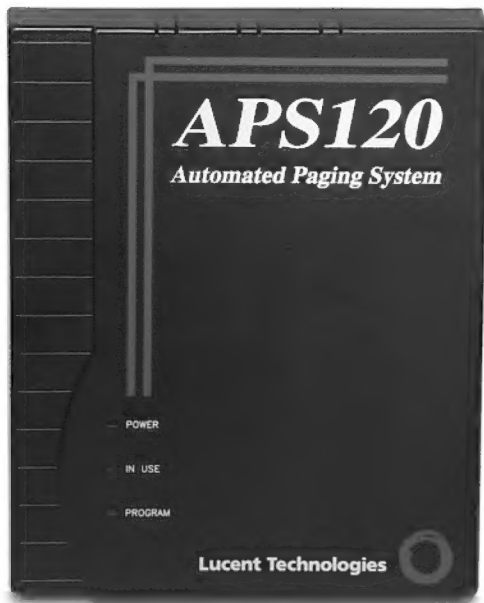


APS 120 / APS 360

Basic System

User's Manual



Lucent Technologies



TABLE OF CONTENTS

Chapter	Description	
1.0	Introduction	4
1.1	Product Description and Overview	5
1.1.1	APS 120/360 Components	5
1.1.2	Physical Description	5
2.0	Installing the APS 120/360	7
2.1	Understanding System Requirements	7
2.2	Increasing Transmitter Coverage	8
2.3	Mounting the System Components	8
	For the APS 120/360 Control Unit	8
	For the Transmitter	9
2.4	Connecting the Unit	10
2.5	Verifying Installation	11
3.0	Programming the Telephone System	12
3.1	Forwarding Service Ports to a Hunt Group	12
3.1.1	Configuring Service Ports for Backup	12
4.0	Using the APS 120/360	13
4.1	Entering User-Controlled Paging Mode	13
4.2	Alphanumeric Messages	14
	Pre-Defined Alpha Messages	14
4.3	Sending a Page	15
4.3.1	Paging an Individual - Sending a Local Wireless Page	15
5.0	Troubleshooting	17
5.1	Solving Installation Problems	17
5.2	Technical Support Center	19
Appendix A	Frequently Asked Questions	20
Appendix B	System Passwords	21
	Security Code	21
	System Password	21
Appendix C	User Quick Reference Card	22

Appendix D	
Wave Ware Paging Transmitter	.23
<i>Troubleshooting</i>	<i>.24</i>
<i>Power</i>	<i>.24</i>
<i>Pagers</i>	<i>.24</i>
Appendix E	
Customizing User Recordings & the Main Greeting	.25
<i>Entering Programming Mode</i>	<i>.25</i>
<i>Preparing the System</i>	<i>.25</i>
<i>Managing Name Recordings</i>	<i>.26</i>
<i>Recording a Name</i>	<i>.26</i>
<i>Deleting a Name</i>	<i>.27</i>
<i>Administering the Main Greeting</i>	<i>.27</i>
<i>Recording the Main Greeting</i>	<i>.28</i>
<i>Deleting the Main Greeting</i>	<i>.29</i>

1

CHAPTER ONE

I.0 Introduction

The APS I20/360 Automated Paging System is designed to meet the needs of today's professional workforce. Enabling quick and efficient paging of individuals in or away from their office, the APS I20/360 provides a communications solution for reaching today's highly mobile business professionals. In addition, the APS I20/360 provides a more pleasant and professional work environment as the need for location-wide overhead pages is minimized.

An automated paging system, the APS I20/360 connects to the existing key system or Private Branch Exchange (PBX) telephone system to page individuals by local wireless paging.

The APS I20/360 offers a variety of benefits, including:

- No-fee local wireless paging
- A single access number
- A professional, efficient and friendly communications solution

Callers that reach the APS I20/360 are typically asked to select a party to page. (The exact prompts may vary based on user-customization.) Once selected, the desired party's Pager ID and the party can be immediately paged via local wireless paging. For more detailed information on caller paging options, refer to [section 4.3, *Sending a Page*](#).

1.1 Product Description and Overview

The APS 120/360 Automated Paging System is a communications solution designed to operate as an add-on to your existing telephone system configuration.

The unit's key features include:

- Numeric and alphanumeric local wireless paging support
- Professional pre-recorded voice prompts
- Handling of two simultaneous inbound calls
- Storage for up to 120 customized recordings of user names on the APS 120 or 360 customized recordings of user names on the APS 360. (See [Appendix E](#).)

