SET-UP INSTRUCTIONS

How can the **DB9009-TX** be used as an RTP Sender, sending audio to **DB9009-RX** decoder used as an RTP Receiver

DEVA® BROADCAST

Publish Date: 05-Oct-2023

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General information

The IP Audio encoder and decoder are controlled trough a build in WEB Server and a standard web browser is used to monitor their status or to make some adjustments. To operate the devices you need to know their IP Address. In case you are not aware of the IP Addresses and how to open the WEB interface, please refer to "Appendix A - DB9009-TX Quick User Guide" on page 9 and "Appendix B - DB9009-RX Quick User Guide" on page 13.

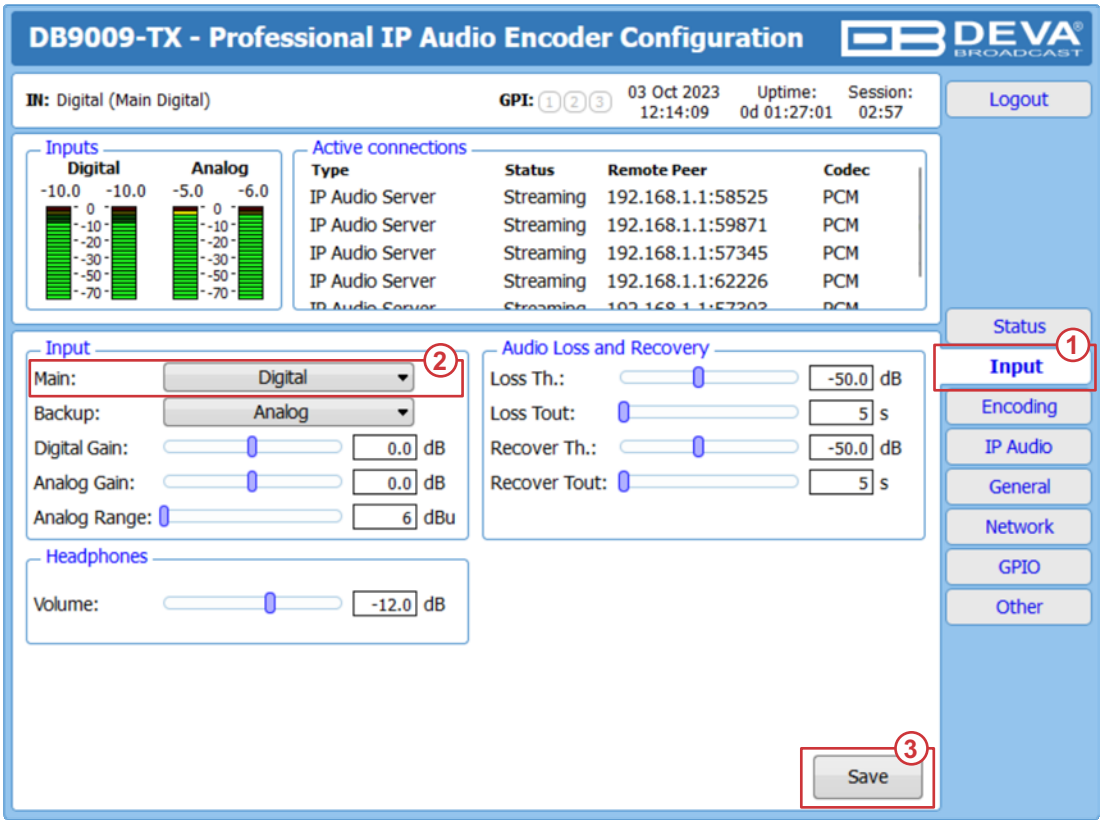
This configuration is perfect if your setup requires only point-to-point connection. It has a minimum and almost constant delay value (usually less than a second).

