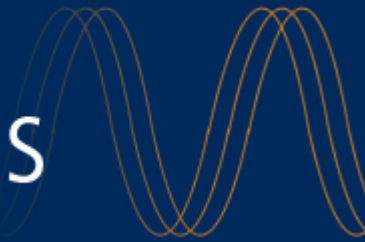




NautelWaves



Hello

Welcome to the 20th issue of Nautel Waves with NV Release 4 notification, input from several customers, new RF Toolkit features, our regular columns, plus a chance to win an iPad Mini.

UPCOMING WEBINARS

New Webinar Series

PUSHRADIO™



VS300 Exciter

[Learn more >](#)

iPad mini



In this issue

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RF Toolkit Propagation Tool Gets New Features

The Nautel RF Toolkit Propagation Tool is an easy-to-use, no-charge service that allows broadcasters to analyze approximate coverage of FM and TV stations, based upon the power of the station and antenna height and gain.

It utilizes the Longley-Rice algorithm and publicly available digitized terrain data, land cover data and population data. It is optimized for the ease-of-use of a relatively non-technical user, and as a result, uses preset groups of transmitter configurations, and receiver contour settings.

We have now added "custom" selections, making it possible to fine tune the settings for your application.

To use the new custom selection, create your site as normal, then click "New Coverage Plot" and choose the last entry in the "Tx System" pull down menu. Then you can select your exact Transmitter Power in Watts, Feedline Loss in dB, and Antenna Gain in dBi.

New Coverage Plot

Description	Radio coverage plot 9
Transmitter Site	Studio
Frequency (MHz)	103
Antenna Center height above ground (m)	91
Tx system	Custom
Tx power (Watts)	1000
Tx line loss (dB)	0.3
Tx antenna gain (dBi)	3.22
Rx system	Custom
Rx antenna center height (m)	10
Rx level 1 (dBµV/m)	54
Rx level 2 (dBµV/m)	60
Maximum range (km)	150
Opacity (%)	40

Submit

Similarly, clicking "Rx System" and scrolling all the way down to Custom on that menu allows you to enter the Receive Antenna Height in Meters above the ground, as well as the Rx1 and Rx2 contours to be plotted.

Note that the Nautel RF Toolkit is not a substitute for professional Consulting Engineering.

[Go to the RF Toolkit Now >](#)

Nautel and ENCO Cooperate to Create 'Push Radio'

WIN an iPad Mini

Submit a qualifying story about your experience using a VS300 as a Replacement Exciter. Odds of winning our last two iPad story contests were 1 in 9 and 1 in 3. Winner to be drawn at Radio Show in September

[Tell us your VS300 story now!](#)

LATEST WEBINARS



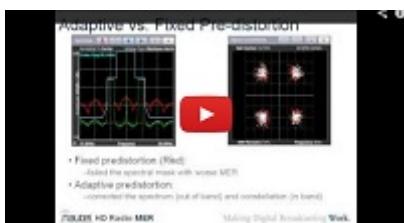
[NVLT High Power Transmitters >](#)



[LP UHF TV Transmitters >](#)



[NV Software Release 4.0 >](#)



[MER Measurement HD Radio >](#)



[Radio Coverage Tool In Depth >](#)

In certain categories of radio groups, the highest operating costs and lowest reliability are found in the audio distribution system from the centralized studios to the distributed transmitter sites. Satellites are extremely expensive, but for instance the public internet is just not reliable enough for real-time audio distribution. Locating the content playout system at the transmitter is seen as expensive and difficult to monitor and control.



Now, Nautel and ENCO have worked together to embed a mini program automation system right inside the Nautel transmitter.

While a far cry from a true studio automation, the system is capable of playing playlists of MP3 or WAV cuts which are stored on a USB memory device, having new playlists sent to it by a master ENCO DAD system in the headquarters, as well as having new content uploaded from the DAD to the transmitter USB storage. Lastly, the transmitter can keep an internal "as-played" log which is then retrieved by the DAD system for reconciliation and billing. While the system doesn't support segue at this point, it is perfect for stations which run programs rather than individual cuts, such as educational or religious broadcasters.

[Learn more about Push Radio >](#)

NV Series Release 4 Now Available

The Release 4 Software Update for NV Series transmitters is now available. You can find it on our [Latest Software page](#) or via [Nautel's Updater and Manager](#) automatic notifications if you have this installed.

