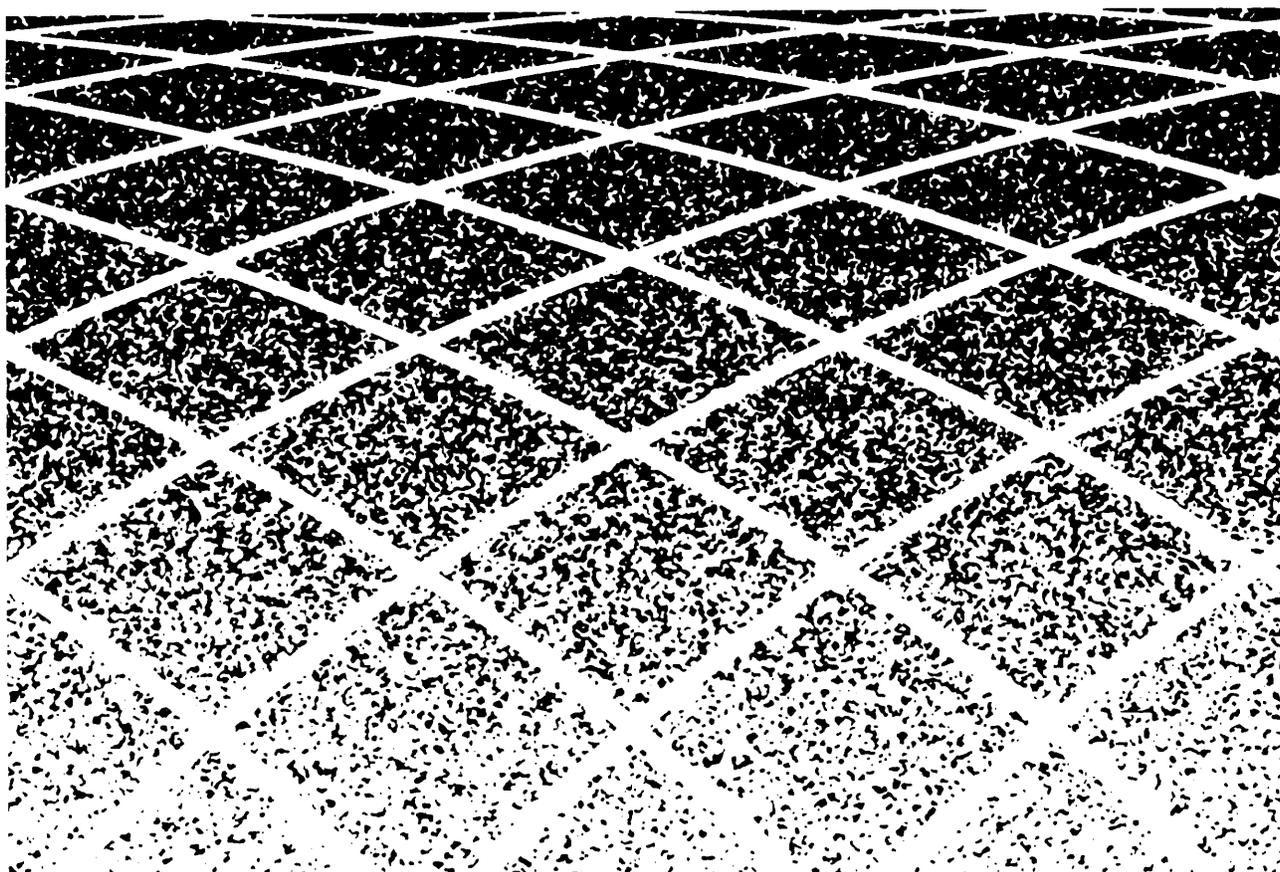




AT&T Digital Announcer

Installation and Use



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514-616-100
Issue 1
July 1992

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Product Ordering Information

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Introduction

1

Overview of the AT&T Digital Announcer™

The AT&T Digital Announcer™ is a telecommunications product that can record, store, and play back two voice messages in a telecommunications systems environment. You can use the AT&T Digital Announcer in any of the following configurations:

- an AT&T call management system (CMS) for Merlin®, MERLIN® II, and MERLIN LEGEND™
- a standard, 2-wire tip/ring telephone circuit
- a contact activated start application, such as an emergency announcement over a loudspeaker paging system

The Digital Announcer provides the following features:

- **Up to two Recorded Announcements May Be Stored and Played to Callers**

The Digital Announcer can record and store either one or two announcements, depending on your needs. For example, if you want a “day” message and a “night”

message, you can record both messages and manually activate the appropriate message at the appropriate time of day.

- **Announcement Recording by Either a Handset or Pre-Recorded Cassette Tape**

The Digital Announcer allows you either to manually record announcements using the handset or record pre-recorded announcements from a tape cassette recorder. Almost any cassette tape recorder can be used for this feature.

- **Upgradable Memory for Announcements**

The Digital Announcer comes from the factory with a total message memory of 64 seconds, which can be upgraded to 128, 192, or 256 seconds. This upgrade must be done by an AT&T- authorized technician.

- **Customizable Announcement Lengths**

At any time, you can change how the total message memory capacity is allocated between the two messages. For example, if you were using two messages (message 1 for day and message 2 for night) and needed two messages of equal length, you could split the total message memory time between message 1 and message 2 equally. However, if you realized later that you needed a longer message for the day and a shorter message for the night, you could allocate 60 or 80% of the total message memory capacity to message 1. If you need only one long message, you can allocate the total message memory capacity to message 1 alone.

- **Rechargeable Internal Battery**

The Digital Announcer contains a rechargeable, internal battery that provides sufficient power to store your recorded announcements for an extended period of time (depending on the amount of message memory your unit is equipped with) and maintain full functional and operational ability for a defined time.

About this Manual

This manual is divided into the following chapters and appendices:

- **Chapter 1: Introduction** presents an overview of the AT&T Digital Announcer.
- **Chapter 2: Installing the AT&T Digital Announcer** is intended for the AT&T-authorized technician and describes how to install the Digital Announcer.
- **Chapter 3: Using the AT&T Digital Announcer** describes how to operate the Digital Announcer.
- **Chapter 4: Upgrading the AT&T Digital Announcer** is intended for the AT&T-authorized technician and describes how to upgrade the message memory and firmware.
- **Chapter 5: Troubleshooting** explains LED status and general problem resolution.
- **Appendix A: Planning Form** is intended for the AT&T technician to determine unit configurations and customer requirements before installing the Digital Announcer.
- **Appendix B: Administering the AT&T Digital Announcer on DEFINITY®, System 75, and System 25** describes how system managers for a DEFINITY, System 75, or System 25 would administer the Digital Announcer on these PBXs.
- **Appendix C: Technical Specifications** provides the specifications for the Digital Announcer.

Installing the AT&T Digital Announcer

2

Overview

This chapter provides the procedures that you will use to install the AT&T Digital Announcer.



NOTE:

The information presented in this chapter is intended only for AT&T-authorized technicians.

Preparing for Installation

Before installing the Digital Announcer, perform the following procedures:

1. Verify that you received all of the equipment.
2. Make sure you have the necessary tools to perform the installation.

Installing the AT&T Digital Announcer

3. Gather information on how the unit will be configured by completing the planning form in Appendix A.
4. Select a site for the unit.

Verifying Equipment

Before installing the Digital Announcer, make sure that you received the following equipment:

- **AT&T Digital Announcer**
- **power supply**
- **bracket for wall mount**
- **handset and handset cord**
- **modular cord**



NOTE:

If you are using this unit with MERLIN, MERLIN II, or MERLIN LEGEND CMS, you must also obtain the Announcer unit interface cord included with the CMS interface board.

Figure 2-1 shows the equipment required.