DB9009-TX AND DB9009-RX SET-UP

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

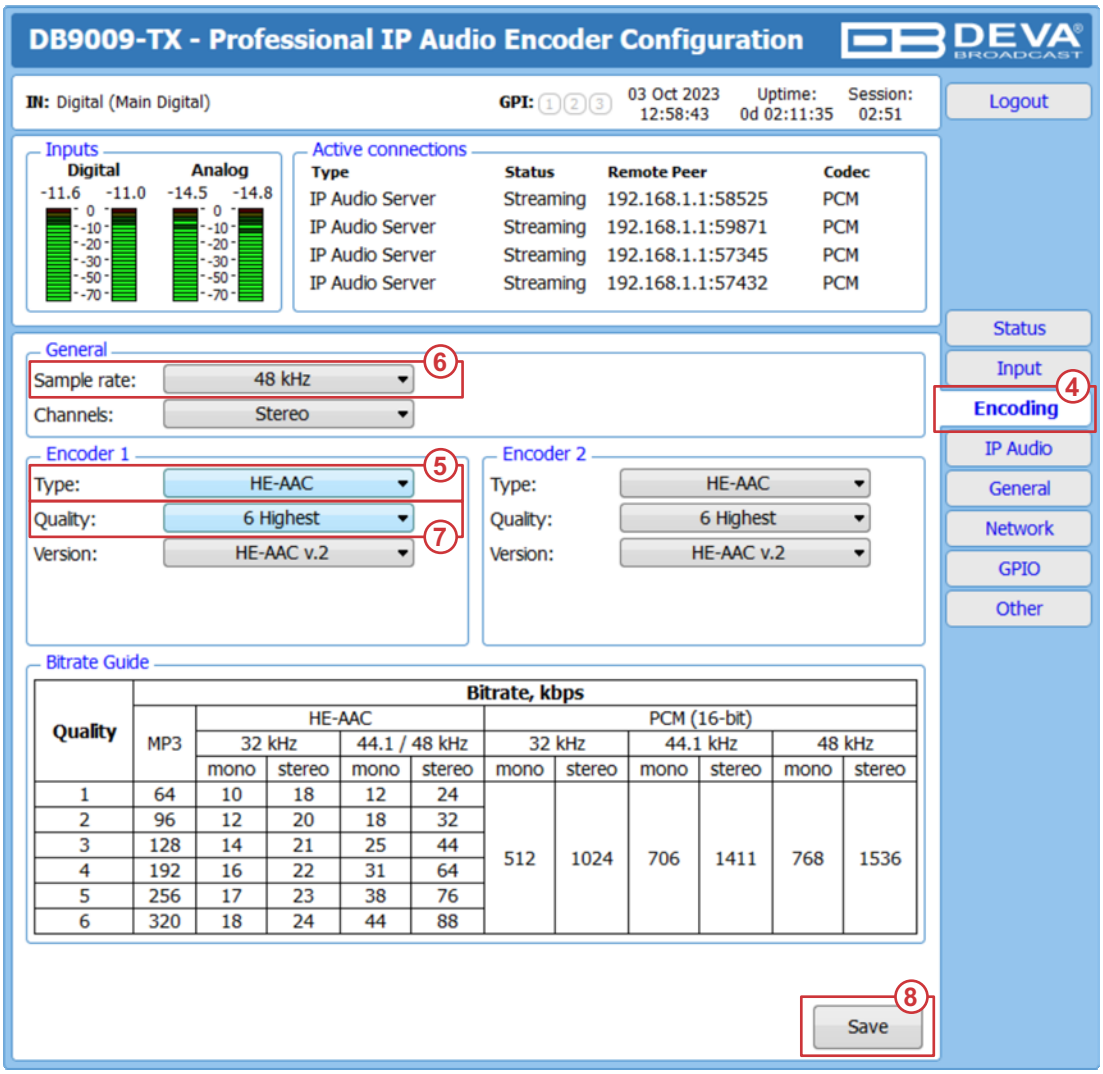
- DB9009-TX should be connected to a Network (Internet or LAN).
- DB9009-TX could be set with dynamic IP.
- DB9009-RX configured as RTP receiver with static IP.
- If the DB9009-RX is placed behind a router, you will have to make sure that the RTP Receiver port is properly NAT forwarded.

