the procedure.

When you enter the number of the Data Terminal Equipment (DTE) you want to call, use one of the following procedures:

- Enter the telephone number of the DTE you want to call; press the assigned leased network access code delimiter key; then enter the leased network access code.

- Press the assigned leased network access code delimiter key; enter the leased network access code; press the delimiter key again; then enter the telephone number of the DTE you want to call.

Once you complete entering the leased network number, press the SEND softkey as usual.

Using AT Commands at a Terminal

After you type ATD, type the number of the DTE you want to call using one of these two sequences:

- Type the telephone number of the DTE you want to call; type a colon; then type the leased network access code.

- Type a colon; type the leased network access code; type another colon; then type the telephone number of the DTE you want to call.

Once you complete entering the leased network number, press <CR> as usual.

APPENDIX A

INSTALLATION

When you receive your SRS-1050, plug the telephone line from the wall into the LINE socket at the back of the set.

If the LCD displays a date and time, you have power. If not, you'll need a power supply to connect to the AC wall socket and the power socket at the back of the phone.

If you plan to use a headset, disconnect the handset from the jack on the left side of the phone and plug the headset into the same jack.

Use Chapter 3 to enable headset use and to set the clock/calendar, phone parameters, and other local features.

Find out from your system administrator what numbers and features have been assigned to buttons on your phone, and label those buttons appropriately.installation

These instructions are intended mainly for System Administrators or service personnel or end users that are installing the SRS-1050.

Installation of the SRS-1050 involves two steps:

- Connecting the set to the network.
- Entering Service Profile Identifier (SPID).
- Labeling the set.
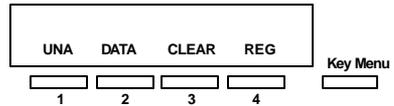
Standard Softkey Layout

INSTALLING THE SRS-1050

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 below: "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 B-1 illustrates the connections when one power supply is used for both the NT1 and the SRS-1050 and also indicates the position of the power switch on the SRS-1050.
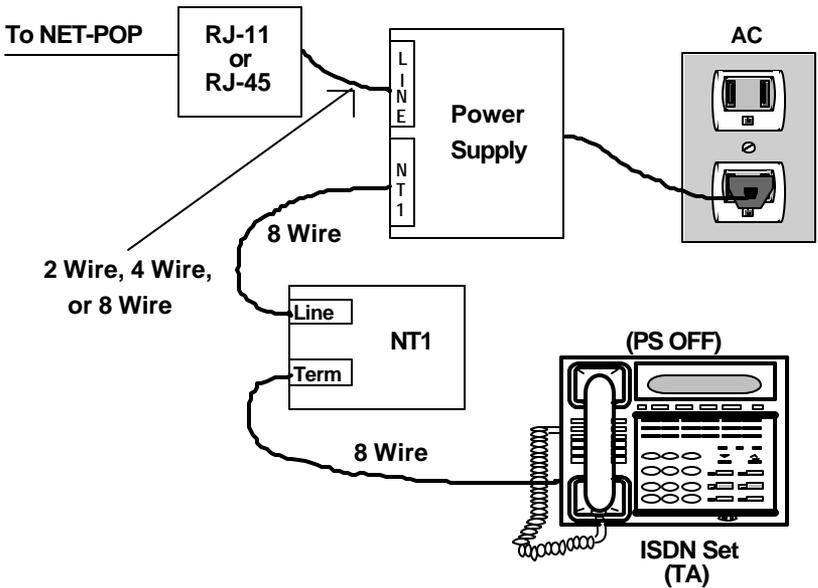
Figure B-1: Power Connections

