RATH

Installation & Operations Manual

Cellular Emergency Phone

2 YEAR WARRANTY

RATH

Thank you for purchasing RATH's 2500-PWR24U Power Supply. We are the largest Emergency Communication Manufacturer in North America and have been in business for over 35 years.

We take great pride in our products, service, and support. Our Emergency Products are of the highest quality. Our experienced customer support teams are available to remotely assist with site preparation, installation, and maintenance. It is our sincere hope that your experience with us has and will continue to surpass your expectations.

Thank you for your business,

The RATH® Team

Table of Contents

Item Listing

Items Needed (Provided by RATH®):
- Emergency phone
- Snake eye security screw bit
- GSM or CDMA cellular unit and antenna

Items Needed (Not Provided):
- Anchor screws for mounting
- Electrical conduit for 110/120vac power
- Sim Card for GSM Cellular Unit (CDMA will be pre-configured at factory)
- 1/4" driver for snake eye security screw bit
- Wire nuts for connecting AC

Installation

Installations Where Antenna Cable is Externally Mounted:

1. Mount phone to the wall or pole using anchor screws.
2. Mount the antenna bracket to the wall using appropriate anchor screws. Antenna should be mounted at least two feet from the phone.
3. Drill hole in appropriate location in the box for electrical power and antenna.
4. Attach conduit to the phone if appropriate for the install.
5. Attach the antenna cable to the cellular unit and screw into port labeled "Antenna".
6. Run the 110/120vac electrical wires to the phone and attach to the power supply wiring using appropriate wire nuts.
7. Turn on the electrical power.
8. Remove power from the cellular unit by disconnecting the barrel connector on the side.
9. Locate SIM Card Slot on cellular unit, press yellow button to remove holder, insert Sim Card as shown on the unit, and reapply power (not required for CDMA).

GSM: Wait for lights on unit to be as follows: **Power:** Lit and Solid **Rdy:** Lit and Solid **NW:** Slow Blinking
FXS: Off (will light when button is pressed on phone)
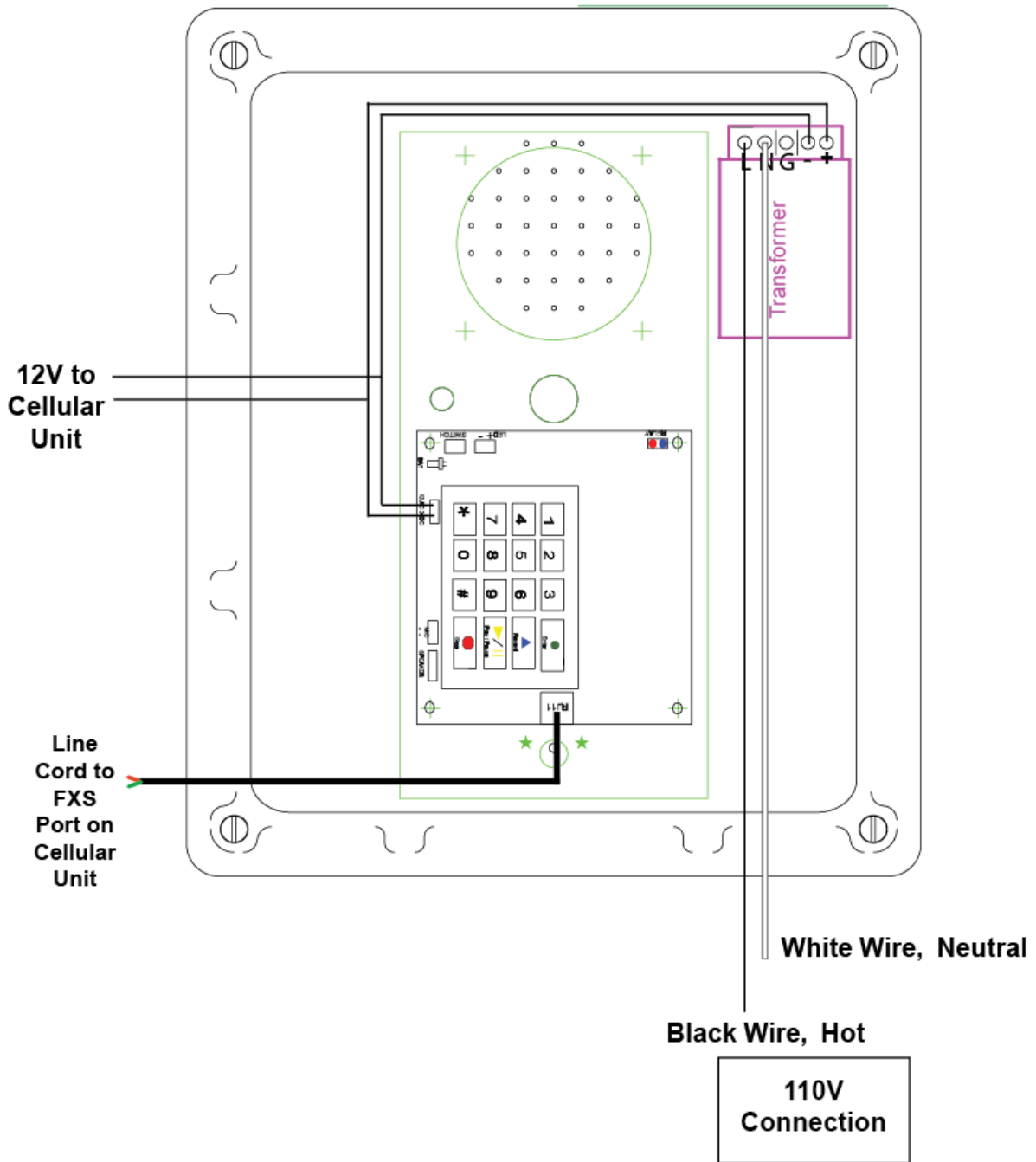**CDMA:** Wait for power light to be lit solid and at least one signal strength light to be lit