DB9009-TX RTP SENDER SET-UP



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

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

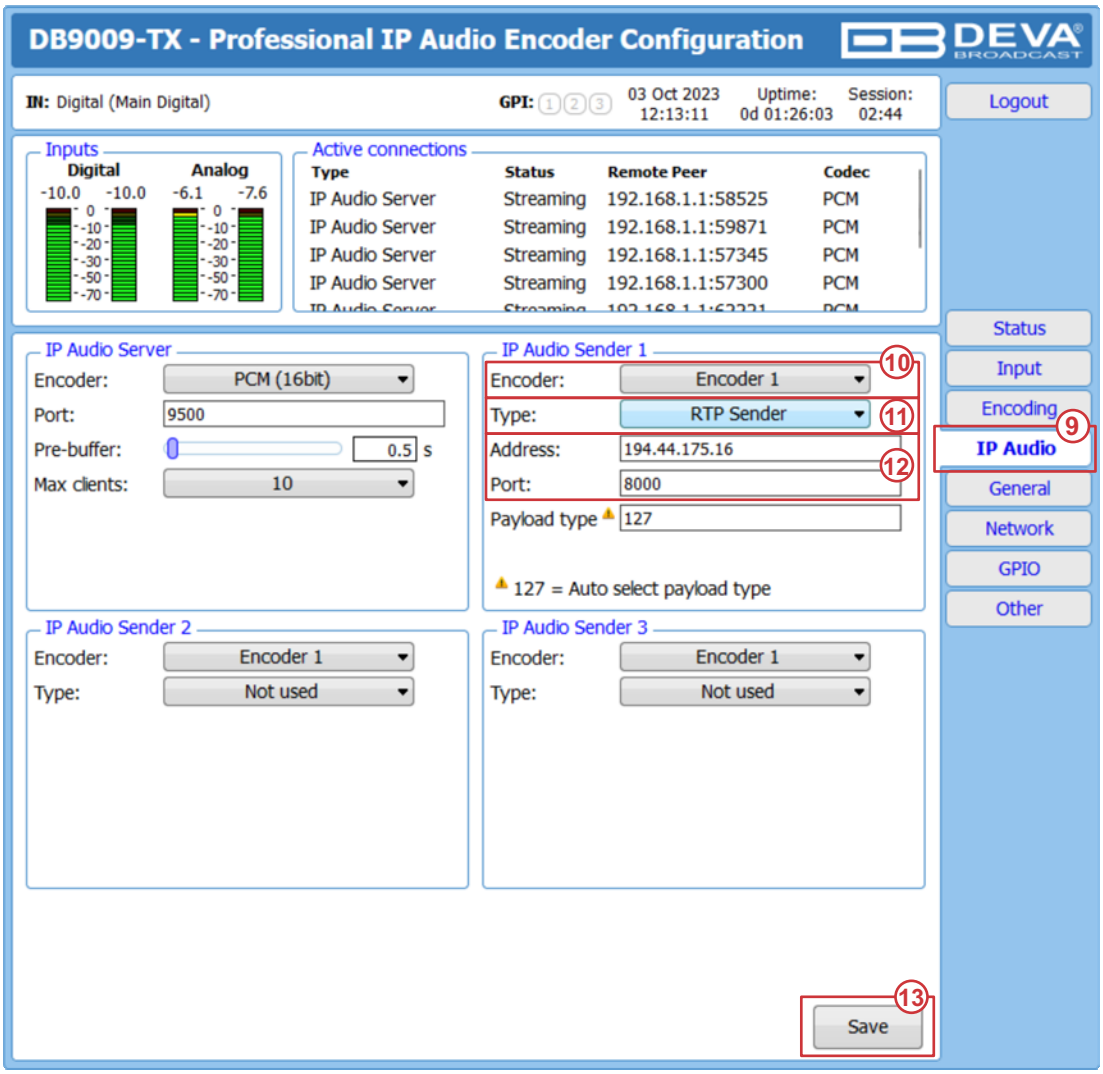


5. Assign **Encoder type;**
6. Assign **Sample rate**;
7. Assign desired **Signal Quality**.

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** from the drop-down menu;
11. Select **RTP Sender** from the drop down menu;
12. Specify **URL**, **IP Address** or Multicast group IP address, and **Port** of the RTP Receiver to be used;
13. Press [Save].

FOR YOUR INFORMATION: A multicast address (Mcast group) is a logical identifier for a group of hosts in a computer network, that are available to process datagrams or frames intended to be multicasted for a designated network service.

Multicast works in a local network or any other network that is specially set/configured. For more information as regards how a multicast network could be set, please refer to your network administrator.

For detailed information and instructions on how communication with the DB9009-TX can be established, please refer to "Appendix A - DB9009-TX Quick User Guide" on page 9.