1.1.1 APS 120/360 Components

Before installation, verify that the APS 120/360 arrives with these items:

- APS 120 or APS 360 Controller Unit
- APS 120 or APS 360 User's Manual
- APS Mounting Template
- APS Mounting Hardware
- 9V AC Power Supply (for the APS 120/360 Control Unit)
- Two standard RJ-11 Telephone Cables
- APSXMTR Transmitter Unit
- APSXMTR Power Supply and Data Harness
- APSXMTR 400MHz ½ Wave Antenna and right angle BNC Connector
- APSXMTR Mounting Brackets, Screws and Drywall Anchors

1.1.2 Physical Description

The front of the unit displays the following LED indicators:

- POWER (red) - lights when the unit is on.
- IN USE (green) - flashes when there is activity on the APS 120/360. (Activity is defined as any inbound call transaction.)
- PROGRAM (green) -- lights when the unit is in programming mode. The unit is in programming mode when recording names or recording the main greeting. (See [Appendix E](#).)

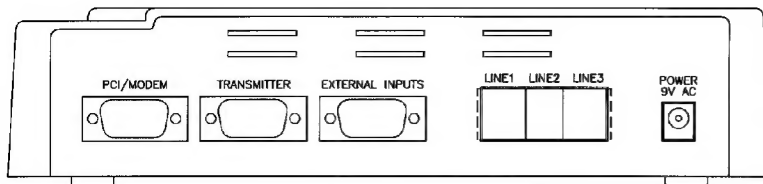


Figure 1

The rear panel of the APS 120/360 has the following connectors (see Figure 1):

- PCI/Modem Connector - not used for operating the APS 120/360.
- Transmitter Connector - connects to the Transmitter Unit for local wireless paging.
- External Inputs Connector - not used for operating the APS 120/360.
- Line 1/Line 2/Line 3 Port Connectors - three Industry Standard Telephone (IST) communications ports. These are used to connect to analog line/station ports on the PBX. Ports 1 and 2 service incoming calls. Port 3 is not used for operating the APS 120/360.
- 9V AC Jack - accepts 9V AC power to the unit. The power supply included with the unit provides 9V AC at 780mA from a 110V AC source.

NOTE: Terms "Line" and "Port" are interchangeable.

2

CHAPTER TWO

2.0 Installing the APS 120/360

The APS 120/360 is designed for quick and easy installation. This section provides system installation professionals with the information needed to install the APS 120/360 successfully.

2.1 Understanding System Requirements

Before installing the unit, ensure that your system supports a minimum of one IST (analog line) port. To customize your unit to best meet your needs, ensure your telephone system supports the associated features as identified below. Refer to Chapter 3, *Programming the Telephone System*, for information on customizing the telephone system ports.

- Industry Standard Telephone (IST) Ports - analog station ports required for maximum performance and capacity. The following configurations are also supported, with the noted suggested site conditions.
 1. One IST Port - if low traffic volume is expected.
 2. Two IST Ports - if high traffic volume is expected.
- Hunt Group - ability to define a set of extensions as accessible via a single master extension number. Typically, consists of two or more extensions configured so that a single extension number will, when called, cause a ring to appear on any one of the set of extensions making up the Hunt Group.

2.2 Increasing Transmitter Coverage

Before installation, it is important to consider the paging area to be covered by the transmitter. The range and performance of the transmitter can be improved with the proper installation of the antenna. The antenna is connected to the transmitter directly. To cover a large paging area, or in an area where transmission interference is expected, you can boost overall performance by positioning the unit as high up on the building as feasible. When paging throughout a multi-story building, better performance may result from positioning the unit at the midpoint of the building.

***WARNING:** Do not attempt to operate the paging system without the antenna connected to the paging transmitter. Damage to the paging transmitter may result.*

2.3 Mounting the System Components

To ensure proper installation of the APS 120/360, follow the guidelines below:

For the APS 120/360 Control Unit:

- Install the APS 120/360 as a wall-mount unit or in some other secure location.
- For wall-mounting, drill templates are provided for the unit to assist in properly placing the mounting screws. When mounting the unit on hollow walls or other similar materials, use suitable fasteners. Plastic screw anchors are provided.
- Never install the unit in a damp area or where the unit may be exposed to moisture or extreme fluctuations in temperature.
- Mount the unit and transmitter near a standard 110V AC power source. The unit comes equipped with a 9V AC power jack. The power supply included with the unit provides 9V AC at 780mA from a 110V AC source.
- Never install the unit in areas where the ambient temperature goes below 40 degrees (F) or exceeds 90 degrees (F).
- Connect the unit to the transmitter using the APSXMTR Power Supply/Data Harness provided with your transmitter. Route the connections to keep them clear of induced magnetic or electrical noise. The data cables should be connected to the APS 120/360 transmitter port on one end and to the proper transmitter data port on the other. The proper cable ends are labeled accordingly.

