

SET-UP INSTRUCTIONS

How can the **DB91-TX** be used
as a Icecast Source Client, sending audio to
an Icecast Server



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General information

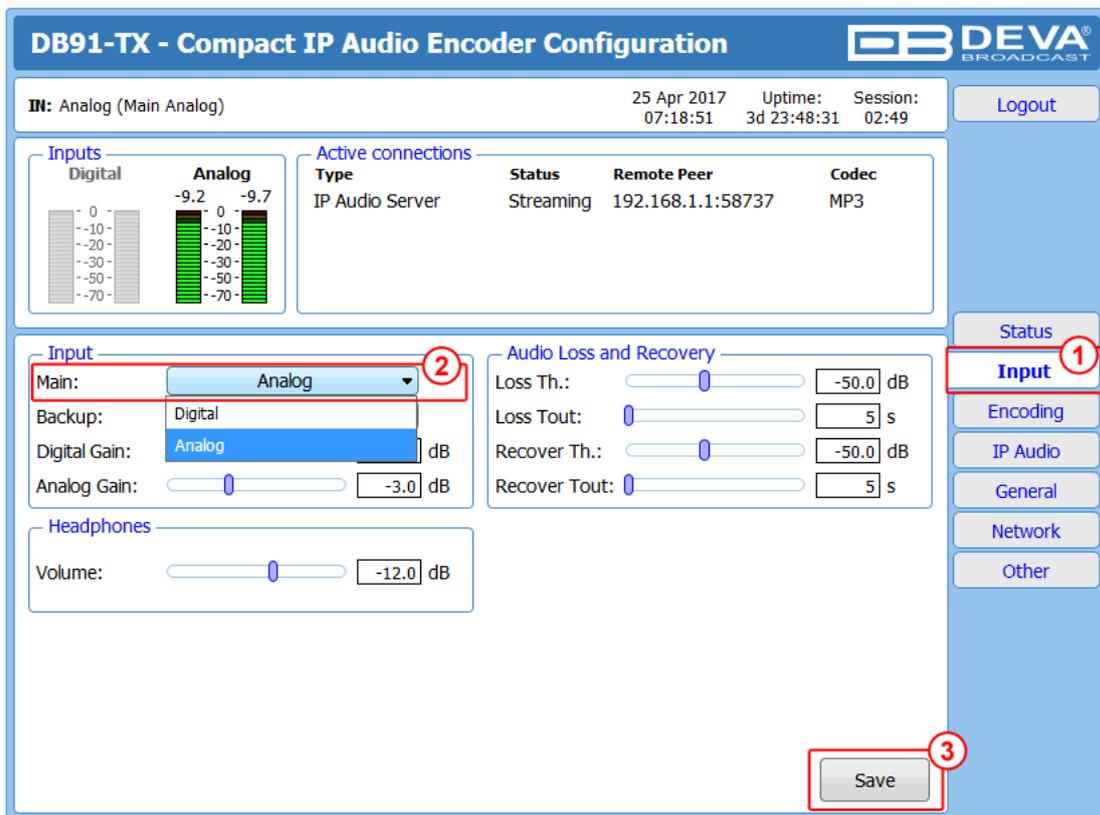
The IP Audio encoder is controlled through a built-in WEB Server and a standard web browser is used to monitor its status or to make some adjustments. To operate the device you need to know its IP Address. In case you are not aware of the IP Address and how to open the WEB interface, please refer to [“Appendix A - DB91-TX Quick User Guide” on page 7.](#)

DB91-TX SET-UP REQUIREMENTS

Prior to implementing the below written adjustments, the following requirements should be fulfilled:

- DB91-TX should be connected to a Network (Internet or Local connection).
- DB91-TX could be set with dynamic IP.
- Properly configured Icecast Server with static IP.
- You will have to make sure that the Icecast server port is properly NAT forwarded.

DB91-TX ICECAST SOURCE CLIENT SET-UP



The screenshot displays the configuration page for the DB91-TX Compact IP Audio Encoder. The page title is "DB91-TX - Compact IP Audio Encoder Configuration". The interface includes a header with the DEVA BROADCAST logo and a status bar showing the date (25 Apr 2017), uptime (07:18:51), session duration (3d 23:48:31), and session time (02:49). A "Logout" button is present in the top right.

