

## *Quick User Guide*

# DB94-TX

## Compact MPX over IP Audio Encoder

### → **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](http://www.devabroadcast.com/downloads) for the most recent software and firmware downloads, prior the installation.

This Quick user guide will make the installation of **DB94-TX** 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  $\mu$ PX 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-TX 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-TX 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 use the "DEVA Ethernet Setup Tool" (**STEP 3**). Then open a new WEB Browser and enter the device IP address and port in the address field then press [Enter].

## STEP 3

### Network Discovery

#### DEVA ETHERNET SETUP TOOL

The DEVA Ethernet Setup Tool is designed to detect and configure networked DEVA products that lack front-panel IP configuration or UPnP support. It simplifies network setup by identifying the device's current IP address and allowing changes.

Once the device is connected to a local network or to the Internet by the applied LAN cable, download and install the DEVA Ethernet Setup Tool.

#### DOWNLOAD LATEST VERSION

The latest version of DEVA Ethernet Setup Software can be found on our website:

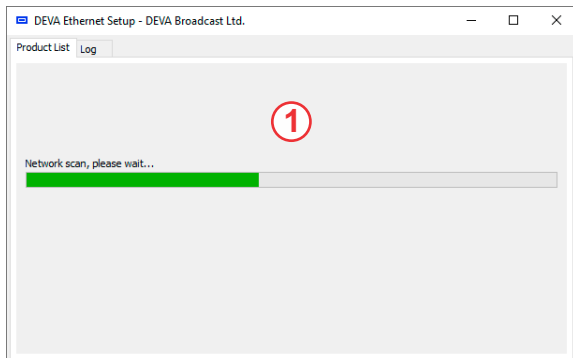
<http://www.devabroadcast.com/downloads>

**IMPORTANT:** This software requires the installation of third-party software called WinPcap (<https://winpcap.org>) if it is not installed already.

#### USING THE TOOL

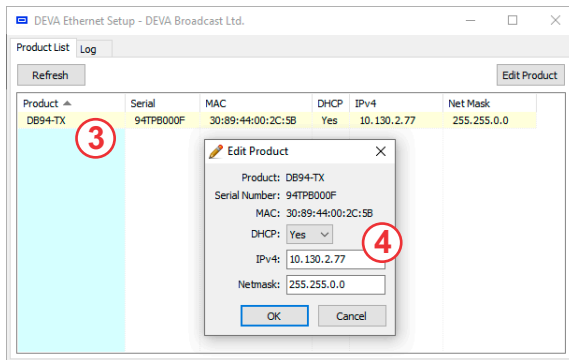
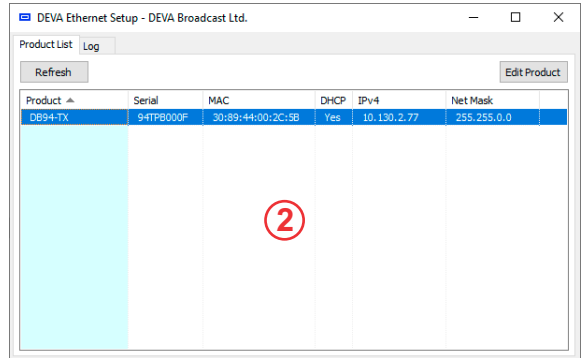
In order for the tool to be able to find the device during the network scan, please make sure that the unit is connected to the power supply chain and Ethernet network. Then, open the DEVA Ethernet Setup Tool and follow the instructions listed below:

1. Once the program window opens, an automatic network scan process will be started.

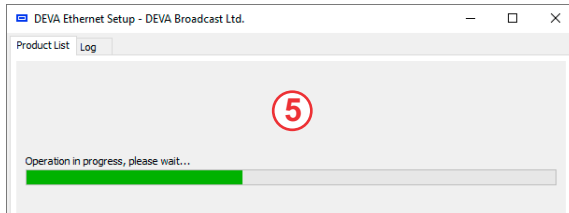


2. Once the network scanning process is completed, the collected data will be depicted in section Product List:

3. To change the parameters, select the product and press [Edit Product]. A new window will appear:



4. Enter the needed changes and press [OK]. Make sure to write down the IP address as it will be needed in order for the device to be accessed via WEB or Software interfaces.