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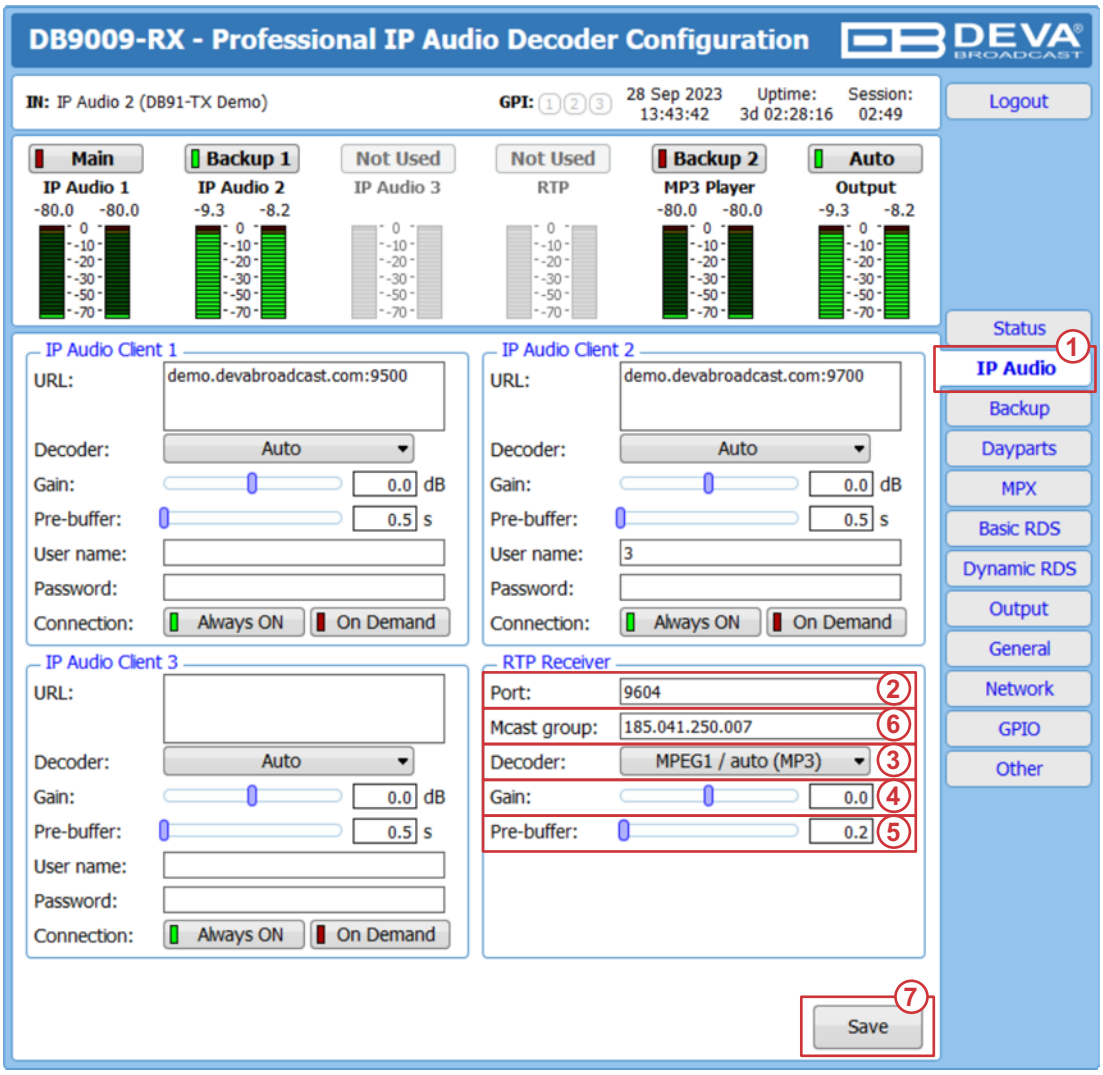
DB9009-RX RTP RECEIVER SET-UP



1. Go to ***Settings> IP Audio***;
2. RTP Receiver section - Specify the audio player **Port**;
3. Specify **Decoder** to be used;
4. Set **Gain**;
5. Set **Pre-buffer**;
6. If needed, specify **Multicast group** IP address;
7. Press [Save];