NOTE:

An external power surge suppression unit (such as an AT&T 147A Surge Protector) is strongly recommended.

Installing the AT&T Digital Announcer

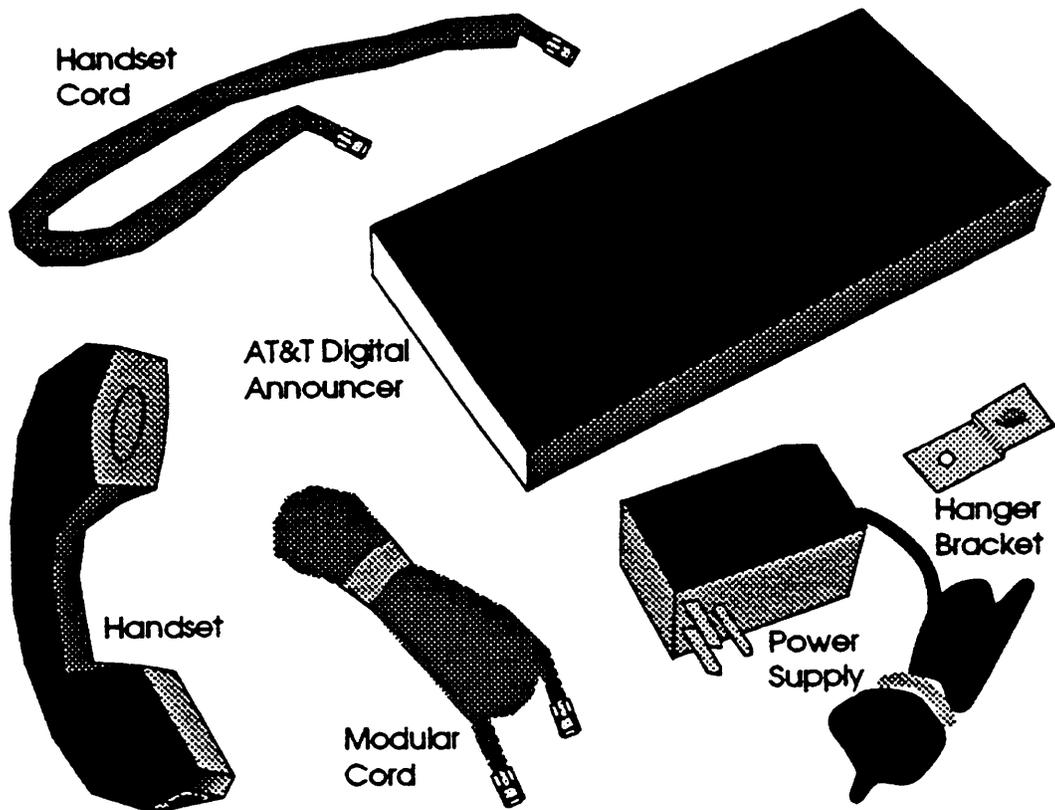


Figure 2-1. AT&T Digital Announcer Equipment

Materials Required

To install the Digital Announcer properly for tip/ring, System 25 CMS, System 75 CMS, and contact activated start applications, you need the following items:

- modular jack (RJ11-type jack for tip/ring applications; RJ25-type jack for contact activated start applications)
- #1 Phillips® screwdriver
- cross-connect wire (if connecting to a jack)
- screw (if mounting the unit on a wall). You will not wall-mount the unit if you are using it with a CMS application.

To install the Digital Announcer properly for MERLIN, MERLIN II, or MERLIN LEGEND CMS, you need the following items:

- the Announcement interface cord provided with the CMS interface board
- #1 Phillips screwdriver

Gathering Information

Before installing the Digital Announcer, you must determine the following information on the planning form in Appendix A.

- whether the user wants the unit to answer calls and store the announcements for up to one-half hour during a power failure. If the user wants the Power Failure Answer option set to “off ,” the unit will store the recorded announcements for up to three hours during a power failure, but will not answer any calls during that time. When the

Power Failure Answer option is activated, the unit will answer calls and store the recorded announcements between 30 minutes and 3 hours, depending on the number of calls serviced by the unit during the power outage.

- the type of configuration in which the unit will be used. The unit may be used in one of the following configurations:
 - with an AT&T CMS for MERLIN, MERLIN II, or MERLIN LEGEND
 - with a conventional tip/ring telephone line interface (including System 25 CMS and System 75 CMS)
 - with a contact activated start application
- the number of announcements the user wants (either one or two announcements).
- the total message memory available in this unit.
- the length of time the user wants to allocate to each announcement.
- the number of rings before the unit answers a call and plays an announcement. This feature is known as “Ring Count Delay.” Ring Count Delay is unnecessary if the unit will be used with CMS or contact activated start applications.
- whether the user wants the unit to hang on a wall or rest on a flat surface.

Selecting a Site

The AT&T Digital Announcer may be mounted on a wall or placed on a shelf.



NOTE:

Do not stack items on this unit or place the unit on top of other equipment.

Certain factors must be considered before installing the Digital Announcer for the customer. The Digital Announcer operates reliably in an office environment, but it needs to be located in an area that meets the following conditions:

- near a telephone system interface.
- near a properly-grounded power outlet. Ungrounded machines may be harmed by static electricity, may fail to work properly, and can be a safety hazard. Extensive internal circuit damage can result by connecting the unit to an ungrounded outlet.
- well-ventilated and away from heat sources. Excessive heat and direct sunlight can cause undesirable conditions such as low-humidity, which can cause static problems.
- isolated from strong electromagnetic fields produced by electrical devices (for example, air conditioners, large fans, large electric motors, radio and television transmitters, and high-frequency security devices).
- away from water and excessive humidity.

Installing the Digital Announcer

To install the Digital Announcer, perform the following procedures:

1. Set the switches on the rear panel of the unit.
2. Apply AC power to the unit.
3. Connect the unit to the telephone system.
4. Activate the Battery option.
5. Mount the unit on a wall (if necessary).

When installing this unit, refer to the planning form in Appendix A, and Figures 2-2 and 2-3.