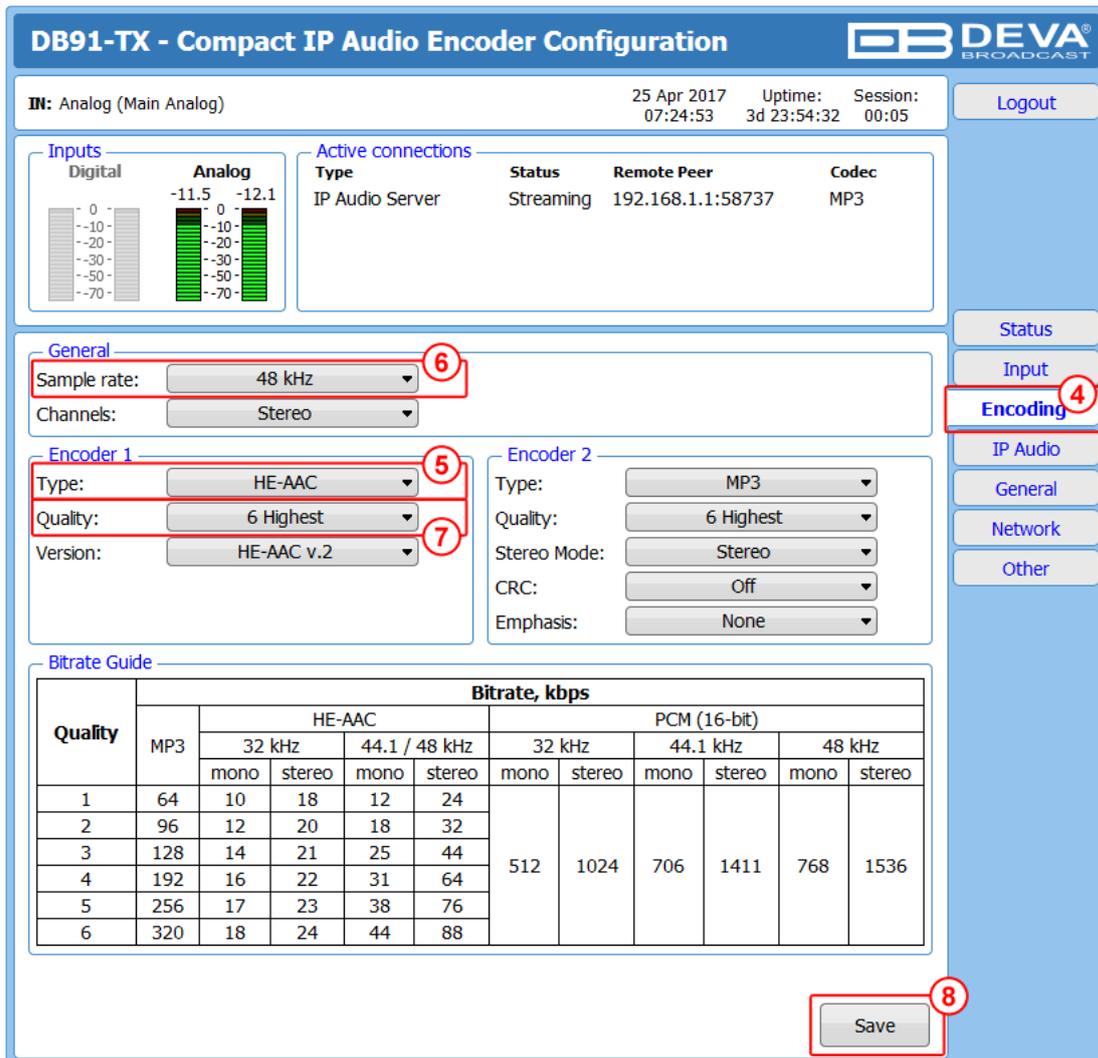
The main content area is divided into several sections:

- Inputs:** Shows digital and analog input levels. The analog input is currently at -9.2 dB and -9.7 dB.
- Active connections:** A table showing one active connection:

Type	Status	Remote Peer	Codec
IP Audio Server	Streaming	192.168.1.1:58737	MP3
- Input:** A dropdown menu for the main input, currently set to "Analog". A red box with a "2" highlights this dropdown.
- Audio Loss and Recovery:** Sliders for Loss Th. (-50.0 dB), Loss Tout (5 s), Recover Th. (-50.0 dB), and Recover Tout (5 s).
- Headphones:** A volume slider set to -12.0 dB.
- Navigation:** A vertical menu on the right with buttons for "Status", "Input" (highlighted with a red box and "1"), "Encoding", "IP Audio", "General", "Network", and "Other".
- Save:** A "Save" button at the bottom right, highlighted with a red box and "3".

1. Go to *Settings* > *Input*;
2. Choose the preferred audio **signal input**;
3. Press [Save];

4. Go to **Settings**> **Encoding**;



DB91-TX - Compact IP Audio Encoder Configuration

IN: Analog (Main Analog) 25 Apr 2017 Uptime: Session:
 07:24:53 3d 23:54:32 00:05 [Logout](#)

Inputs

Digital: -0, -10, -20, -30, -50, -70

Analog: -11.5, 0, -12.1, -10, -20, -30, -50, -70

Active connections

Type	Status	Remote Peer	Codec
IP Audio Server	Streaming	192.168.1.1:58737	MP3

General

Sample rate: 48 kHz (6)

Channels: Stereo

Encoder 1

Type: HE-AAC (5)

Quality: 6 Highest (7)

Version: HE-AAC v.2

Encoder 2

Type: MP3

Quality: 6 Highest

Stereo Mode: Stereo

CRC: Off

Emphasis: None

Bitrate Guide

Quality	Bitrate, kbps										
	MP3	HE-AAC				PCM (16-bit)					
		32 kHz		44.1 / 48 kHz		32 kHz		44.1 kHz		48 kHz	
	mono	stereo	mono	stereo	mono	stereo	mono	stereo	mono	stereo	
1	64	10	18	12	24	512	1024	706	1411	768	1536
2	96	12	20	18	32						
3	128	14	21	25	44						
4	192	16	22	31	64						
5	256	17	23	38	76						
6	320	18	24	44	88						