Installations Where Antenna is Mounted to Phone Enclosure:

1. Mount phone to the wall or pole using anchor screws.
2. Drill a hole in an appropriate location in the box for connecting electrical power to the phone.
3. Attach conduit to the phone if appropriate for the install.
4. Run the 110/120vac electrical wires to the phone and attach to the power supply cables using appropriate wire nuts.
5. Turn on the electrical power.
6. Remove power from the cellular unit by disconnecting the barrel connector on the side.
7. Locate SIM Card Slot on cellular unit, press yellow button to remove holder, insert Sim Card as shown on the unit, and reapply power (not required for CDMA).

GSM: Wait for lights on unit to be as follows: **Power:** Lit and Solid **Rdy:** Lit and Solid **NW:** Slow Blinking
FXS: Off (will light when button is pressed on phone)
CDMA: Wait for power light to be lit solid and at least one signal strength light to be lit

Wiring

12V to Cellular Unit

Transformer

L N G

Line Cord to FXS Port on Cellular Unit

White Wire, Neutral

Black Wire, Hot

110V Connection

Programming the Phone

Note: Phones are already programmed to dial 911.

To program an alternate number, remove the 4 security screws in each corner and either remove front cover or inside plate to access the phone circuit board. Follow the directions on page 4:

Speaker Phone Programming

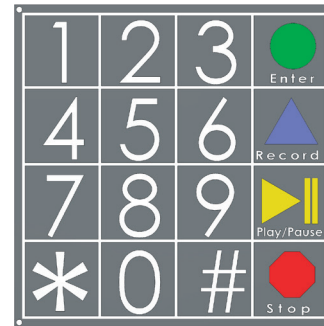**Step 1:** To Begin Program Mode

    A. Press **Enter**

Step 2: To Program Emergency Number

    A. Press **1, Enter,** (phone number), **Stop**

Step 3: To Exit Program Mode

    A. Press **Stop** for 3 seconds

Keypad

Handset Phone Programming:

Step 1: Plug phone line cord into an active analog phone jack

Step 2: Press and hold the **Program** button, lift handset off hook, then release **Program** button
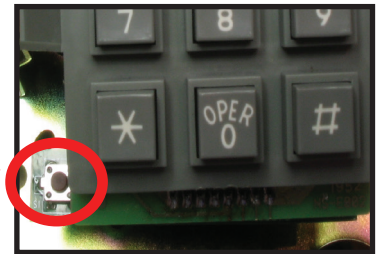
Step 3: Press the **#** key 10 times (you will hear confirmation tones)

    Note: When programming, ignore messages or busy tones from the phone system.

