

FS 900



EXECUTIVE KEY TELEPHONE SET



Southwestern Bell
Freedom Phone®

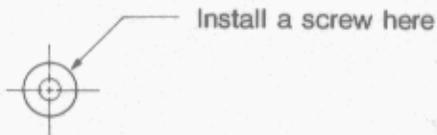
7442 Shadeland Station Way
Indianapolis, IN 46256-3925

OWNER'S MANUAL

TO MOUNT THE STATION ON THE WALL

DO NOT ASSEMBLE THE PEDESTAL TO THE STATION
READ ALL INSTRUCTIONS BEFORE INSTALLING.

There are screws for wall mounting supplied. Make certain to use the correct screws for mounting into dry plaster or masonry walls. Consult the Owner's Manual for hardware installation instructions.



1. Hold this template on the wall and mark the screw locations. After the marks are made, remove the template. Install the screws into the wall with the screw head approximately 3/16" away from the wall. Note: Make certain the installed screws and wall are able to support about 44 pounds weight.
2. Thread the long telephone line cord supplied through the pedestal groove, leaving approximately 2" slack at the top (to install into the Jack at the top of the station when it is wall mounted).
3. Mount the pedestal with the telephone line cord in the groove so that the screw heads insert into the holes on the bottom of the pedestal (the deeper portion of the pedestal should be on the bottom).

Lightly push the pedestal down so the body of each screw will be securely latched in the slots. Then tighten down the screws until the pedestal is mounted securely.



4. Put the station against the pedestal, about 1" above the bottom edge and slowly slide down until the station locks on the pedestal tabs.
5. Insert the plug of the small piece of telephone line cord on the top, into the Jack on the top of the station, making sure the extended spring of the plug faces the wall.
6. To complete station installation, refer to FS 246 Installation and Operation Manual.

CONGRATULATIONS! You have purchased an EXECUTIVE KEY TELEPHONE SET that will fill all of your present needs. As you read this OWNER'S MANUAL, you will realize that you have a multitude of functions at your fingertips. In order to take advantage of these useful features, learn to operate this system by following all of the instructions printed here and in the USER'S GUIDE of the station.

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THIS MANUAL SHOULD BE READ COMPLETELY BEFORE INSTALLING AND OPERATING THIS EXECUTIVE KEY TELEPHONE SET

GLOSSARY

In this manual you may find words you are not familiar with. If you refer to the definitions listed below, you will find it easier to install and operate this system.

1. **KSU**—Key Service Unit is the core of this multi-CO line system
2. **Station**—individual telephone operated only by connection to the KSU
3. **Executive Station**—fully featured station with display and speakerphone
4. **Master Station**—Station connected to extension No. 20 and has the capability of programming certain features of the system
5. **Cartridges**—Pre-programmed circuits that add additional capabilities to the system
6. **Intercom**—allows a call placed from one station to another station in the system without using an OUTSIDE LINE.
7. **DSS**—Direct Station Selection—allows quick use of an Intercom path from one station to another
8. **Jacks**—molded portion at the ends of wires or cords inter-connect the parts of the system when they are plugged into the proper receptacles
9. **Template**—guide to aid in wall mounting this unit—see page 9 for details
10. **IPM**—Impulses per minute
11. **CO line**—(Central office) OUTSIDE Line installed by the telephone company
12. **Off-Hook**—A condition in which the handset is off the cradle, or the speakerphone is in use
13. **On-Hook**—A condition in which the handset is on the cradle and the speakerphone is not in use

UNPACKING

Carefully remove the Executive Key Telephone set and its accessories from the shipping carton. If there is any visible damage, do not use the unit. Notify your dealer or shipping carrier immediately.

Keep the shipping carton and packing materials as well as all literature.

The following items are included in this carton:

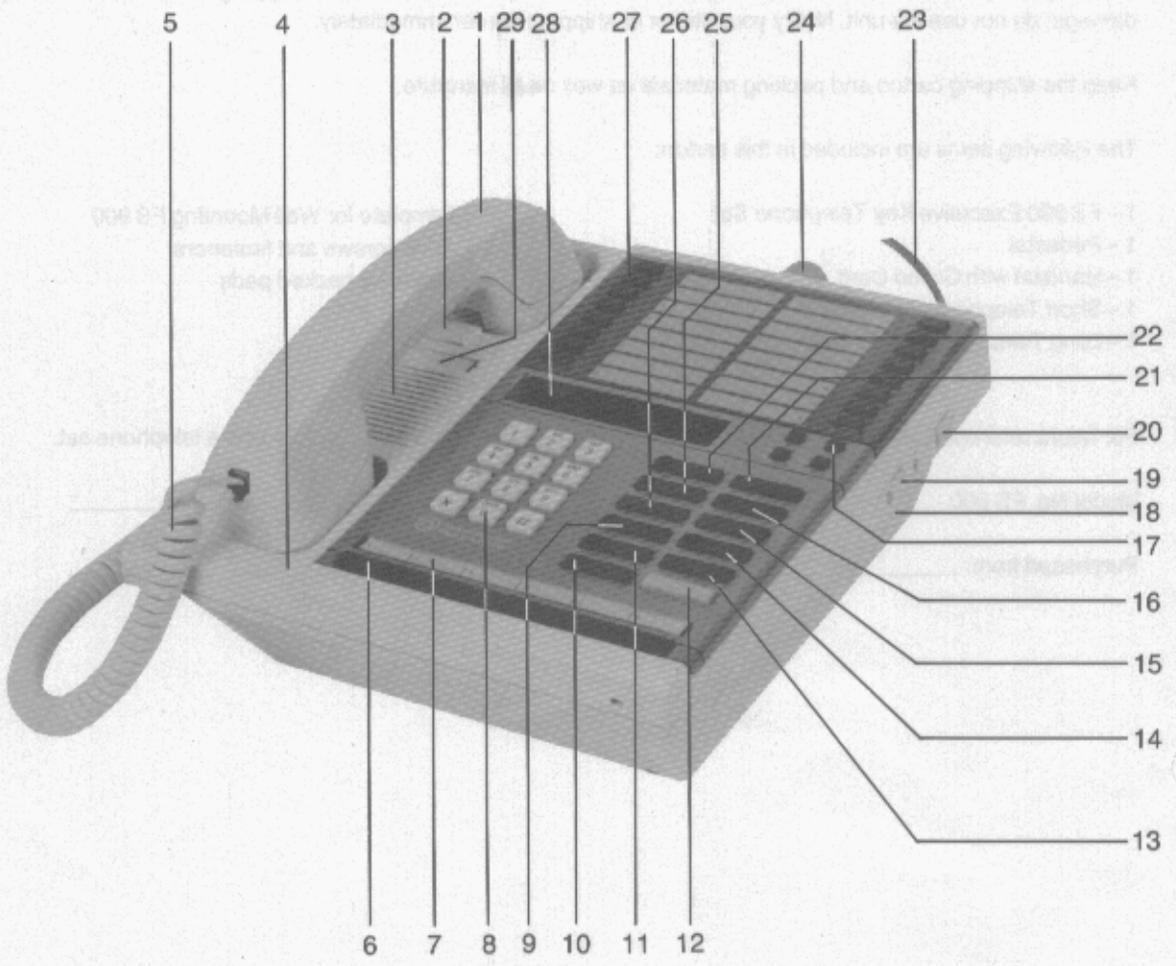
- | | |
|----------------------------------------|---------------------------------------|
| 1 – FS 900 Executive Key Telephone Set | 1 – Template for Wall Mounting FS 900 |
| 1 – Pedestal | 2 – Each screws and fasteners |
| 1 – Handset with Coiled Cord | 4 – Adhesive backed pads |
| 1 – Short Telephone Line Cord | |
| 1 – Long Telephone Line Cord | |