Figure B-2 illustrates the connections when a power supply is
needed for the NT1 and another is needed for the SRS-1050 and
also indicates the position of the power switch on the SRS-1050.
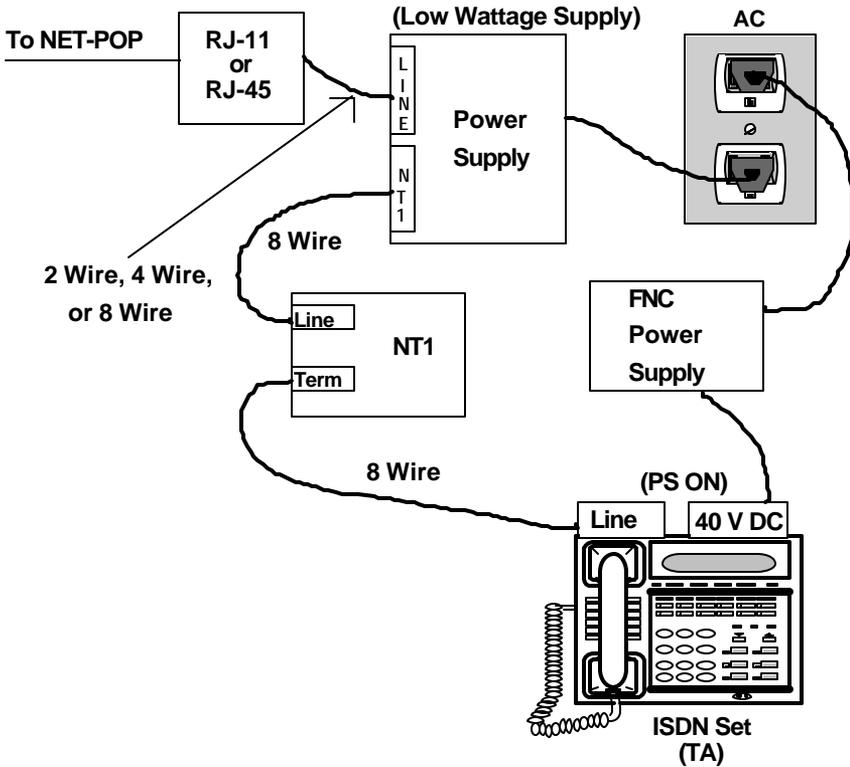
Figure B-2: Power Connections

CONNECTING TO THE NETWORK

When you receive your SRS-1050, plug the telephone line from the wall into the LINE socket 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 a power supply to connect to the wall socket and to the 40 V DC power socket on the back of the set.

If you are connecting power for the first time, you should see the message SPID NG. See the next section to enter a Service Profile Identifier (SPID).

ENTERING THE SPID

The Service Profile Identifier identifies your set to the network. You will need to enter a SPID if you are on a multipoint configuration.

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, and then disconnect and reconnect power to make the set function normally.

To enter the service profile identifier, follow these steps:

1. Press REGISTER (softkey 4) 8, ENTER (softkey 1).

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

```
ENTER SPID
ID=000000000000
```

2. Dial your SPID number and press ENTER.

This screen appears:

```
SPID ASSIGNMENT END
ID=XXXXXXXXXX
```

3. Press REGISTER (softkey 4) to return to normal operations.

PROGRAMMING AND LABELING 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.

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.

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.

Fujitsu has developed a DOS/Windows and a Macintosh application file using Microsoft EXCEL 4.0 and Excel 5.0 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.

For use with the printing application, Fujitsu has included a laser printer compatible paper template in the SRS-1050 User's Guide. As an alternative, you may print, type, or write in the needed designation on the template. Additional templates may be purchased from your distributor or from Fujitsu.

Do not remove the perforated display window from the template until after printing.

All other 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 manual feed tray.

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

Fujitsu Terminal Equipment Termination 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 discussions 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 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.

Single Unit Installations

The maximum distance between the NT1 and the ISDN Terminal Equipment is 3000 feet in a single unit installation. 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
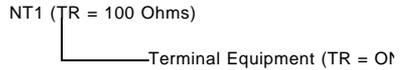
Two Unit Installations

Bridging at the NT1 –
Maximum Distance Between
NT1 and Units is 250 ft.

The overall maximum length of
the cable is 1600 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 (if
present) should be set to
FIXED or (PB).

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 250 ft.

The overall maximum length of
the cable is 1600 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 (if present)
should be set to FIXED or (PB)
when the distance between the
NT1 and the Terminal
Equipment is 400 ft or less for
level 3 wire, or 600 ft for level 5
wire. Longer loops require
ADAPTIVE (or PTP).

NT1 (TR = OFF)

    ┌──Terminal Equipment (TR = ON)
    └──Terminal Equipment (TR = ON)
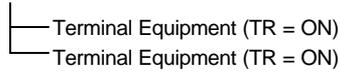
Multiple Unit Installations

Bridging at the NT1

The overall maximum length of cable is 1600 ft. 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 (if present) should be set to ADAPTIVE (or PTP).

NT1 (TR = ON 100 Ohms)

———Terminal Equipment (TR = OFF

———Terminal Equipment (TR = OFF

———Terminal Equipment (TR = ON

Notes

APPENDIX B

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

The first choice, called 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 SPEAKER, 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 SPEAKER 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 SPEAKER 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 SRS-1050 does not connect to a line until you press a Call Appearance button.)