Installing the AT&T Digital Announcer

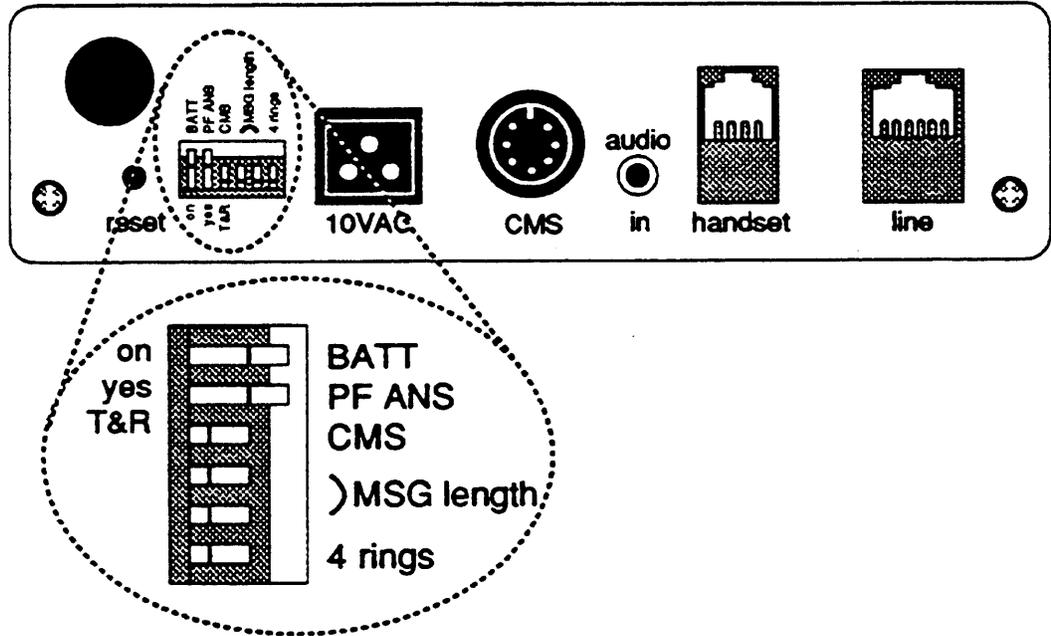


Figure 2-2. Rear Panel of the Digital Announcer

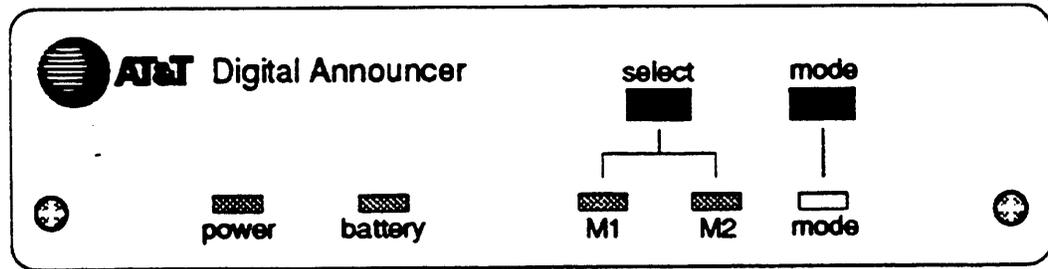


Figure 2-3. Front Panel of the Digital Announcer

Setting the Switches

Before powering up the unit, you must set the switches on the rear panel of the unit.

To set the switches, perform the following steps:



WARNING:

Do not turn the Battery switch ON prior to applying AC Power to prevent any possible damage to the internal components of the unit.

1. Move switch #1 to the "Batt" position to turn off the battery.
2. Move switch #2 to the "PF ANS" position to turn off the Power Failure Answer option. If you turn off this option, the unit ignores incoming calls during a power failure and retains its announcements for up to three hours.



NOTE:

The position of this switch has no effect if the unit is used with MERLIN, MERLIN II, or MERLIN LEGEND CMS or contact activated start applications. When used with CMS or contact activated start applications, the unit retains its announcements for up to three hours, regardless of the setting of switch #2.



NOTE:

The MERLIN, MERLIN II, and MERLIN LEGEND CMS delay message length on the "set option" screen of the CMS PC may need to be changed to

Installing the AT&T Digital Announcer

accommodate the message length of the Digital Announcer. Refer to the appropriate CMS Administrators Guide.

3. Set the operating mode:
 - a. If you are connecting the unit to a MERLIN, MERLIN II, or MERLIN LEGEND CMS, move switch #3 to the "CMS" position, and then proceed to Step 4. If this unit is to be used with CMS for System 25 or System 75, proceed to Step 3b.
 - b. If you are connecting the unit to a conventional tip and ring telephone circuit, move switch #3 to the "T&R" position, and then proceed to Step 4.
 - c. If you are using the unit in a contact activated start application, move switch #3 to the "T&R" position, and then proceed to Step 4.
4. If the unit has 64 seconds of message memory (factory default configuration), use the following table to set switches #4 and #5 to specify how the unit will allocate announcement time between message 1 and message 2.

Switch #4	Switch #5	MSG 1 (time)	MSG 2 (time)
Down	Down	32 seconds	32 seconds
Up	Down	36 seconds	26 seconds
Down	Up	51 seconds	13 seconds
Up	Up	64 seconds	0 seconds

If the unit was purchased with more than 64 seconds of message memory (for example, 128, 192, or 256 seconds), refer to the tables provided on pages 3-9 and 3-10.

⇒ NOTE:

The configuration switch changes become effective when one of the following conditions occurs:

- The AC Power is applied to the unit.
- The Reset button on the back panel is pressed.

If you make any changes to the switch settings, the unit will not put the changes into effect until one of the previous conditions occurs.

5. Move switch #6 either to the “1” position to have the unit answer after the first ring (or pair of rings in a “split ring” environment) or to the “4” position to have the unit answer after the fourth ring. (This step sets the Ring Count Delay.)

⇒ NOTE:

The position of this switch has no effect if the unit is used with MERLIN, MERLIN II, or MERLIN LEGEND CMS or contact activated start applications.

Applying AC Power

To apply AC power, perform the following steps:

1. Plug the cord from the power supply into the 10 volt AC connector on the back panel of the unit.
2. Plug the power supply into a suitable electrical outlet.



NOTE:

An external power surge suppression unit (such as an AT&T 147A Surge Protector) is strongly recommended.

As soon as the unit is powered-up, it begins an internal diagnostic and initialization procedure. The unit performs this procedure only if it has been disconnected (without power) for longer than three hours. During this procedure, the Power LED on the front panel turns on, and the Battery LED starts blinking rapidly. Next, the M1 LED turns on, and the Mode LED turns red and remains on for the amount of time allocated for message 1. If you allocated any time for message 2, the M1 LED turns off, the M2 LED turns on, and then the Mode LED turns red and remains on for the amount of time allocated for message 2.

After the unit completes the diagnostic and initialization procedure, the Mode LED turns off, and the M1 LED starts blinking slowly, signifying that a message has not been recorded yet. The Battery LED also starts blinking slowly, indicating that it is recharging for a period of up to 18 hours. The Battery LED remains on when the battery is fully charged.

If the blinking pattern or the steady on condition of the Battery LED is interrupted with an extended off cycle, the unit is in an Out of Service condition. If this condition occurs, refer to Chapter 5.

Connecting the Unit to the Telephone System

Depending on the type of configuration you want, perform one of the following steps:

- If you are using the unit in CMS mode for MERLIN, MERLIN II, or MERLIN LEGEND, connect the DIN connector cable from the CMS unit to the CMS port the rear panel of the unit.
- If you are using the unit in tip/ring line interface mode, connect one end of the modular cord supplied to the Line connector on the rear panel of the unit, and connect the other end of the modular cord to an RJ11 jack providing tip/ring from the host telephone system.
- If you are using the unit with contact activated start applications, connect one end of the modular cord supplied with the unit to the Line connector on the rear panel of the unit, and connect the other end of the modular cord to an RJ25 jack providing tip/ring from the host telephone system. Then, add the contact activation signal to the jack so that it appears at the unit on pins 1 and 6.

Setting the Battery Option Switch

After the unit is powered up, move switch #1 to the “On” position so the unit starts charging its internal battery, enabling the unit to store recorded announcements and answer calls (if specified) during a power failure. The Battery LED blinks slowly, signifying that the internal battery is charging. This LED continues blinking slowly for up to 18 hours, at which time the battery is fully charged. After the battery is fully charged, the Battery LED stops blinking and remains on.

Mounting the Unit on a Wall

To mount the unit on a wall, perform the following steps:



NOTE:

The unit is not wall-mounted when used with a CMS application.

1. Fasten the bracket to the wall.
2. Hang the unit on the bracket by placing the mounting hole on the bottom of the unit on the hook of the bracket. The front panel faces the ceiling.

