

## SET-UP INSTRUCTIONS

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



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## General information

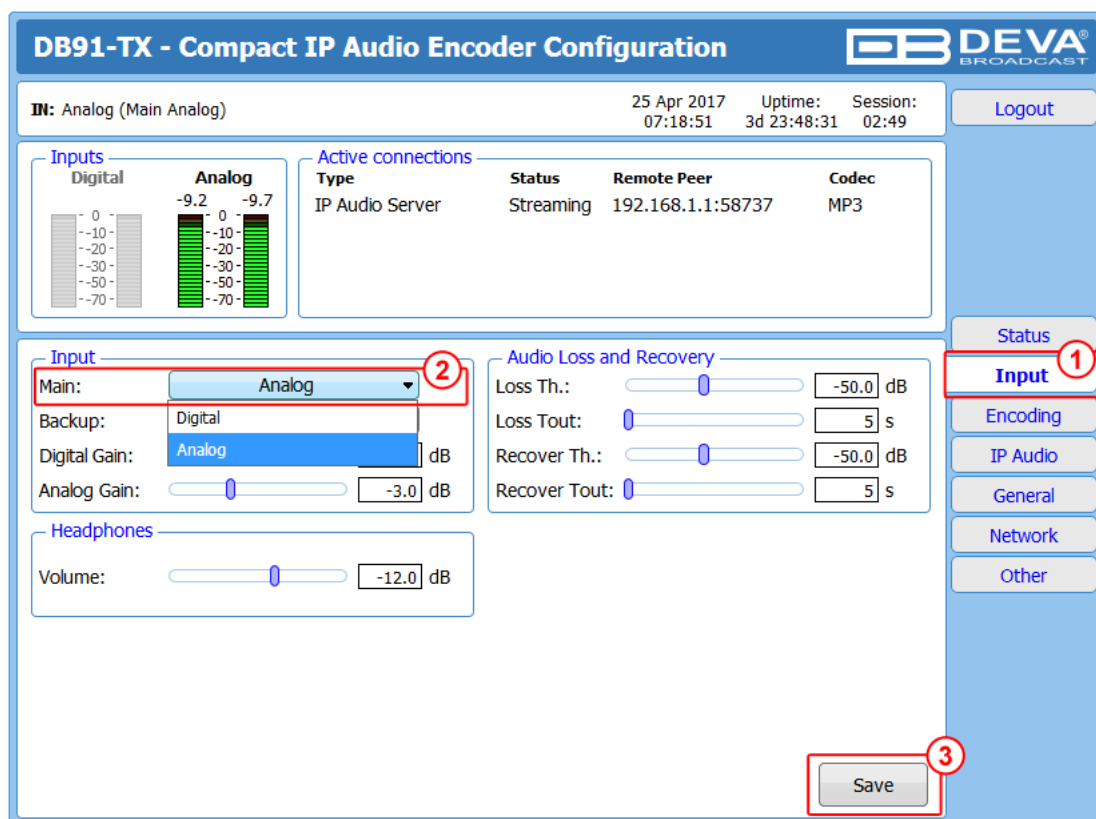
The IP Audio encoder is controlled through a built-in WEB Server and a standard web browser is used to monitor its status or to make some adjustments. To operate the device you need to know its IP Address. In case you are not aware of the IP Address and how to open the WEB interface, please refer to [“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 SHOUTcast Server with static IP.

## DB91-TX ICECAST SOURCE CLIENT SET-UP



The screenshot shows the configuration page for the DB91-TX Compact IP Audio Encoder. The main section is titled 'DB91-TX - Compact IP Audio Encoder Configuration'. It 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). There is a 'Logout' button in the top right.