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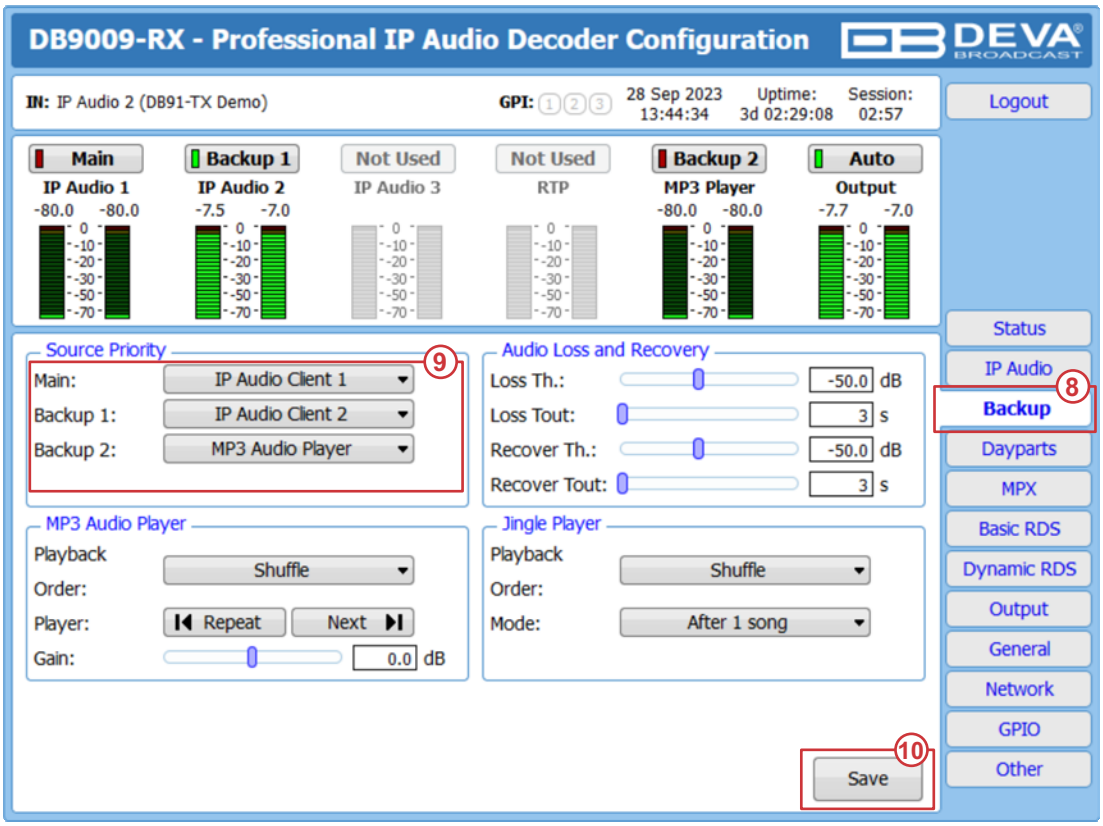
8. Go to ***Settings> Backup***;



9. From the ***Source Priority*** section set the priority of the **RTP Audio Player**.
10. Press Save[10] to save the changes.

For detailed information and instructions on how communication with the DB9009-RX can be established, please refer to "Appendix B - DB9009-RX Quick User Guide" on page 13.

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Appendix A

Quick User Guide

DB9009-TX

Professional 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.

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This Quick user guide will make the installation of the DB9009-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 complete user manual - www.devabroadcast.com/downloads.**

STEP 1 Connection

1. Install the unit on its operation place;
2. Before connecting the AC Power, make sure that the fuse rating is in accordance with the mains supply at your location. DB9009-TX Power Supply Factory Settings are: 100-240 V AC; 1AFuse.;
3. Connect the DB9009-TX to the TCP/IP network using a cable with RJ-45 connector;
4. Optionally, connect the necessary for the configuration - audio cables (analog and/or digital), GPI and etc.

STEP 2 Network Settings

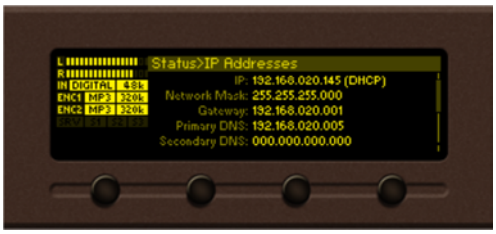
DB9009-TX can be operated in two methods. Through the Front panel navigational menu or via a standard WEB Browser.

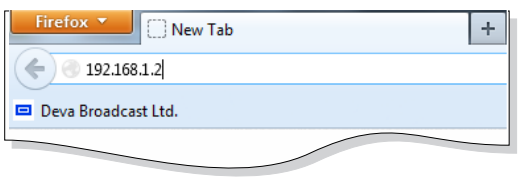
For more information about the Front panel navigational menu, please refer to the User Manual which can be found on **www.devabroadcast.com/downloads**

STEP 3 WEB Interface

There are two options for access to the WEB Interface of DB9009-TX IP Audio Decoder. The first one is through manual identification of the IP address of the device, and the second one is through the Network discovery option (For Windows 7 and above users only).

STEP 3.1 Manual IP Address Identification





1. Connect the device to a local network or to the Internet by the applied LAN cable. Through the Front panel navigational menu pressing the [OK] button you will enable you to enter the device main menu;
2. Using the [RIGHT] navigational button find the "***Status***" section located at the end of the Menu;
3. Press the [OK] Button to enter the "***Status Section***" . Via the Front panel navigational menu press the [DOWN] button.This operation will visualize the screen containing information about the IP Address of the device;
4. Open a new WEB Browser and enter the device IP address in the address field then press "Enter";
5. A window that requires username and password will appear. Default values being - Username: user or admin, Password: pass.

