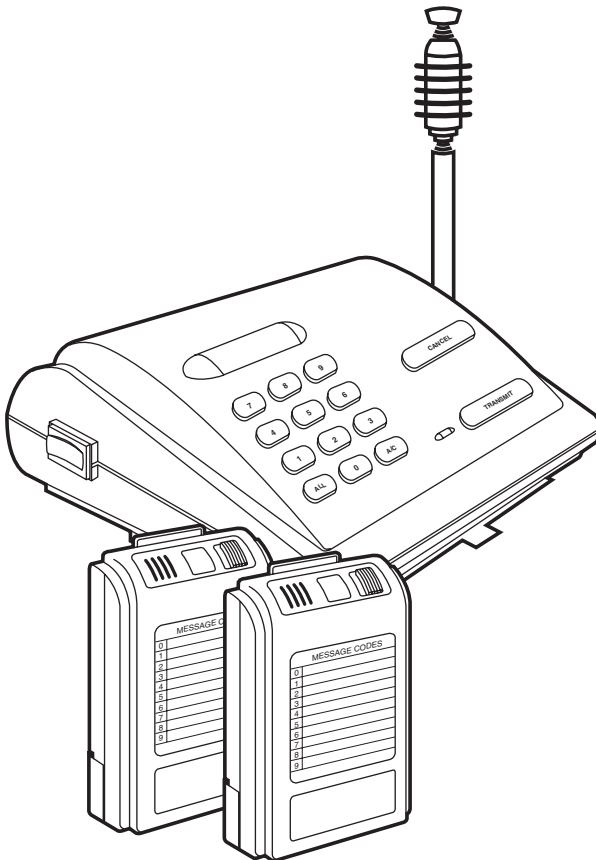




Campus Pager



**CUSTOMER
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INFORMATION**

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**FEDERAL COMMUNICATIONS COMMISSION
and INDUSTRY CANADA
RADIO FREQUENCY INTERFERENCE STATEMENT**

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult an experienced radio/TV technician for help.

Caution:

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

To meet FCC requirements, shielded cables and power cords are required to connect this device to a personal computer or other Class B certified device.

This digital apparatus does not exceed the Class B limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada .

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de classe B prescrites dans le Règlement sur le brouillage radioélectrique publié par Industrie Canada.

**NORMAS OFICIALES MEXICANAS (NOM)
ELECTRICAL SAFETY STATEMENT****INSTRUCCIONES DE SEGURIDAD**

1. Todas las instrucciones de seguridad y operación deberán ser leídas antes de que el aparato eléctrico sea operado.
2. Las instrucciones de seguridad y operación deberán ser guardadas para referencia futura.
3. Todas las advertencias en el aparato eléctrico y en sus instrucciones de operación deben ser respetadas.
4. Todas las instrucciones de operación y uso deben ser seguidas.
5. El aparato eléctrico no deberá ser usado cerca del agua—por ejemplo, cerca de la tina de baño, lavabo, sótano mojado o cerca de una alberca, etc..
6. El aparato eléctrico debe ser usado únicamente con carritos o pedestales que sean recomendados por el fabricante.
7. El aparato eléctrico debe ser montado a la pared o al techo sólo como sea recomendado por el fabricante.
8. Servicio—El usuario no debe intentar dar servicio al equipo eléctrico más allá a lo descrito en las instrucciones de operación. Todo otro servicio deberá ser referido a personal de servicio calificado.
9. El aparato eléctrico debe ser situado de tal manera que su posición no interfiera su uso. La colocación del aparato eléctrico sobre una cama, sofá, alfombra o superficie similar puede bloquea la ventilación, no se debe colocar en libreros o gabinetes que impidan el flujo de aire por los orificios de ventilación.
10. El equipo eléctrico deber ser situado fuera del alcance de fuentes de calor como radiadores, registros de calor, estufas u otros aparatos (incluyendo amplificadores) que producen calor.