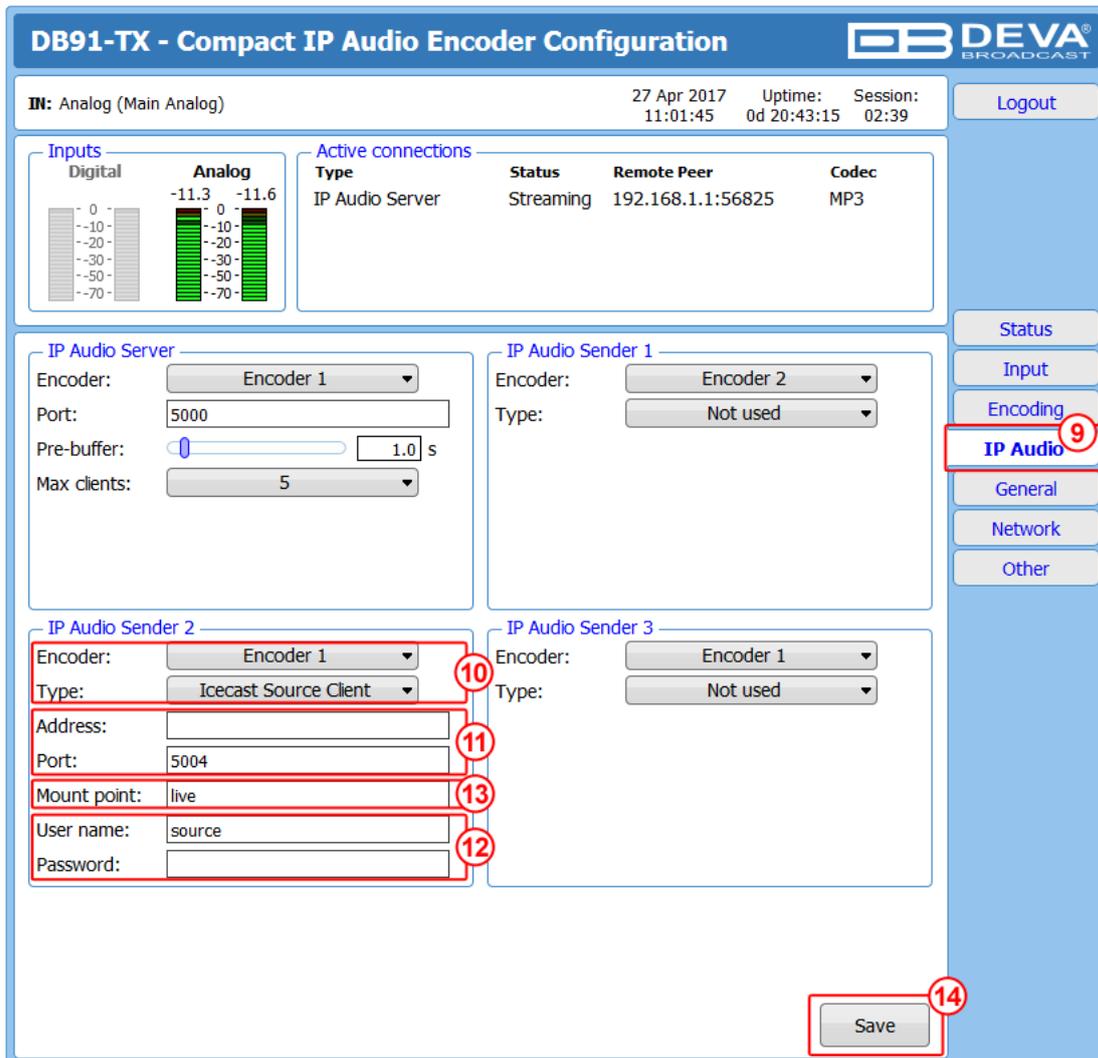
[Save](#) (8)

5. Assign **Encoder type**;
6. Assign **Sample rate**;
7. Assign desired **Signal Quality**.

The combination of these parameters will define the stream bitrate (see **Bitrate Guide** table at the bottom of this screen). The network connection should have enough bandwidth to process all the streams. As a rough estimate, the bandwidth should be at least twice the stream's bitrate, multiplied by the number of simultaneous connections;

8. Press [Save];

9. Go to *Settings*> *IP Audio*;



10. Then in *IP Audio Sender 1/2/3* section - Specify **Encoder**, and as type select **Icecast Source Client** from the drop down menu;
11. Specify **URL** or **IP Address**, and **Port** of the Icecast Server;
12. In order for the server to accept the audio feed, the **username** and **password** (preliminary assigned to the server) should be written in the relevant fields. **PLEASE NOTE** that in most cases the user name is “source” and cannot be changed;
13. Specify **Mount point** of the Icecast Server;
14. Press [Save] to save the changes.

For detailed information and instructions on how communication with the DB91-TX can be established, please refer to [“Appendix A - DB91-TX Quick User Guide” on page 7.](#)

Appendix A

Quick User Guide

DB91-TX

Compact 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 for the most recent software and firmware downloads, prior the installation.

This Quick user guide will make the installation of **DB91-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**

1. The encoder has to be connected to the local network or Internet by cable with RJ-45 connector;
2. As only one input at a time can be managed by the encoder, please select the preferred signal source input - either analog or digital one:
 - For Analog audio use a cable that ends with two standard RCA jacks to connect the analog signal source to the analog audio inputs of DB91-TX;
 - For Digital audio use a cable that ends with standard RCA jack to connect the S/PDIF signal source to the digital audio input of DB91-TX;
3. Connect the device to the power supply.

STEP 2**Configuration**

DB91-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.

