

Quick Start Advisory – Live Audio Broadcasting

Set up a InfoSpot/Talking House Transmitter with direct audio input feed from a live sound system.

Range Test

After setting up your Transmitter's broadcast frequency and the antenna system (the wire antenna or the Range Extender) per the instruction manual, orient your antenna to best cover the desired area. Use the internal message that comes in the Transmitter's internal memory to do the initial distance testing using a car radio receiver. [Leave the switch set to "Message Chip."]

The antenna works best if elevated a bit and not paralleling things such as walls, metal poles, etc. Items very near the antenna can affect the system's range, so keeping the antenna "in the clear" is always best, and always away from metal, which can absorb or reflect the signal.

If you are transmitting with the Transmitter alone using the wire antenna: Place the transmitter on table or similar near the reception area and run the antenna wire up a 10' section of plastic conduit or a wood post. This has been found to produce a good 150-200 radius coverage area.

If the signal begins to fade in fringe areas where you desire that it be stronger, you may need a Range Extender unit to boost the signal. The Range Extender allows you to connect coaxial cable to the back of the transmitter and elevate the antenna to a roof or support structure like a light pole or temporary mast. The elevation boosts the signal and range dramatically, to between 1000-2000 feet. Important: The Range Extender antenna needs to be mounted to the top of the support pole/post/roof mast so the antenna does not parallel the support.

Switch Settings

Now set the Transmitter Mode switch on the rear of the unit to "Live Radio." This sidelines the Transmitter's internal message player and enables the Transmitter to pass thru audio directly from your sound system. You can just use the internal microphone which automatically engages when "Live Radio" is selected, or, you can bring audio to the Live Input Jack on a wire, as described below.

Live Input Jack

Take audio from your audio board's "Line Out" or "Aux Out" audio port. Route the audio line to the Live Input Jack on the rear of the Transmitter. The Live Input jack is a standard 1/8" (3.5 mm) jack, which will admit a 1/8" (3.5 mm) mono or stereo audio plug.

Audio Specifications

It is important to input an unamplified "line level"/low impedance, unbalanced audio feed. Use a source in which the audio level can be trimmed up/down. 150 mV (peak to peak) is an ideal level for full

modulation. If your sound system allows you to add compression and limiting to the audio being provided, that is always good for maximum loudness and clarity.

Audio Levels

If audio levels are too low, the result is a dull, “hard to hear” sound on the radio, sometimes with background “hiss”, even when near the transmitter; if the audio input level is too high, a ragged, distorted sound can be the result. The right level will sound loud, natural, crisp and easy to listen to.

NOTES

Use a car radio to do the evaluation and make sure to move away a few hundred feet so that you can determine if the quality changes with distance. The result should be about the same wherever your signal is adequate. At farther distances, if the audio begins to sound soft, your audio input level may still be too low. Try increasing it, but not to the point in which distortion is heard. Of course, like any radio signal, if you attempt to monitor in areas where the signal itself is insufficient, you will begin to hear background hiss, static or hear far off radio stations increase in the background as you move away.

Some car radio receivers are very sensitive and others are not, so the range may appear to vary somewhat vehicle by vehicle. In fact, you may be hearing the differences in sensitivity and noise rejection between different receivers.

There is an optional hand mic which plugs into the back of the transmitter, if that would be helpful to your arrangement.

If you detect 60 cycle “hum” in the audio, which can result from ungrounded equipment. Make sure the various components you are using are grounded together and grounded directly to the transmitter - and not only through their audio lines or power supplies. Also, a regulated power supply can be substituted for the power supply supplied to provide additional AC line filtering. Email info@theRadiosource.com for details on making a power supply substitution.

Need an assist?

Email info@theRADIOsource.com or call 616-772-2300 (9-5 Eastern)