ListenTech-Note

Stationary RF Transmitter Range Limiting

Description:
The purpose of this tech note is to drastically limit the range of the 72 MHz Stationary RF transmitter without altering the electronics of the unit. This method can be used as an alternate approach to allowing more frequencies in a general area.

Note: This tech note is designed for 72 MHz only and does not describe how many systems can be used within a given area or if every scenario will work using this method.

Required Products:
(1) LT-800-072 Stationary FM Transmitter
(1) LA-124 90° Helical Antenna (216 MHz)
(x)* LR-5200-072 Intelligent DSP RF Receiver (72 MHz)
(x)* LA-402 Universal Stereo Headphones

*This number reflects the total number of participants in the room.

Transmitter Setup:
1. Connect the LA-124 90° Helical Antenna (216 MHz) antenna to the back of the transmitter.
2. Verify or select the High RF power setting on the back of the transmitter. The max range with this configuration is 50 linear ft., outside of 50 ft. the transmission is no longer efficient, causing the receivers to squelch (mute audio output).
3. Turn on the transmitter and set it to one of the appropriate channels for the application. Refer to the table below for recommended channel selections.

Number of Channels	Channel
1	E
2	A, E
3	A, E, H
4	A, E, I, H
5	A, E, I, J, H
6	A, C, E, I, J, H
7*	1, 5, 10, 16, 21, 24, 31
8*	1, 5, 10, 16, 21, 24, 31, 35

*Narrowband frequencies must be used when more than 6 channels are required.

Receiver Setup:

1. Connect the LA-402 headphones to the receiver.
2. Turn on the LR-5200-072 receiver and set it to the channel of its respective transmitter. The receivers can be setup to toggle between the available channels via the iDSP Software Suite or by holding the Power and Up buttons simultaneously for 4 seconds.
3. Test the complete system.
4. Repeat as necessary for multiple receivers.

Should you have any further questions or concerns, please contact Listen Technologies' technical services team at 801.233.8992 or support@listentech.com for further assistance.