There is no sense in rebroadcasting noise, as that is going to be a total turnoff for listeners.

novonics´ Ben Barber discusses FM Rebroadcast Receivers and the importance of Remote Monitoring

The Receiver Matters for Rebroadcast applications and don´t overlook monitoring remote locations.

Ben Barber is president/CEO of Inovonics; the company makes several products relevant to translator applications and remote monitoring. "With the advent of multicast channels on HD Radio, the ability to get your signal into new markets greatly improved," he said.

Don't overlook the importance of monitoring remote installations.

Barber said, "There's a local engineer here in California who was responsible for a 10-watt translator down into a canyon. He was about 30 miles away, and there was no way of knowing if that translator was on the air or not until someone called the station and said they'd been off the air — for three days!"

Barber said Inovonics offers a small compact receiver, the INOmini 635 SiteStreamer, that can be placed at the translator site and provide feedback about any issues.

"A station can lease out their HD-2, HD-3 etc. and have it broadcast on the analog FM band in a different area. Just for this purpose, Inovonics came out with the Aaron 655, which is designed to receive HD-2, -3, -4 and then use the audio and PAD data to create an analog FM signal complete with RDS data."

FM receivers, he said, are at the heart of a translator install. "You need your receiver to be very sensitive and very selective, often in order to pull signals out of the mud. There is no sense in rebroadcasting noise, as that is going to be a total turnoff for listeners."

"In addition, you can monitor the audio feeding the site, to make sure signal is getting there, and listen to the translator's audio that is being rebroadcast over the air on any web-enabled device." Inovonics offers INOmini SiteStreamers models for AM, FM, HD Radio, and DAB+.

Ben Barber

AARON SERIES | REBROADCAST RECEIVERS

i INOVONICS BROADCAST

AARON 655

CORE FEATURE SET

- ✓ Unparalleled 'Software-Defined-Radio' (SDR) Receiver Performance
- ✓ Tuning Range 65.0MHz - 108.0MHz
  *AARON 655 [87.5MHz - 107.9MHz]
- ✓ Balanced Analog and AES-Digital Program Line Outputs
- ✓ Synchronous, Low-Latency (≤ 2.4 ms) Off-Air Composite / MPX Output
- ✓ Local Alarm Tallies Plus Self-Logging Alarms
- ✓ Remote Control Web Interface with Live Listening, Email & SMS Alarm Notifications
- ✓ 50 Ohm "N" Antenna connector

- ✓ Includes "F" to "N" Connector Adapter
- ✓ BandScanner for Onsite RF Spectrum Analysis
- ✓ Dynamic Web Interface
- ✓ Web Page Streaming 32k, 64k, 128k MP3
- ✓ Full SNMP Monitor / Control
- ✓ Network Port for Control & Monitoring
- ✓ Headphone Jack - 1/4" Front Panel (TRS)
- ✓ Left / Right Analog and AES Output < 2.4 ms
  *AARON 655 [< 4.5 ms]
- ✓ Composite Safety Clipper

- ✓ Test Tone Generator 20Hz - 20kHz Adjustable Level
- ✓ Composite / MPX Output (BNC), adjustable 1V p-p and 6V p-p for ±75kHz carrier deviation
- ✓ Analog Line Outputs adjustable between -20dBu and +18dBu
  *AARON 655 [-12dBu to +18dBu]
- ✓ Digital AES3 Line Outputs adjustable between -30dBFS and 0dBFS
- ✓ Digital AES Sampling Rate

AARON 640	AARON 650	AARON 655
48 kHz	32 kHz, 44.1 kHz, 48 kHz	44.1 kHz

ADDITIONAL FEATURES	AARON 640 FM REBROADCAST RECEIVER	AARON 650 FM REBROADCAST RECEIVER	AARON 655 FM/HD REBROADCAST RECEIVER
Composite Pass-Through < 250us	✓	✓	—
Active Reception Processing for Bandwidth, Stereo Blend, HF Blending, and more	✓	✓	—
Dual Antenna Inputs ("N" connectors)	—	✓	—
Dual Composite / MPX Outputs ("BNC" connectors)	—	✓	—
FFT Analyzer for the Composite Baseband, Left / Right XY Plots, Audio Levels Over Time	—	✓	—
RDS Message Logging via USB Port to a Local PC for Proof of Play	—	✓	—
Failover Audio Backup via SD CARD	—	✓	—
Failover Audio Backup via Web-Stream	—	✓	✓
Failover Audio Backup Analog / Digital Input	—	—	✓
Composite / MPX Regeneration	—	✓	✓
Built-in RDS Encoder	—	✓	✓
RDS Messaging Can Be Altered and Modified for Rebroadcast	—	✓	✓
Receives HD Radio 1-8 as Program Source	—	—	✓
3 Band Complete Audio Processor / Stereo Generator	—	—	✓
HD Pad Data converted to RDS	—	—	✓
Stream Pad Data converted to RDS	—	—	✓
Accepts Streaming Audio as Input	—	—	✓
Accepts Analog Audio as Input	—	—	✓
Accepts Digital Audio as Input	—	—	✓

WHY INOVONICS?
- Quality Solutions. Competitive Prices.
- Quick to install. Easy to Program.
- Three-year Factory Warranty.
- Quality after-sales service.

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