For the Transmitter:

- Install the APSXMTR unit as a wall-mount unit or in some other secure location.
- Right angle brackets and screws are provided for wall mounting.
- Never install the antenna near or adjacent to telephone, public address or data communications lines, or overhead power cables.
- Avoid running antenna cables adjacent to other cables.
- Avoid mounting the transmitter near telephone exchanges or computer equipment.
- Always use 50-ohm coaxial cable between antenna & transmitter.
- Avoid mounting the unit on or near foil-backed plasterboard, metal mesh or wire-reinforced glass, metal sheeting, large mirrors suspended ceiling or elevator shafts.
- Avoid direct contact with the circuitry to prevent electrostatic discharge (ESD).
- NEVER transmit without an antenna attached to the transmitter.

During normal paging operations, position the paging transmitter antenna vertically to maximize paging range. When using a transmitter in the shelf mount configuration, use a right angle coaxial cable antenna adapter for proper antenna positioning.

WARNING: Coaxial cable used for television, satellite or CCTV installations is normally 75-ohm and unsuitable for connecting the antenna and transmitter.

2.4 Connecting the Unit

The physical components of the system include:

- APS 120/360 control unit
- APSXMTR Transmitter
- Local antenna
- Right angle BNC connector
- APSXMTR Power Supply/Data Harness
- APS 120/360 9V AC Power Supply

To connect the unit, follow these steps:

1. Connect the barrel jack of the APS 9V AC power supply to the 9V AC jack on the rear panel of the APS 120/360 control unit.
2. Plug the APS 9V AC power supply into a standard 110V AC outlet. The outlet should not be controlled by a switch. The power LED on the unit should be lit.
3. Connect the APSXMTR Antenna to the BNC connector located on the top of the APSXMTR unit. You may or may not employ the right angle connector.
4. Connect the APSXMTR power supply and data harness to the APSXMTR. The harness is labeled at each end to ensure proper connection. The APSXMTR has two connectors located on the top of the unit. The APSXMTR harness connects to the 9-pin female serial port using the connector labeled "Connects to Transmitter." The harness is shaped like a 'Y' cable with the power supply at one end of the 'Y' and the "Connects to Transmitter" at the other end.
5. Connect the power supply end of the harness to the connector at the end of the APSXMTR power supply. Connect the other 9-pin female connector to the Transmitter port on the rear panel of the APS 120/360 control unit. This connector is labeled "Connects to Computer". This connector is located at the center of the 'Y' cable.
6. Connect the APSXMTR power supply to a standard 110V AC outlet. The PWR/BAT LED on the bottom of the APSXMTR unit should light.
7. Connect the two RJ-11 telephone cables to the Ports labeled Line 1 & Line 2 on the rear panel of the APS 120/360 control unit. Do not connect the telephone cables to Line 3. (Line 3 is not available for use in the APS 120/360 Basic System.)
8. Connect the other end of each telephone cable to a standard analog station port on your PBX. These ports shall be used to access the paging function of the APS 120/360 system. Note these extension numbers. If possible, they may be placed in a

'hunt group' or in a reciprocal rollover group. This allows the use of a single 'hunt' number to access either of the two lines.

***IMPORTANT:** Never operate the APS 120/360 unit without having the APSXMTR Antenna connected. Damage to the APSXMTR may result!*

2.5 Verifying Installation

To avoid operational problems and to verify that the unit was installed correctly, perform the following checks:

- Check the APS unit to transmitter data cable connections. Incorrect cable connections are the most common installation errors.
- Verify that the transmitter and pager frequencies match. (Each unit has a frequency listed on its label.)
- Ensure that the pagers are at least 10 feet (3 meters) from the transmitter and antenna.
- Ensure that the pager batteries are installed and the pagers are turned on.
- Ensure that the power LED lights on both the APS unit and transmitter are lit. If the LED lights are not lit, verify the power connections.
- Verify interface with the PBX and that the unit can answer a ringing line.