11. El aparato eléctrico deberá ser conectado a una fuente de poder sólo del tipo descrito en el instructivo de operación, o como se indique en el aparato.
12. Precaución debe ser tomada de tal manera que la tierra física y la polarización del equipo no sea eliminada.
13. Los cables de la fuente de poder deben ser guiados de tal manera que no sean pisados ni pellizcados por objetos colocados sobre o contra ellos, poniendo particular atención a los contactos y receptáculos donde salen del aparato.
14. El equipo eléctrico debe ser limpiado únicamente de acuerdo a las recomendaciones del fabricante.
15. En caso de existir, una antena externa deberá ser localizada lejos de las líneas de energía.
16. El cable de corriente deberá ser desconectado del cuando el equipo no sea usado por un largo periodo de tiempo.
17. Cuidado debe ser tomado de tal manera que objetos líquidos no sean derramados sobre la cubierta u orificios de ventilación.
18. Servicio por personal calificado deberá ser provisto cuando:
 - A: El cable de poder o el contacto ha sido dañado; u
 - B: Objetos han caído o líquido ha sido derramado dentro del aparato; o
 - C: El aparato ha sido expuesto a la lluvia; o
 - D: El aparato parece no operar normalmente o muestra un cambio en su desempeño; o
 - E: El aparato ha sido tirado o su cubierta ha sido dañada.

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1. Specifications

Operating Voltage — 120 VAC, 60 Hz

Transmitting Frequency — 27.255 MHz

System Codes — 1000 combinations

Transmitting Range — Up to 2 miles (3.2 km)

Pagers Supported — 100

RF Transmitting Power — 7 watts

Message Code Numbers — 10 (0-9)

Antenna Connection — UHF/RF connector

Power — FX810A: 120 VAC, 60 Hz;

FX810AE: 230 VAC, 50 Hz;

FX801A, FX802A: 2 AAA batteries (not included)

Size — FX810A: 3"H x 10"W x 8.5"D (7.6 x 25.4 x 21.6 cm);

FX801A, FX802A: 3.5"H x 2.5"W x 1"D (8.9 x 6.4 x 2.5 cm)

Weight — FX810A: 5.5 lb. (2.5 kg);

FX801A, FX802A: <0.1 lb. (<0.1 kg)

2. Important Notes

We recommend that you use a surge protector with all electronic devices. Use a surge suppressor on the input power supply of the Campus Pager.

WARNING

BEWARE OF ELECTRIC SHOCK!!!

You might be shocked if you remove the cover or back of the Campus Pager. THERE ARE NO USER-SERVICEABLE PARTS INSIDE! If you have problems with your Campus Pager, call for technical support.

WARNING

You might cause a fire if you expose the Campus Pager to rain or moisture! Keep the unit in a clean, dry environment.

To reduce the risk of fire, do not set the Campus Pager on any heating or cooking appliance.

3. Introduction

3.1 Campus Pager

The Campus Pager is a wireless, in-house paging system that alerts you to important messages through its individual system pagers. One model (FX800A) is available with included pagers (FX801A), and another model (FX810A) works with pagers that you order separately (FX801A, FX802A).

3.1.1 UNPACKING THE CAMPUS PAGER (BASE UNIT AND TWO PAGERS)

The Campus Pager package (FX800A) includes the following items:

The Campus Pager package includes the following items:

- (1) Campus Pager base unit
- (1) antenna
- (2) wall-mount brackets
- (2) screws
- (2) Tone Pagers (FX801A)
- This User's Manual

3.1.2 UNPACKING THE CAMPUS PAGER (FX810A)

The Campus Pager (FX810A) includes the following items:

- (1) Campus Pager
- (1) Base Unit
- This User's Manual

You must order the pagers separately to work with the FX810A. Choose from either the Tone Pager (FX801A) or the Vibrating/Tone Pager (FX802A). See **Sections 3.2** and **3.3** for more information about these pagers.



Figure 3-1. Campus Pager.

You can use the Campus Pager in a variety of applications, in any environment in which you need unlimited/direct paging. The Pager has a transmission range of up to 2 miles (3.2 km).

- restaurants
- hospitals
- factories
- hotels
- apartment complexes
- construction sites
- offices
- retail outlets
- residential properties
- campgrounds

The Campus Pager can send ten different message codes (0-9) and address up to 100 individual (system) pagers.

Attractive features of the Campus Pager system include:

- Nonvolatile memory—stores system and pager codes for over one year, even if the power fails.
- Pager message memory—stores the last eight message codes and lets you review them by pressing a button.
- “Page All” feature—sends a message to all pagers simultaneously.
- Center-loaded antenna—provides up to a maximum of two miles transmitting range, depending on the conditions at the receiving site. You can replace this antenna with an outdoor antenna for extended transmission range. One of your local consumer electronics stores might carry an outdoor antenna. If you cannot locate a store that sells an antenna, call for technical support.
- “Low Battery” alarm—shows when the pager’s battery level is low.