NOTE: Due to the inability of some WEB Browsers to read the IP address format displayed on the screen of the device, the numbers included in the IP Address must be written without the leading zeros. For example: ***192.168.020.068*** must be written as ***192.168.20.68***

STEP 3.2 Network Discovery for Windows 7

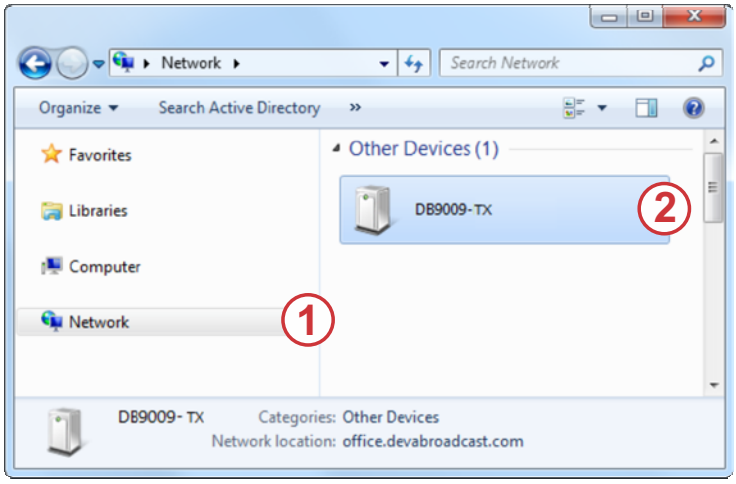
Network discovery is a network setting that defines whether your computer can see (find) other computers and devices on the network and whether other computers on the network can see your computer. By default, Windows Firewall blocks network discovery but you can enable it.

1. Open Advanced sharing settings by clicking the Start button, and then click 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 Network **(1)**. If you have successfully enabled the network discovery option, the device will be displayed. Double click on DB9009-TX (2) will open a new WEB browser window requiring username and password. (*For more information refer to* **Step 4**).



NOTE: If you have already enabled this function on your computer just open a new Explorer bar and click on Network **(1)**. The device will be displayed. If not, follow the instructions from **Step 3.2**.

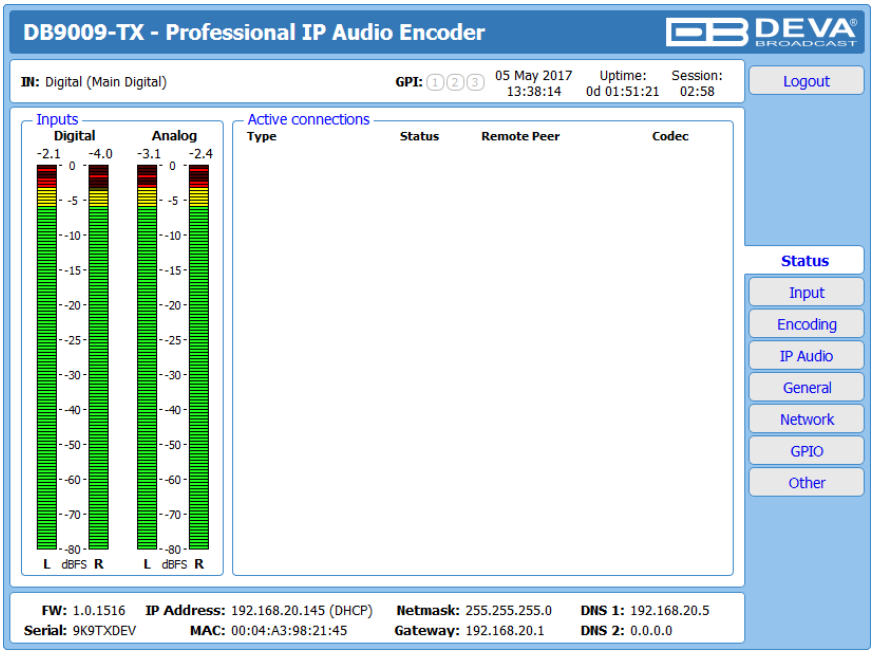
STEP 4 Device Access

The DB9009-TX provides you with a protected access to the device settings. You can choose between two types of log in:

1. As an ADMINISTRATOR – which will give you full control over the settings (username: admin, password: pass);

2. As a USER – this type of log-in will allow you to monitor the device without applying settings (username: user, password: pass).

In order to make the necessary adjustments to the device, please log in as ADMINISTRATOR.