AUTOHOLD

The second choice, called 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

The third choice, called 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.

Guide Assumptions

To simplify presentations in this guide, the text 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 SPEAKER for handsfree operation or lift the handset.

APPENDIX C

TESTING

The SRS-1050 has a self-test mode that performs the following tests:

- 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 40 V DC jack if you are using the DC power supply.

2. Press and hold down both 1 and 3 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)
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
. . . . .
```
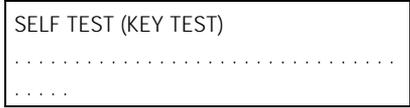
The set cannot originate or receive a call during the self-test.

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

PERFORMING TESTS

The following sections summarize the self-tests that you can perform on the SRS-1050 Digital Set.

LED Test

The LED test is done first automatically. It turns all but the data LEDs red for one second, off for one second, green for one second (except MSG), and finally off again. 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 2 or 3 to start the LCD tests.
- Press 4 to start the Memory/Line test.

- Press 5 to start the Program and Loop switch test (with optional data terminal adapter only).

These tests are described in the sections below. Tests 1, 2, 3, and 5 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 5 sounds its associated confirmation or DTMF 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
Key Menu Key	Key Menu	Key Menu Key
Multifunction buttons	MULTIASSIGN KEY nn	nn: 1 to 18 (key no.)
Fixed function buttons	FUNCTION KEY 1	DROP
	FUNCTION KEY 2	TRANSFER
	FUNCTION KEY 3	HOLD
	FUNCTION KEY 4	CONFERENCE
	FUNCTION KEY 5	REDIAL
	FUNCTION KEY 6	SPEAKER
DTMF keypad keys	TEN KEY X	X=(5), 6, 7, 8, 9, 0, #, and *

(DTMF keys 1, 2, 3, 4, and 5 (with data terminal adapter installed) are reserved for test selection and not displayed on the LCD.)

Tone Test

When you press 1 on the DTMF keypad, the speaker sounds a Ringer Tone. 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 (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.
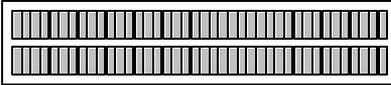
When you press the 3 on the DTMF keypad, the LCD displays the first set of display characters supported by the set. Press 3 again to display the rest of the supported display characters.

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

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.

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.

When the RAM test terminates successfully, the Digital Set goes immediately to the ROM access test. Upon detection of an error, the sequence stops and an error code is displayed.

When the ROM access test terminates successfully, the DTE interface circuit test starts automatically on sets that have the optional data terminal adapter. An error in this test is reported by an error code in the LCD display.

When the DTE test terminates successfully, the NT line test starts automatically. An error in this test is reported by an error code in the LCD display.

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

SELF TEST (MEMORY/LINE)
 VOICE & DATA ALL GOOD

Program and Loop Switch Test

If your SRS-1050 has the optional data terminal adapter, pressing 5 displays the status of the Program (PRG) and Loop switches that are a part of the TA. The display looks like this:

SELF TEST (PROGRAM SW/LOOP SW)
PROG RAM: OFF LOOP:NOR

Pressing the Program switch on the back of the set changes PROG RAM: OFF to PROG RAM: ON. Pressing the Loop switch changes LOOP: NOR to LOOP: TEST. See your *Data User's Guide* for the function of these switches.

Exiting Test Mode

To exit test mode, remove power and reapply it.

Table C-1 Self-Test Result Codes

Display Message	Test Result
S/M ERROR CODE (01)	SMCM, RAM, ROM test failed.
S/M ERROR CODE (02)	Line SIU test failed.
S/M ERROR CODE (03)	Line SIU test timed out.
S/M ERROR CODE (04)	Line NT test failed; message received does not match message sent.
S/M ERROR CODE (05)	Line NT test timed out.
S/M ERROR CODE (06)	Line NT test failed; no response received.
S/M ERROR CODE (07)	SMCM test timed out.
S/M ERROR CODE (07) RCM (02)	SMCM, RCM test timed out.
RCM ERROR CODE (01)	RCM RAM test failed.
RCM ERROR CODE (02)	RCM test timed out.
VOICE ALL GOOD	All tests passed.
VOICE & DATA ALL GOOD	All tests passed (with data terminal adapter).

APPENDIX D

INTERPRETING Q.931 MESSAGE LOGGING CODES

With Q.931 message logging, you can view messages in History mode in two different formats:

- Normal format
- Hexadecimal format

This appendix describes these two formats in detail, showing what messages look like in each. At the back of this appendix you'll find three tables explaining the codes and abbreviations used in the messages.