For future reference, write in the Serial Number below. You will find it on the bottom of the telephone set.

Model No. FS 900 Serial No. _____

Purchased from: _____ Date: _____

Check the contents of the box and remove the telephone from the shipping carton. If there is any damage to the telephone, please contact the manufacturer.



LOCATION OF CONTROLS

1. HANDSET
2. HANDSET HANGER
3. SPEAKER
4. CABINET
5. HANDSET COILED CORD
6. 6 OUTSIDE LINES WITH LEDS
7. OUTSIDE LINE NUMBER CARD
8. DIAL KEYS
9. CALL WAITING KEY WITH LED
10. SPEAKER KEY WITH LED
11. CALL TRANS./NRS KEY WITH LED
12. HOLD KEY
13. TONE/PAUSE KEY
14. PRIVACY KEY WITH LED
15. FLASH KEY
16. AUTO REDIAL KEY WITH LED
17. TIME SET KEYS
18. PEDESTAL
19. VOLUME SLIDE SWITCH
20. RINGER VOLUME HI-LO SWITCH
21. SPEED/STORE KEY
22. INTERCOM KEY WITH LED
23. TELEPHONE LINE CORD
24. SPEED DIAL NUMBER CARD
25. MUTE/DND KEY WITH LED
26. CONFERENCE KEY
27. SPEED DIAL KEYS
28. DISPLAY
29. STATION NUMBER CARD

FUNCTION OF CONTROLS

- A. SPEED DIAL KEYS
1. Enables station user to store frequently dialed numbers and to call them by pressing the corresponding speed dial number on the OUTSIDE LINE.
- B. DIAL KEYS
1. Used to dial the number of an INTERCOM number or an OUTSIDE LINE.
2. The * key is used in programming your 2-DIGIT speed dial numbers.
3. The # key is used for INTERCOM PARKING and certain programming.
- C. FEATURE KEYS
1. INTERCOM
A. Used to make a call to another station within the intercom system.
2. MUTE/DND
A. MUTE - Mutes microphone during conversation.
B. DND - Prevents INTERCOM ringing and reduces the level of OUTSIDE LINE ringing.
3. CONFERENCE
A. Provides station user with the ability to hold a 3-party conversation.
4. CALL WAITING
A. Called station user to take a CALL WAITING message in another station.
B. Is used to answer a CALL WAITING message.
5. CALL TRANS. NRS
A. CALL TRANS.
1. Used to transfer an OUTSIDE call from your station to another station.
B. NRS - NIGHT RING SERVICE
1. Station can be programmed to select from options that will respond to a call.
2. SPEAKER
A. Allows you to hear the person calling and converse on either INTERCOM or an OUTSIDE LINE using the handset.
B. Used to answer handset or terminate an INTERCOM call.
6. SPEED/STORE
A. Speed Dial user to speed dial a number on an OUTSIDE LINE.
B. Used to store OUTSIDE telephone numbers into station or system SPEED DIAL.
7. AUTO REDIAL
A. Provides last number received of a busy OUTSIDE telephone number.
B. Provides automatic redialing of a busy OUTSIDE telephone number.
8. FLASH
A. This feature allows you to send a third request according to FAX telephone answering equipment specifications and is available only on an OUTSIDE LINE.
9. PRIVACY
A. Allows you to change the programmed PRIVACY on OUTSIDE LINE.
10. TONE/PAUSE
A. Enables station user to change from auto dialing to tone dialing to reach a pause.
11. HOLD
A. Prevents station user from calling OUTSIDE conversation on hold.

FUNCTION OF CONTROLS

LOCATION OF CONTROLS

A. SPEED DIAL KEYS

1. Enables station user to store frequently dialed numbers and to call them by pressing one key.

B. DIAL KEYS

1. Used in routine dialing of an INTERCOM number or an OUTSIDE Line.
2. The * key is used in programming your FS 900 Executive Key Telephone Set.
3. The # key is used for INTERCOM PAGING, and system programming.

C. FEATURE KEYS

1. INTERCOM
 - A. Used to make a call to another station within the immediate system.
2. MUTE/DND
 - A. MUTE—Silences microphone during conversation.
 - B. DND—Prevents INTERCOM ringing and reduces the level of OUTSIDE Line ringing.
3. CONFERENCE
 - A. Provides Station user with the ability to hold a 3-party conversation.
4. CALL WAITING
 - A. Enables Station user to place a CALL WAITING message at another station.
 - B. Is used to answer a CALL WAITING message.
5. CALL TRANS./NRS
 - A. CALL TRANS.
 1. Used to transfer an OUTSIDE call from your station to another.
 - B. NRS—NIGHT RING SERVICE
 1. System can be programmed to select those stations that will receive incoming calls after hours.
6. SPEAKER
 - A. Allows you to hear the person calling and converse on either INTERCOM or on an OUTSIDE Line without using the handset.
 - B. Used to place, answer, or terminate an INTERCOM call.
7. SPEED/STORE
 - A. Allows Station user to speed dial a number on an OUTSIDE Line.
 - B. Used to store OUTSIDE telephone numbers into station or system SPEED DIAL.
8. AUTO REDIAL
 - A. Permits last number redialing of a busy OUTSIDE telephone number.
 - B. Permits continuous automatic redialing of a busy OUTSIDE telephone number.
9. FLASH
 - A. This feature allows you to send a timed hookflash according to PBX telephone switching equipment specifications and re-establish dial tone on an OUTSIDE Line.
10. PRIVACY
 - A. Allows you to change KSU programmed PRIVACY on OUTSIDE Lines.
11. TONE/PAUSE
 - A. Enables Station user to change from pulse dialing to tone dialing and to insert a pause.
12. HOLD
 - A. Permits station user to put OUTSIDE conversation on hold.