To help you implement, we've compiled all the questions and answers from the recent NV/NX Release 4 Firmware Update Webinar in to a comprehensive FAQ. Learn more about what's in Release 4, how to upgrade, presets, flash, USB, etc. [Go to Latest Software >](#) [Read the Release 4 FAQs >](#) [Watch the Release 4 Webinar >](#)

Customer Story: J1000 to the Rescue post Sandy

Several New York area stations recall how the 'disaster-ready' Nautel J1000 transmitter came to the rescue after Hurricane Sandy.

"Nautel's quick assistance helped us return to serving the community after the storm." Alex Roman, WLIB Director of Engineering.



[View All Nautel Webinars >](#)

LATEST VIDEOS



[High Power NVLT Series >](#)



[Digital UHF TV NT Series >](#)



[MER Instrumentation >](#)



[Nautel Omnia Direct >](#)

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"Nautel and the J1000 came through brilliantly! The flexibility of the J1000 enabled us to work quickly and be back on air, albeit at lower power, by the evening drive time." Stephen Shultis, Chief Technology Officer, New York Public Radio.

[Read More >](#)
[Tell us Your Story now >](#)

Customer Story: Power Savings with the VS Series

Casey Williams at WZSP shows that even a low power Class A FM station (4.1 kW ERP) can save noticeable money with Nautel's VS Series transmitters.



"At \$2,400 per year savings in power, we will pay for the transmitter in just over three years!" Casey Williams, Station Manager.

[Read More >](#)
[Tell us Your Story now >](#)

Peter's Fireside Chat

Sometimes you need a GPS...

What a thrill. As many of you may know, Nautel introduced its first two TV transmitters at this year's NAB (the NT150 and the NT 500). We were blown away by the traffic that came to see them. Chuck Kelly lost his voice by day two, giving so many demos! We consistently heard the same refrain: bring the familiar Nautel reliability, AUI and customer service and you will have great success in the market.



What really sealed the deal was winning a Pick Hit from Broadcast Engineering magazine. It appears we were the only winner for TV transmitters this year. I wondered (tongue-in-cheek) if the Broadcast Engineering team needed a GPS to find Nautel way over on the radio floor! All kidding aside, it was a great honor and we look forward to a bright future in this exciting new market.

Tips 'n Tricks by Jeff Welton

Jeff details how to check ground radial integrity without digging, and how to make a quarter wave stub. Also, find out who won the Nautel swag pack from last issue's question.

[Read More >](#)

TOP LINK



[New Nautel 50 kW transmitter installation at KFNW in Fargo, North Dakota. Installation team on site one day prior to factory engineer's arrival to do the commissioning >](#)

UPCOMING EVENTS

Broadcast Asia, Jun 18-21
Singapore

WBA, Jun 19-20
Elkhart Lake, WI

Mediatech Africa, Jul 17-19
Johannesburg, SA

ABA, Jul 18-20
Little Rock, AR

SMPTE, Jul 23-26
Sydney, Australia

TAB, Aug 7-8
Austin, TX

ABA, Aug 16-17
Birmingham, AL

IBC, Sep 13-17
Amsterdam

IBA, Oct 29-30
Carmel, IN

Radio Show, Sep 18-20
Orlando, FL

[View All Upcoming Events >](#)

LATEST SOFTWARE

All latest software updates are now accessible at Nautel.com
[View Latest Software >](#)

Submissions for this Tips 'n Tricks column are encouraged and if published you'll receive a Nautel T-shirt. Submissions should be typed and emailed, with high resolution photos, to info@nautel.com using the subject line Tips 'n Tricks.



LPFM Corner by Christy Lynn White

It is hard to believe that the LPFM filing window that has been talked about since the fall of 2011 is now just four months away. In fact, there are a few sites featuring LPFM filing window countdowns. With the date fast approaching, communities continue to prepare and the tools and resources available are growing.



Nautel is joining this list of resources with recently-made changes to our [Radio Coverage Tool](#). The new "custom plot" option allows those preparing for the filing window to map approximate coverage with various transmitter sites, power levels, antenna heights and antenna gain. [Check it out here](#). Other resources include the FCC [LPFM Channel Finder](#), the REC network [LPFM Channel Search](#) tool, and several LPFM "how to" sessions and webinars.

An interesting read for those looking to apply during the upcoming LPFM window is an old [April Radio Magazine article](#). The article nicely details the ownership limits for LPFM stations and provides a breakdown of the points system determination established by the FCC if more than one application is received for the same geographic area.

Learn more about Nautel's [VS300 for LPFM](#), or contact [Christy White](#) directly at 1-877-662-8835