3

CHAPTER THREE

3.0 Programming the Telephone System

Before activating the APS 120/360, you must administer the telephone system. The telephone system can be administered prior to or following the APS installation and programming, but must be completed before activating the unit. Use the guidelines below in conjunction with the specific telephone system vendor instructions to program it correctly.

3.1 Forwarding Service Ports to a Hunt Group

Assign the extensions associated with the two APS 120/360 service ports to a hunt group (this will prevent losing incoming calls). If desired, users can forward their telephone extension to the hunt group that will queue the calls for the APS 120/360. For more detailed information on hunt groups, refer to [Section 2.1, *Understanding System Requirements*](#).

3.1.1 Configuring Service Ports for Backup

If your telephone system does not have a hunt group capability, then configure the two service port extensions to rollover or forward calls to each other when a busy signal or no answer occurs. For example, if Port 1 is busy, the call is forwarded to Port 2 automatically. Users can then forward their telephone extension to the first service port, ensuring that when a new call is received, if the first service port is busy, the new call is forwarded to the second service port automatically.

If possible, the first service port (Line 1) should be assigned to extension 400 in the PBX, and the second port (Line 2) should be assigned to extension 401. This will allow the APS to automatically transfer certain programming requests to the first port, which is where all recordings must be done. If extensions 400 and 401 are unavailable for use by the APS then any extensions may be assigned, but users of the system must be informed to call the extension associated with Line 1 directly to perform any programming on the APS.

4

CHAPTER FOUR

4.1 Using the APS 120/360

Entering User-Controlled Paging Mode

The User-Controlled Paging Option enables users to select their default paging method using the telephone keypad. By dialing in to the unit, the user can change his or her paging method to either receive local wireless paging or no paging.

The Disable Paging option enables users to disable paging. Callers trying to reach an individual with paging disabled receive the message, "Your party can not be paged at this time." The system default is set so that users receive local wireless paging. To change the default paging method using the telephone keypad, follow these steps:

1. Use the standard telephone number to dial in to the unit.
2. At the Main Menu, press * (star). (**NOTE:** The Main Menu does not specify * as an option.)
3. Use the telephone keypad to enter your Pager ID number.
4. Enter your user password and press #. Your password is set to equal your Pager ID + 1000. For example, the password for Pager ID 2 is 1002 (i.e., $1000 + 2 = 1002$). The system will not recognize the password as valid until the # key is pressed.
5. The system prompts you to select local wireless paging or no paging. Press 2 for local wireless paging or press 4 to disable paging.
6. To confirm and save your selection, press 1. To select a different paging option, press 2.

4.2 Alphanumeric Messages

The APS 120/360 enables pre-defined alphanumeric messages to be sent to individuals who are assigned to the APS 120/360 alphanumeric Pager IDs. Alphanumeric messages are pre-determined and identified by their number to the system. Alphanumeric messages may only be sent to user-IDs associated with alphanumeric pagers.

Pre-Defined Alpha Messages

The APS 120/360 is pre-programmed with 30 alpha messages. These are identified as follows:

- * 1 Emergency
- * 2 Urgent
- * 3 Cancel last message
- * 4 Your meeting has been canceled
- * 5 Cancel delivery
- * 6 Switch on mobile phone
- * 7 Call job site
- * 8 Report to job site
- * 9 Stop all work immediately
- * 10 Call supervisor
- * 11 Call lab
- * 12 Call front desk
- * 13 Call home/spouse
- * 14 Call babysitter
- * 15 Go to lobby
- * 16 Report to kitchen
- * 17 Report to housekeeping
- * 18 Go to lounge
- * 19 Call production
- * 20 Call warehouse
- * 21 Call your office
- * 22 Call receptionist
- * 23 Call secretary
- * 24 Pick up your messages
- * 25 Go to your office
- * 26 See your supervisor
- * 27 Call hospital
- * 28 Call doctor
- * 29 Visitor arrived
- * 30 Go to lunch/break

4.3 Sending a Page

When an individual is away from his or her desk and/or telephone, the APS 120/360 will activate, allowing the caller to send a page (unless the individual at that extension selects no paging), or if the individual has not forwarded his or her calls to the APS extension/hunt group).

