# Shout(cast) it out!

Using a Shoutcast or Icecast stream as an STL with your Nautel transmitter

What we'll cover...

- How to set up an Icecast server

- What encoder should I use?
  - Which ones to avoid!

- Encoder Configuration for SECaster
  - Some tips and 'gotchas' when setting up your stream

- How to configure your transmitter to best use your stream

- MaxxKonnect Wireless as an alternate IP delivery option

Using a Shoutcast/Icecast Stream with your Nautel transmitter

- # Download Icecast server from www.icecast.org

- Quick & Easy setup

- Encoder and server on the same PC
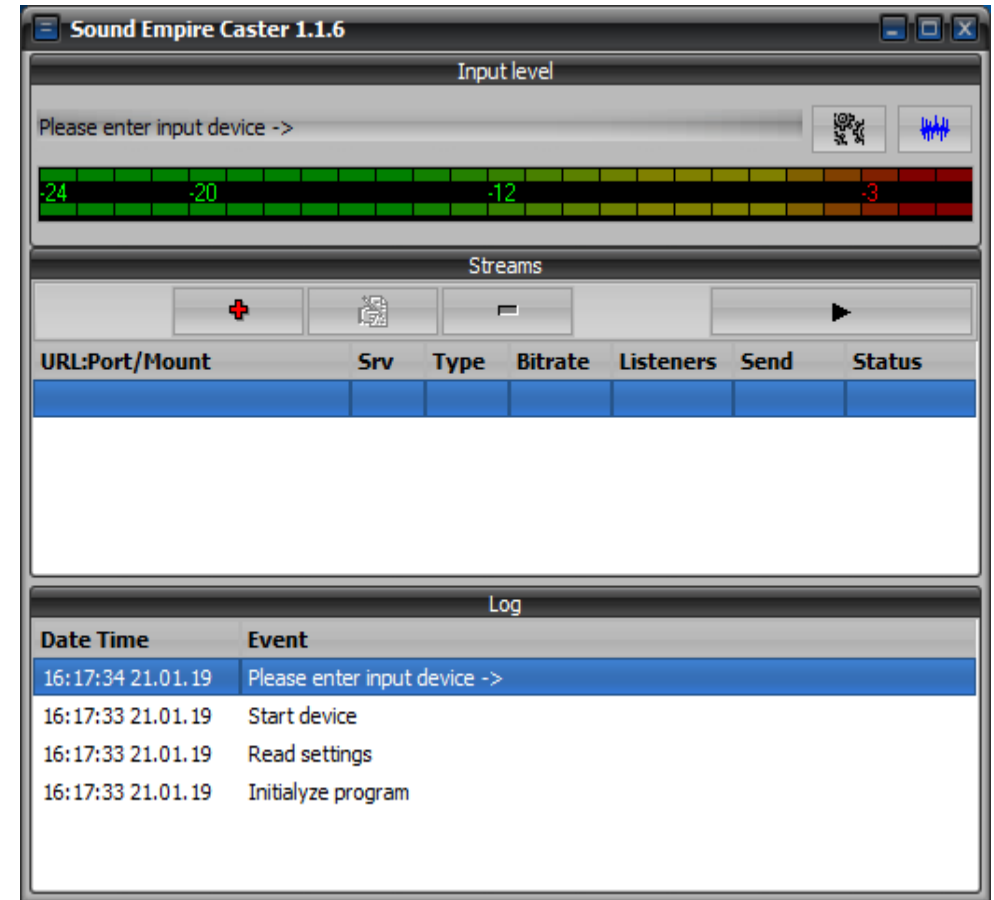
Install & configure your Icecast server

Visit www.icecast.org. Click Download and choose Icecast for Windows. Download and execute the file.

Once installed, browse to C:\Program Files (x86)\Icecast

In the Icecast folder, find **icecast.xml**. Right click and choose Edit. The file should open in Notepad.