D. OUTSIDE LINE KEYS

1. Used to connect an OUTSIDE Telephone Line to be used through the Key System.

E. CLOCK SET KEYS

1. SET TIME—Allows programming of time of day.
2. ALARM—Enables Station user to set a 10 sec. audible alarm.
3. AM/PM—Distinguishes set time as night or day.
4. DATE—Permits setting of current date.

F. DISPLAY— give a visual representation of all numbers dialed as well as time, alarm, and date status.

G. FOR OPERATION OF STATION CONTROLS, REFER TO SECTION ENTITLED "FEATURES AND OPERATION".



FIGURE 3



FIGURE 4

INSTALLATION OF EXECUTIVE KEY TELEPHONE SET

INTO DRY WALL OR PLASTER

Locate a wall stud, if you can. Install the screws (provided) through the template into the wall stud. Leave $3/16"$ of the screw exposed to mount the pedestal. (Figure 2)

If it is not possible to utilize a wall stud, use a dry wall expander or similar type fastener. Consult your local hardware store for information.

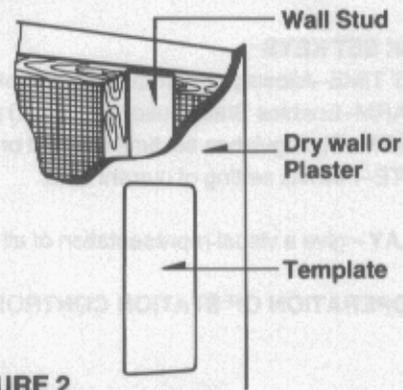


FIGURE 2

INTO WOOD

Use the screws enclosed and install them leaving $3/16"$ of the screw exposed to mount the pedestal. (Figure 3)

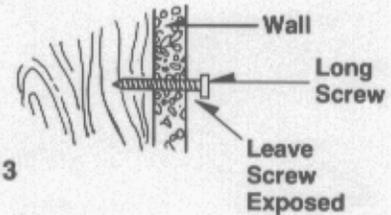


FIGURE 3

INTO MASONRY

Use a $7/32"$ masonry drill bit and drill two holes. Insert the two plastic anchors and install the two screws leaving $3/16"$ exposed to mount the pedestal. (Figure 4)

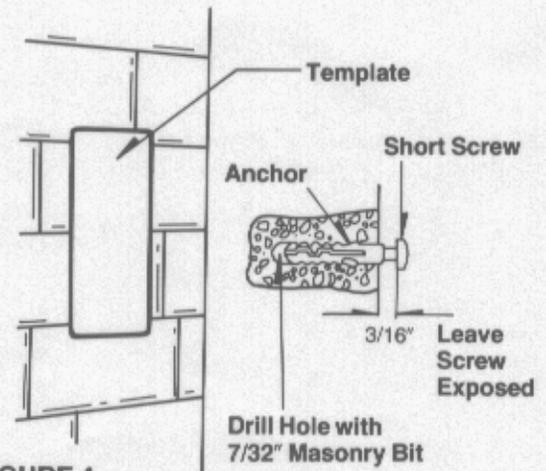
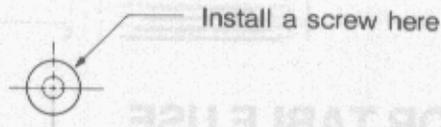


FIGURE 4

ADDITIONAL COPY OF TEMPLATE INCLUDED IN PACKAGE

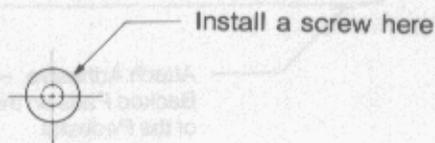
TO MOUNT THE STATION ON THE WALL DO NOT ASSEMBLE THE PEDESTAL TO THE STATION READ ALL INSTRUCTIONS BEFORE INSTALLING.

There are screws for wall mounting supplied. Make certain to use the correct screws for mounting into dry plaster or masonry walls. Consult the Owner's Manual for hardware installation instructions.



1. Hold this template on the wall and mark the screw locations. After the marks are made, remove the template. Install the screws into the wall with the screw head approximately 3/16" away from the wall. Note: Make certain the installed screws and wall are able to support about 44 pounds weight.
2. Thread the long telephone line cord supplied through the pedestal groove, leaving approximately 2" slack at the top (to install into the Jack at the top of the station when it is wall mounted).
3. Mount the pedestal with the telephone line cord in the groove so that the screw heads insert into the holes on the bottom of the pedestal (the deeper portion of the pedestal should be on the bottom).

Lightly push the pedestal down so the body of each screw will be securely latched in the slots. Then tighten down the screws until the pedestal is mounted securely.



4. Put the station against the pedestal, about 1" above the bottom edge and slowly slide down until the station locks on the pedestal tabs.
5. Insert the plug of the small piece of telephone line cord on the top, into the Jack on the top of the station, making sure the extended spring of the plug faces the wall.
6. To complete station installation, refer to FS 246 Installation and Operation Manual.

If you have selected Wall Mounting, then the handset hanger must be in the "UP" position for the handset to hang securely in the cradle.

To set the hanger, pull it up and rotate it 1/2 turn and drop it into the recess again.

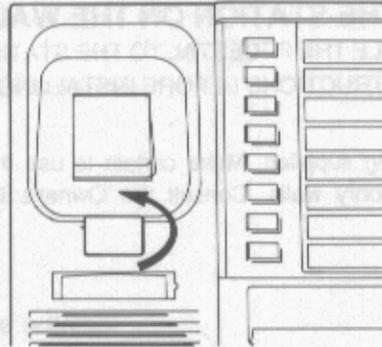


FIGURE 5

FOR DESK OR TABLE USE

This unit is also designed for desk or table use. If you desire an increased viewing angle, attach the wall mounting pedestal on to your station. Simply reverse the pedestal so that the deeper end is at the top of the phone. Push down on the top of the pedestal until the station locks on the pedestal tabs. You may want to place 4 adhesive backed pads (INCLUDED) on the bottom of your pedestal to keep your station from sliding on the desk.