Asuccessful log in the Control Window will look like this

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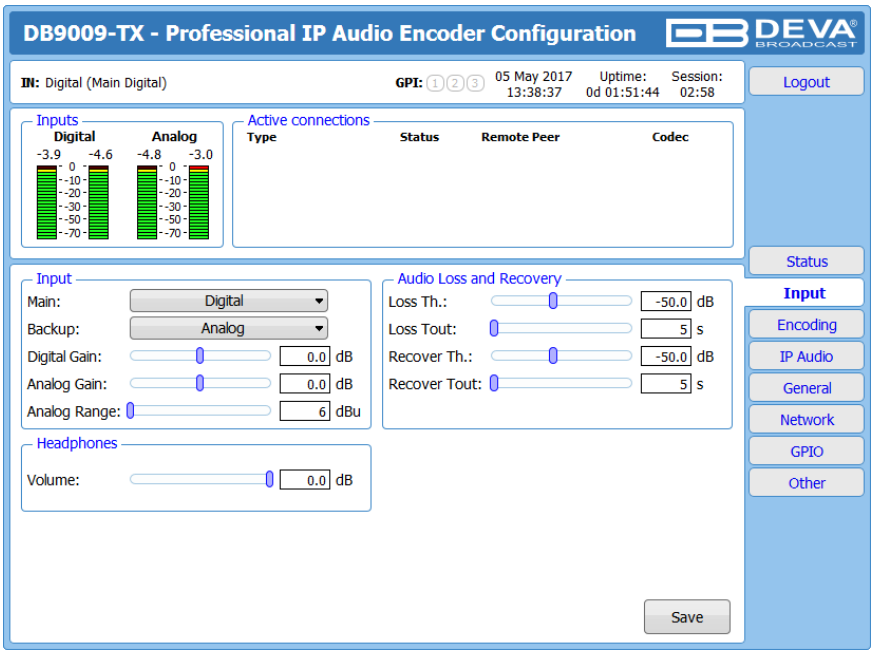
STEP 5 Device Settings

Upon entering the device's settings, you will be able to apply the needed adjustments to the DB9009-TX. In order the applied settings to be used press the [Save] button, placed on the bottom right part of each screen.



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.

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Appendix B

Quick User Guide

DB9009-RX

Professional 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.

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This Quick user guide will make the installation of the DB9009-RX 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 complete user manual - www.devabroadcast.com/downloads.**

STEP 1 Connection

1. Install the unit on its operation place;
2. Before connecting the AC Power, make sure that the fuse rating is in accordance with the mains supply at your location. DB9009-RX Power Supply Factory Settings are: 100-240 V AC; 1AFuse.;
3. Connect the DB9009-RX to the TCP/IP network using a cable with RJ-45 connector;
4. Optionally, connect the necessary for the configuration - audio cables (analog and/or digital), GPI and etc.

STEP 2 Network Settings

DB9009-RX can be operated in two methods. Through the Front panel navigational menu or via a standard WEB Browser.

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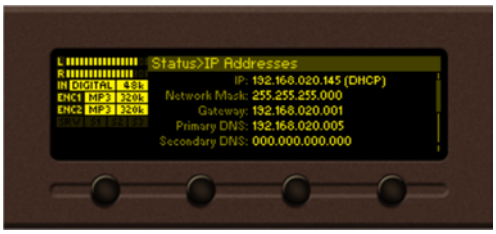

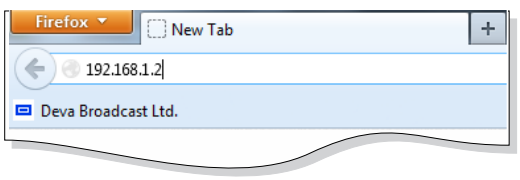

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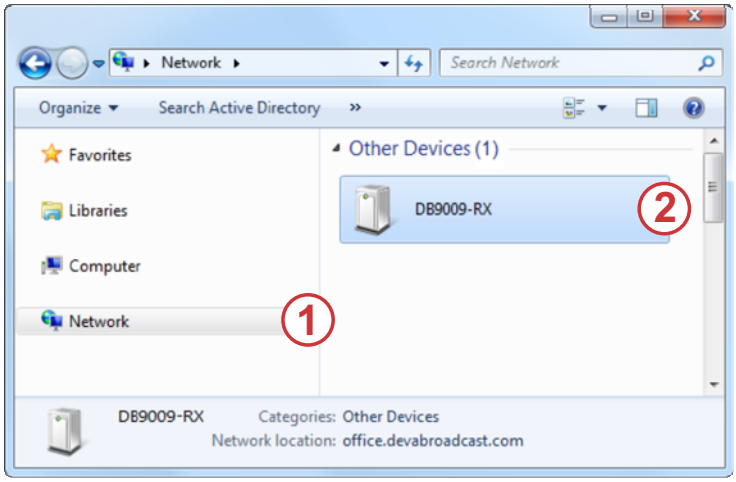