Installing the AT&T Digital Announcer

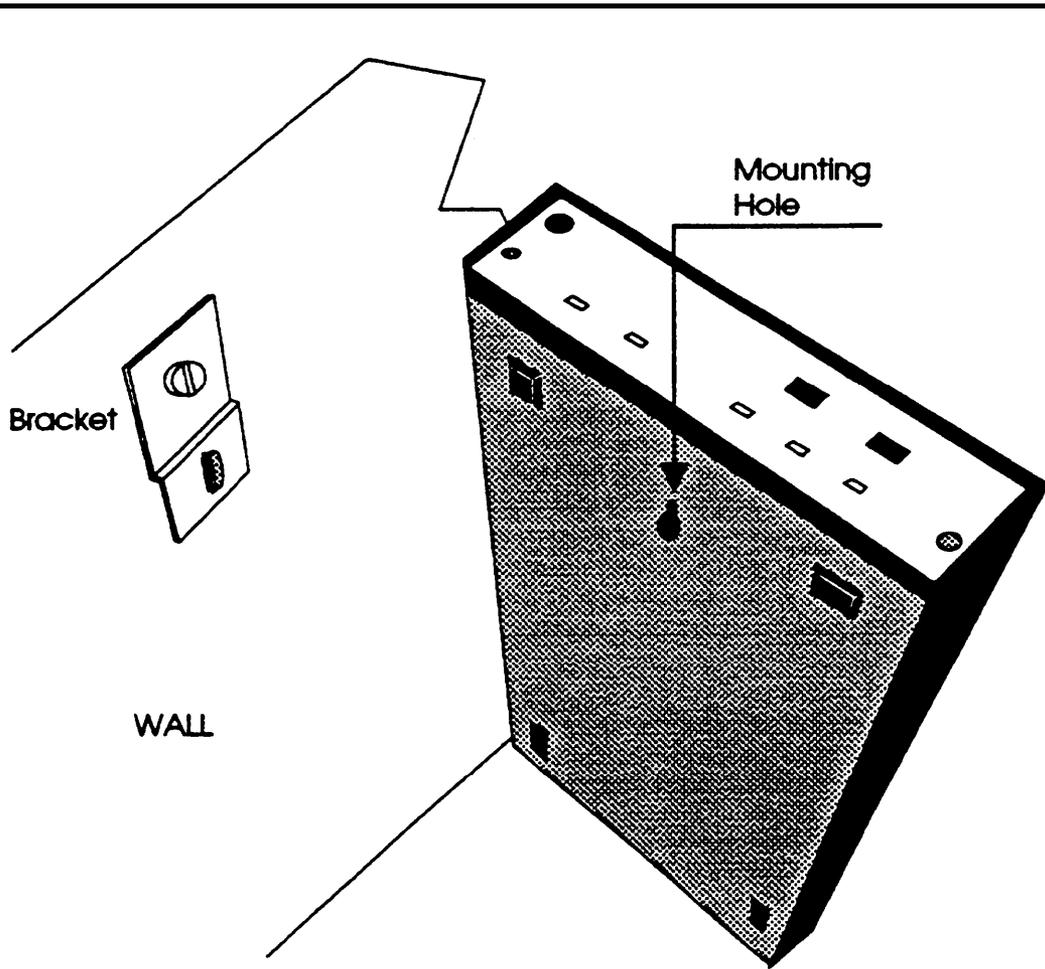


Figure 2-4. Mounting the Digital Announcer on a Wall

Using the AT&T Digital Announcer

3

Overview

This chapter provides the procedures that you will use to perform the following tasks:

- Record an announcement.
- Listen to an announcement.
- Select the announcement to be played to callers.
- Set the Power Failure Answer option.
- Change the lengths of the announcements.
- Change the number of rings before the unit answers a call (Ring Count Delay).



NOTE:

You cannot use message 2 unless you have allocated message memory for it.

Recording an Announcement

With the Digital Announcer, you can record announcements from either the handset provided with the unit or a cassette tape player.

Recording with the Handset



NOTE:

If this unit is being used in a contact activated start application, disconnect its cord from the Line connector on the rear panel before recording the announcement.

To record an announcement with the handset, perform the following steps:

1. Plug the handset cord into the Handset jack on the rear panel of the unit.
2. Press the Select button on the front panel of the unit to select the Message LED (M1 or M2) of the announcement you want to record.

Depending on the announcement you selected, either the M1 or M2 LED turns on. If no announcement has been recorded yet for the Message LED you selected, the Message LED blinks slowly.

3. Press and hold the Mode button until the Message LED you selected (M1 or M2) starts blinking rapidly.

4. Release the Mode button and speak your announcement into the handset.

The Message LED stops blinking and remains on steadily, and the red Mode LED turns on, signifying that the unit is recording. When there are fewer than five seconds of recording time remaining, the Message LED starts blinking rapidly.

5. When you are finished speaking your announcement, press and release the Mode button.

If you reach the end of the time allotted for the announcement, the unit automatically stops recording the message.

The red Mode LED turns off, and the Message LED remains on, signifying that the announcement has been recorded.

6. Disconnect the handset from the rear panel of the unit, and place the handset in a secure place.

 **NOTE:**

If this unit is being used in a contact activated start application, reconnect its cord to the Line connector on the rear panel.

Recording from a Cassette Tape Player

NOTE:

If this unit is being used in a contact activated start application, disconnect its cord from the Line connector on the rear panel before recording the announcement.

To record an announcement from a cassette tape player, perform the following steps:

1. Using a 3.5-mm mono audio plug, connect the audio output of a cassette tape player into the audio input jack on the rear panel of the Digital Announcer.
2. Press the Select button on the front panel of the unit to select the Message LED (M1 or M2) of the announcement you want to record.

Depending on the announcement you selected, either the M1 or M2 LED turns on. If no announcement has been recorded yet for the Message LED you selected, the Message LED blinks slowly.

3. Cue and pause the cassette tape.
4. Press and hold the Mode button until the Message LED you selected starts blinking rapidly.
5. Release the Mode button, and then release the pause button on the cassette tape player.

The Message LED stops blinking and remains on steadily, and the red Mode LED turns on, signifying that the unit is recording. When there are fewer than five seconds of recording time remaining, the Message LED starts blinking rapidly.

6. When you are finished recording the announcement, press and release the Mode button. If you reach the end of the time allotted for the announcement, the unit automatically stops recording the message.

The red Mode LED turns off, and the Message LED remains on, signifying that the announcement has been recorded.

7. Disconnect the cassette tape player from the rear panel of the unit.

⇒ NOTE:

If this unit is being used in a contact activated application, reconnect its cord to the Line connector on the rear panel.

Listening to an Announcement

To listen to a recorded announcement, perform the following steps:

⇒ NOTE:

If this unit is being used with a contact activated start application, the announcement may also be heard over its "broadcast" channel. If this announcement is not desirable, refer to page 3-2 ("Recording an Announcement").

1. Plug the handset cord into the Handset jack on the rear panel of the unit.
2. Press the Select button on the front panel of the unit to select the Message LED (M1 or M2) of the announcement you want to hear.

Depending on the announcement you selected, either the M1 or M2 LED turns on.

3. Press and release the Mode button.

The green Mode LED turns on, and you hear the announcement in the handset. When the announcement stops, the green Mode LED turns off.

If you want to stop listening to the announcement while it is playing, press and release the Mode button. If you want to re-record the announcement, follow the procedure on page 3-2 (“Recording an Announcement”).

Selecting the Announcement to be Played

The Digital Announcer can record and store either one or two announcements, depending on your needs. For example, if you want a “day” message and a “night” message, you can record both messages and manually activate the appropriate message at the appropriate time of day.

To select the announcement that callers hear when they access the Digital Announcer, press the Select button to specify the Message LED (M1 or M2) of the announcement you want the system to play to callers. Depending on the announcement you selected, either M1 or M2 turns on. When a caller accesses the Digital Announcer, the green Mode LED turns on as the selected announcement plays.

Setting the Power Failure Answer Option

The Digital Announcer provides the Power Failure Answer option, which enables the unit to answer calls and store announcements for up to three hours during a power failure. If the you want the Power Failure Answer option set to “off,” the unit will store the recorded announcements for up to three hours during a power failure, but will not answer any calls during that time. When the Power Failure Answer option is activated, the unit will answer calls and store the recorded announcements between 30 minutes and 3 hours, depending on the number of calls serviced by the unit during the power outage.