```
5:20 PM   Tuesday   January 4
     UNA    DATA    CLEAR    REG
                                        Key Menu
   ┌───┐  ┌───┐  ┌───┐  ┌───┐        ┌───┐
     1      2      3      4
```
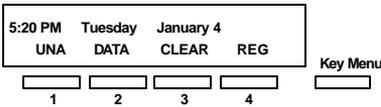
Standard Softkey Layout

(The DATA softkey label appears only if you have an optional data terminal adapter installed.)

Note: Softkey 1 also serves as the ENTER key (for entering information as indicated in this User Guide).

NORMAL FORMAT IN HISTORY MODE

The normal format of the History mode shows abbreviated information. An abbreviated message and call status code are displayed for transmission and reception messages. The information element codes, selected Directory Number value, and call status code are not shown.

The screens below are examples of messages in the normal format of History mode. Note that line 2 of the displays shows the names of softkey functions specific to History mode. Use the softkey R-DOWN to see additional messages (move from screen 1 to screen 2) and R-UP to backtrack to previous messages (move from screen 2 to screen 1). The softkey HEX switches the display to hexadecimal format, and EXIT leaves History mode.

```
T>N:MAN-INFO      CR=01
HEX     R-UP     R-DOWN     EXIT
```

```
N>T:SETUP         CR=09
HEX     R-UP     R-DOWN     EXIT
```
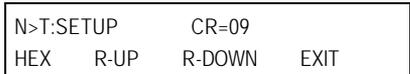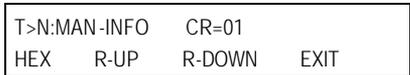
Definitions of the different fields shown in the normal format of the History mode follow:

T>N: Transmission message identifier for terminal-to-network messages. This identifier is followed by the abbreviated message and a list of up to six related information element codes. Table D-1 explains the different abbreviated messages. Table D-2 lists and defines the information element codes.

N>T: Reception message identifier for network-to-terminal messages. This identifier is followed by the abbreviated message and a list of up to six related information element codes. Table D-1 explains the different abbreviated messages. Table D-2 lists and defines the information element codes.

CR: Call reference number

HEXADECIMAL FORMAT IN HISTORY MODE

You can use the hexadecimal format of History mode to see more detailed message information than is displayed in the normal format.

The selected Directory Number value, call status code, and information element codes are displayed, as well as the abbreviated message and call reference number.

In the hexadecimal format, you can view only one message at a time. To see another message, you must press the NORMAL softkey to return to normal format, use R-UP and R-DOWN to display another message on the screen, and then press the HEX softkey to return to hexadecimal format.

The screens that follow are an example of a message in the hexadecimal format of History mode. Line 2 of the displays shows the names of softkey functions specific to History mode. Use the softkeys R-UP and R-DOWN to scroll through the lines of the message. The softkey NORMAL switches the display back to normal format, and EXIT leaves History mode.