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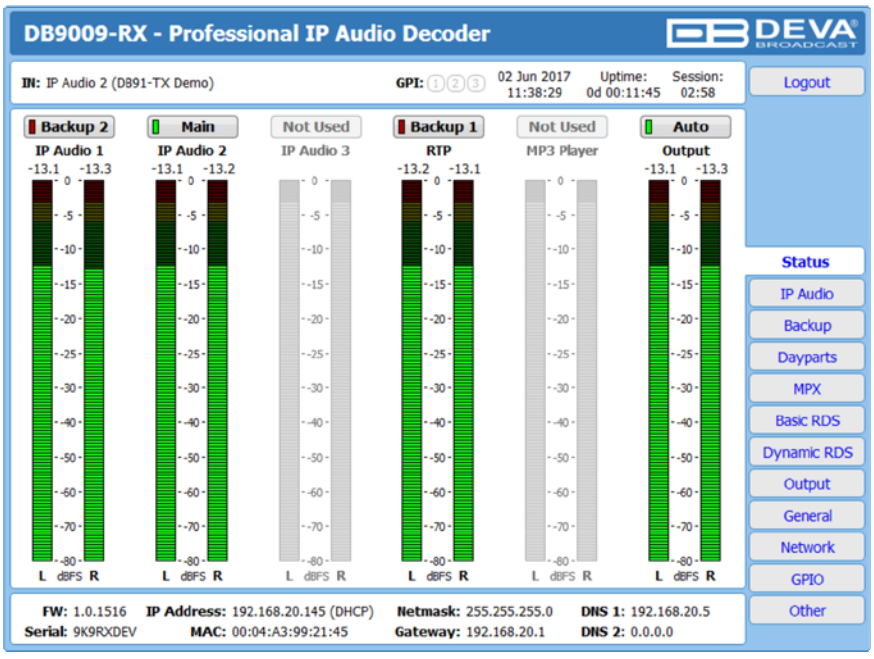

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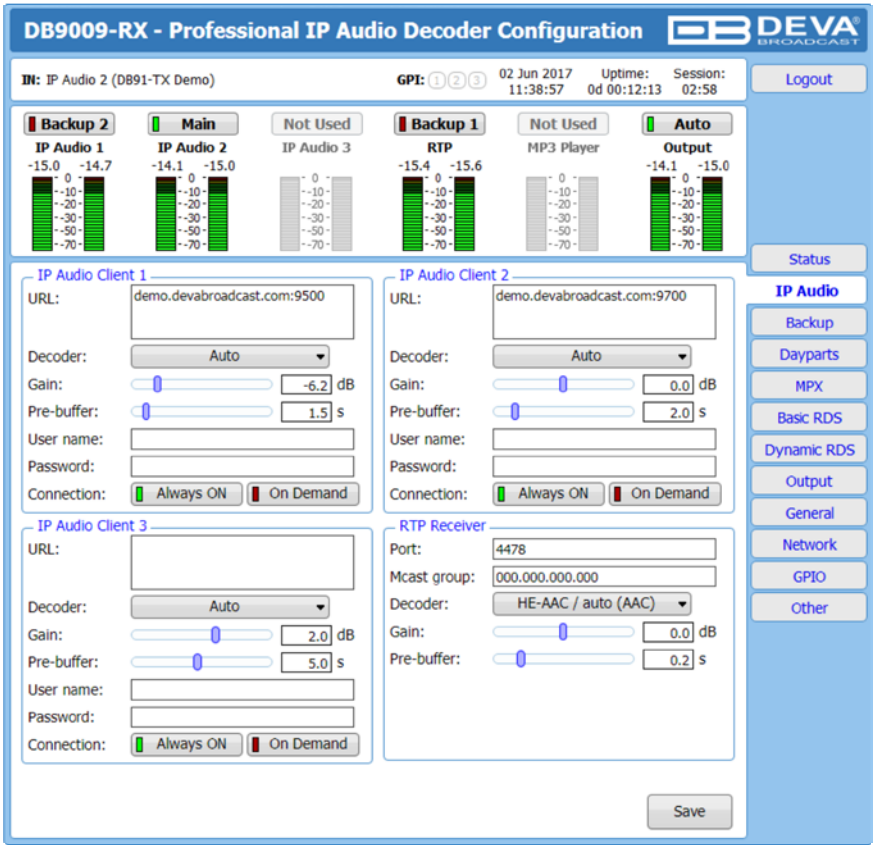

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