The Power Failure Answer option affects the unit only when it is in tip/ring mode (that is, it is not used with MERLIN, MERLIN II, or MERLIN LEGEND CMS, or a contact activated start application). If the unit is used with CMS or a contact activated start application, the unit retains your announcements for up to three hours, depending on the battery charge and the amount of message memory of your unit.

To turn the Power Failure Answer option on or off, perform the following steps:

1. Move switch #2 to one of these positions:
 - If you want the unit to answer calls during a power failure, set the switch to “Yes.”
 - If you do not want the unit to answer calls during a power failure, set the switch to “PF ANS.”



NOTE:

The position of this switch has no effect in CMS or contact activated start applications.

2. Using a small, pointed object such as the tip of a bent paper clip, press the Reset button on the rear panel.



NOTE:

Unless you press the Reset button, the setting for the Power Failure Answer option will not change.

Changing the Lengths of the Announcements

At any time, you can change how the total message memory is allocated between the two announcements. However, when you perform this procedure, your recorded messages are destroyed.

To change the lengths of the announcements, perform the following steps:



NOTE:

Make sure you know the total message memory for your unit (that is, 64 sec, 128 sec, 192 sec, or 256 sec). To determine the total message memory for your unit, refer to the planning form (Appendix A).

1. Refer to the table for the amount of message memory your unit contains, and set switches #4 and #5 to specify the length of time for message 1 and message 2.

Using the AT&T Digital Announcer

Total Message Memory: 64 seconds

Switch #4	Switch #5	MSG 1 Length	MSG 2 Length
Down	Down	32 seconds	32 seconds
Up	Down	38 seconds	26 seconds
Down	Up	51 seconds	13 seconds
Up	Up	64 seconds	0 seconds

Total Message Memory: 128 seconds

Switch #4	Switch #5	MSG 1 Length	MSG 2 Length
Down	Down	64 seconds	64 seconds
Up	Down	76 seconds	52 seconds
Down	Up	102 seconds	26 seconds
Up	Up	128 seconds	0 seconds

Total Message Memory: 192 seconds

Switch #4	Switch #5	MSG 1 Length	MSG 2 Length
Down	Down	96 seconds	96 seconds
Up	Down	114 seconds	78 seconds
Down	Up	153 seconds	39 seconds
Up	Up	192 seconds	0 seconds

Total Message Memory: 256 seconds

Switch #4	Switch #5	MSG 1 Length	MSG 2 Length
Down	Down	128 seconds	128 seconds
Up	Down	152 seconds	104 seconds
Down	Up	204 seconds	52 seconds
Up	Up	256 seconds	0 seconds

- Using a small, pointed object such as the tip of a bent paper clip, press the Reset button on the rear panel.



NOTE:

Unless you press the Reset button, the lengths of the announcements will not change.

Now, you must re-record your announcements. Refer to page 3-2 ("Recording an Announcement").

Changing the Ring Count Delay

When the unit is operating in tip/ring mode (that is, it is not used with MERLIN, MERLIN II, or MERLIN LEGEND CMS, or a contact activated start application), you can set the unit to answer calls on either the first or fourth ring.

To change the ring count delay, perform the following steps:

1. Move switch #6 to one of these positions:
 - If you want the unit to answer after one ring, set the switch to “1.”
 - If you want the unit to answer after four rings, set the switch to “4.”

 **NOTE:**

The position of this switch has no effect in MERLIN, MERLIN II, or MERLIN LEGEND CMS, or contact activated start applications.

2. Using a small, pointed object such as the tip of a bent paper clip, press the Reset button on the rear panel.

 **NOTE:**

Unless you press the Reset button, the Ring Count Delay will not change.

Upgrading the Message Memory

4

Overview

This chapter provides the procedures you will use to upgrade the message memory of the AT&T Digital Announcer.

⇒ NOTE:

The information presented in this chapter is intended only for AT&T-authorized technicians.

Tools Required

Before you start an upgrade, make sure you have the proper tools ready:

- #1 Phillips screwdriver
- Dip IC removal tool (chip puller)
- an antistatic grounded wrist strap
- an antistatic grounded work mat



CAUTION:

Electronic equipment can be damaged by electrostatic discharge. Do not touch any electronic component unless you are properly grounded. Grounding can be established by placing the equipment on a properly grounded work mat and by wearing a properly grounded wrist strap. The wrist strap must have intimate contact with the bare skin and must never be worn over clothing. Do not work on equipment unless you are familiar with the necessary procedures for preventing damage caused by electrostatic discharge.



CAUTION:

To prevent damage to the unit, unplug the power cord from the AC outlet and turn off the battery before removing the cover of the unit.

Upgrading the Message Memory

A new AT&T Digital Announcer is shipped from the factory with 64 seconds of memory for messages. However, at any time, the user can order memory chips to upgrade the unit's message memory to 128 seconds, 192 seconds, or 256 seconds. Each upgrade of 64 seconds of memory consists of two memory chips. Therefore, if the user upgrades his or her system to 192 seconds of message memory, the upgrade will consist of installing four additional memory chips (two chips for each 64 second increment of memory).

When upgrading this unit, refer to Figures 4-1 and 4-2.

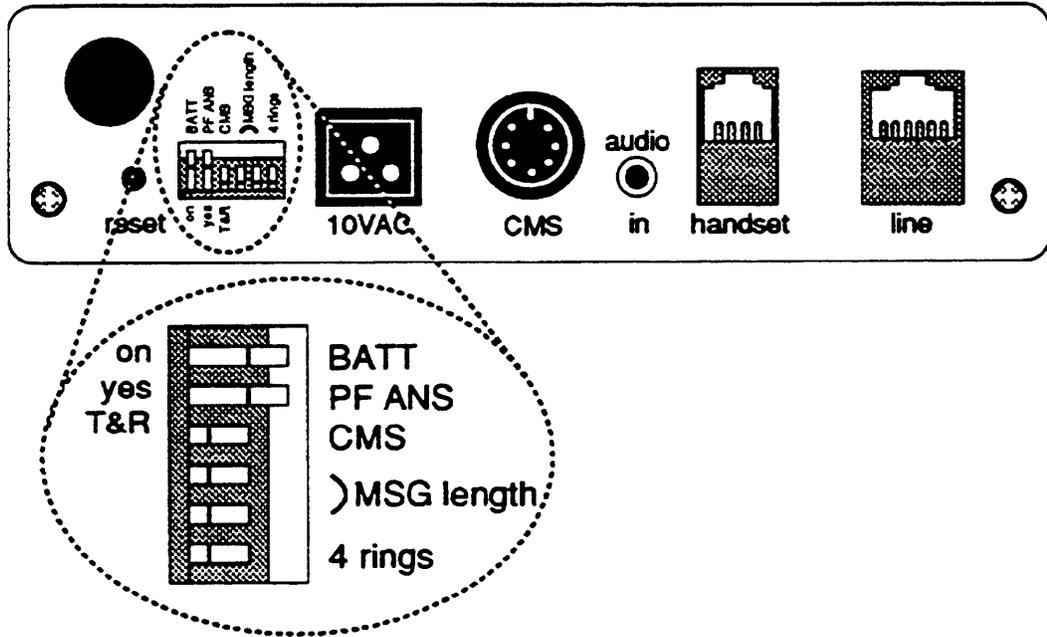


Figure 4-1. Rear Panel of the Digital Announcer

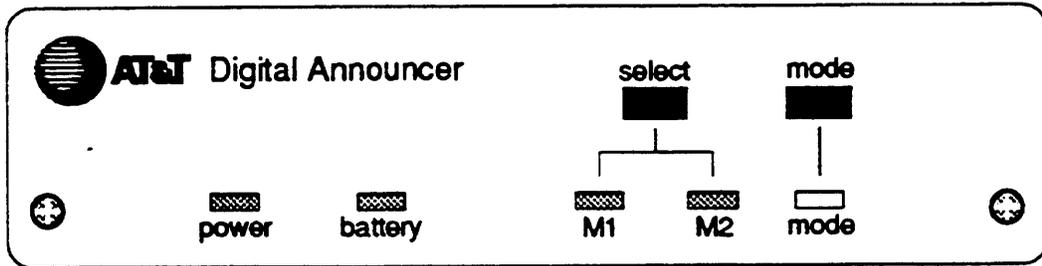


Figure 4-2. Front Panel of the Digital Announcer

Upgrading the Message Memory

To upgrade the message memory, perform the following steps:

1. Move switch #1 to the "BATT" position to turn off the internal battery.
2. Unplug the power supply from the outlet.
3. Unplug the power connection and the CMS or modular cable connector from the rear panel.
4. Remove the unit from the wall (if it is wall mounted).
5. Remove the two screws from the front panel.