Install & configure your Icecast server

Scroll through the file and find the <authentication> section.

```
<authentication>
    <!-- Sources log in with username 'source' -->
    <source-password>hackme</source-password>
    <!-- Relays log in with username 'relay' -->
    <relay-password>hackme</relay-password>

    <!-- Admin logs in with the username given below -->
    <admin-user>admin</admin-user>
    <admin-password>hackme</admin-password>
</authentication>

<!-- set the mountpoint for a shoutcast source to use, the default if not
     specified is /stream but you can change it here if an alternative is
     wanted or an extension is required
<shoutcast-mount>/live.nsv</shoutcast-mount>
-->
```

Edit username
and passwords

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Configure your Icecast Server
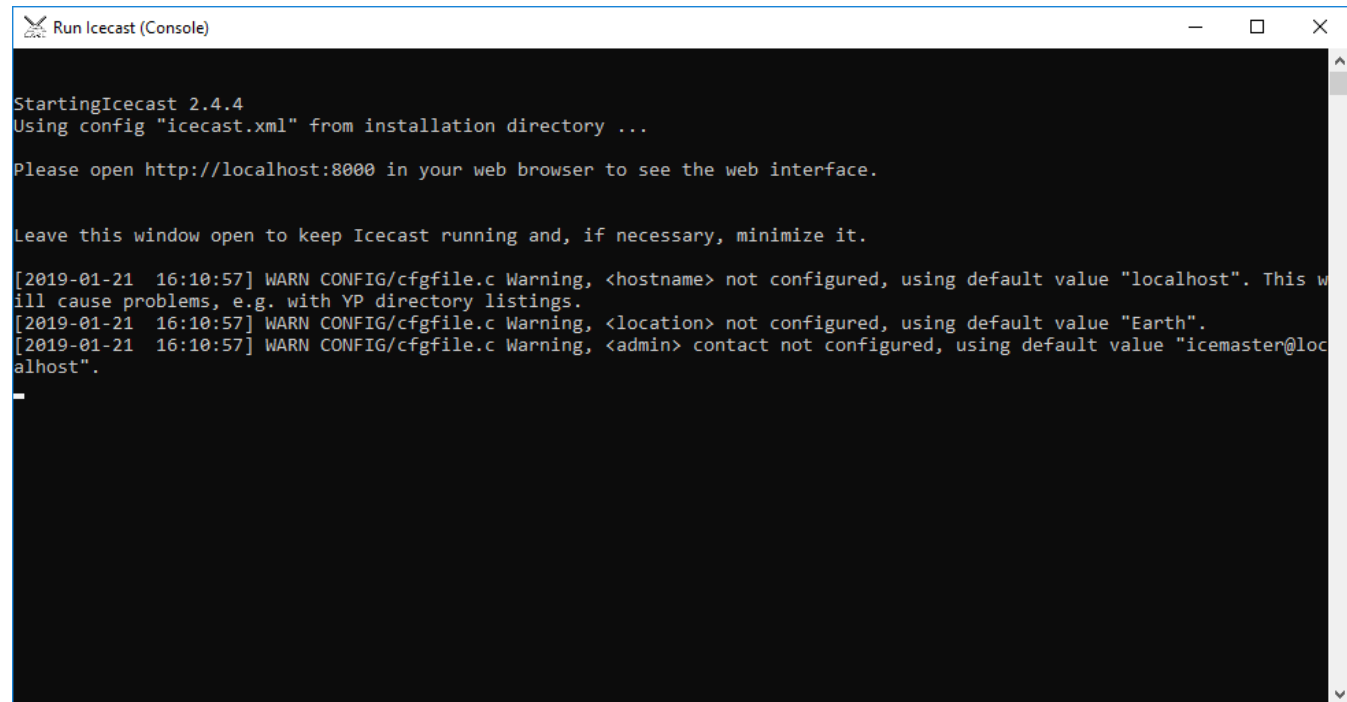
Click Start, find Icecast. Then choose 'Run Icecast (console)'

A command window will open.

This MUST remain open.

Closing it will stop the Icecast server.

You can minimize it.

What encoder can I use?

Sound Empire Caster (SECaster) is our recommended encoder for this application.