SEE FIGURE 6 BELOW

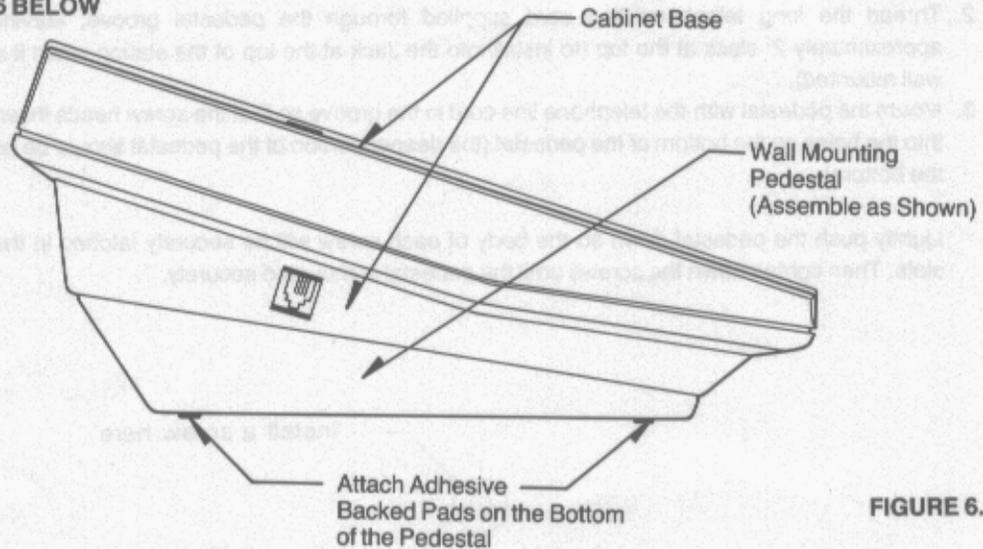


FIGURE 6.

TO REMOVE YOUR STATION NUMBER CARD, and the OUTSIDE LINE NUMBER CARD:

1. Remove the clear plastic retainer by inserting a straightened paper clip into the small slot in the retainer and prying outward.
 2. Remove and fill in the cards accordingly.
 3. Reinsert the cards.
 4. Replace the plastic retainers by first inserting one end, then lightly bend and snap the other end into the recess.
- TO REMOVE the MEMORY INDEX CARD, slide it out from the slot in the rear of the cabinet by gently pulling the card tab out. After you fill in the telephone numbers on the card, slide it back into position.

CHECKING YOUR SYSTEM-DIAGNOSTIC TESTING

A. INITIAL OPERATION

Upon plugging the KSU power supply into the outlet, you should observe the following indications if your system is properly connected.

1. The SPEAKER LED will show a RAPID flash for a period of 4 seconds.
2. Your display show:

TEST 0

3. The display will go blank (or show the time if the KSU is equipped with an optional cartridge).

NOTE: After you have completed the installation of your station, it is recommended that you perform the following sequence of diagnostic tests to assure that your system is fully operational.

B. DIAGNOSTIC TESTING

1. TONE and LED test

- a. Press the * key and then press the number 5 on the DIAL keys.
- b. You will hear one ring tone.
- c. The display will show:

P19-5

- d. All LEDs on the station will FLASH in sequence, beginning with the INTERCOM LED and ending with OUTSIDE Line number 6 LED.
 - e. After you press each key, a confirmation tone will be heard.
- ### 2. FUNCTION test
- a. To perform a system function test and test your station, refer to the chart on the next page.
- ### 3. WHEN THIS TEST IS COMPLETE
- a. Press the * key twice.

NOTE: If you receive a call during Diagnostic Testing, it will terminate the test. To reinstate the test, start with B1 again.

C. TRIAL TESTING YOUR EXECUTIVE STATION

1. To make a trial INTERCOM call
 - a. Lift the handset or press the SPEAKER key.
 - b. Dial the number of an operating station you want to call.
2. To make a trial OUTSIDE call
 - a. Lift the handset or press the SPEAKER key.
 - b. Press the key of an OUTSIDE Line accessible to that station.
 - c. After receiving the dial tone, dial the number.

DIAGNOSTIC DISPLAY CHART

The chart below is a representation of letters and numbers as they will actually appear on the display of your station of various times.

PRESS THIS KEY	DISPLAY WILL SHOW	
INTERCOM	INTEC	
MUTE/DND	DND	
CONFERENCE	CONF	
CALL WAITING	CALL	
CALL TRANS./NRS	TRSF	
SPEAKER	SPEAR	
SPEED/STORE	SPEED	
AUTO REDIAL	REDIAL	
FLASH	FLASH	
PRIVACY	PHI	
TONE/PAUSE	TONE	
HOLD	HOLD	
OUTSIDE LINES 1-6	CO 3	← LINE NUMBER (1 TO 6)
SPEED DIAL 1-16	SPD 3	← KEY NUMBER (1-16)
SET TIME	TIME	
AM PM	AMP	
ALARM	ALARM	
DATE	DATE	
DIAL KEYS 0-9	DIG 3	← DIAL KEY NUMBER (0 to 9)
* KEY	DIG A	
# KEY	DIG b	

FEATURES AND OPERATION

INTERCOM

HOW TO USE INTERCOM

A. TO MAKE AN INTERCOM CALL

1. a. Press INTERCOM or SPEAKER key. The INTERCOM LED will flash SLOW. The SPEAKER LED will be steady ON. The display will be blank. You will hear dial tone.
— OR —
b. Lift handset. You will get the same results as above, except the SPEAKER LED will go OFF.

NOTE: If you do not begin to dial within 10 seconds, you will get a busy tone and the display will show "BUSY". INTERCOM LED will go OFF.
To reinstate a dial tone, press the INTERCOM key again.

2. Dial the station number (from 20 to 35) or press the SPEED DIAL key for the station you are calling.
3. Lift the handset or press the SPEAKER key and converse.
4. If the called station is busy after dialing is complete, you will hear a busy tone.
Display will add "BUSY" to the number dialed.

B. TO ANSWER AN INTERCOM CALL

1. When the INTERCOM LED shows a RAPID flash, display will show "CALL" and the station number calling you, and you hear a ring signal, lift the handset or press the SPEAKER key and converse.
2. The INTERCOM LED will show a SLOW flash.

C. TO TERMINATE AN INTERCOM CALL

1. Press the SPEAKER key, or hang up the handset.
The LED will be OFF and the display will show the time if the Optional Cartridge is used.

D. TO RELEASE A CALL AND RE-ESTABLISH A DIAL TONE:

1. Press INTERCOM key again.

DND MODE (DO NOT DISTURB)

This feature allows a station user to prevent INTERCOM ringing, and to reduce the level of OUTSIDE LINE ringing.

Placing a station in DND MODE does not prevent the station user from making a call, only from receiving a call.

A. TO ACTIVATE DND MODE

1. When the station is not in use, press the MUTE/DND key.
 - a. The display will show the number dialed and "dnd."

B. TO CANCEL DND MODE

1. When the station is not in use, press the MUTE/DND key again.
 - a. The display will show the time.

MUTE (OFF HOOK ONLY)

This feature gives you the ability to converse privately with those close to you without the party on the other end of the line hearing these conversations. Your microphone is silenced during the time you are in MUTE.