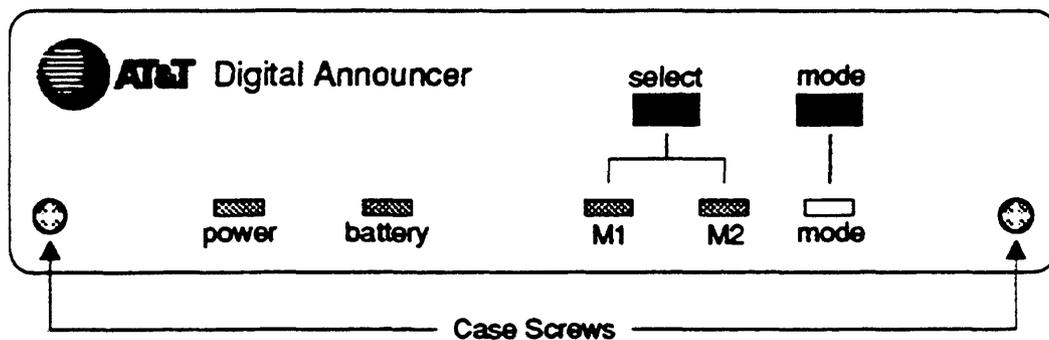


Figure 4-3. Location of Case Screws on the Front Panel

6. Remove the front panel from the unit, press on the CMS DIN connector on the rear panel to start moving the internal circuit board, and pull out the internal circuit board (Figure 4-4).

Upgrading the Message Memory

The front panel is connected to the circuit board via a keyed connector. Be careful to support the front panel, and do not pull on the connector cable. The existing memory chips are located on the lower right corner of the circuit board.



NOTE:

Do not remove the cable or keyed connector from the circuit board. Also, do not pull on the cable when you are removing the circuit board from the unit.

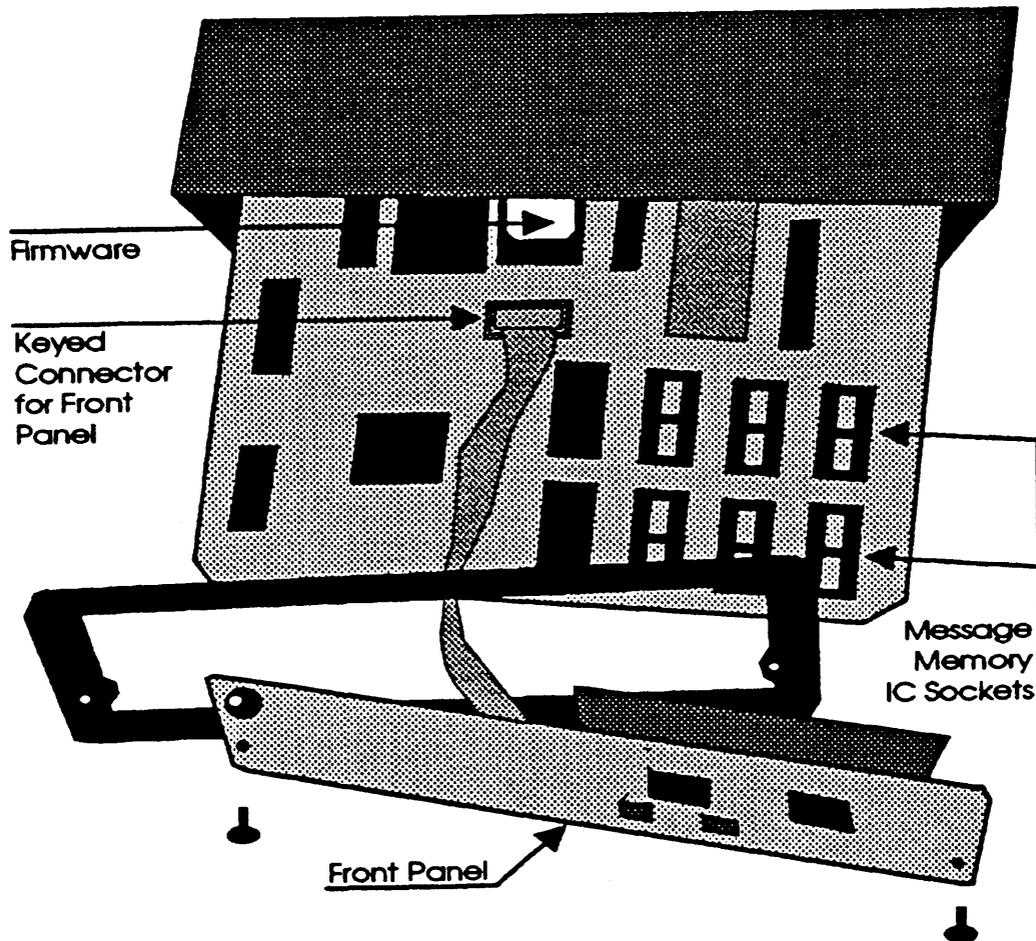


Figure 4-4. Removing the Circuit Board

7. Insert the new pair (or pairs) of message memory chips above the existing pair (or pairs) of message memory chips (Figure 4-5). For example, if you are upgrading the message memory to 128 seconds (that is, adding 64

Upgrading the Message Memory

seconds of memory to a unit that has the factory-installed 64 seconds of memory), put the two memory chips in U24 and U25 chip sockets.

The following table shows the locations of the memory chips for each upgrade of 64 seconds of memory.

Memory Upgrade	Chips Sockets	Total MESSAGE Memory
First 64-second upgrade	U24, U25	128 sec
Second 64-second upgrade	U26, U27	192 sec
Third 64-second upgrade	U28, U29	256 sec

NOTE:

The memory chips for the initial 64 seconds of message memory that the unit is shipped with from the factory are located in U22 and U23.

When inserting the additional memory chips, make sure you observe the position of the notch (or dot) near pin 1 of the original memory chips (Figure 4-6). Install the additional chips with their notch (or dot) in the same position.