- It's free.
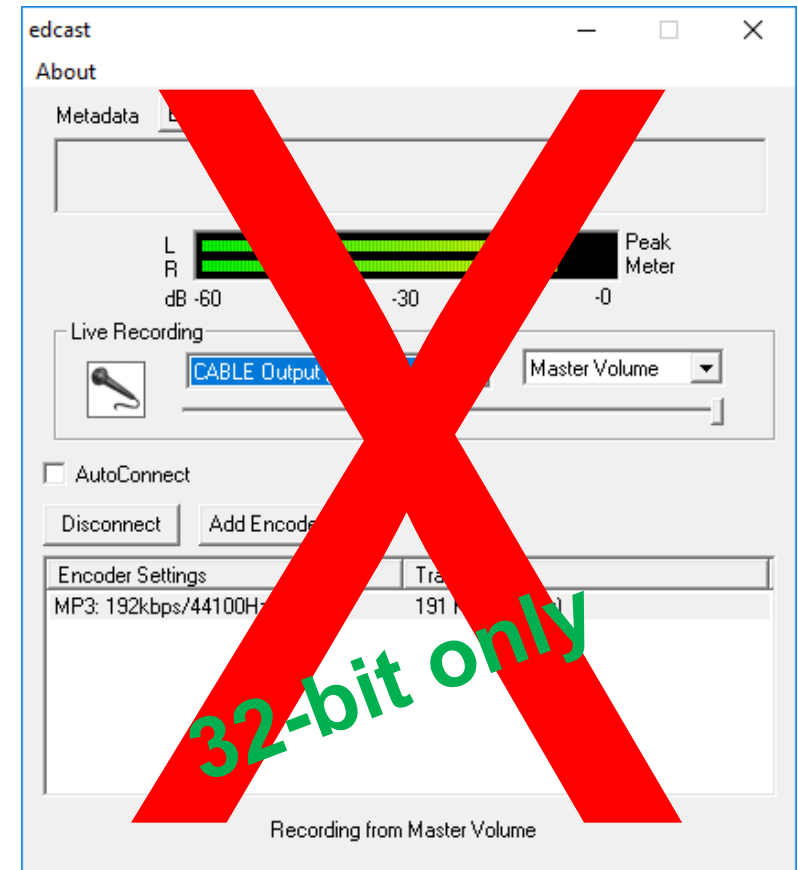- It's reliable.
- It's easy to configure.
- It works.

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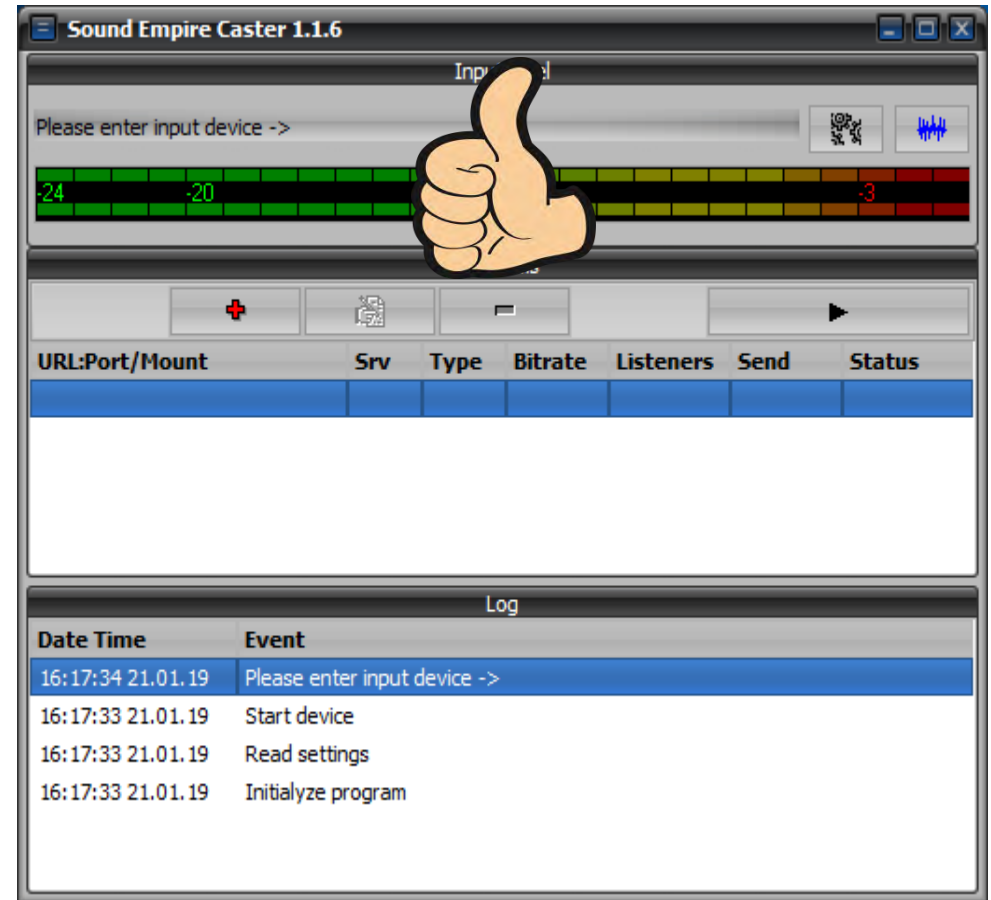
Why can't I use another encoder?