4.3.1 Paging an Individual - Sending a Local Wireless Page

Callers have two options. Callers can choose between entering a phone number (numeric message) to which the called party can return the call, or if the called party has an alphanumeric pager, sending a pre-defined alphanumeric message. Numeric messages may be up to 20 digits in length.

The following lists the pager types for the APS 120 and the APS 360 Basic Systems:

	<u>Numeric</u>	<u>Alphanumeric</u>
APS 120 Basic Pager IDs:	001-100	101-120
APS 360 Basic Pager IDs:	001-100 121-220 241-340	101-120 221-240 341-360

To specify a phone number (or numeric message), at which the called party can reach you, follow these steps:

1. At the Main Greeting, press 1.
2. The system prompts you to enter the Pager ID of the individual to be paged. Enter the desired Pager ID. The user name (if recorded) and Pager ID is played.
3. Enter the phone number at which you can be reached followed by the # key.
4. The system confirms that the page will be sent.

To send the called party a pre-programmed message, follow these steps:

1. At the Main Greeting, press 1.
2. The system prompts you to enter the Pager ID of the individual to be paged. Enter the desired Pager ID. The user name (if recorded) and Pager ID is played.
3. Press the * (star) key.
4. Enter a message number [1 through 30] and press the # key.
If the message number specified is not valid, the system responds with "INVALID" and prompts you to re-enter a message number.
5. The system confirms that the page will be sent.

NOTE: In order to send the message to an alphanumeric pager, the user must press the * (star) key when prompted to enter their message followed by the corresponding message number and the # key.

NOTE: If the called party has disabled all paging options, the caller is informed that the party can not be paged at that time.

5

CHAPTER FIVE

5.0 Troubleshooting

Most operational problems are the result of incorrect port configuration or incorrect cable connections. This chapter provides a list of the most common problems encountered after installing the APS 120/360 and recommended solutions.

5.1 Solving Installation Problems

Problem: **APS 120/360 does not answer calls.**
 Red POWER LED is not lit.

Cause: *AC power not connected.*

Solution: • Check power connection to 110V AC wall outlet and that the outlet is not controlled by a switch.
 • Check 9V AC barrel jack connection to back of APS 120/360 unit.
 • If connections appear correct and condition persists, contact Technical Support.

Problem: **APS 120/360 does not answer calls.**
 Red POWER LED is lit.
 Green IN USE LED is not lit.
 Green PROGRAM LED is not lit.

Cause: *Telephone lines not properly connected to unit.*
 Incorrect telephone number being called.

Solution: • Check telephone connections to back of APS 120/360 unit.

- Verify Service Port Telephone numbers correspond to telephone lines connected to Service Ports 1 and 2.
- Verify telephone lines are standard analog POTS type lines.
- If condition persists, disconnect the called line from the unit and connect the line to a standard analog telephone.
- Verify the extension rings at the standard analog telephone and can be properly answered via an 'off-hook' condition.
- If the standard telephone can answer the call, contact your Lucent Technologies Hotline.

Problem: **APS 120/360 does not answer calls.**
Red POWER LED is lit.
Green IN USE LED blinks on and off.
Green PROGRAM LED is lit.

Cause: *APS 120/360 is in programming mode to record names or the main greeting.*
The unit is in programming mode.

Solution: • This condition is not a problem. The APS 120/360 does not answer calls when in Programming Mode. Programming Mode is active when the Green PROGRAM LED is lit. The APS 120/360 should begin answering calls when the PROGRAM LED is no longer lit.

• Exit programming mode.

Problem: **APS 120/360 answers calls but does not respond to DTMF key presses.**

Cause: *PBX not programmed for DTMF operation.*
DTMF digit duration is too short.
Calling extension on the PBX does not support DTMF dial through to called extension.

Solution: • Check for proper DTMF programming on your local PBX.

• Check for minimum DTMF duration of 80 milliseconds. (Try holding key presses down for a longer duration.)

• Verify the standard analog telephone connected to the APS 120/360 port can hear the sent DTMF digits. If DTMF digits appear to be sent correctly, contact Technical Support.

Problem: **APS 120/360 fails to enter voice recording mode. Busy signal or Recorder Tone returned from PBX, or APS transfers call to a different extension on the PBX. Service Port 1 connected incorrectly, or not administered as extension 400 in the PBX.** (See [Appendix E.](#))

Cause: *Service Ports 1 and 2 crossed (e.g., Service Port 1 connected to service Port 2 telephone line and vice versa). Extension 400 not used for Service Port 1.*

Solution: • Verify Service Port Telephone numbers correspond to telephone lines connected to Service Ports 1 and 2.
• Dial the proper extension assigned to Port 1 directly to program APS.