3.2 Tone Pager (FX801A)

The Tone Pager beeps 12 times every ten seconds. This process is repeated three times and then the pager beeps once every 60 seconds. Pressing the on/off button allows you to view old messages from newest to oldest. Two FX801A pagers come with the FX800A; no pagers come with the FX810A (you must order them separately).

UNPACKING THE FX801A

The FX801A package includes:

- (1) Tone Pager
- This User’s Manual

You can order additional pagers to work with your base unit.

3.3 Vibrating/Tone Pager (FX802A)

The Vibrating/Tone Pager works in a similar fashion, except that it does not beep 12 times every ten seconds. Instead, it vibrates once. The process does not repeat three times, but the unit does beep once every 60 seconds, and allows you to view old messages from newest to oldest by pushing the on/off button. The FX802A includes one pager; however, you can order additional pagers to work with your base unit.

UNPACKING THE FX802A

The FX802A package includes:

- (1) Vibrating Pager
- This User's Manual

You can order additional pagers to work with your base unit.

For more information about how to properly install and operate the Campus Pager, read the rest of this manual.

4. Installation

4.1 Positioning the Campus Pager

You can operate the Campus Pager from a flat surface such as a table, counter, or shelf. Or, you can use the supplied wall-mount brackets to mount it on a wall. Steel and concrete walls reduce the Campus Pager's transmitting range. If the Campus Pager is located in a concrete or steel building, and part of the coverage area is located outside the structure, place the unit and antenna close to a window.

To mount the Campus Pager on a wall, follow these steps:

1. Slide the wall-mount brackets into the 2 wall-mount sockets, as shown in **Figure 4-1**.

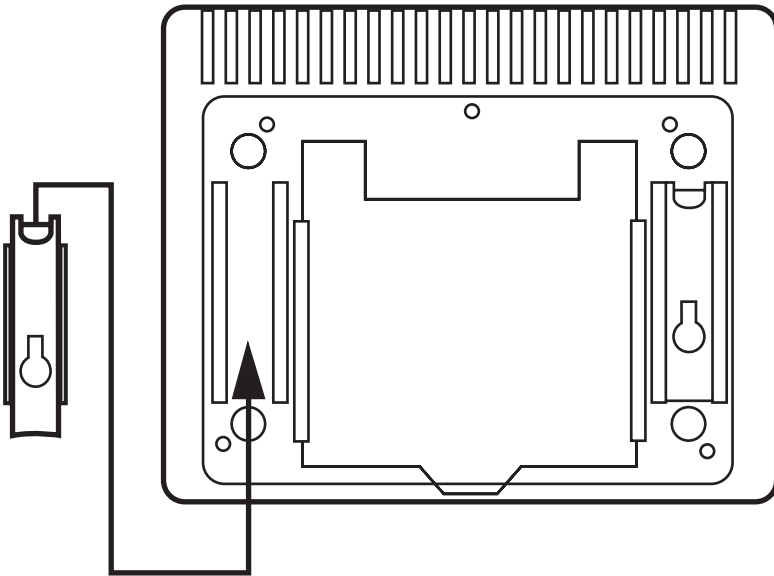


Figure 4-1. Connecting wall-mount brackets.

2. Insert the center-loaded antenna connector into the antenna jack on the right side of the Campus Pager. Turn the connector clockwise until the antenna locks in place. For maximum efficiency, extend the antenna to its full length, orient it vertically, and keep it away from walls. See **Figure 4-2**.

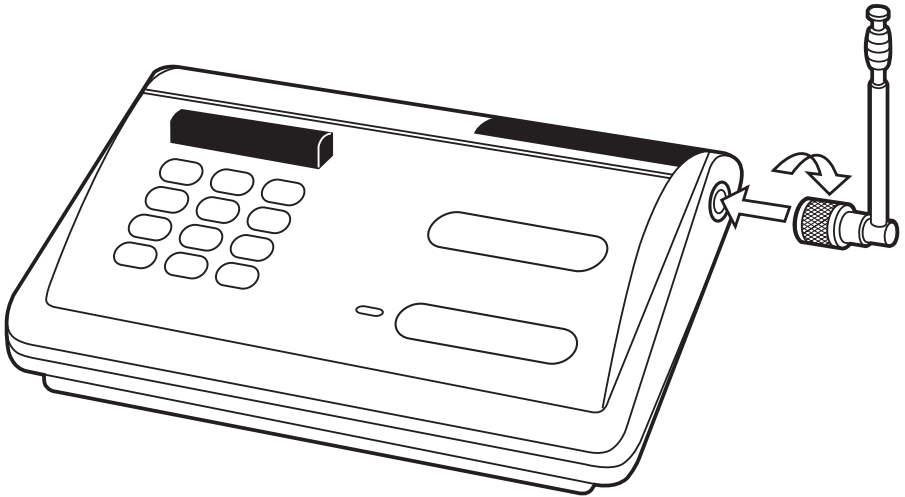


Figure 4-2. Connecting the antenna to the Campus Pager.