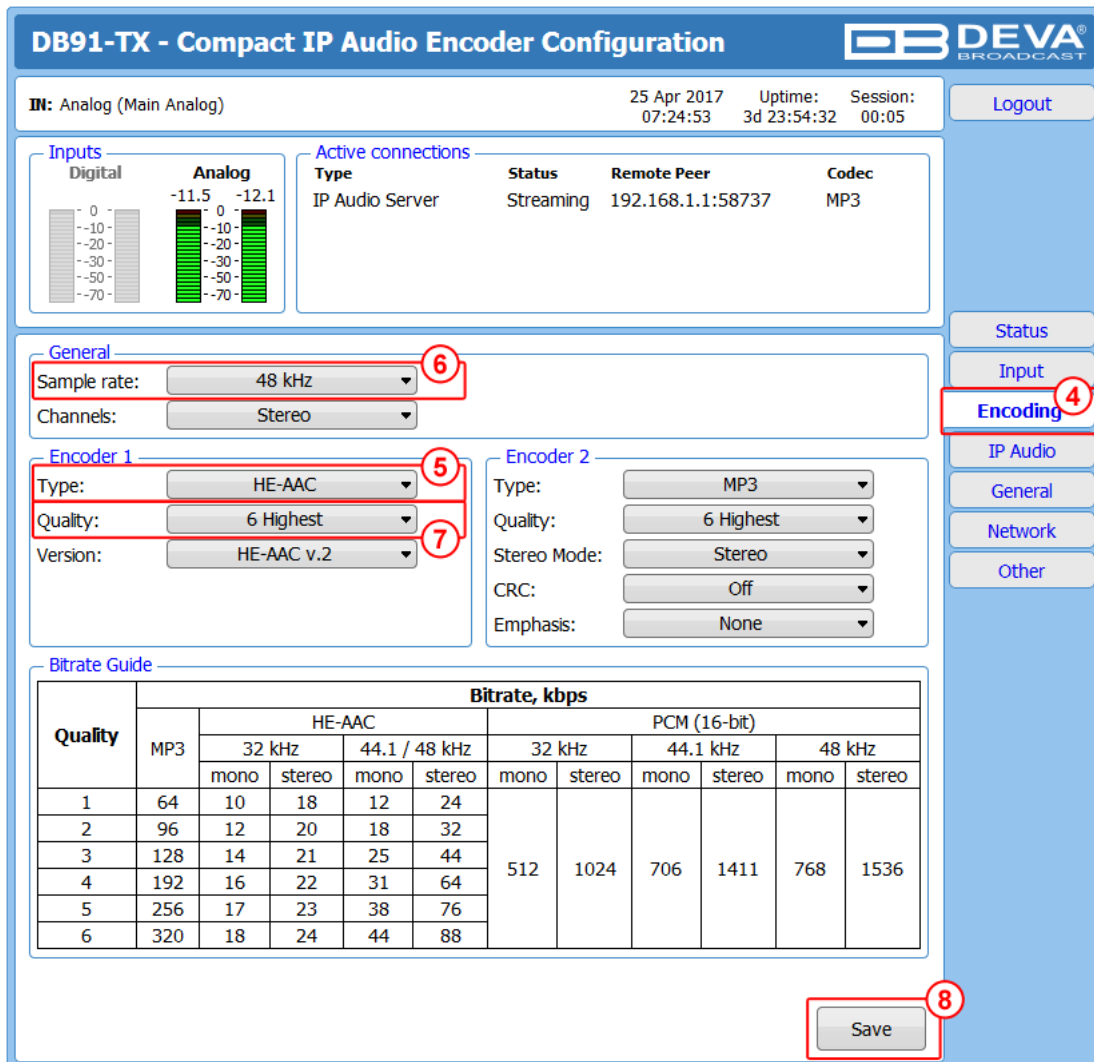
The interface is divided into several sections:

- 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:** The 'Main' input is set to 'Analog' (highlighted with a red box and a circled '2'). Other options include 'Digital'. Below this are 'Digital Gain' and 'Analog Gain' sliders, both set to -3.0 dB.
- Audio Loss and Recovery:** Contains sliders for 'Loss Th.' and 'Recover Th.' (both at -50.0 dB) and 'Loss Tout' and 'Recover Tout' (both at 5 s).
- Headphones:** A 'Volume' slider is set to -12.0 dB.
- Right Sidebar:** Contains a 'Status' button (highlighted with a red box and a circled '1'), and a menu with options: 'Input', 'Encoding', 'IP Audio', 'General', 'Network', and 'Other'.
- Bottom:** A 'Save' button (highlighted with a red box and a circled '3') is located at the bottom right.

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** (5)

Type: HE-AAC (7)