A. TO USE MUTE MODE

1. Press MUTE/DND key.
 - a. The MUTE/DND LED will show a RAPID flash.

B. TO RELEASE MUTE MODE

1. Press MUTE/DND key again.
 - a. The MUTE/DND LED will go OFF.

CONFERENCE (THREE PARTY CONVERSATION)

1. Press the INTERCOM key. You will hear dial tone.
2. Contact one party on INTERCOM. The display will show the station number you are calling.
3. Press CONFERENCE key.
4. Contact the second party on INTERCOM. The display will show the station number you are calling.
5. Press CONFERENCE key.

NOTE 1: If you made an error and called the wrong station, to reach the station number you want, press the CONFERENCE key and call the party you want on INTERCOM. Then, to institute the CONFERENCE call, press the CONFERENCE key again.

NOTE 2: To leave the two other parties talking, hang up.

CALL WAITING

You may receive a CALL WAITING signal while on another call.

Press the CALL WAITING key to answer the signal, and your CALL WAITING LED will show a RAPID flash, you will hear 4 beep tones and the display will show "CALL" and the calling station number.

You can receive up to 4 CALL WAITING signals that you can answer in the same succession that they were made. Your CALL WAITING LED will show a RAPID flash until you converse with the last one.

When you answer the first signal, your display will show the number of the next CALL WAITING party.

If the party that sent you a CALL WAITING signal is busy, or does not answer your response, by pressing the CALL WAITING key again you will automatically receive the next successive CALL WAITING signal.

A. TO PLACE A CALL WAITING SIGNAL (used only in INTERCOM MODE)

1. Press SPEAKER, or INTERCOM key, or lift the handset.
2. Call the station you want.

IF THE NUMBER IS BUSY OR NOT ANSWERING, THEN:

1. Press the CALL WAITING key. You hear 4 beep tones followed by a dial tone.

NOTE: If the number you dialed is busy, the busy signal will be interrupted by 4 beep tones, the display will show "BUSY" and the number you dialed.

2. Hang up the handset or press the SPEAKER key.

B. TO ANSWER A CALL WAITING SIGNAL

THERE ARE TWO WAYS TO ANSWER A CALL WAITING SIGNAL

1. ON HOOK—Phone is not in use.
Press SPEAKER, or INTERCOM key or lift the handset and then press the CALL WAITING key.
2. OFF HOOK—Phone is in use.
Press CALL WAITING key.
 - a. The OUTSIDE Line will be automatically placed on UNIVERSAL HOLD when you answer the CALL WAITING signal. (GREEN OUTSIDE Line LED will show a RAPID flash. The display will show the number of the calling station.)
 - b. The CALL WAITING LED will go OFF when the conversation starts.
 - c. After the conversation is completed, hang up the handset or press the SPEAKER key. If you wish to return to the OUTSIDE Line, press the OUTSIDE Line key.

PAGING (INTERCOM)

This feature allows station user to make announcements to all stations in the system, except busy stations. Four beep tones indicate the beginning of a PAGE.

A. TO PAGE

1. Lift the handset or press the SPEAKER key, press the # key on the DIAL keys. (The word "PAGE" will appear on the displays of all the Executive Stations in the system that are not busy.)
2. Make your announcement.
3. Hang up the handset.

OUTSIDE LINE CALLS

A. TO MAKE AN OUTSIDE CALL

1. Press an unlit OUTSIDE Line key. (The green LED will show an intermittent flash. The SPEAKER LED is ON steady).
2. Dial the number.
3. The display will show the OUTSIDE Line number and the telephone number.
4. When connection is made, converse via the speakerphone or pick up the handset.

B. TO RECEIVE AN OUTSIDE CALL

1. When you receive the ring signal, the GREEN LED will show a SLOW flash and the display will show "L-" and the line number the call is on.
2. Pick up the handset or press the SPEAKER key. (The SPEAKER LED will go ON.)
3. Press the OUTSIDE Line key. (Green LED will show an INTERMITTENT flash.)

To terminate the call, hang up the handset or press the SPEAKER key. (The SPEAKER LED will go OFF and the display will be blank or show the time.)

SPEED DIAL

A. STATION PROGRAMMED

1. Press an unlit OUTSIDE Line key. (Green LED will show an INTERMITTENT flash, SPEAKER LED is ON steady. The display will show the Line number in use.)
2. Press the SPEED DIAL key where the number is stored. The display will show the Line number in use and the telephone number you are calling.
3. Either lift the handset or press the SPEAKER key and converse.

B. SYSTEM PROGRAMMED

1. Press an unlit OUTSIDE Line key. (Green LED will show an INTERMITTENT flash, SPEAKER LED will be ON steady.)
2. Press the SPEED/STORE key.
3. Dial the two digit SPEED DIAL number (10-49) representing the OUTSIDE telephone number you want. The display will show L- and the line number, SPEED DIAL number and the telephone number you are calling.
4. Either lift the handset or press the SPEAKER key and converse.

NOTE: Keep a record of these numbers in the User's Guide for reference.

CALL WAITING (INTERCOM)

FLASH

FLASH timing is programmed at the Master Station number 20 and applied for all OUTSIDE Lines at each station.

1. When you need to terminate an OUTSIDE Line connection and start another call, press the FLASH key for a new connection.
2. When the Key System is connected behind at PBX, press FLASH to signal the PBX.

PRIVACY

When PRIVACY is on, no other station can join in on the same OUTSIDE line.

Private or non-private KSU programmed status can be changed individually by each station for each OUTSIDE Line. During an OUTSIDE Line call:

1. If the PRIVACY LED is ON, PRIVACY is ON.
2. If the PRIVACY LED is OFF, PRIVACY is OFF.

During conversation, press PRIVACY button for the status you want.

TONE/PAUSE

A. TONE

WHEN IN PULSE DIALING MODE:

1. If you dial an OUTSIDE number on the DIAL keys, pressing the TONE/PAUSE KEY will activate TONE dialing.
2. The display will show L- and the line number in use, the telephone number being dialed, plus a dash (-) for pause.

During manual dialing you are unable to insert a PAUSE.

B. PAUSE

You can insert a PAUSE into speed dialing of long distance numbers, so that in redialing, a tone detection PAUSE is established.

The display will show L- and the line number in use, the telephone number being dialed and a "P" for PAUSE.