```
08 01 CR:09 SETUP:05
NORMAL     R-UP     R-DOWN     EXIT
```

```
BC:04 03 80 90 AW CID:18
NORMAL     R-UP     R-DOWN     EXIT
```

```
01 88 SIG:34 01 40 LS:96
NORMAL     R-UP     R-DOWN     EXIT
```

```
SCA:22 01 01 DCA:25 01 10
NORMAL    R-UP    R-DOWN    EXIT
```

The following information is shown:

- Transmission or reception message identifier. This identifier is followed by the abbreviated message and a list of up to six related information element codes. Table D-1 explains the different abbreviated messages. Table D-2 lists and defines the information element codes.

- Selected Directory Number value

- Call reference number

- Call status code. Table D-3 explains the valid call status codes.

- Channel identifier (not shown in this example). The channel identifier, if displayed, shows B1, B2, or D, depending on the channel used.

CODES AND ABBREVIATIONS

The following three tables explain the abbreviated messages, information
element codes, and call status codes.

Table D-1   Message Abbreviations

Abbreviated message ....Full Message

ALERTING..Alerting

ASSOC...Associated

ASSOC-ACK ....Associated Acknowledge

CALL-PROC.....................................Call Proceeding

CONF ....Conference

CONF-ACK.......................................Conference Acknowledge

CONF-REJ ....Conference Reject

CONNECT ....Connect

CONN-ACK ....Connect Acknowledge

DISC...Disconnect

DROP ....Drop

DROP-ACK.......................................Drop Acknowledge

DROP-REJ ....Drop Reject

HOLD..Hold

HOLD-ACK.......................................Hold Acknowledge

HOLD-REJ ....Hold Reject

INFO...Information

MAN-INFO.......................................Management Information

MIM ....Management Information Messages

OVERLAP...Overlap Sending

PROGRESS.......................................Progress

RECONNECT ....Reconnect

RECONN-ACK ....Reconnect Acknowledge

RECONN-REJ...................................Reconnect Reject

REDIRECT..Redirect

Table D-1 Message Abbreviations (continued)

Abbreviated message.......................Full Message

RELEASE...Release

REL-COM ....Release Complete

RESTART ....Restart

REST-ACK ....Restart Acknowledge

SETUP...Setup

SETUP-ACK......................................Setup Acknowledge

STATUS ....Status

STATUS-ENQ...................................Status Inquiry

TRANSFER ....Transfer

TRANS-ACK ....Transfer Acknowledge

TRANS-REJ......................................Transfer Reject

UNSPECIFIED..................................Unspecified Error

Table D-2   Information Element Codes

Information element code	Meaning
AC	Adjunct Control
AT	Associated Type
BC	Bearer Capability
CAU	Cause
CDN	Called Party Number
CGN	Calling Party Number
CID	Channel Identification
CR	Call Reference
DC	Display Control
DCA	Destination Call Appearance
DF	Display Field
EI	Endpoint Identifier
ERR	Element Error
FA	Feature Activation
FI	Feature Indication
KP	Keypad
KPC	Keypad Control
LS	Locking Shift
LLC	Low Layer Capability
MIE	Management
OCA	Origination Call Appearance
OCR	Other Call Reference
PI	Progress Indicator
RI	Restart Indicator
SCA	Selected Call Appearance
SIG	Signal
SWH	Switchhook
ST	Call State
TC	Terminal Capabilities
UC	User Code

Table D-3   Call Status Codes

Code	Status	Meaning
U00	NULL	Null State
U01	CALL INIT	Call Initiation
U02	OVERLAP	Overlap Sending
U03	OUT PROC	Outgoing Call Proceeding
U04	CALL DLVD	Call Delivered
U07	CALL RCVD	Call Received
U08	CONN REQ	Connection Request
U09	IN PROC	Incoming Call Proceeding
U10	ACTIVE	Active
U11	DISC REQ	Disconnect Request
U12	DISC IND	Disconnect Indication
U19	REL REQ	Release Request

Notes

APPENDIX E

ISDN CALL IDENTIFICATION (ICI) DISPLAYS

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.

Notes

APPENDIX F

ERROR MESSAGES

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

Table F-1
Connection Status MessagesBCS (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
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 or 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
038	OUT OF ORDER	Network out of order
041		Temporary failure
042	NETWORK BUSY	Network congested

Table F-1 Connection Status Messages (continued)

Cause #	Message Displayed	Description
043		Access information discarded
050	FACILITY N/A	Requested facility not subscribed
051	SERVICE NG	Service request incomp atible
052		Outgoing calls barred
053	SERVICE NG	Service operation violated
054	CALLED BARRED	Incoming calls barred
057	BEARER TYPE NG	Bearer capacity not authorized
058		Bearer capability not currently available
063		Service or option not available
065	BEARER TYPE NG	Bearer service not implemented
066		Channel type not implemented
069	FACILITY N/A	Requested facility not implemented
081		Invalid call reference value
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 nonexistent or not implemented
098		Message not compatible with call state
100		Invalid information element contents
102	TIMER EXPIRE	Recovery or timer expired
111		Protocol error, unspecified
127		Interworking, unspecified

Table F-2
Connection Status MessagesDPS (Packet Switched)

Display format	Description
DATA CLR DTE.....................	DTE disconnected
DATA CLR OCC	Number busy
DATA CLR DER......................	Out of order
DATA CLR RPE......................	Remote procedure error
DATA CLR RNA.....................	Reverse charging not accepted
DATA CLR NA	Incompatible destination
DATA CLR INV......................	Invalid facility request
DATA CLR ERR......................	Local procedure error
DATA CLR NC.......................	Network congestion
DATA CLR NP	Number error

Each command reports its successful or unsuccessful execution. Errors usually result in a display of the word ERROR or ERR INC.

This error reporting also applies to the offline commands for setting terminal adapter parameter defaults. These defaults can be stored in a set of profiles, and you can choose which profile to apply to a port when making your data call.

The offline commands for these purposes are described in the *Data User's Guide*, along with each command's response and related messages.

Notes