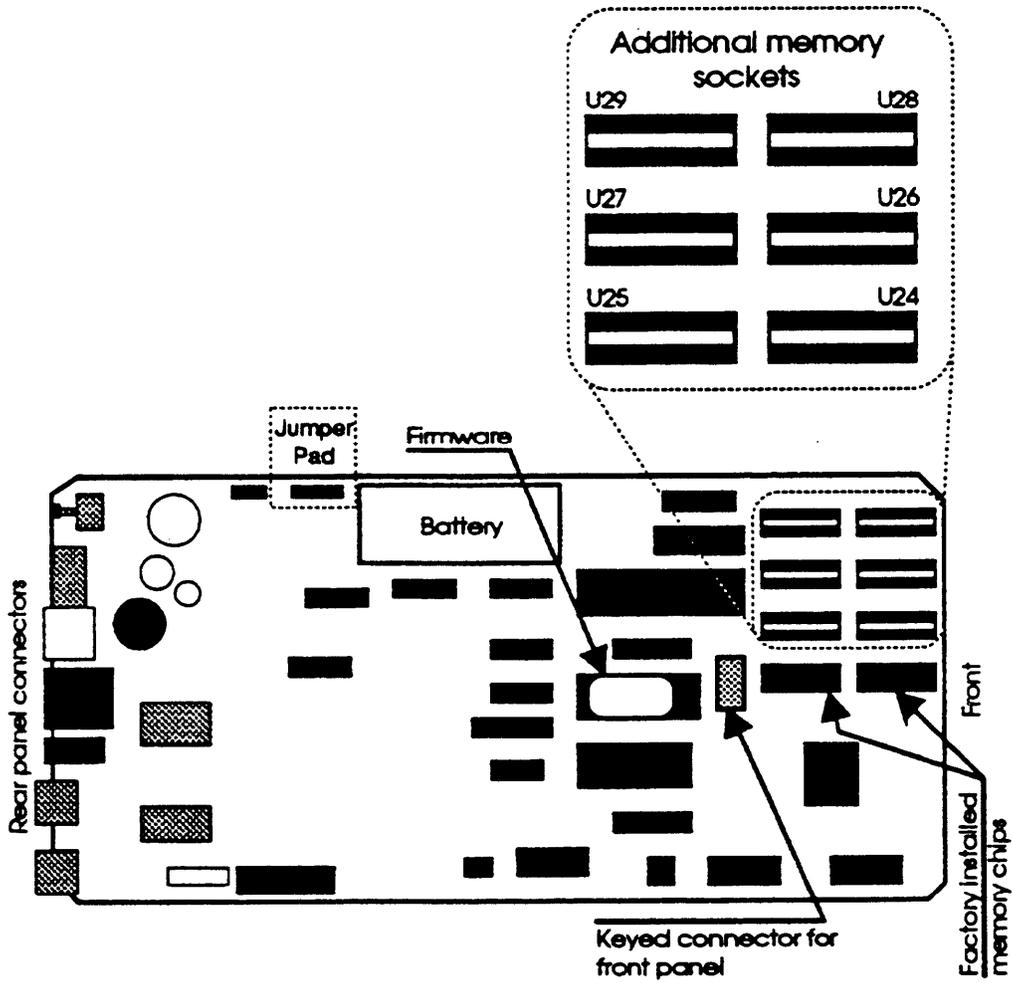


Figure 4-5. Layout of Circuit Board

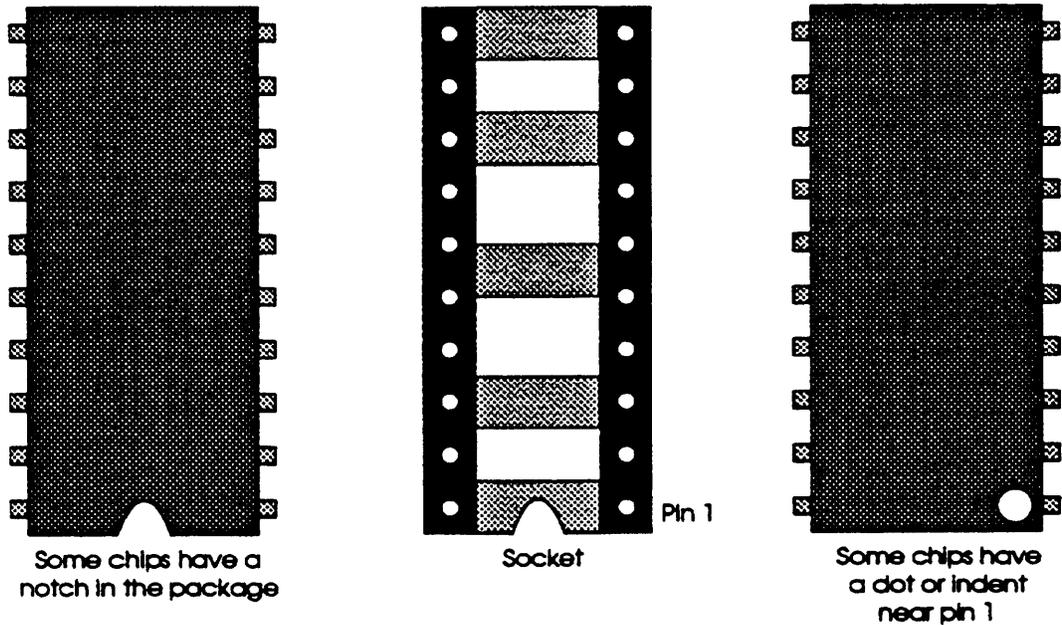


Figure 4-6. Memory Chip and Socket

8. Using the following table, configure the voice jumpers (JP1 and JP2) to the settings specified for the total message memory of the unit. Figure 4-7 shows the location and settings of the jumpers.

Total Message Memory	JP1 Setting	JP2 Setting
128 seconds	1-2	4-5
192 seconds	2-3	5-6
256 seconds	2-3	4-5



NOTE:

The voice jumpers for the initial 64 seconds of factory-installed message memory are located in the following positions:

- JP1: 1-2
- JP2: 5-6

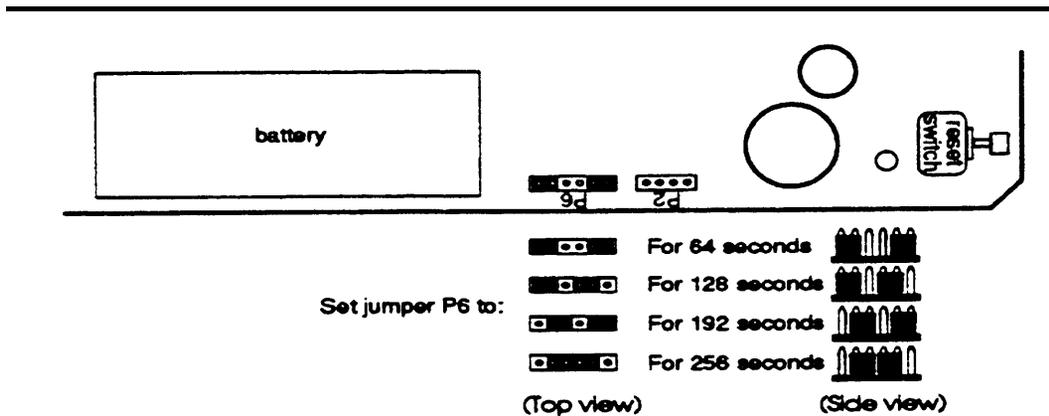


Figure 4-7. Location of Jumpers

9. Insert the circuit board into the slot of the unit.

Be sure that you mount the circuit board in the slot when you insert it into the unit (Figure 4-8).



NOTE:

Make sure the front panel is connected to the circuit board. The front panel connects to the circuit board via a keyed connector. While you work on the circuit

Upgrading the Message Memory

board, the connector may come loose. If this occurs, reconnect it with the cable coming out towards the front of the unit.

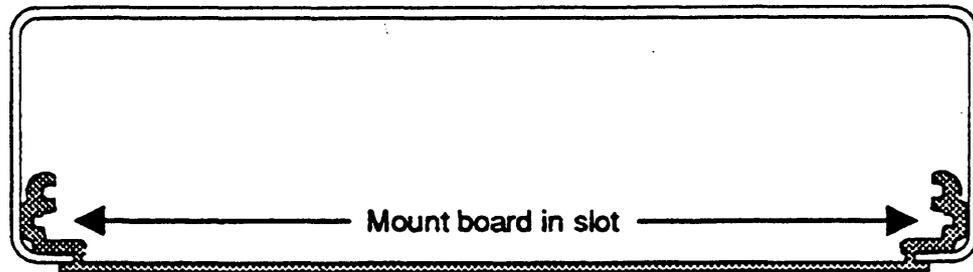


Figure 4-8. Mounting Slots for the Circuit Board

10. Insert the front panel on the unit.
11. Insert the screws on the front panel.
12. Connect the Power connector and the CMS or modular connector to the rear panel.
13. Plug the power supply into an electrical outlet.
14. Move switch #1 to the "ON" position to turn on the internal battery.