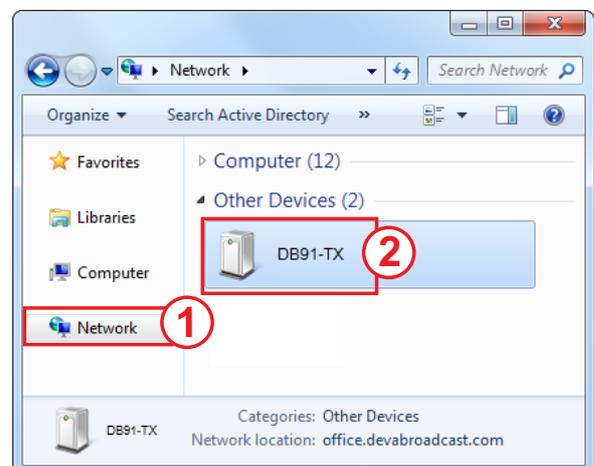
To operate the device you need to know its IP Address. In case you are not aware of it, you can hear it through the headphones when you turn on the device. Alternatively, use the Network discovery feature at Local networks (for reference see Step 3).

STEP 3**Network discovery for Windows 7**

Network discovery is a network setting that defines whether your computer can see (find) other computers and devices on the network and whether other computers on the network can see your computer. By default, Windows Firewall blocks network discovery but you can enable it.

If you have already enabled this function on your computer just open a new Explorer bar and click on **(1)**. The device must be displayed.

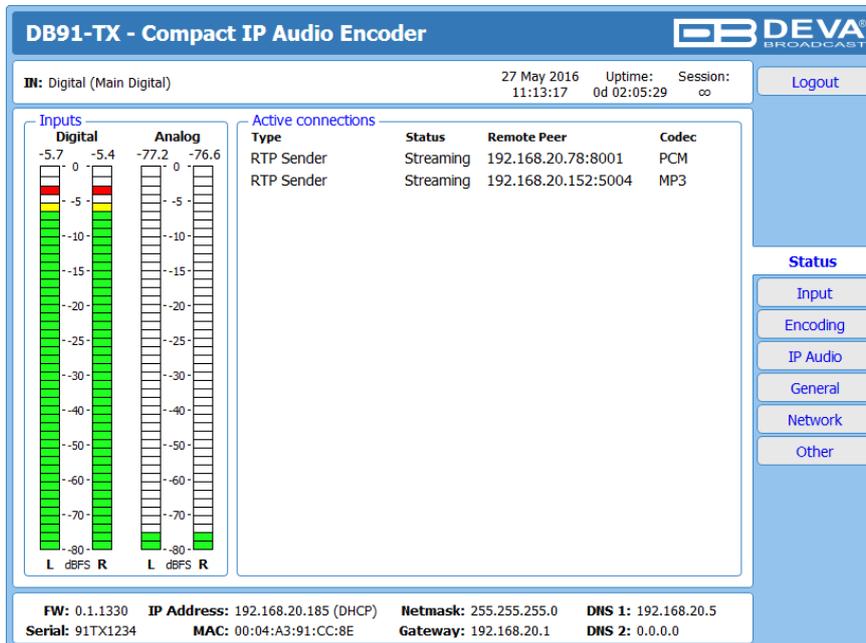
1. Open Advanced sharing settings by clicking the Start button, and then on "Control Panel". In the search box, type "network", click "Network and Sharing Center", and then, in the left pane click "Change advanced sharing settings";
2. Select your current network profile;
3. Click **Turn on network discovery**, and then click Save changes. If you're prompted for an administrator password or confirmation, type the password or provide confirmation.
4. To access the device open a new Explorer bar and click on **(1)**. If you have successfully enabled the network discovery option, the device will be displayed. Double click on **(2)** will open a new WEB browser window requiring username and password. Default values being -Username: user or admin, Password: pass.