5. A new network scan process will be performed automatically to confirm that the applied settings are accepted.

## STEP 4 Access

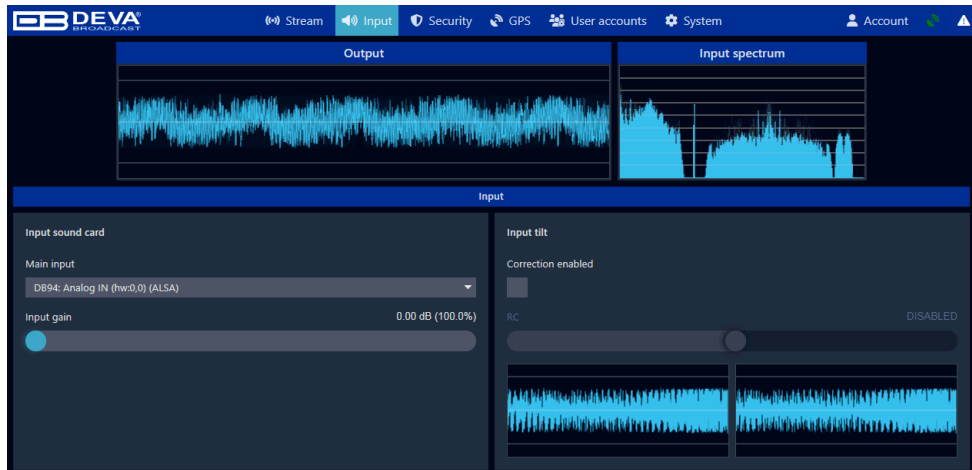
DB94-TX provides you with a protected access to the device settings. To make the necessary adjustments to the device, please log in as an ADMINISTRATOR. The default values being:

- username: admin
- password: pass.



**STEP 5****WEB Interface**

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

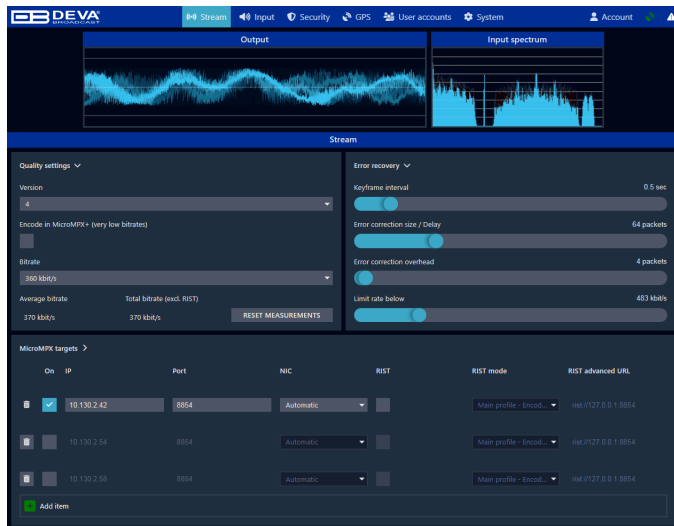
**STEP 6****Settings**

In the Input tab (depicted above), you can select an input sound card.

**IMPORTANT:**

1. In order for the MicroMPX to work correctly, the input level has to be at exactly 0 dB. Please adjust the gain slider (if needed) so that the thin lines in the scope display just reach the peaks.

2. If possible, use a digital sound card. Analog sound cards usually have a highpass filter in their inputs, which causes the peak level to become non-constant. If needed, the "Input tilt" correction can be used to compensate for this. This is never needed for digital inputs, but it usually is needed for analog inputs.



These two remarks only apply when you use a MicroMPX encoder that's not built into an audio processor.

Once done, the display should look as depicted.

Next, type in the IP address of the decoder device in the Stream window.

The default port for MicroMPX is 8854. If you changed it in the decoder, make sure to use the correct port in the encoder.

Instead of using the standard protocol, you can also choose to wrap all data in RIST. RIST is a protocol that offers a very good error recovery, and allows connecting even if you do not have a static IP address at the decoder sites.

If you have dynamic IP addresses on your decoder sites, or if you have severe dropouts that Forward Error Correction cannot handle, we recommend using RIST.

RIST support is currently experimental, only available in beta versions of MicroMPX.

#### **RECOMMENDATIONS:**

The rest of this document describes how to set-up the device without RIST. If you are using RIST, you can skip the parts about error recovery and etc. Port forwarding is still needed, but you can choose on which side you will set it – the encoder or decoder.

Some important notes on how to make the best use of RIST:

- Make sure to set “RIST” enabled and “RIST Mode” to the same value everywhere.
- RIST does not use forward error correction; ignore those settings. Instead, it has a “RIST Delay”, that needs to be set high enough in order to handle dropouts. Meaning that if you expect long dropouts, you need to set the “RIST Delay” high.
- RIST Delay causes the display of incoming packets to be delayed as well! So you might not see any action for some time when you enable RIST.
- Aside from RIST Delay, the normal delay is there to handle any hiccups caused by the sending device. Depending on the encoder used, you can set this value low - 0.1 second or so.
- RIST also supports redundant links. We don't currently support that via our normal settings. You can configure it, but for that you'll need to use the Expert mode, and manually enter the RIST URL's. Detailed description about RIST is available in Appendix 3 of the user manual.

**Thank you for choosing DEVA!**

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