Troubleshooting

5

Overview

This chapter provides the following information:

- the procedures to troubleshoot the AT&T Digital Announcer
- the meaning of the various states of the LEDs

Troubleshooting Procedures

The following table describes the various problems you may encounter with the Digital Announcer and their resolutions.

Problem	Resolution
MERLIN, MERLIN II, or MERLIN LEGEND CMS Reports “Message Unit Out of Service”	<p>FIRST: Insure that the unit is “In Service” (with LEDs properly illuminated) and properly connected.</p> <p>SECOND: Insure that the switch on the rear panel is set for “CMS” operation.</p> <p>If it is not set properly, correct the setting, press the Reset switch, and re-test.</p> <p>THIRD: Insure that the message length in the unit is not in conflict with the CMS delay message length option.</p> <p>FOURTH: Follow the procedures in the CMS manual for message unit problems.</p>

<p>The unit does not answer; all LEDs are off</p>	<p>Check if the transformer is plugged into a working AC outlet and the power cord is connected to the connector on the rear panel. If the outlet is not working or the cord is not connected, correct and re-test.</p> <p>If the unit is properly connected to a working AC outlet and the LEDs are still off, contact the appropriate AT&T Helpline provided in the front of this manual.</p>
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<p>The unit does not answer properly or at all; LEDs are on</p>	<p>Insure that the line cord is properly connected to the unit and the modular jack as appropriate for this installation.</p> <p>If not, correct and re-test. If it is, proceed to the next step. Check the switches on the rear panel.</p> <p>If the switches are not correct for your installation, set them correctly, press the Reset switch, and re-test.</p> <p>If the switches are set correctly, check the LED Status table on page 5-6.</p> <p>Correct such items as message not recorded or selected, and then re-test.</p> <p>If the battery light indicates an Out of Service Error Code, press the Reset switch and re-test.</p> <p>If this does not correct the problem, contact the appropriate AT&T Helpline provided in the front of this manual.</p>
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Troubleshooting

<p>The unit gives “busy” signal in tip/ring (T&R) mode</p>	<p>Check the CMS/T&R switch on the rear panel. If it is set to “CMS,” set it to T&R, press the Reset switch, and re-test.</p> <p>If this fails to correct the problem, contact the appropriate AT&T Helpline provided in the front of this manual.</p>
<p>Power transformer is “Warm” to the touch</p>	<p>This is normal operation. The power supply is normally warm when plugged into a working AC outlet, and properly connected to the unit.</p>

LED Status Table

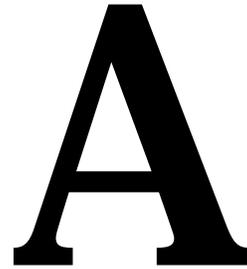
The following table describes the various states of the LEDs.

Status of LED	Meaning
Message LED blinks slowly	The message is selected, but no announcement is stored.
Message LED on	The message is selected, there is an announcement stored, and the announcement is ready to play to callers.
Message LED off	The message is not selected.
Message LED on; Green Mode LED on	The selected announcement is being played.
Message LED on; Red Mode LED on	The selected announcement is being recorded, or the unit is in the process of being initialized.
Message LED blinks quickly	If this occurs when the Mode button is being pressed, the selected announcement is ready to be recorded. If this occurs while the announcement is being recorded, there are only five seconds of memory left for the recording.

Troubleshooting

Battery LED blinks slowly, more than 16 times without interruption	The battery is recharging.
Battery LED remains on	The battery is charged.
Power LED remains on	The unit is running on AC power.
Power LED off; Battery LED on	The unit is running on its internal battery.
Battery LED blinks slowly, 16 times or less with interruption	This is an error condition.

Appendix A: Planning Form



Overview

This appendix provides the Planning Form that the AT&T-authorized technician must complete before installing the AT&T Digital Announcer.

Planning Form

Complete the Planning Form on the next page before installing the Digital Announcer.

Appendix A: Planning Form

Planning Form for the AT&T Digital Announcer

To be completed by the AT&T Technician

Please answer the following questions:

1. Does the customer want the Digital Announcer to answer calls during a power failure?

Yes _____ No _____



NOTE:

Choosing "Yes" causes the announcements to be "erased" after only 30 minutes of power failure operation.

2. Will this unit be used for MERLIN, MERLIN II, or MERLIN LEGEND CMS, as a "Tip/Ring" (T&R) or contact activated start application?

CMS _____ T&R or Contact Activated Start _____



NOTE:

System 25 and System 75 CMS require this option to be set to "T& R."

If you selected CMS, enter "2" in question 3.

Appendix A: Planning Form

3. How many announcements does the customer want this unit to provide?

1 _____ 2 _____

 **NOTE:**

If the answer to this question is "1," enter the total message memory in question 5 (that is, 64, 128, 192, or 256 sec), and enter "0" for message 2 in question 6.

4. What is the total message memory available in this unit?

64 sec ____ 128 sec ____ 192 sec ____ 256 sec ____

5. What are the time allocations for each message?

Message 1 _____ sec Message 2 _____ sec

6. How long does the customer want the Ring Count Delay option to be?

1 Ring _____ 4 Rings _____

7. Wall Mount _____ Flat Surface _____

Prepared by: _____

Date: _____

Serial # of Unit: _____

Customer: _____

Appendix B: Administering the AT&T Digital Announcer on DEFINITY, System 75, and System 25

B

Overview

This appendix describes how to administer the AT&T Digital Announcer on a DEFINITY, System 75, or System 25.

Administering the Digital Announcer

To use the AT&T Digital Announcer on a DEFINITY, System 75, or System 25, you must administer it as an analog announcement.

Appendix C: Technical Specifications

C

Overview

This appendix provides the technical specifications for the Digital Announcer.

Specifications

Power Requirements

AC Line Voltage:	120 Volts (nominal) 103.5 Volts (minimum) 126.5 Volts (maximum)
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Frequency:	60 Hz
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Appendix C: Technical Specifications

Power Consumption: 7 to 9 Watts (dependant on memory size)

Total Heat Dissipation: 35 BTU/hr

Physical Requirements

Size: 5.5" x 10.9" x 1.6"; desktop or wall-mount configuration

Weight: 2 lbs.

Environmental Requirements

Temperature: 0 to 40°C (operating)
32 to 104°F
-25 to 50°C (storage)
-13 to 122°F
-25 to 50°C (shipping)
-13 to 122°F

Humidity: 0 to 95%, Non-condensing

Battery Backup Operation

The following table provides battery run-time information. When viewing this table, please keep the following in mind:

- These figures are for a fully charged battery.
- The figures for "Power Failure Answer On," which list how long the unit will operate during a power outage with the Power Failure Answer option activated, depend on the number of calls the unit services during the power outage. For each call answered, the amount of time the unit remains operational decreases.

Appendix C: Technical Specifications

Message Memory	Battery ON (Power Failure Answer OFF)	Power Failure Answer ON
64 seconds	180 minutes	30 minutes
128 seconds	90 minutes	15 minutes
192 seconds	60 minutes	10 minutes
256 seconds	45 minutes	7.5 minutes

Audio Input Jack

Input Impedance: 100K Ohms, single ended

Connector: 3.5 mm miniature, monoral phone plug



NOTE:

The audio input jack can be used with amplified and non-amplified sources.

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