Problem: **APS 120/360 does not play the recorded user name when the associated extension is entered.** (See [Appendix E.](#))

Cause: *User name has not been recorded.*

Solution: • Enter programming mode and record specified User Name.

Problem: **APS 120/360 fails to send a local wireless page.**

Cause: *Local wireless Transmitter unit not powered.
Local wireless Transmitter unit not properly connected to APS 120/360.
Improperly programmed local wireless pager.*

Solution: • Check the 110V AC connection of the local wireless Transmitter.
• Verify the transmitter power LED is lit.
• Check the connection of the Transmitter to the APS 120/360. Verify the connections are secure.
• Verify the “Connects to Computer” cable end is connected to the APS 120/360 port labeled 'Transmitter'.
• Verify the “Connects to Transmitter” cable end is connected to the APSXMTR.

5.2 Technical Support Center

To speak directly to a representative at the Technical Support Center, call 1-800-242-2121, available 24 hours a day, 7 days a week. Follow the prompts for your telephone system.

Appendix A: Frequently Asked Questions

Q: I entered a valid two-digit Pager ID number, but the unit did not immediately recognize it.

A: The Pager ID Length configured in the APS system instructs the unit to wait for three digits. You may speed the process by pressing the # key immediately after the Pager ID number.

Q: I entered a valid password but nothing happened.

A: You must press the # key after entering a password.

Q: I selected a valid message number, but nothing happened.

A: You must press the # key before selecting a message number and the # key after selecting a message number.

Q: Do all APS 120/360 users need to have a PBX extension?

A: No, APS 120/360 users do not need to have a PBX extension in order to use the system. APS 120/360 users just need a pager with a valid ID. Callers must know the user's Pager ID to send the page.

Q: Why did the APS 120/360 say "Memory Full" when I attempted to save a recording? (See [Appendix E.](#))

A: All of the unit's available recording space is used. APS units are configured with enough memory to store one 16-second main greeting and either 120 or 360 names, depending on the model. The APS 120 unit has storage capacity for 120 user names. The APS 360 has the capacity for up to 360 user names.

Appendix B: System Passwords

There are two passwords associated with the APS 120/360. The passwords and their individual functions are described below.

Security Code

The Security Code controls user access to the APS 120/360 programming mode. Users are prompted to enter the system password when they press the '#' key and select "1" for programming in response to the APS 120/360 Main Greeting. The default password value is 9832.

System Password

The System Password is used to control the main greeting recording when the user is in Programming Mode. Users are prompted to enter this password when they choose to record or delete the main greeting. The default System Password is 6263.

Each APS 120/360 user has one additional password that allows them to change from local wireless paging to no paging, and vice versa. It is a four-digit DTMF password, consisting of digits numbered 0 through 9. Users are prompted to enter this password when they select the * key in response to the APS 120/360 Main Greeting. Users can select local wireless paging or no paging. This password is fixed in the APS 120/360. The password is the user's Pager ID plus 1000. For example, a user with Pager ID 3 would have the password "1003".

Appendix C: User Quick Reference Card

***Administrator: Please make photocopies of this page
and have all individuals, who will be paged with the APS,
fill it out and return it to you.***

- Your telephone extension _____
- Your Pager ID _____
- Extension to call to record name _____
- Extension to call to enable/disable paging

- Extension to call to send a page (and/or forward your calls) _____

- User Password _____
- Security Code (for recording name) _____

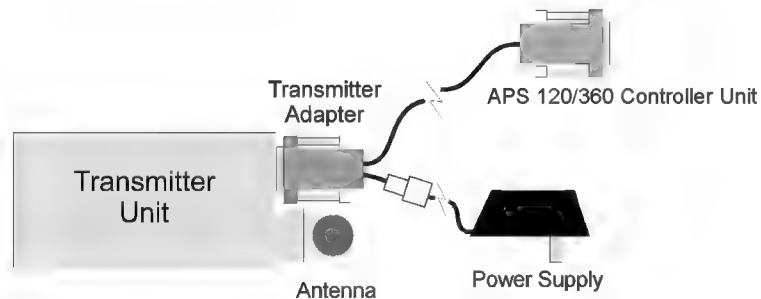
Appendix D: Wave Ware Paging Transmitter

Your WaveWare Paging System includes a Transmitter Unit, a "Rubber Duck" Antenna, a Right Angle Antenna Adapter, a Power/Comm Adapter Cable, and a Power Adapter. To install the paging system, perform the following steps:

1. Attach the "Rubber Duck" antenna to the Transmitter Unit. The Right Angle Antenna Adapter is available for proper antenna positioning. In normal paging operations, the paging transmitter antenna should be oriented in a vertical position to maximize the paging range.