Quality: 6 Highest

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						

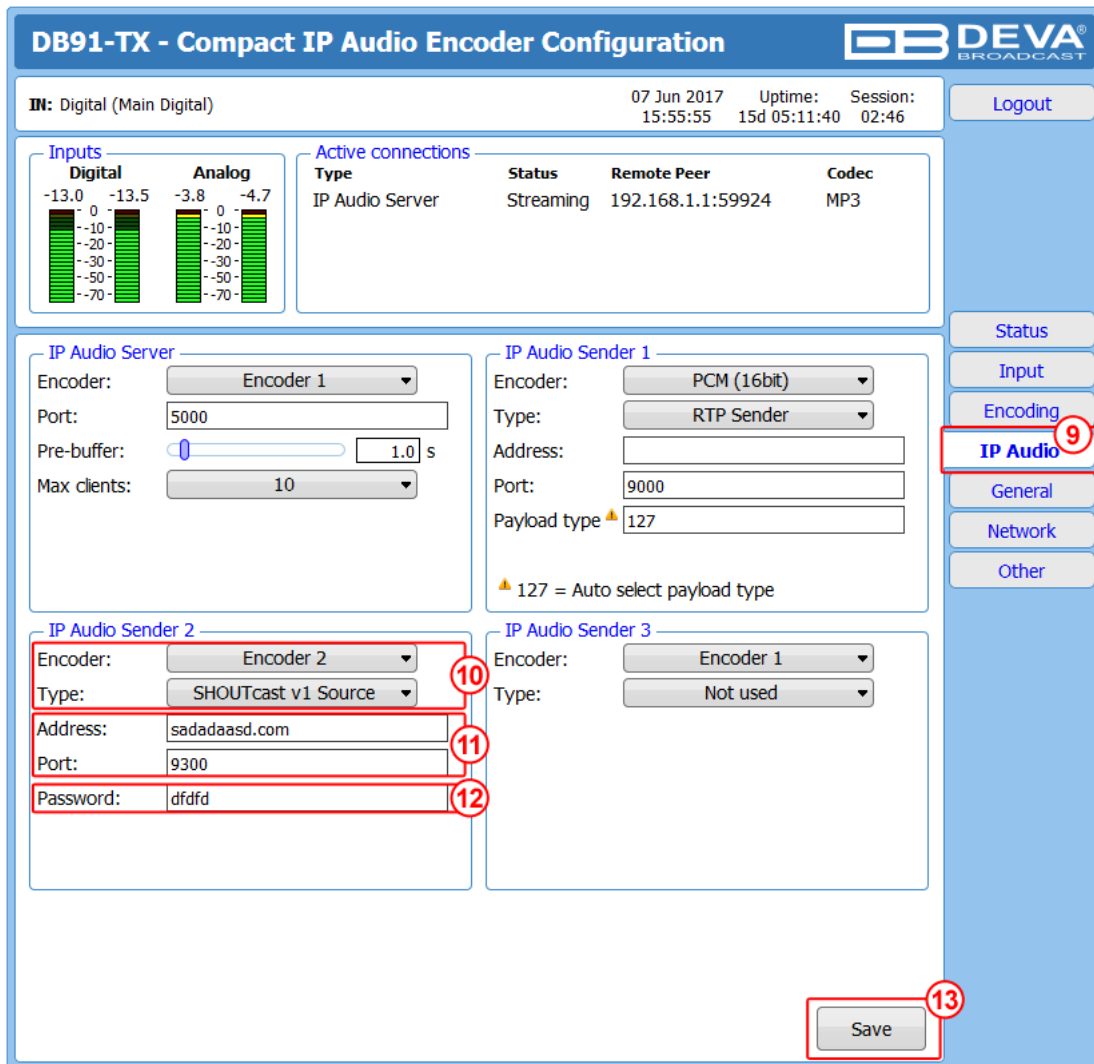
Save (8)

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 **SHOUTcast v1 Source** from the drop down menu;
11. Specify **URL** or **IP Address**, and **Port**. If **URL** is to be used, it must be written without the http//, just stream.vendor.com. When **Port** is set, **PLEASE NOTE** that by default, the SHOUTcast stream source port is server port +1. In your case it should be set to 8101. Port 8100 is used for server management and listeners connections
12. In order for the server to accept the audio feed, **password** (preliminary assigned to the server) should be written in the relevant fields;
13. 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*

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





**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.

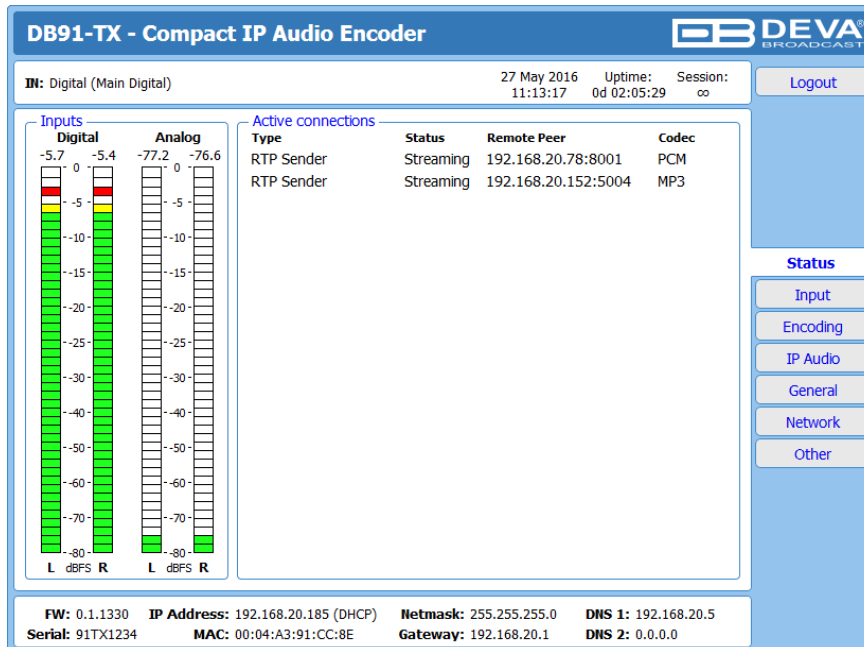
The DB91-TX provides you with a protected access to the device settings. Upon pressing the Settings button, a window requiring username and password will appear.

**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](http://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.*