TO STORE A PHONE NUMBER USING A PAUSE (MCI, SPRINT, PROVIDE A DELAY FOR PBX, ETC.):

1. Press SPEED/STORE key. Display will show "S DIAL".
2. Press the SPEED DIAL key (1 thru 16) or 2-digit code for System Speed Dial number.
3. Dial the numbers before the PAUSE.
4. Press PAUSE. This inserts a tone detection pause and changes dialing to TONE from PULSE (or continues in tone).
5. For PULSE line only, press # key and dial the remaining numbers.
6. For TONE line, dial the remaining numbers.
7. Press SPEED/STORE key.
8. Repeat steps 1 to 6 for any remaining SPEED DIAL numbers requiring PAUSE.
9. Be sure to record the number you stored and the location it is stored in.

To insert a PAUSE without changing from PULSE to TONE:

1. Press the TONE/PAUSE key.
2. Press the * key.

HOLD

A. THERE ARE TWO (2) KINDS OF HOLD

1. UNIVERSAL—Press the HOLD key once. The Green LED will show a RAPID flash. HOLD can be released by any station.
2. EXCLUSIVE—Press the HOLD key twice. The Green LED will show a RAPID INERMITTENT flash. HOLD can be released only by station that put the call on HOLD.

NOTE: After you put a call on HOLD, if you hang up the handset, and do not use your telephone, the Line will be disconnected automatically after 3 to 5 minutes. If you do not hang up the handset, the call will stay on HOLD indefinitely.

B. TO RELEASE HOLD

Press the OUTSIDE Line key the call is on.

NRS—Night Ring Service

Your station can be programmed by the Master station to receive OUTSIDE calls at night. Check with the System programmer to determine if your station will respond to night rings.

If the CALL TRANS./NRS LED is ON, this indicates that the SYSTEM NIGHT RING SERVICE has been activated.

LAST NUMBER REDIAL

TO REDIAL THE LAST NUMBER YOU CALLED

1. Press an unlit OUTSIDE Line key. (Green LED will show an INTERMITTENT flash. L- and the line number will be displayed.)
2. Press AUTO REDIAL key. (The number being redialed will also be displayed.)

NOTE: You may redial the last telephone number on any available OUTSIDE Line.

AUTO REDIAL

The AUTO REDIAL function will redial the called number up to fifteen times at intervals of about one minute. While the number is being redialed (the function is in the active mode) you will hear the line after the dialing is completed, on the SPEAKER. The AUTO REDIAL LED will be ON and the display will show the number you are calling.

There is a period between active dialing, when the function is in the passive mode, the AUTO REDIAL LED will show a SLOW flash.

NOTE 1: Other stations can not access the OUTSIDE Line on which the AUTO REDIAL is in operation. If you wish to prohibit INTERCOM calls from ringing at your station, press the DND key.

NOTE 2: When the other party is no longer busy, to establish a conversation, lift the handset or press the SPEAKER key.

IF THE PARTY YOU WANT TO REACH IS BUSY AND YOU WISH TO CONTINUE TO REDIAL

1. Press AUTO REDIAL key. (AUTO REDIAL LED will show a SLOW flash. PRIVACY LED will be ON.)
2. Hang up.
3. If you are not using your station for other functions and the number you are calling is busy, then the display will show the number you are calling.

NOTE: AUTO REDIAL will automatically be terminated when:

- a. The line is no longer busy.
- b. If you use the station for other functions.
- c. The number has been redialed 15 times.
- d. When you receive an INTERCOM call.
- e. If incoming call is received on the same line.

CALL TRANSFER

1. A. TO TRANSFER AN OUTSIDE CALL FROM YOUR STATION TO ANOTHER:

1. Press the CALL TRANS./NRS key. The display will show the transfer symbol.
OUTSIDE Line GREEN LED will show a RAPID INTERMITTENT flash. You will hear dial tone and your INTERCOM LED will show an INTERMITTENT flash.
2. Dial the station to receive the call.
The display will also show the station number you are transferring the call to.
3. You can either hang up or wait for the station to answer, then hang up.

You may get the transferred call back after 45 seconds if your system is programmed for 45 seconds recall. (Program Number 8 in System Programming of FS 246 Installation & Operations Manual).

B. IF YOU GET A BUSY SIGNAL

1. The display will show the transfer symbol, the station number and the word "BUSY".
2. Press CALL TRANS./NRS key and tell the outside party that there is a call in progress.

C. IF THE PARTY WANTS TO WAIT

1. Press CALL TRANS./NRS key again. The display will show the transfer symbol.
2. Dial the station number once more and if it is still busy, press the CALL WAITING key and the caller can wait to be connected. The display will also show the transfer symbol, the station number you are transferring the call to, and the word "BUSY".

2. TO ANSWER A TRANSFERRED CALL

- A. If the party transferring the call hangs up before you answer, then you have an immediate connection to the transferred call.
- B. If the party transferring the call wants to converse with you before you get the call, you will receive the transferred call when the transferring party goes ON HOOK.

CONFERENCE (THREE PARTY CONVERSATION)

A. TO SPEAK WITH ONE OUTSIDE AND ONE INTERCOM PARTY:

1. You must contact your OUTSIDE Line party first.
2. Press the CONFERENCE key.
You will hear the dial tone.
3. Contact your INTERCOM party.
4. Press CONFERENCE key.

To leave the other two parties talking, hang up.

B. TO SPEAK WITH TWO OUTSIDE PARTIES

1. Contact one OUTSIDE party.
2. Press the CONFERENCE key.
You will hear the dial tone.
3. Contact your second OUTSIDE party.
4. Press the CONFERENCE key.

If you want to speak with one OUTSIDE party only, press that OUTSIDE Line key and the other OUTSIDE party will be released. When you hang up, the calls will be terminated.

BOTH INTERCOM AND OUTSIDE

TIMING A CALL

The TIMER can be activated only when the station is in use.

1. TO TIME A CALL—Press the SET TIME key. The display will show: 00-00 and the TIMER Will start counting immediately.
2. Timing the call can be started and stopped intermittently during conversation by pressing the SET TIME key to start and pressing it again to stop.
3. The timer will stop automatically when the call is finished and you hang up. The display will show the length of call time continually until you press the SET TIME key and resume normal clock display.

OPTIONAL FEATURES

DOOR ANNOUNCER or EXTERNAL PAGING

A. TO RECEIVE A RING SIGNAL FROM THE DOOR ANNOUNCER

Your station may or may not be the only one programmed to receive a ring signal when the DOOR ANNOUNCER CALL button is depressed. Your display will show "CALL DOOR."

If other stations in the system are also programmed to receive the signal, then the ring will first be heard at the lowest numbered programmed station. If that station is busy, the signal will ring at the next higher numbered programmed station and so on.

To answer a DOOR ANNOUNCER ring signal at your station, pick up the handset or press the SPEAKER key and converse.