Note: Do not attempt to operate the paging system without the antenna connected to the paging transmitter, as damage to the paging transmitter may occur.

2. Plug the Power/Comm Adapter Cable into the DB9 connector at the rear of the APS 120/360 controller unit labeled, "Transmitter".
3. Plug the Power/Comm Adapter Cable into the DB9 female connector on the Transmitter Unit.
4. Plug the Power Adapter into a 110 VAC power outlet. The red colored PWR/BAT LED indicator on the Transmitter Unit should be illuminated when power is properly applied.
5. The green colored TX LED indicator on the Transmitter Unit should illuminate during a paging transmission.



Troubleshooting

Power

When the WaveWare Paging Transmitter Unit is assembled and power is applied, you should be able to see a red PWR/BAT indicator illuminated on the Transmitter Unit. If not, verify that all connections are tight and verify that 110 V AC power is available at the power outlet. If connections are tight, power is available and the red PWR/BAT indicator still doesn't illuminate, determine if the Power Adapter is at fault by trying another Power Adapter. If the Transmitter Unit still does not respond, the Transmitter Unit is most likely in need of repair or replacement.

At power-up, the Transmitter Unit is supposed to send a status message through the Transmitter port to the APS 120/360.

Pagers

When you send a paging message command to the Transmitter unit from the APS 120/360, the green TX indicator on the Transmitter Unit should illuminate for a few seconds to indicate that transmission is occurring. If you don't receive a message on the selected paging receiver, follow the checklist below to troubleshoot the paging reception:

1. Verify that the pager is turned on.
2. Verify that the pager has a fresh battery.
3. Verify that you have selected the proper Pager ID number when calling the APS 120/360.
4. Verify that the pager is located at least 10 feet away from the Transmitter Unit during transmission. (Some paging receivers do not properly decode paging messages when the paging receivers are located in close proximity to the transmitter antenna. Holding a paging receiver at 10 feet away from a transmitter antenna is usually sufficient to allow the paging receiver to properly decode a paging transmission).
5. Verify that the antenna is attached to the transmitter unit.
6. Verify that the pager is at the same frequency as the Paging System Transmitter. (Both the pagers and the transmitter have labels which provide frequency information.)

Appendix E: Customizing User Recordings & the Main Greeting

The APS 120/360 is pre-loaded with an APS 120/360 Basic Database. This database supports a maximum of 120 (for the APS 120) or 360 (for the APS 360) pagers. The APS 120 has enough memory to allow names to be recorded for up to 120 pagers. The APS 360 has the capacity to store names for up to 360 pagers. These names are played as part of the confirmation process. In the event that no name is recorded, the Pager ID alone is played as part of the confirmation process.

Entering Programming Mode

The programming mode enables you to record and delete user names and the main greeting. Recorded names are used for user selection when paging. The main greeting describes the APS 120/360 Automated Paging System to the caller.

To enter the programming mode, follow these steps:

1. Dial in to the unit on Line 1.
2. At the Main Menu, press the # key.
3. The system prompts you to press 1 to program or 2 to play an announcement. Press 1 to enter programming mode. (Option 2 is not supported by the basic APS 120/360 unit.)
4. Enter the four-digit security code for programming mode and press the # key. (The default security code is 9832.)
5. The system prompts you to select the specific programming function you wish to perform. Press 1 to record a name, press 2 to record the main greeting (Announcement #1), press 3 to delete a name, press 4 to delete the main greeting, or press 5 to exit programming.
6. Follow the detailed instructions below for each programming function.

Preparing the System

To program the unit, all ports must be idle. The process of clearing the ports for programming is called "busying out the system". While in the busy out mode, the unit can not handle calls and blocks calls in to and out of the unit until you exit the programming mode.

The APS 120/360 uses two communications ports for fast and efficient traffic handling. Each port supports a specific function. Port 1 handles inbound calls, plus all voice recording functions. Port 2 handles only inbound calls.