3. Mark the positions for the two supplied mounting screws on the wall. The positions should be 5-7/8" apart. Drill the two holes, then thread the two screws into the wall. The screws should extend 1/5". Do not over-tighten the screws.
4. Align the keyholes on the back of the brackets with the two screws, then push in and press down to secure the Campus Pager to the wall. See **Figure 4-3**.

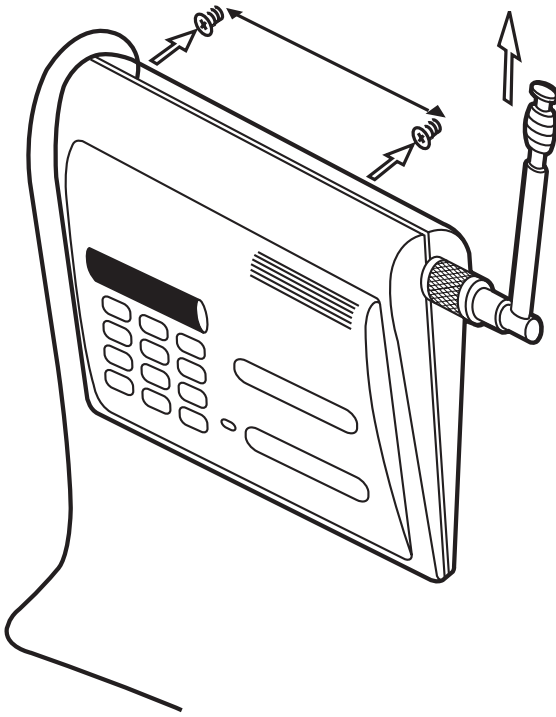


Figure 4-3. Connecting the Campus Pager to the mounted screws.

You can use an outdoor base antenna in place of the supplied antenna to increase the Campus Pager's transmitting range. The PL259-type antenna jack on the Campus Pager makes it easy to use with a variety of antennas.

WARNING

When installing or removing a base station antenna, use extreme caution. If it starts to fall, let it go. It could contact overhead power lines. If the antenna touches the power line, contact with the antenna, mast, cable, or guy wires can cause electrocution and death. Call the power company to remove the antenna. Do not attempt to do so yourself.

4.2 Positioning the Antenna Ground Wire

For best transmission, fully extend the black antenna ground wire. Do not coil this wire, as this will diminish the transmission efficiency.

4.3 Connecting Power to the Campus Pager

Plug the power cord into a standard AC outlet.

The Campus Pager does not operate when AC power fails, but it maintains the system code in memory. (See **Section 4.6.**) Because the Campus Pager maintains its memory through power failure, there is no need to reprogram the unit when power is restored. The Campus Pager can maintain this code for more than one year without power.

4.4 Installing/Replacing Pager Batteries

The individual pager is powered by two AAA batteries (not supplied). We recommend that you use alkaline batteries to power the pager.

To install or replace the pager's batteries, see **Figure 4-4**, and follow these steps:

1. Slide the battery compartment door open.
2. Insert two fresh alkaline batteries as indicated by the polarity symbols (+ and -) marked inside the compartment.
3. Slide the battery compartment door closed.

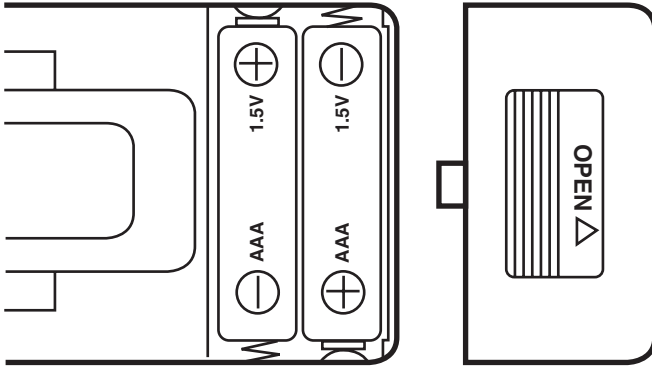


Figure 4-4. Installing batteries in the pager.

