Quick User Guide

Radio Explorer III DAB

Advanced Mobile DAB/DAB+ Radio Analyzer

→ **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 the Radio Explorer III DAB quick and easy. Follow these steps to 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 — Device Connection

1. Connect the supplied FM and GPS Antennas to the BNC and SMA connectors, placed on the rear panel of the device;
2. Select a suitable location for installation of the GPS Antenna that would allow routing of the antenna cable to the Radio Explorer III DAB and also would provide a clear view of the sky for a good satellite reception;
3. By using the supplied Car Cigarette Lighter adapter, connect Radio Explorer III DAB to the Car Cigarette Lighter;
4. Configure the Logger campaign. (*For more information refer to* **Step 5**).

NOTE: Make sure that you have routed the cable of the GPS Antenna in such a manner that would prevent pinching the cable by doors, windows or trunk lids when opened or closed.

STEP 2 — Configuration

Radio Explorer III DAB can be configured in three methods, depending on the client's preferences:

1. **Through the very intuitive user interface** with OLED screen, front panel navigational and soft buttons ensures an easy usage of the device's build-in features;
2. **Through the built-in Web server** – you can use a standard web browser to monitor the status or to make some adjustments. iOS and Android devices are also supported;
3. **Through the supplied free of charge DEVA Device Manager Software** – the easy-to-use interface allows quick and easy connection to the device. Aimed at facilitating the use of our products, DEVA Device Manager Software is free of charge.
   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

A standard web browser can be used to monitor Radio Explorer's status or to make some adjustments. There are two options for access to the WEB Interface of Radio Explorer III DAB: through manual identification of the IP address of the device, and alternatively through the Network discovery option. (*For Windows 7 users only*).
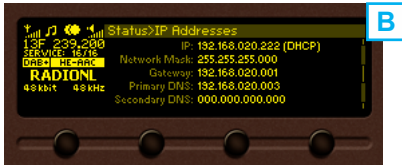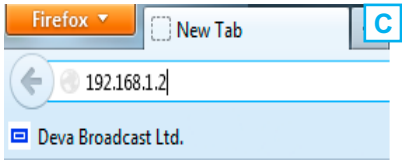
STEP 3.1 — Manual IP Address Identification

Connect the device to a local network or to the Internet by a LAN cable. Through the Front panel navigational menu pressing the "OK" button will enable you to enter the device main menu.

Using the "Right" navigational button find the "Status" section located at the end of the Menu **(A)**.Press the "OK" Button to enter the "Status Section" and then press the "DOWN" button.

B

This operation will visualize the screen **(B)** containing information about the IP Address of the device.

C

Open a new WEB Browser and enter the device IP address in the address field then press "Enter" **(C)**.

A window that requires username and password will appear. (*For more information refer to* **Step 3.3**)

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: *192.168.020.095* must be written as *192.168.20.95*

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 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**. If you have successfully enabled the network discovery option, the device will be displayed. Double click on **the device's icon** will open a new WEB browser window requiring username and password.
   (*For more information refer to* **Step 3.3**)

NOTE: If you have already enabled this function on your computer just open a new Explorer bar and click on **Network**. The device must be displayed. If not follow the instructions from **Step 3.1** or **Step 3.2**
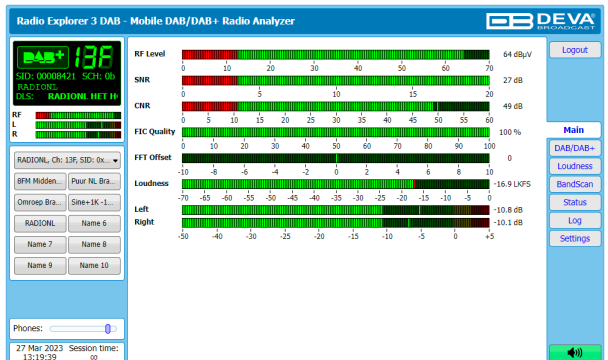

STEP 3.3 | **WEB Access**

Radio Explorer III DAB 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 and choose different stations without applying settings (username: *user*, password: *pass*).

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

A successful log in the Control Window will look like this:

Radio Explorer III DAB is a Google Earth compatible tool for visualization of the collected FM Radio Measurements. Once a campaign is finalized, using the supplied DEVA Device Manager the collected files could be converted into KMZ format automatically and the results visualized in Google Earth.