You can! 👍

Encoder must be able to support MP3 or WAV

Encoder must support L/R stereo streaming

Encoder MUST stream at 16-bit

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Why can't I use another encoder?

Setup SECaster as your encoder

SECaster downloads as a .zip file. Extract it. Then run SECaster.exe

SeCaster is NOT an installer – just an executable.
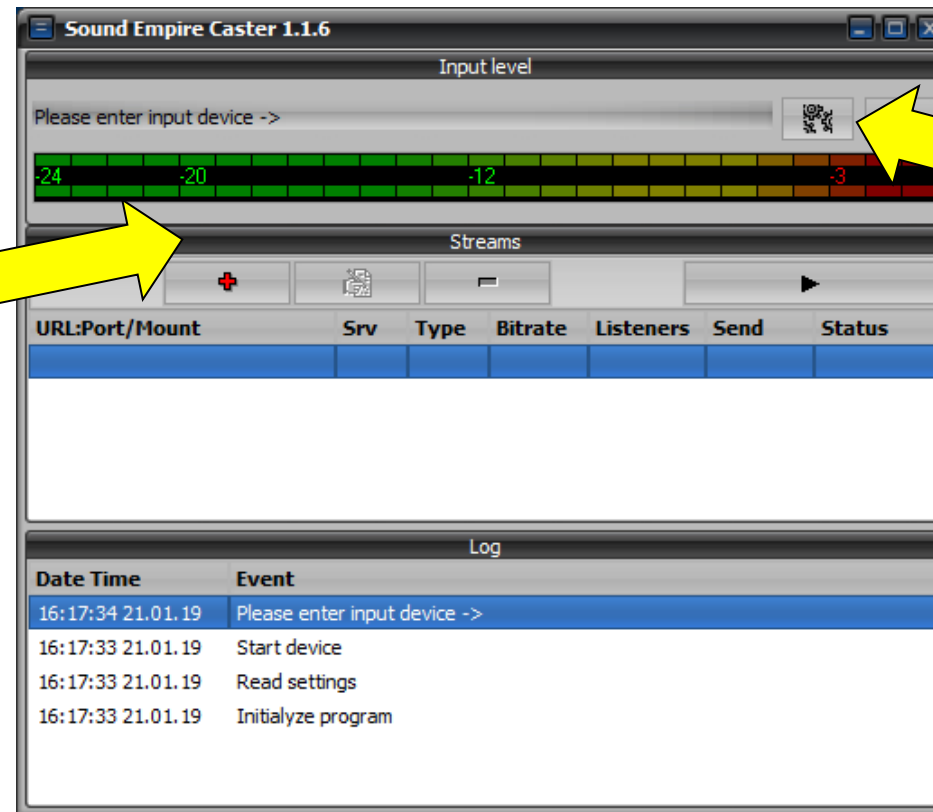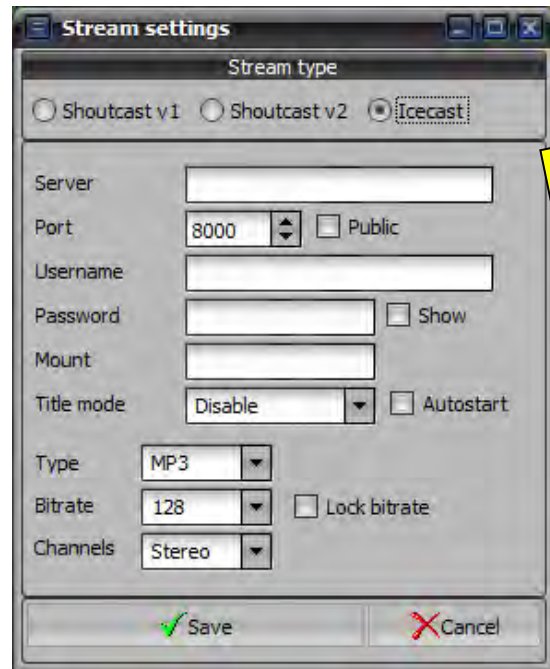
Create a desktop shortcut for easier accessibility

