



encompass LE2

Installation Quick Start Guide

The **encompass LE2™** is a digital satellite receiver that will receive signal from **AMC-1 - vertical polarity**. The receiver is designed to be virtually "plug and play" once it is connected to a correctly pointed satellite antenna.

Your box should include:

1. The **encompass LE2** satellite receiver
2. This one-sheet installation guide
3. Power Module, Input: 100-240 VAC 50-60 Hz 1.0 A - Output: 12 VDC, 1.5 A
4. Required UL Safety Sheet

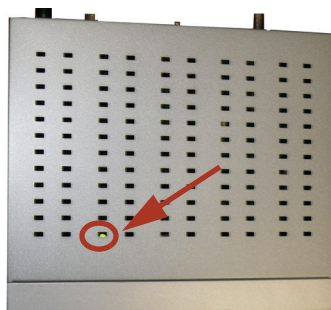
The system has been designed to utilize a .84-meter downlink antenna. If you need pointing coordinates for AMC-1, please contact the Muzak Network Operations Center (NOC) at 1-800-327-6549. You can also go to <http://noc.muzakcitycenter.com> to obtain pointing information for a list of cities across North America. A polarity chart is included on the back of this document. Properly adjusting the antenna's azimuth, elevation, and polarity is critical to achieving good signal performance at the downlink site.

When the receiver locks to the signal for the first time in a new installation, it will switch programs continuously until the unit is authorized by Muzak NOC (800-327-6549) or through the web interface (<http://www.muzakcitycenter.com>). This also applies to receivers that have been removed from service. Important: The receiver must be successfully locked to the AMC-1 carrier before it can be authorized. The instructions below help verify this status.

The **encompass LE2** is a single zone output, fully addressable receiver with a front-panel display and three front-panel buttons, (up) ▲, (down) ▼ and **enter**.



encompass LE2 Receiver Connections		
1	DC IN	Using the enclosed power module (only), connect the appropriate end to the encompass LE2 rear-panel port labeled "DC IN". Connect the other end to an appropriate 100-240 VAC 50-60 Hz, three-prong power outlet.
2	Audio Output	Connect to "AUDIO". The incoming audio service is mono and the same channel is present on Left and Right outputs.
3	RF Input	Connect the coaxial cable from the LNB to the encompass LE2 "RF IN."
What to Expect		
Within a few seconds of power-up, the receiver will display the initializing message. The receiver performs several self-diagnostic tests.		INITIALIZING
After passing the self-diagnostic tests, the receiver will display " AUTHORIZE VIA WEB OR NOC " if it has not been authorized. This statement is spread over two screens and alternates every second. Carrier Lock is required to get this message. If the receiver displays "NO SIGNAL", check your antenna alignment, polarity setting, and cable distribution from the satellite antenna to the receiver. Also make sure you have the coaxial cable (RG6) connected to the RF IN port.		AUTHORIZE VIA WEB OR NOC



Note: Again, the receiver must be locked to the carrier before it can be authorized. To verify carrier lock, look through the vent-holes in the top of the **encompass LE2**. If the receiver is locked to the carrier, you should see a green LED toward the front of the receiver, about ¾ of the receiver width from the left (with the front of the receiver facing you). You must view the receiver at an angle to see the LED. In the picture at left, the circle and arrow mark the location of the LED. If the LED is steady-green, the receiver's tuner is locked to the Muzak carrier. When the receiver is authorized, the front-panel display will show the name of the audio program currently playing.

Note: The ":" flashes when the receiver is specifically being addressed by the NOC control system.

Program Selection

When the receiver is authorized for more than one audio program, simply press and release ▼ or ▲ on the front panel to change to another program. When you press and release either arrow, the display will start blinking. Keep pressing and releasing the appropriate arrow until you reach the desired program, then press and release **enter**. The display will stop blinking and the receiver will begin playing the newly selected program. If **enter** is not pressed, the receiver display will return to the current program after 30 seconds.

There are two things to remember about the program display:

- The programs are organized in alphabetical order
- The receiver will only display authorized programs

The **encompass LE2** has some basic diagnostic tools for verifying signal quality. The table below explains how to access these tools.