Aimed at facilitating the use of our products, DEVA Device Manager Software is free of charge. The installation process is fairly simple and identical for all supported by the software devices. Just use the Installation file which can be downloaded from **www.devabroadcast.com/downloads** , launch the Wizard and accept the default recommendations.

In order to avail yourself of all provided by the software advantages, please refer to DEVA Device Manager Software's user manual which could also be found on our website.

STEP 5 Logger

Radio Explorer III DAB is an advanced coverage survey mobile tool, fully compliant with the ETSI EN 300 401 DAB standard. Among its best assets are the two powerful DAB tuners, lending unprecedented accuracy and reliability to this product. In addition to measuring all of the important DAB signals, such as RSSI, SNR, CNR, FIC Quality, FIB Errors, FFT Offset and the Left & Right Audio level values, it also allows for monitoring up to 10 services within the DAB ensemble with predefined acquisition time in a round-robin scheduler. All measured parameters are stored in a log file for further analysis through the DEVA Device Manager software.

Logger campaigns can be started via the front panel men, WEB Interface and Software. It is necessary that the campaign frequencies/channels and supplemental Radio Explorer III settings be pre configured before starting a campaign. No additional adjustments or settings will be required, except for the occasion when the campaign is to be stopped.

STEP 5.1 Set-up via front panel menu

In order to set up a campaign via the front panel menu, the following steps should be completed:

1. Press the [OK] button to enter the Menu Page;

2. Select Logger icon from the Menu page and press "OK" to enter it.
3. Then select *Logger> Channel 1*;
4. Specify name of the Channel, frequency and for 'Active' - select Antenna 1; to exclude a station from the campaign the "Disable" button should be selected;
5. Change the Acquisition time as per your preferences. We recommend setting it to 10 seconds;
6. Steps from 3 to 5 should be applied for each of the channels to be monitored. Once all Channels are set you can proceed to the last step
7. Go to *Logger> Logger Mode* and as a value set 10 seconds. In order for a campaign to be commenced the device should be inactive for the specified time.

NOTE: The Front Panel inactivity time should expire prior the Logger mode countdown to begin.

Prior to applying any settings, a connection to the device via the WEB Interface should be made.

1. Open the main application window and go to Settings> Logger tab;

2. Set the Campaign's start time delay from the "Logger" box placed at the top of the window;

3. Set the Name, Service and Acquisition time parameters for each of the channels;

4. In order for a station to be included in the campaign, the [Antenna] button should be selected; to exclude a station from the campaign the [Disable] button should be selected;

Steps from 3 to 4 should be applied for each of the channels to be monitored. Once all channels are set you can proceed to the last step;
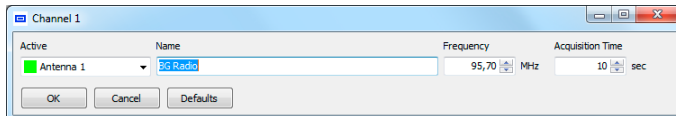
5. Press the [Save] button to save the applied changes;

6. Disconnect the device from the local network connection and wait for the campaign to be commenced

NOTE: In order for a Campaign to be commenced the device should be inactive for the specified time. During the campaign, the device should be inactive. The front panel navigational menu, WEB Interface and Device Manager Software should not be used.

Below are the settings that should be applied in order for a PI Campaign or Logger to be realized. Prior to applying any settings, a connection to the device via the DEVA Device Manager Software should be made.

Logger Mode

1. Enter the device window and go to "Logger" tab;
2. Set the Logger mode start time delay via the 'Logger Mode' drop-down menu placed at the top left corner;
3. Click on one of the channels to set Name, Frequency parameters and acquisition time for each of the channels;

4. Change the Acquisition time as per your preferences. We recommend setting it to 10 seconds;
5. In order for a channel to be included in the campaign, "Antenna 1" should be selected from the "Active" drop-down menu. To exclude a station from the campaign select the "Disable" option;
6. Press the "OK" button to save the applied changes;
7. Steps from 2 to 6 should be applied for each of the channels to be monitored. Once all Channels are set you can proceed to the last step;
8. Disconnect the device from the local network connection and wait for the campaign to be commenced.

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