The pager will notify you when the batteries are getting low, by displaying “b” on the pager’s LED when you press the pager’s ON/OFF switch. It will also notify you by beeping once every fifteen seconds.

The pager also maintains memory during a power loss, so you do not need to re-enter its pager code (see **Section 5.3**).

5. Using the Campus Pager

This section contains operating notes for using the Campus Pager. Read these notes before attempting to operate the system.

5.1 Overview

Before operating the Campus Pager, be sure that you understand the following information concerning the paging system's capabilities.

The Campus Pager covers a maximum range of up to two miles using the supplied center-loaded antenna.

This distance is based on average conditions over a line-of-sight path. This range may be less, depending on surrounding conditions. The Campus Pager sends a number (from 0-9) to one or all of the pagers. The pagers in turn beep and display the numbered message. Each pager has a label where you can write down the message you've established for each number. We recommend that you use a pencil, so the number can be easily changed at a later date.

Each pager has its own pager code, which allows the Campus Pager to send a message to a single pager, or to ALL of your system's pagers using the TRANSMIT ALL feature. You can record each of the pager codes, and their corresponding users on the card located under the Campus Pager. (The card is inside the bottom of the unit and must be pulled out from the front.) You can also write down the messages represented by each message code. Again, we recommend that you use a pencil, so the number can be easily changed at a later date.

5.2 Storing the System Code

Before you can use the Campus Pager, you must designate a system code. The system code ensures proper signaling between the Campus Pager and the pager.

To enter and store a system code, follow these steps:

1. Turn the Campus Pager power on.

2. Turn the Campus Pager over and locate the system code button, which is inside the hole labeled **SYSTEM CODE**. Insert a pointed object such as a straightened paper clip and press the button (see **Figure 5-5**). The **TRANSMIT** display will show the previous system code for about one second, then shows ___.

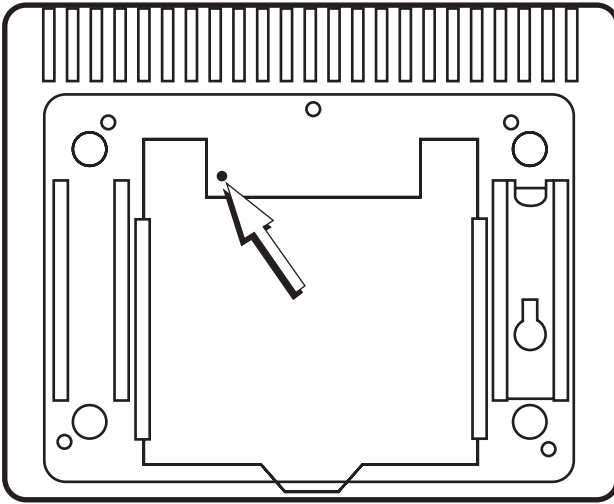


Figure 5-1. The Campus Pager system code button.

3. Enter a three-digit system code. After about one second, the display shows ___, and the system code is stored.
4. If you enter a wrong code, reset it by pressing **A/C**, **CANCEL**, or the system code button. Then repeat Steps 2 and 3 to store the system code again.

NOTE

If your application requires more than 100 system pagers, you can use multiple Campus Pager systems. If using more than one Campus Pager, each system should have a unique system code.

5.3 Storing the Pager Code

Before you can use the Tone Pager or Vibrating/Tone Pager, you must designate a pager code for each of the pagers.

NOTE

You must reset all pager codes when you enter a new system code.

To enter and save a pager code, follow these steps:

1. Turn the pager OFF.
2. Press and hold the ON/OFF switch, then slide it to the ON position (see

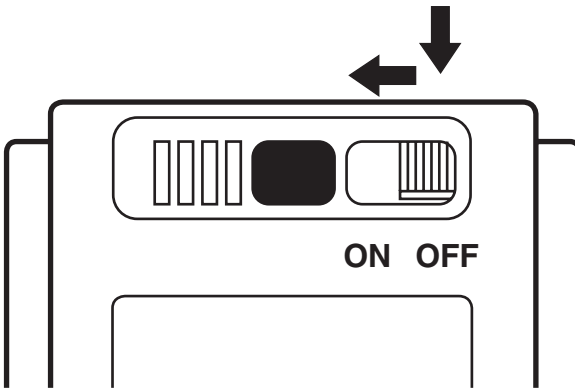


Figure 5-2. Pager ON/OFF Switch.