Step 4: Press **3**, then **#**, then the phone number you wish to dial
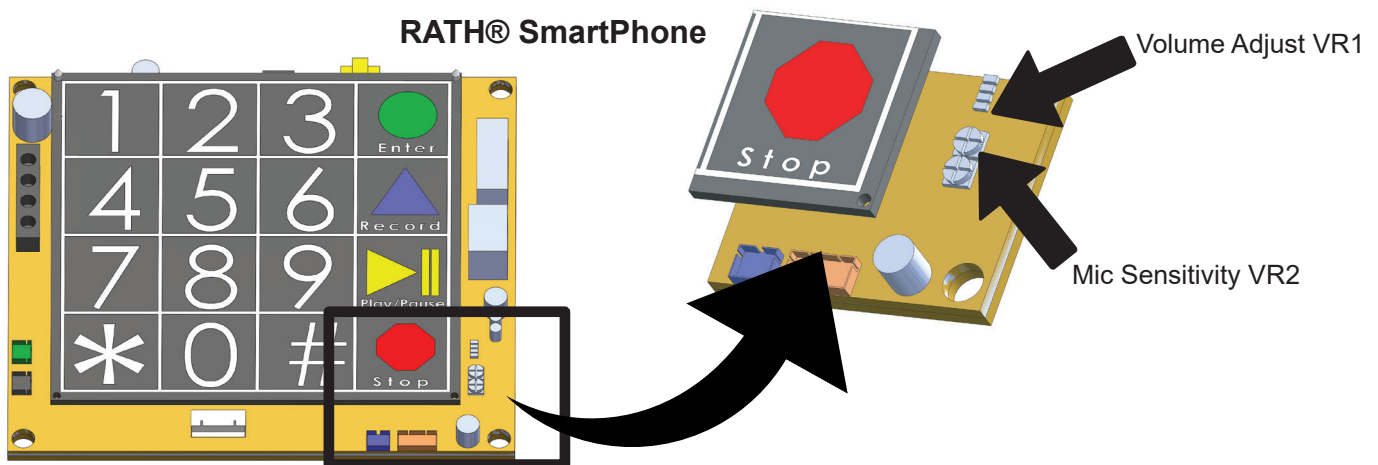
Step 5: Press ***** then **#** to exit Programming Mode

Program Button

Adjusting the Volume

If the volume is too low or high, adjust it by referring to the diagram and instructions below.

RATH® SmartPhone

Volume Adjust VR1

Mic Sensitivity VR2

Adjusting the Microphone:
If the person you are calling reports your voice is not loud enough, increase the Microphone Sensitivity by adjusting VR2 a 1/4 turn clockwise (requires a small Phillips screwdriver).

Adjusting the Speaker:
If the voice of the person you call is not loud enough in the phone speaker, increase the volume by adjusting VR1 a 1/4 turn clockwise.

Troubleshooting

Problem	Possible Cause & Solutions
No dial tone when the button is pushed:	• Check to make sure the phone line is connected to the SmartPhone board. • Verify SIM Card is seeded correctly in cellular unit and all lights on front are appropriately lit.
Audio is low from the speaker:	• Speaker control needs to be adjusted. Go to "Speaker Adjustment" on page 4. • Make sure the speaker holes are not blocked.
Audio is distorted from the speaker:	• Speaker control needs to be adjusted. Go to "Speaker Adjustment" on page 4. • Make sure there are no items touching the speaker inside the enclosure.
When called party hangs up, call does not disconnect:	• Cellular unit does not have the proper disconnect signal. Contact your service provider and ask for a CPC or Open-Loop Disconnect signal.
Phone appears non-functional. Light does not flash and no audio is heard from speaker when buton is pushed:	• Check to make sure the phone line is connected to the SmartPhone. • Verify that there are 12v coming out of the transformer to cellular unit and SmartPhone. • Push button may be non-functional. Short connector and see if call is placed.