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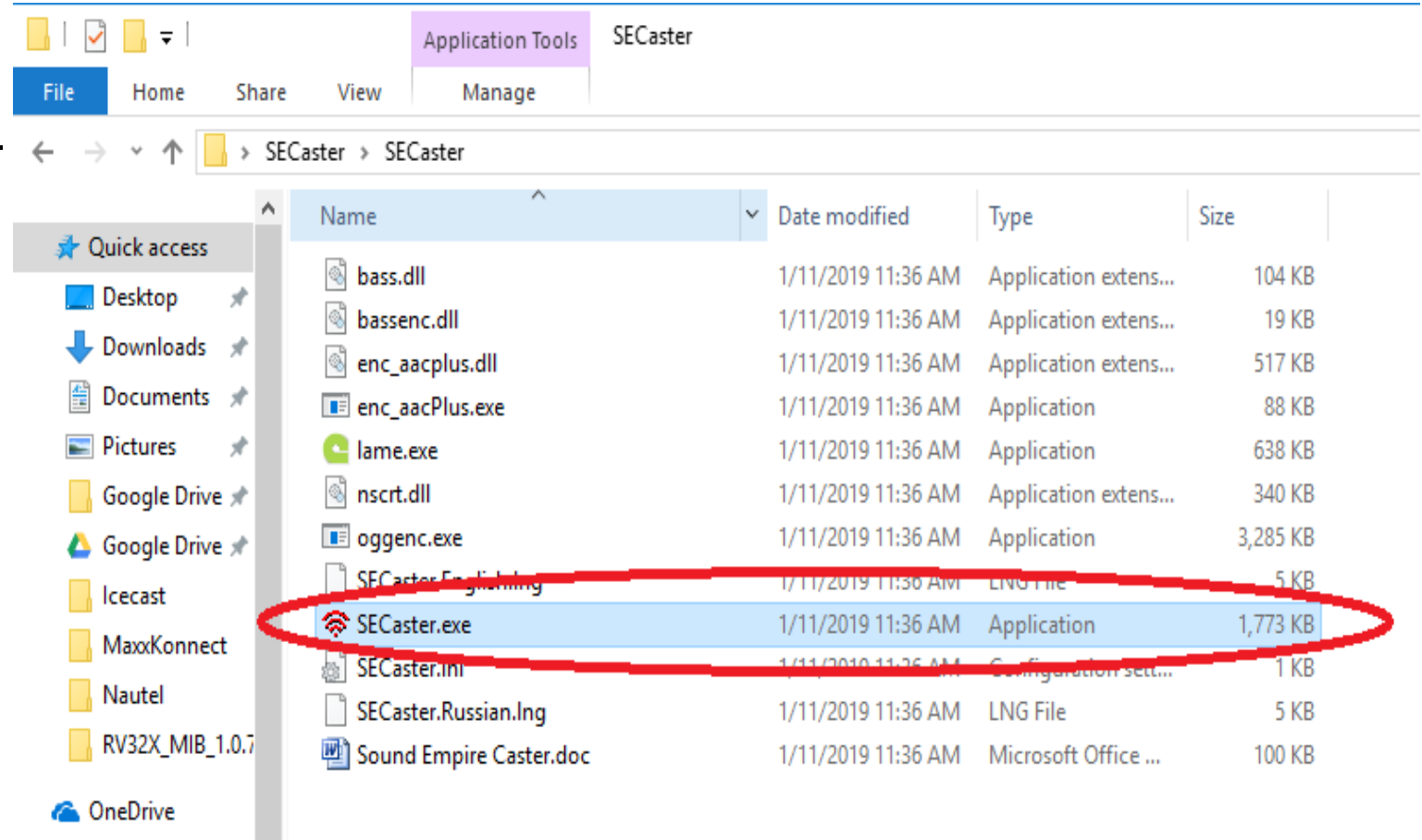
Setup SECaster as your encoder
Set up your audio input and encoder settings.

Click the ▒▒ to setup audio & encoder parameters.