To program the names or the main greeting, call in to the unit on the extension assigned to Port 1. If there is activity on Port 2, the caller will be prompted with a series of wait and press messages, instructing the caller to "Press 1" to continue waiting.

To ensure secure and accurate programming, it is recommended that programming only occur when inbound calls are not expected or when the system is idle.

NOTE: After the security password is entered, the unit stops handling new calls on Port 2. The wait and press messages continue until this process is complete.

Managing Name Recordings

Name recordings are used to identify an individual associated with a specific Pager ID. The name or phrase recorded is the actual recording played back on the phone for user confirmation when selecting a party to page. A name should be recorded for each pager.

Recording a Name

To record a name, follow these steps:

1. Follow [steps 1 through 5 in Entering Programming Mode.](#)
2. Press 1 to record a name.
3. Enter the Pager ID associated with the name you want to record. If the Pager ID entered is either incomplete or invalid, the system responds with "INVALID" and you must re-enter the number.

NOTE: The system provides two seconds for recording each name, after which it will automatically stop recording.

4. The system prompts you to record the name. Say the name clearly. If the system can not hear you speaking, it prompts you to retry the recording.
5. Press 1 to review the recording, press 2 to save the recording, or press 3 to re-record the name.
 - If you press 1 to review the recording, the system plays back the recording. To save the recording press 1, to re-record press 2.
 - If you press 2 to save the recording, the system confirms that the recording is saved and prompts you to press 1 to return to the programming menu, press 2 to record another name, or press 3 to exit.
 - If you press 3 to re-record, return to step 4 above.

NOTE: When a new recording is saved, any previous recording for that Pager ID is erased. To record a new name for an existing location, follow the steps in Recording a Name above.

Deleting a Name

To delete an existing recording, follow these steps:

1. Follow steps 1 through 4 in *Entering Programming Mode*.
2. Press 3 to delete a name.
3. Enter the Pager ID associated with the name you want to delete. If the Pager ID entered is either incomplete or invalid, the system responds with "INVALID" and you must re-enter the Pager ID.

The system prompts you to wait while the name is deleted and returns you to the main programming menu.

NOTE: If a name recording is deleted, callers will only hear the Pager ID when paging.

Administering the Main Greeting

The main greeting is played by the APS 120/360 as the main greeting to callers on Ports 1 and 2. The main greeting may be up to 16 seconds in length. The main greeting should identify the company name and inform the caller that they have reached an automated paging system.

Recording the Main Greeting

To record the main greeting, follow these steps:

1. Follow [steps 1 through 5 in Entering Programming Mode.](#)
2. Press 2 to record the main greeting (Announcement #1).
3. The system prompts you to enter the system password. (The default is 6263.) Enter the four-digit password followed by the # key. The system will not recognize the password as valid until the # key is pressed.
4. Enter 1 to record the main greeting announcement, followed by the # key.
5. The system plays the announcement (if it has been previously customized) for confirmation and prompts you to press 1 to record "Announcement 1", which is the main greeting. Press 1.
6. The system prompts you to record the announcement. Say the announcement message clearly. If the system can not hear you speaking, it prompts you to retry the recording. The system allows up to 16 seconds for recording each announcement. When finished recording, simply stop talking - do not press any button. The APS will automatically recognize the end of speech.
NOTE: Do not attempt to record in a noisy location or through a speakerphone.
7. Press 1 to review the announcement, press 2 to save, press 3 to re-record, or press 4 to return to the main programming menu.
 - If you press 1 to review the recording, the system plays back the recording. Press 1 to save the recording or press 2 to re-record. If you press 2, follow the prompts to re-record the main greeting.
 - If you press 2 to save the recording, the system confirms that the recording is saved, and prompts you to press 1 to return to the programming menu.
 - If you press 3 to re-record, follow the prompts to re-record the main greeting.
 - If you press 4, the system returns you to the main programming menu.

Deleting the Main Greeting

In order to delete the main greeting you must perform the following steps.

1. Follow steps 1 through 5 in *Entering Programming Mode*.
2. Press 4 to delete the main greeting.
3. The system prompts you to enter the system password. (The default is 6263.) Enter the four-digit password followed by the # key. The system will not recognize the password as valid until the # key is pressed.
4. Enter 1 to delete the main greeting announcement, followed by the # key.

Deleting the main greeting will cause the APS 120/360 to employ the default main greeting when answering inbound calls.



54-5038-01
9904