

# Moseley

# Application Note

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## Rincon Expands the Payload Capacity of Starlink STL

*Joining Rincon Audio Transporter with the industry standard Starlink produces the first eight channel digital STL in the licensed 950 MHz band.*

STL frequencies are becoming crowded in many markets. Stations frequently need to add additional audio channels. Expanding Starlink STLs with Rincon can be a creative and cost effective solution to increasing the payload capacity of new or existing links.

### New Installations

Planning for a new installation, Moseley has a Starlink model with its capacity devoted entirely to IP. Simply connect the IP port on the Rincon to the IP port on the Starlink. As an example, at 32 QAM this installation will support 8 channels (4 Stereo) AAC-Low Complexity at 448 kbps. Or, choose 2 Linear Uncompressed channels (one stereo) and scale the remaining bandwidth to accommodate two 256 kbps and one 128 kbps stereo pairs. These are only examples. Any combination is possible up to the maximum bandwidth of your FCC STL channel allocation.

Models required for a new installation:

- 1 Starlink SL9003Q-LAN
- 1 Rincon 440
- 1 Rincon 404



Rincon Digital Audio  
Transporter

*Rincon, is the broadcast industry's first Software Defined Audio Transport Product optimized to deliver multichannel digital audio over IP, T1/E1 networks and radio links simultaneously. Rincon features:*

- *Four stereo audio pairs (8 channels)*
- *AES/EBU and Analog connectors*
- *Linear Uncompressed, AAC LC/LD, MPEG 2, MP3, G.722/G.711*
- *Main/backup paths with auto switchover*
- *Built-in silence sense to initiate backup*
- *Unicast/multicast RS-232*
- *Status and control closures transported across link*
- *Management by web browser, Smartphone or Tablet*

**Existing Starlink Systems**

In an existing installation you can greatly increase the capacity of a Starlink SL9003Q-2SLAN. Again, simply connect the IP port on the Rincon to the IP port on the Starlink. Either retain the existing audio module for your main linear uncompressed audio feed or remove it and let Rincon do all the audio work as in the earlier example. You can even share the bandwidth here with the HD Radio™ stream. As an example, at 32 QAM with the existing Starlink audio modules, you can add stereo pairs at moderate bandwidth. Any combination is possible up to the maximum bandwidth available.

Models required to expand an existing Starlink:

- 1 Rincon 440
- 1 Rincon 404

**Backup Protection**

Rincon is equipped to provide redundancy to your audio feeds. A second audio stream can be assigned to an alternate network path for backup. For example, a Moseley LanLink, DSL, or broadband modem, or a T1 line can transport the backup audio stream. At the receiving end the backup feed is switched on line automatically in case of a failure of the main link.

**Solutions**

Starlink is modular with configurable bandwidth and QAM rate. Combine this flexibility with the Rincon's library of audio algorithms and high channel count to create an unlimited number of custom of audio transport combinations. These solutions are often lower in cost than installing multiple discrete STL links. Contact Moseley Sales to discuss how Starlink and Rincon can be employed in your station.

Specifications are subject to change without notice.