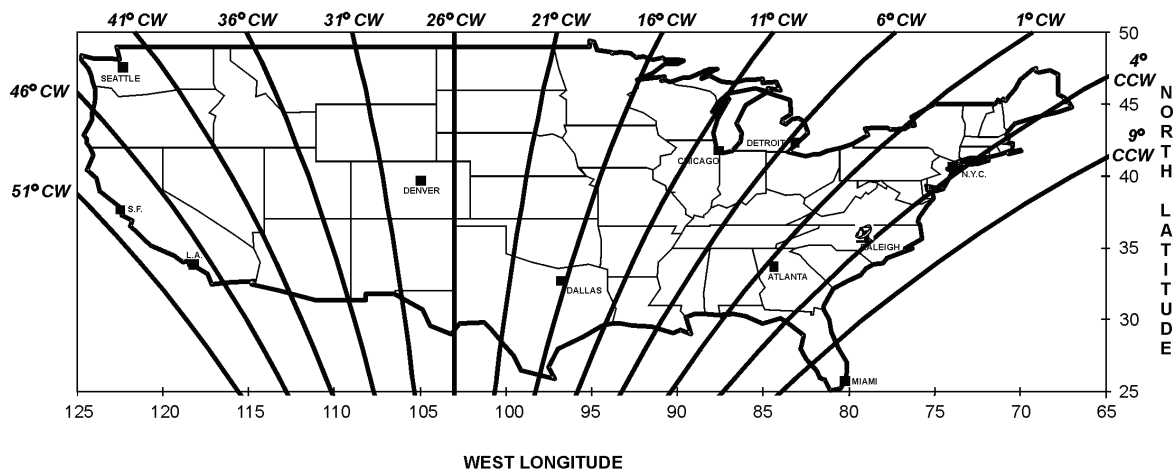
Function	Action	Display Action	Display
Enter Diagnostics	Hold both the ▼ and ▲ for 2 seconds.	Flashing	SETUP?
Signal Quality Verification	1. Press and release ▼ or ▲ until the display reads "SIGNAL?"	Flashing	SIGNAL?
	2. Press enter to obtain a 10-second average signal level. The level (in units of dB) is displayed for 15 minutes or until s is pressed. The signal level must be above 8.0 to ensure reliable downlink performance. At 8.0, the downlink still has 3 dB of margin to minimize the impact of rain fade.	Solid	SIGNAL: XX.X
Serial Number Verification	1. After entering diagnostics, press and release ▼ or ▲ until display reads "SERIAL NUMBER?"	Flashing	SERIAL NUMBER?
	2. Press enter to display receiver's serial number for 10 seconds. To return to diagnostics menu, press ▲.	Solid	S/N XXXXXX

Environmental Operating Conditions & Physical Specifications	
Use	Indoor
Altitude	Up to 2000 meters
Temperature Range	50 ^o F to 104 ^o F
Relative Humidity (max.)	80% for temperatures up to 88 ^o F decreasing linearly to 50% relative humidity at 104 ^o F.
Weight	1.6 pounds or 0.7 kilograms
Dimensions (H x W x D)	1.55"x 7.5"x 6.55" or 39.4 mm x 191 mm x 166.4 mm

Trouble Shooting

If the receiver is in a warning condition, the ":" becomes ":". By selecting the diagnostic mode on the front panel you can read one or more warning messages to help you troubleshoot. Technical help may be obtained by calling 800-327-6549. You can also find a detailed troubleshooting guide with the most common issues available at: <http://noc.muzakcitycenter.com>.

LNB POLARITY ADJUSTMENT FOR AMC-1



Aligning Steps

1. Face the front of the reflector with the LNB between you and the reflector.
2. Spin the LNB until the collector pin inside the square hole of the LNB is facing perfectly **vertical**.
3. Spin the LNB per the chart relative to your geographical location.

ie: For Chicago, you would spin the LNB approximately 9.52 degrees clockwise from a **vertical** position