B. TO MAKE AN ANNOUNCEMENT

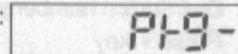
Any station can make an exterior announcement by EXTERNAL PAGING or directly through the DOOR ANNOUNCER (whichever Optional feature is installed in your system).

1. Lift the handset or press the SPEAKER key (the SPEAKER LED will be ON steady).
2. Press the * key for either DOOR ANNOUNCER or EXTERNAL PAGING. The display will be blank if you have a DOOR ANNOUNCER Unit or if you are using the EXTERNAL PAGING feature.
3. Make your announcement.
4. Hang up or press the SPEAKER key.

FS 900 STATION PROGRAMMING

ALL PROGRAMMING SHOULD BE MADE WITH THE HANDSET IN THE CRADLE (THE STATION IS NOT IN USE)

NOTE 1: When the * key is pressed at the start of programming, the display will show :



NOTE 2: When programming is completed, if an optional cartridge has been used, the display will show the time. If not the display will be blank.

NOTE 3: SHOULD YOU MAKE AN ERROR IN PROGRAMMING YOUR STATION, DISPLAY WILL SHOW "E" AND YOU WILL HEAR FOUR BEEP TONES.

STORE AN OUTSIDE NUMBER IN STATION SPEED DIAL

Select OUTSIDE numbers you wish to program:

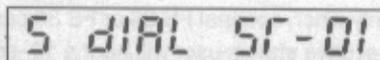
1. Press SPEED/STORE key.

2. Display will show :



3. Press the SPEED DIAL key. (1 thru 16)

The display will show:



4. Dial the outside number on the DIAL keys.

5. Press the SPEED/STORE key.

6. Repeat above for each SPEED DIAL key.

7. Be sure to record the number and SPEED DIAL key in the USER'S GUIDE chart.

NOTE 1: Both an INTERCOM and OUTSIDE NUMBER can be stored in each key.

NOTE 2: The station number system programmed for each SPEED DIAL key is as follows:

SPEED DIAL key number 1 is station number 20, SPEED DIAL key number 2 is station number 21, successively until SPEED DIAL key number 16 is station number 35.

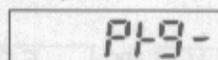
AUTO-ANSWER MODE

Each individual station has the option of having INTERCOM calls introduced to that station by either a ring signal or immediate voice connection (automatic speaker activation).

DEFAULT: INTERCOM calls will be introduced by a ring signal.

1. To change mode, press * key.

2. The display will show :



3. For AUTO-ANSWER mode, dial Number 11 on the DIAL keys.

4. For a ring signal, dial number 10 on the DIAL keys.

5. Press * key again.

FOLLOW ME

Each individual station has the option of two different FOLLOW ME connections in the INTERCOM MODE.

A. **CONDITIONAL FOLLOW ME**—To have your calls forwarded when your station is busy.

1. Press * key.
2. Press number 2 on DIAL keys.
3. Dial Station number you want to receive your call.
4. Press * key

B. **UNCONDITIONAL FOLLOW ME**—To have your calls forwarded at all times.

1. Press * Key
2. Press number 3 on the DIAL keys.
3. Dial Station number you want to receive your call.
4. Press * Key.

To resume normal INTERCOM operations

1. Press * key.
2. Press number 2 or the number 3 on DIAL keys.
3. Press * key.

ALARM TIME SET (Feature available only when optional FS 25 or FS 30 cartridge is used.)

When the ALARM TIME has been reached, the Executive station user will hear a 10-second ringing.

To set the alarm:

1. Press the ALARM key. Previous alarm time, if any, will be displayed. If there is a previous ALARM TIME displayed, press SET TIME to remove it. If there was no previous data the display will show:

HH - $\bar{n}\bar{n}$

HH for hours, $\bar{n}\bar{n}$ for minutes

2. Press the DIAL keys that correspond to the hours and minutes of alarm time. (EX. 2:05 = 0205) (If wrong data is entered the display will show an E for error.) Press ALARM key again, and start over.
3. Press the AM/PM key if you want PM.

To Store the ALARM TIME you have just set:

1. Press ALARM key.

To view the ALARM TIME programmed, press ALARM key, then press ALARM key again to return to TIME display.

STATION NUMBER IDENTIFICATION

This feature informs you of your station number (20 to 35.)

1. Press * key. Display shows P19-
2. Press 4 on the DIAL key pad. The display shows P19-4 and S11-20 after a few seconds.
3. Press * key again.

FS 900 FUNCTION LED STATUS

FUNCTION	STEADY OFF	STEADY ON	RAPID FLASH 480 IPM	INTER-MITTENT FLASH (2 SEC ON ½ SEC OFF)	SLOW FLASH 60 IPM	INTER-MITTENT RAPID FLASH (½ SEC ON, ½ SEC OFF)
INTERCOM	UNUSED	ALL 5 INTERCOM PATHS BUSY	RINGING AT YOUR STATION	YOU ARE USING INTERCOM PATH		
MUTE/DND	UNUSED	IN DND MODE	WHEN MUTED			
CALL WAITING	UNUSED		CALL WAITING MESSAGE			
CALL TRANS./NRS	UNUSED	SYSTEM IS IN NIGHT RING MODE				
SPEAKER	UNUSED	WHEN SPEAKER IS IN USE	NO DATA COMMUNICATION BETWEEN KSU AND THE STATION			
AUTO REDIAL	UNUSED	AUTO REDIAL IS ACTIVE			BETWEEN ACTIVE STAGES OF AUTO REDIAL	
PRIVACY	UNUSED	PRIVACY MODE IN EFFECT				
CO LINE	UNUSED	IS IN USE IN THE SYSTEM	UNIVERSAL HOLD	YOUR STATION IS USING THIS LINE	RING SIGNAL	EXCLUSIVE HOLD

RING & TONES

TONE/SIGNAL		INDICATION
Timed in seconds: 1 on, 3 off continuously		You are receiving an OUTSIDE call.
Timed in seconds: 1 on, 2 off continuously		You are receiving an INTERCOM call.
4 beep tones		You are receiving a PAGE signal.
2 beep tones		Incoming INTERCOM call in auto answer mode.
Intermittent beep tones		Busy or DO NOT DISTURB station.
Fast beep tones		The station you are trying to reach is not installed. The number you are dialing does not exist. The cartridge for the C.O. line you are trying to use is not installed.
Program confirmation tone (1 beep tone)		In programming mode, indicates successful completion of a program.
Program error tone (4 beep tones)		In programming mode, indicates an error in programming.
Dial tone (continuous tone)		You are in INTERCOM mode
Call waiting tone (4 beep tones)		You have placed a CALL WAITING. There is a CALL WAITING placed at your station.

