

ENCOMPASS LE – QUICK START GUIDE



The **ENCOMPASS LE™** 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 LE satellite receiver | 2. This one-page installation guide |
| 3. Power Module, Input: 120VAC 60 Hz .4 A - Output: 18 VAC, 1.2 A | 4. Required UL Safety Sheet |

The system has been designed to utilize an .84-meter downlink antenna. If you need pointing coordinates for AMC-1, please contact the Muzak Network Operations Center (NOC) at 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 attached to the back of this document. Properly adjusting the antenna’s azimuth, elevation and polarity is critical to achieve 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 note: The receiver must be successfully locked to the AMC-1 carrier before it can be authorized. Instructions below help verify this status.

The **ENCOMPASS LE** is a fully addressable receiver with a front-panel display and three front-panel buttons, (up) ▲, (down) ▼ and **enter**



ENCOMPASS LE Receiver Connections – Reference above right picture		
1	Power	Using the enclosed power module (only), connect the appropriate end to the encompass LE rear panel port labeled “POWER”. Connect the other end into an appropriate 105-130 VAC, 60 Hz, three-pronged power outlet.
2	Audio Output	Connect to “MAIN AUDIO OUT” set “A”. The incoming audio service is mono and the same channel is present on both “A” outputs. Note: The “OPTIONAL AUDIO OUT” or “B” output set are for expansion by adding the optional encompass LE audio storage card.
3	RF Input	Connect the coaxial cable from the LNB to the encompass LE “RF IN.” This is the top “F” connector.
Warning: An RF INPUT and RF OUTPUT are provided on the unit. The signal quality is degraded if the input is placed on the “RF OUT.”		

What to Expect	
Within a few seconds of power-up, the receiver will display the initializing message. The receiver does several self-diagnostic tests.	A: INITIALIZING
Once the receiver passes its self-diagnostic tests, it 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.	A: 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 LE**. If the receiver is locked to the carrier, you should see a green LED toward the front of the receiver, about $\frac{3}{4}$ of the way over from the left (with the front of the receiver facing you). You'll have to look at an angle to see the LED. In the picture to the left, the white 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. Once the receiver is authorized, the front panel display will show the name of the audio program currently playing. Note: The "A:" flashes when the receiver is specifically being addressed by the NOC control system.

▼ 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 land on the desired program, then press and release **enter** display. The display will stop blinking and will begin playing the newly selected program. If **enter** is not pressed, the receiver display will return to the current program after 30 seconds.

If you have an *optional* second audio card installed, you can access it by pressing and releasing the **enter** button when the display shows a non-blinking program name. When you press and release **enter** the display will change from **A:** to **B:**. You can change programs using the ▲ or ▼ arrows followed by pressing and releasing the **enter** key as explained for the "A" side above.

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 LE** has some basic diagnostic tools for signal quality verification. Below is a grid on how to access them.

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 will stay up for 15 minutes or until ▲ is pressed. (Signal is in units of dB). 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 ▲ arrow.	Solid	S/N XXXXXX

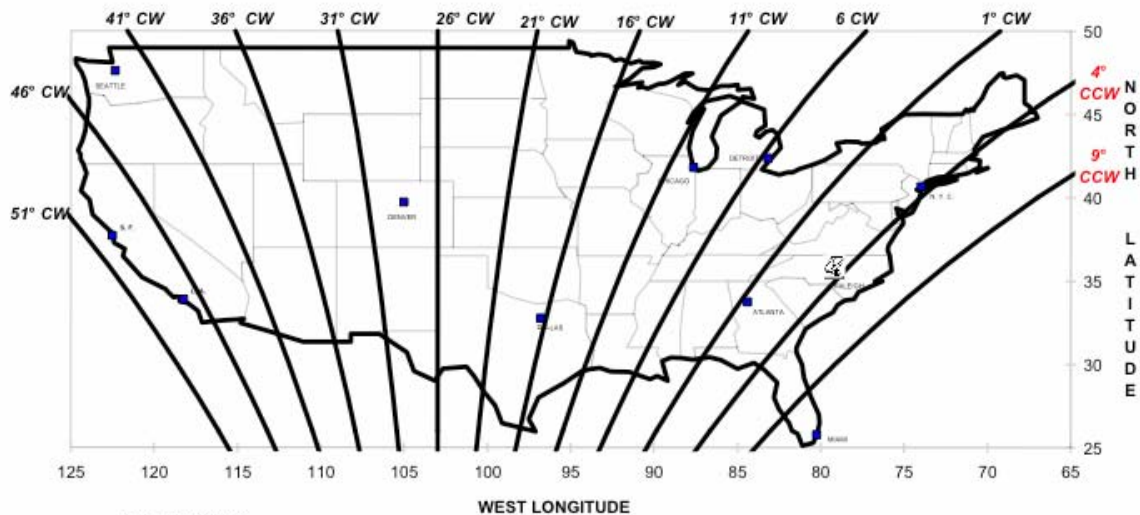
Environmental Operating Conditions & Physical Specifications	
Use	Indoor
Audio	Unbalanced, 10K
Altitude	Up to 2000 meters
Temperature Range	50° F to 104° F
Relative Humidity (max.)	80% for temperatures up to 88° F decreasing linearly to 50% relative humidity at 104° F.
Weight	3.3 pounds or 1.45 kilograms
Dimensions (H x W x D)	2.25"x 9"x 7.5" or 57.15 mm x 228.6 mm x 190.5 mm

Troubleshooting

If the receiver is in a warning condition, the "A:" becomes "A*". By selecting the diagnostic mode on the front panel you can read one or more warning messages to help you troubleshoot. Technical help can 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 AMC1



Aligning Steps

1. Face the front of the antenna with the LNB in 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.

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