

Quick User Guide

DB94-RX/SFN

Compact MPX over IP Audio Decoder

→ BEFORE YOU USE THIS PRODUCT ←

In order to be able to enjoy all the benefits of owning your new DEVA product, please verify first that the latest software and firmware release were installed.

Visit www.devabroadcast.com/downloads for the most recent software and firmware downloads, prior the installation.



DEVA Broadcast Limited is an ISO 9001:2015 / ISO 14001 / ISO 45001 certified company.

This Quick user guide will make the installation of **DB94-RX/SFN** quick and easy. Applying these principles, you can simplify the process and save yourself extra time and effort.

For more information about the Safety precautions and the Operating environment recommendations please refer to the User Manual.

STEP 1

Connection

The DB94 series are provided with preliminary settled μ MPX licenses.

For normal operation it is necessary the device to be connected to a local network or Internet by cable with RJ-45 connector and to the power supply.

IMPORTANT:

It is not recommended the DB94-RX/SFN to be directly connected to the Internet. This may lead to unregulated access and/or problematic operation of the device. To ensure secure connection, we recommend the device to be installed behind a router with an active firewall.

STEP 2

Configuration

DB94-RX/SFN is controlled through a built-in WEB Server and a standard web browser can be used to monitor its status or to make some adjustments.

To operate the device you need to know its IP Address. In case you are not aware of it, you can hear it through the headphones when you turn on the device. Alternatively, use the Network discovery feature at Local networks. Then open a new WEB Browser and enter the device IP address in the address field then press [Enter].

STEP 3

Access

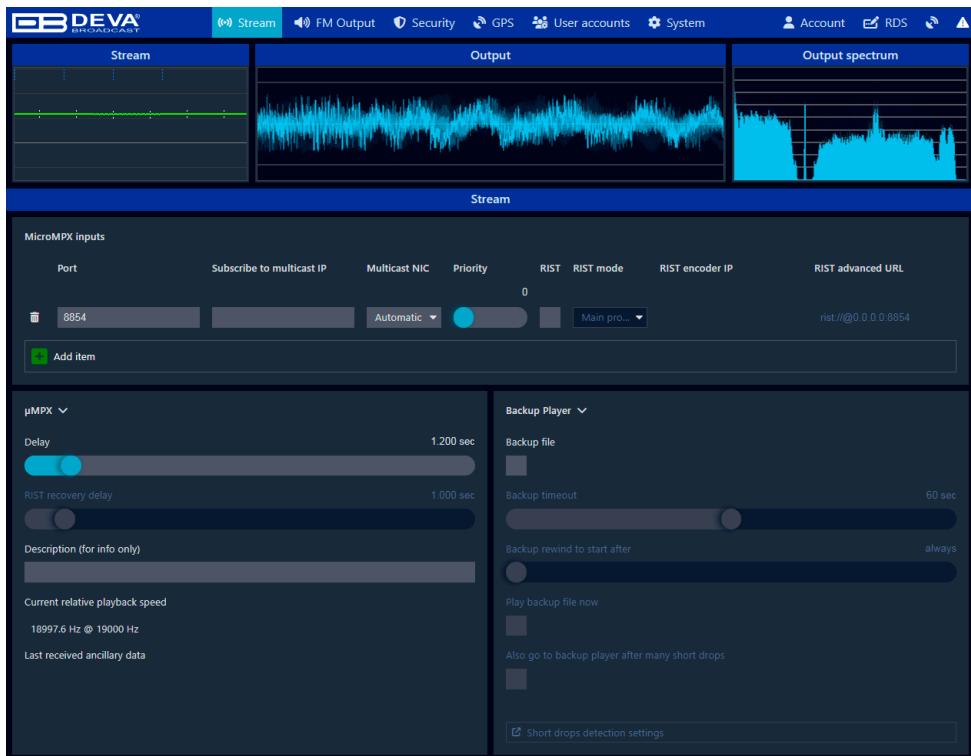
DB94-RX/SFN provides you with a protected access to the device settings. To make the necessary adjustments to the device, please log in as an ADMINISTRATOR. The default values being:

- username: admin
- password: pass.



STEP 4**WEB Interface**

A successful log-in in the WEB Interface will look like this:

**STEP 5****Settings**

Upon opening the WEB interface, the main Stream window will appear (depicted above). The page contains information on the MicroMPX Inputs as well as visual interpretation of the Stream, Output and Output spectrum.

You can prepare a file with emergency audio to be played in case you have a connection drop out.

The MicroMPX decoder expects a 192 kHz mono file that contains MPX data, normalized to 0 dB, in WAV or FLAC format. The file is transmitted as-is, so it needs to be pre-emphasized and it must contain stereo and RDS signals.

MPX files can be generated by recording the output of an FM processor (or even the received signal from a tuner that doesn't demodulate the MPX signal). Or you can use a program like Thimeo WatchCat (<https://www.thimeo.com/watchcat/>) to generate an MPX file from an audio file.

Backup player - Through this screen are applied all needed settings to the alternative sources.

The backup player will start only after Backup timeout time of no usable MicroMPX data elapses. If a few packets arrive and then the signal disappears again, it will continue the backup file playback where it left off, unless the backup player hasn't been used in Backup rewind to start after time. In that case it will start at the beginning. If you always want it to start at the beginning (for example if you have a loop of jingles as backup file), you can set that time to 0.

STEP 6

FM Output

The screenshot shows the DEVA Broadcast WEB Interface. At the top, there are tabs for Stream, FM Output (which is selected and highlighted in blue), Security, GPS, User accounts, System, Account, RDS, and a triangle icon. Below the tabs are three main panels: Stream, Output, and Output spectrum. The Stream panel shows a green waveform. The Output panel shows a blue waveform with a high-frequency dropoff. The Output spectrum panel shows a blue spectrum with a high-frequency dropoff. The main content area is divided into sections: FM Output, FM Tilt correction, Test signals, Demodulated output, and Demodulate output. The FM Output section includes a Device ID dropdown (DB94: Analog IN (hw:0,0) (ALSA)), a Volume (MPX level) slider (0.00 dB (100 %)), and a FM Tilt correction section with a 'Correction enabled' checkbox (checked), an RC slider (+127.246 µs), and a 'High frequency dropoff' checkbox (checked). The FM Tilt correction section also includes an RC slider (4.817) and two waveforms. The Test signals section includes a 'Generate test tone' checkbox (unchecked), a dropdown menu (Sine), and a Frequency slider (400.0 Hz). The Demodulated output section includes a 'Demodulate output' checkbox (unchecked), a 'De-emphasis time' dropdown (50 µs), a Device ID dropdown (DB94: Phones OUT (hw:0,2) (ALSA)), a Volume slider (0.00 dB (100 %)), and a 'Demodulate output' checkbox (unchecked).

FM Output and Demodulated output settings are applied in this section of the WEB Interface.

You can also generate a test tone. To enable the mode: Select the "Test tone Mode" to activate it. Then configure tone settings.

Thank you for choosing DEVA!

Please refer to the User manual for detailed information on how to configure and explore your device.