Click the **+** to setup stream encoder
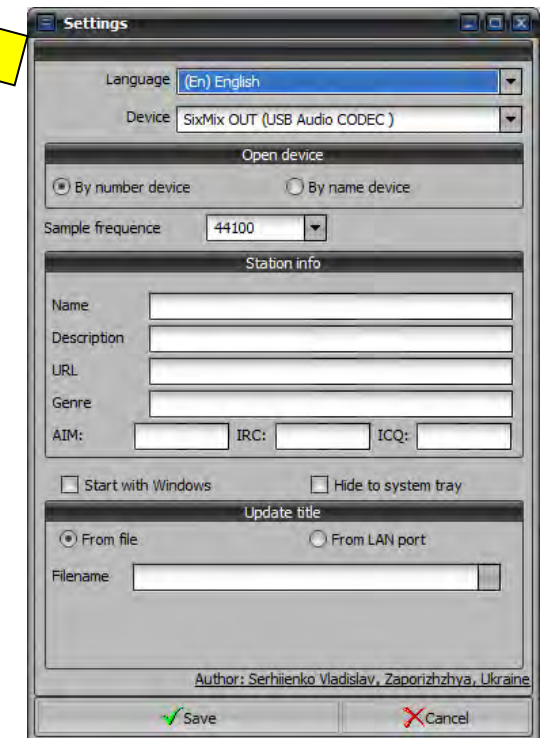
Setup SECaster as your encoder

In Audio setup, select Your audio input device.

In **+** the Stream settings, specify your server address and port number.

If server & encoder are on the same PC, server is **127.0.0.1**
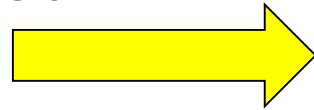SECaster default port is **8000**.
Username & password were what you specified in the XML file.
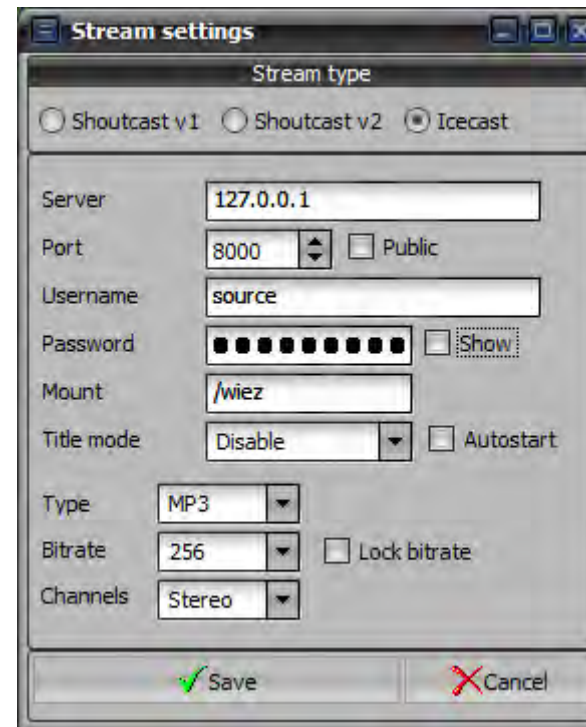
Mount is CRITICAL for Icecast streams.

This is the unique identifier for the stream, as multiple streams can use the same port.

Typically it would be your callsign – formatted as
/wiez

Setup SECaster as your encoder

Once configured, close out of the settings. Then, on the main page, you'll see the stream you configured.

To begin encoding, click the

Play button

THE networking step

Streaming via open Internet

- Open port on your router

- Port should steer to the IP of your Icecast server

Configure your Nautel to decode the stream you configured

In the AUI, click Menu, Audio Player

in the Audio Player screen, click the "Streams" tab.

Then, click "Add" at the bottom.

When "Add Audio Stream" appears, choose "Icecast/Shoutcast" as the Type.

Name is the friendly name in the Preset

The URL is the full stream address.

Configure your Nautel to decode the stream you configured

In Menu, select Presets, then load your preset.

Select, the Main Audio tab. Then set Audio Backup to Enabled.

Choose Audio Source as Audio Player -> AES 2

Select the name you created for your stream as the Audio Player Source.

You may have to adjust the Digital Level depending on your audio encoding level, preprocessing, Orban card, etc.

MaxxKonnect as an alternative STL option

Prioritized, High Speed LTE Internet for Transmitter Sites

- Commercial Class Service – higher QOS on carrier networks

- Static IP address with every activation

- NO throttling of speeds

- NO port blocking

- VPN capable

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www.bohnbroadcast.com
844-549-2646

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To summarize...

- Icecast is easy to set up!

- AES2 = Audio Player in the AUI

- Anything less than 96kbps MP3 sounds like garbage

- MaxxKonnect Wireless makes connectivity easy!

- Don't forget to open the port if you're streaming via Internet

- Use SECaster as your encoder. It'll save you a lot of headaches
  - If you use another encoder, it MUST be 16-bit.

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Thank You

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