PROBLEMS AND SOLUTIONS

PROBLEM: WHEN YOU PLUG THE STATION MODULAR JACK IN, THE LEDS DON'T LIGHT AND THE DISPLAY IS BLANK.

POSSIBLE CAUSES

1. Modular Cord Jack is not plugged into Jack terminal on the wall.
2. Station Cable is not plugged into the KSU.
3. Defective Modular Cord.
4. Defective Station Cable.

SOLUTIONS

1. Plug the modular Cord Jack into the Jack Terminal on the wall.
2. Plug station cable into the KSU.
3. Replace Modular Cord.
4. Replace Station Cable.

PROBLEM: YOUR STATION DOES NOT RESPOND AND THE SPEAKER LED CONSTANTLY FLICKERS.

POSSIBLE CAUSES

1. Reversed data wires.

SOLUTIONS

1. Reverse black and yellow wires in the Jack Terminal.

PROBLEM: YOU CAN'T GET AN OUTSIDE LINE.

POSSIBLE CAUSES

1. Error in programming.

SOLUTIONS

1. Check restrictions and exceptions to restrictions for your station.

PROBLEM: OTHER STATIONS HAVE ACCESS TO YOUR OUTSIDE LINE CALLS.

POSSIBLE CAUSES

1. Non PRIVACY mode for OUTSIDE Lines.
2. Dip Switch setting for PRIVACY is wrong.

SOLUTIONS

1. Press PRIVACY key for PRIVATE line.
2. Reposition KSU Dip Switch #8 correcting PRIVACY mode and then reset the KSU.

PROBLEM: YOU HEAR A HARSH BUZZING SOUND WHILE YOU ARE TALKING ON AN OUTSIDE OR INTERCOM LINE.

POSSIBLE CAUSES

1. Broken wire-red or green to the Jack Terminal or from Jack Terminal to KSU.

SOLUTIONS

1. Recheck and reconnect both red and green wires.

DISPLAY SYMBOL CHART

A : R	H : H	O : 0	V : 8	3 : 3
B : b	I : l	P : P	W : 5	4 : 4
C : c	J : j	Q : 9	X : 4	5 : 5
D : d	K : k	R : r	Y : y	6 : 6
E : e	L : l	S : 5	Z : z	7 : 7
F : f	M : m	T : t	1 : l	8 : 8
G : g	N : n	U : u	2 : 2	9 : 9
				10 : 0

(Example) \ SPEAKER Key

SPERK

CARE AND MAINTENANCE

Locate your station safely. Place it on a solid flat surface where its cord will be out of the way and where it is not likely to be knocked to the floor.

To clean, use a soft cloth, dampened in a mild detergent. Never use abrasives or solvents and never spray cleaners directly onto the station.

REPAIR SERVICE

If you continue to have problems, disconnect your phone, package it carefully and ship it prepaid and insured (for your protection) to:

SOUTHWESTERN BELL TELECOMMUNICATIONS, INC.
FREEDOM PHONE DIVISION
7442 Shadeland Station Way
Indianapolis, IN 46256-3925

BE SURE TO INCLUDE YOUR NAME AND ADDRESS.

LIMITED WARRANTY

This Freedom Phone is warranted to the original consumer purchaser to be free from defects in materials and workmanship under normal installation, use and service for a period of one (1) year from the date of purchase as shown on the purchaser's receipt.

The obligation of Southwestern Bell Telecommunications, Inc., Freedom Phone Division, under this warranty shall be limited to repair or replacement (at our option), during the warranty period of any part which proves defective in material or workmanship under normal installation, use and service, provided the product is returned to Southwestern Bell Telecommunications, Inc., Freedom Phone Division (address below) or to one of our authorized Service Centers TRANSPORTATION CHARGES PREPAID. Products returned to us or to an authorized Service Center must be accompanied by a copy of the purchase receipt. In the absence of such purchase receipt, the warranty period shall be one (1) year from the date of manufacture.

This warranty shall be invalid if the product is damaged as a result of defacement, misuse, abuse, neglect, accident, destruction or alteration of the serial number, improper electrical voltages or currents, repair, alteration or maintenance by any person or party other than our own service facility or an authorized Service Center, or any use violative of instructions furnished by us.

This one-year warranty is in lieu of all other expressed warranties, obligations or liabilities. ANY IMPLIED WARRANTIES, OBLIGATIONS, OR LIABILITIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED IN DURATION TO THE ONE YEAR DURATION OF THIS WRITTEN LIMITED WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

IN NO EVENT SHALL WE BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, WHATSOEVER. Some states do not allow the exclusion or limitation of special, incidental or consequential damages so the above limitation or exclusion may not apply to you.

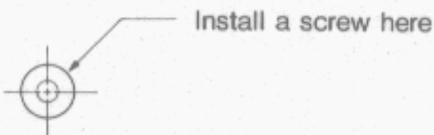
This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

SOUTHWESTERN BELL TELECOMMUNICATIONS, INC.
FREEDOM PHONE DIVISION
7442 Shadeland Station Way
Indianapolis, IN 46256-3925

TO MOUNT THE STATION ON THE WALL

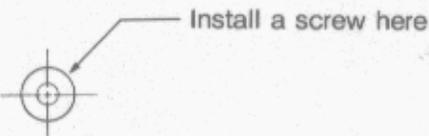
DO NOT ASSEMBLE THE PEDESTAL TO THE STATION
READ ALL INSTRUCTIONS BEFORE INSTALLING.

There are screws for wall mounting supplied. Make certain to use the correct screws for mounting into dry plaster or masonry walls. Consult the Owner's Manual for hardware installation instructions.



1. Hold this template on the wall and mark the screw locations. After the marks are made, remove the template. Install the screws into the wall with the screw head approximately 3/16" away from the wall. Note: Make certain the installed screws and wall are able to support about 44 pounds weight.
2. Thread the long telephone line cord supplied through the pedestal groove, leaving approximately 2" slack at the top (to install into the Jack at the top of the station when it is wall mounted).
3. Mount the pedestal with the telephone line cord in the groove so that the screw heads insert into the holes on the bottom of the pedestal (the deeper portion of the pedestal should be on the bottom).

Lightly push the pedestal down so the body of each screw will be securely latched in the slots. Then tighten down the screws until the pedestal is mounted securely.



4. Put the station against the pedestal, about 1" above the bottom edge and slowly slide down until the station locks on the pedestal tabs.
5. Insert the plug of the small piece of telephone line cord on the top, into the Jack on the top of the station, making sure the extended spring of the plug faces the wall.
6. To complete station installation, refer to FS 246 Installation and Operation Manual.