STEP 4

WEB Interface

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

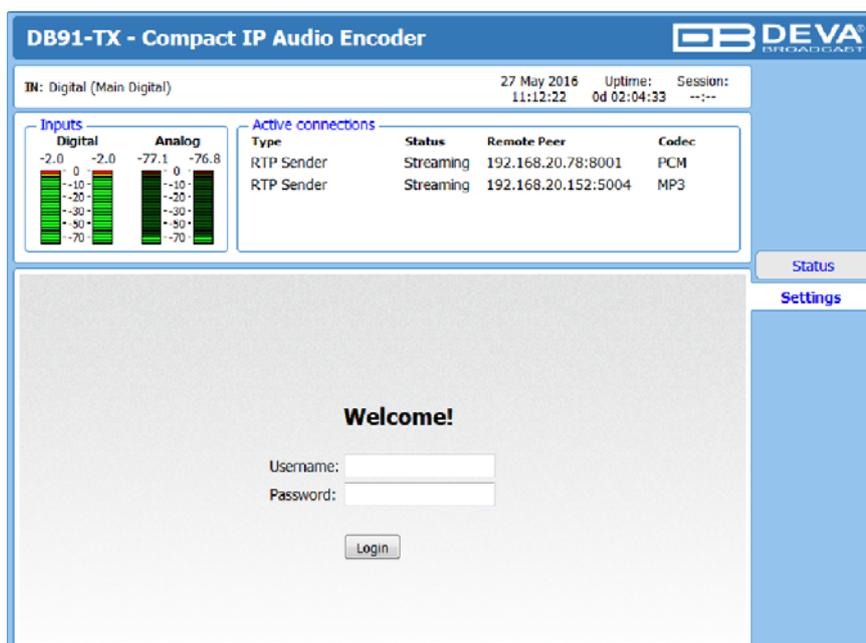


Upon opening the WEB interface, the main Status window will appear. The page contains information on the device's current status - the LED bar-graph representation of the left and right Digital and Analog audio levels in dBFS, as well as the Active connections - Type, Status, Remote Peer and Codec.

At the top of the control window is placed a constant section, containing information about the input in use, Date/Time and session timeout.

The DB91-TX provides you with a protected access to the device settings. Upon pressing the Settings button, a window requiring username and password will appear.

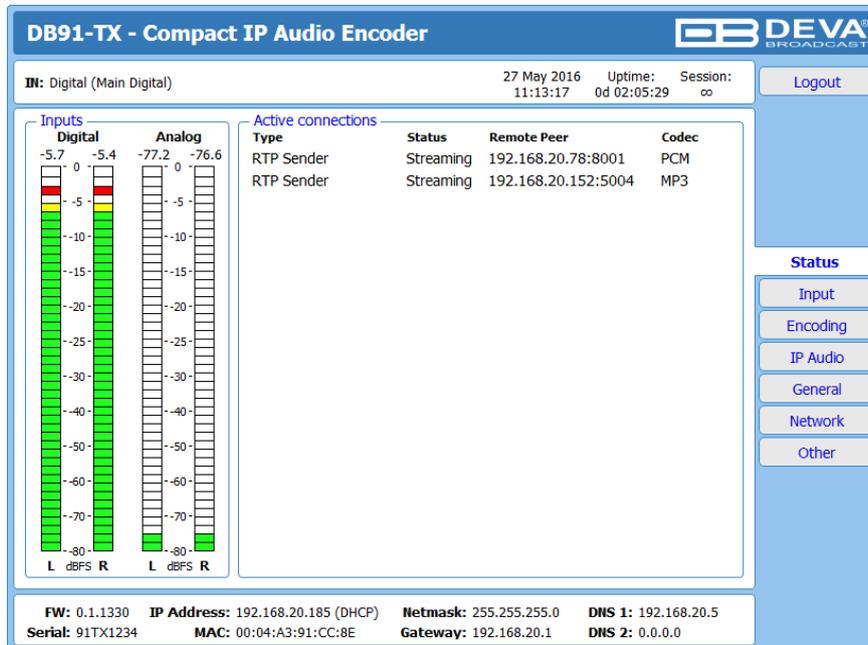
To make the necessary adjustments to the device log in as ADMINISTRATOR. This will give you full control over the settings. The default values being username: *admin*, password: *pass*);



STEP 5

Device Settings

Upon entering the device's settings, you will be able to apply needed adjustments to the Inputs, Encoding and IP Audio configuration of the DB91-TX.



For further information on the available options and features, please refer to the User Manual which can be found on www.devabroadcast.com/downloads, and the accompanying CD.

Thank you for choosing DEVA!

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