3. Make sure that the Campus Pager is turned ON, then enter a two-digit pager code (00-99) and then 0.
4. Press the TRANSMIT button on the Campus Pager, and the unit will transmit the pager code to the pager. The pager will beep four times, and flash "L" on its display four times. The pager then beeps 12 times and simultaneously flashes 0 on its display to confirm that it received the message code 0.

NOTE

For example, if you would like the pager to have a new pager code such as 38, enter 380, and press TRANSMIT.

After you press the TRANSMIT button, the Campus Pager LED flashes the three digits seven times, and simultaneously transmits the pager code to the pager. The three digits will stay lit until you perform one of the following actions:

- Turn the Campus Pager OFF
- Press A/C or CANCEL
- Transmit a message to a pager

Perform the preceding steps for each pager used with the Campus Pager.

NOTE

If the pager does not successfully store the pager code, repeat the preceding steps.

5.4 Transmitting a Message Code to a Single Pager

1. Turn the Campus Pager power ON.
2. Press A/C or CANCEL if the display shows unwanted pager or message codes.
3. Enter the two-digit code for the pager you want to receive the message, then the one digit message code that you want to send. If you enter the wrong pager or message code, press A/C or CANCEL, then re-enter the correct codes.

NOTE

You cannot reset either of these codes after you press the TRANSMIT button.

4. Press the TRANSMIT button. The TRANSMIT display lights during transmission, and the pager's display flashes the message code number seven times. The three digits will remain lit until you perform one of the following actions:

- Turn the Campus Pager OFF
- Press A/C or CANCEL
- Transmit a message to a pager

If desired, press TRANSMIT again to re-send the current message code to the pager.

5. Press A/C or CANCEL, then repeat Steps 3 and 4 if you want to transmit another message code to another pager.

5.5 Transmitting a Message Code to All System Pagers

1. Turn the Campus Pager power ON.
2. Press A/C or CANCEL if the display shows unwanted pager or message codes.
3. Press ALL, then the one digit message codes that you would like to send. If you enter the wrong message code, press A/C or CANCEL, then re-enter the correct code.

NOTE

You cannot reset the message code after you press the TRANSMIT button.

4. Press the TRANSMIT button. The TRANSMIT display lights during transmission, and the pager's display flashes the message code number. See **Section 5.6**. If desired, press TRANSMIT again to re-send the current message code.
5. Press A/C or CANCEL, then repeat Steps 3 and 4 if you want to transmit another message code.

5.6 Receiving a Message Code with the Tone Pager

When a Tone Pager is turned ON and receives a page, it sounds 12 beeps and flashes the received message code on its display, unless you press the ON/OFF button to silence the pager before it finishes beeping. The 12 beeps and message code display repeat about 10 seconds later. Press ON/OFF to silence the pager when it beeps again, or the pager beeps once about every 60 seconds to remind you that there is a new call.

Press ON/OFF to stop the pager from beeping every 60 seconds.

If the message code is transmitted to all pagers, each pager repeats the 12 beeps three times at about 30 second intervals. Press ON/OFF to silence the pager.

5.7 Receiving a Message Code with the Vibrating/Tone Pager

When a Vibrating/Tone Pager is turned ON and receives a page, it vibrates once and flashes the received message code on its display, unless you press the ON/OFF button to silence the pager before it vibrates. The pager beeps once every 60 seconds and allows you to view old messages from newest to oldest by pushing the on/off button.

Each pager has its own pager code, which allows the system to send a message to a single pager, or to all of your system's pagers using the TRANSMIT ALL feature. You can record each of the pager codes, and their corresponding users on the card located under the base unit.

5.8 Reviewing Stored Message Codes

The pager can store eight message codes. Repeatedly press ON/OFF to view the stored message codes on by one, from newest to oldest. A "-" indicates the end of the stored message codes.

When the memory is full and a new message is received, the oldest message code is deleted from memory.

If a newly received message code is identical to the last message received, it is not stored.

All stored message codes are erased when you turn the pager OFF.

6. Service Information

If you have problems with your Campus Pager, first call for technical support. If technical support personnel cannot solve the problem with your Pager, you might have to return the unit to the factory for service.

Before calling for technical support, please have the following items ready:

1. Campus Pager serial number
2. Campus Pager Operator's Guide
3. Sales receipt
4. Campus Pager connected to a phone line



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