


Alarms

DB3010 - FM Radio & IP Audio Confidence Monitoring Receiver


Alarm notifications

E-mail: Enabled Disabled SNMP: Enabled Disabled GPO: Enabled Disabled

RF Alarm

Range: 20 dBuV 110

Thresholds: Low 25 High 75

Trigger time: 05:00 min

Release time: 05:00 min

Email SNMP GPO -

FM Left Audio Alarm

Range: -50 dB +5

Thresholds: Low -40 High 0

Trigger time: 05:00 min

Release time: 05:00 min

Email SNMP GPO -

IP Link Alarm

Down Up

Enable: Enabled Disabled

Trigger time: 05:00 min

Release time: 05:00 min

Email SNMP GPO -

IP Left Audio Alarm

Range: -50 dB +5

Thresholds: Low -40 High 0

Trigger time: 05:00 min

Release time: 05:00 min

Email SNMP GPO -

Stereo Loss Alarm

Mono Stereo

Enable: Enabled Disabled

Trigger time: 05:00 min

Release time: 05:00 min

Email SNMP GPO -

FM Right Audio Alarm

Range: -50 dB +5

Thresholds: Low -40 High 0

Trigger time: 05:00 min

Release time: 05:00 min

Email SNMP GPO -

Internet Stream Alarm

Idle Connected

Enable: Enabled Disabled

Trigger time: 05:00 min

Release time: 05:00 min

Email SNMP GPO -

IP Right Audio Alarm

Range: -50 dB +5

Thresholds: Low -40 High 0

Trigger time: 05:00 min

Release time: 05:00 min

Email SNMP GPO -

Save

Serial: 3K2F3003

Date: 29 Jul 2015

Time: 08:15:08

Session: 59:31

Logout

Main

General

FM Radio

IP Radio

Presets

Alarms

Comm

Outputs

Other

Alarm notifications

- [E-mail] – global enable/disable E-mail notification;
- [SNMP] – global enable/disable SNMP notification;
- [GPO] – global enable/disable GPO actions.

NOTE: If the monitoring option is disabled, notifications will not be sent, nevertheless whether they are enabled or disabled.

RF, FM Left Audio, FM Right Audio, IP Left Audio, IP Right Audio Alarms

The settings applied to these alarms - are identical and are explained in details below.

Range – interactive slider used to adjust the **Low & High thresholds** at which an alarm will be generated;

Thresholds – sets the desired **Low & High thresholds** (as explained above) but in figures.

Trigger Time – waiting time before active alarm is generated;

Release Time – waiting time before idle alarm is generated;

Once the **Range**, **Thresholds**, **Trigger** and **Release times** are set, the preferred alarm type should be selected.

PLEASE HAVE IN MIND that if the alarm notification is globally disabled, notification will not be sent, and the event will only be registered in the Log.

Stereo Loss Alarm, IP Link Alarm, Internet Stream Alarm

The settings applied to these alarms are identical and are explained in details below.

Enable – In order for the alarm to be generated, the function should be enabled;

Trigger Time – waiting time before active alarm is generated;

Release Time – waiting time before idle alarm is generated.


Stereo Loss Alarm, **IP Link Alarm** and **Internet Stream Alarm** are flags related alarms, meaning that:

- **Stereo Loss** – when the indicator points at **Stereo** on the interactive slider, the device is working properly. If the indicator is under **Mono**, an alarm will be generated because of Stereo loss.
- **IP Link** – when the indicator points at **UP** on the interactive slider, the device is working properly. If the indicator is under **Down**, an alarm will be generated because the IP link is lost.
- **Internet Stream** – when the indicator points at **Connected** on the interactive slider, the device is working properly. If the indicator is under **Idle**, an alarm will be generated because the device will not be able to obtain stream.

We recommend, as a preferred notification method in case **IP Link alarm** is generated, **GPO** to be set as when IP link is missing **Email** and **SNMP** could not be sent, and the event will only be registered in the Log. You will be notified of the event upon the IP link is restored.

NOTE: For detailed information on Alarm trigger and notifications refer to [“APPENDIX A : Alarm Triggers” on page 57.](#)

Communication

DB3010 - FM Radio & IP Audio Confidence Monitoring Receiver


Network

Enable: Enabled

DHCP: Enabled Disabled

IP Address:

Netmask:

Gateway:

Primary DNS:

Sec. DNS:

Network Status

MAC: 00:04:A3:31:5E:BB

IP Type: Assigned by DHCP

IP: 192.168.20.217

Netmask: 255.255.255.0

Gateway: 192.168.20.1

DNS 1: 192.168.20.5

DNS 2: 0.0.0.0

Logout

HTTP Server

Enable: Enabled

Server Port: ⚠

Session time: 60:00 min

FTP Server

Enable: Enabled Disabled

Cmd Port:

Data Port:

SNMP Agent

Agent: Enabled Disabled

Agent Port:

Agent ses. time: 03:00 min

Agent ID:

Read Community:

Write Community:

Manager IP:

Manager Port:

SNMP MIB File:

E-mail

Enable: SMTP DEVA Disabled

E-mail 1:

E-mail 2:

Sender:

Username:

Password:

Host name:

Connection:

Server:

Server Port:

⚠ - These settings require reboot.

Serial: 3K1F8001

Date: 20 Oct 2016

Time: 08:24:39

Session: 53:38

WARNING: The applied changes will take effect upon pressing the [Save] button. All settings marked with the symbol ⚠ require reboot, therefore the [Save & Reboot] button should be used.

NOTE: If the new value is invalid or out of range, the edited field will become red.

Network

The network addresses could be set manually (static IP) or automatically via a **DHCP** server. To set static **IP address**, **Netmask**, **Gateway** and **DNS** addresses, the **DHCP** should be [Disabled]. In order for the built-in DHCP client to be activated, the function should be [Enabled]. When the DHCP client is activated, all assigned values will be shown in the relevant fields on the **Network Status**. If due to any reason, the DHCP procedure cannot be completed, DB3010 will use AutoIP and will generate an IP address.

Network Status

Information on the current status of the network can be found here – **MAC**, **IP Type**, **IP**, **Netmask**, **Gateway**, **DNS 1**, and **DNS 2**.

HTTP Server

[Enabled] / [Disabled] the HTTP Server. Specify the **Server Port** and **Session timeout**.

FTP Server

[Enabled] / [Disabled] the FTP Server. Specify the **Command** and **Data Ports** to be used.

SNMP Agent

Specify **Agent ID**, **Agent Port**, **Agent ses. time**, **Read/Write Communities**, **Manager IP** and **Manager Port**.

Agent – [Enabled] / [Disabled] SNMP Agent.

Agent ID is used for identification of the device among others, when an SNMP notification is sent.

Once all needed settings are applied, use the [Test] button to generate a test notification, which upon success will be received by the SNMP Manager.

SNMP MIB File

The latest MIB file can be downloaded directly from the DB3010 by pressing the [Download] button. Downloading this file from the device, guarantees that you have the proper MIB file.

E-mail

Enter the desired alarm recipients in **E-mail 1** and/or **E-mail 2** fields. Fill in your e-mail account settings: **Sender**, **Username** and **Password**, **Server**, **SNMP port** and **Connection type**.

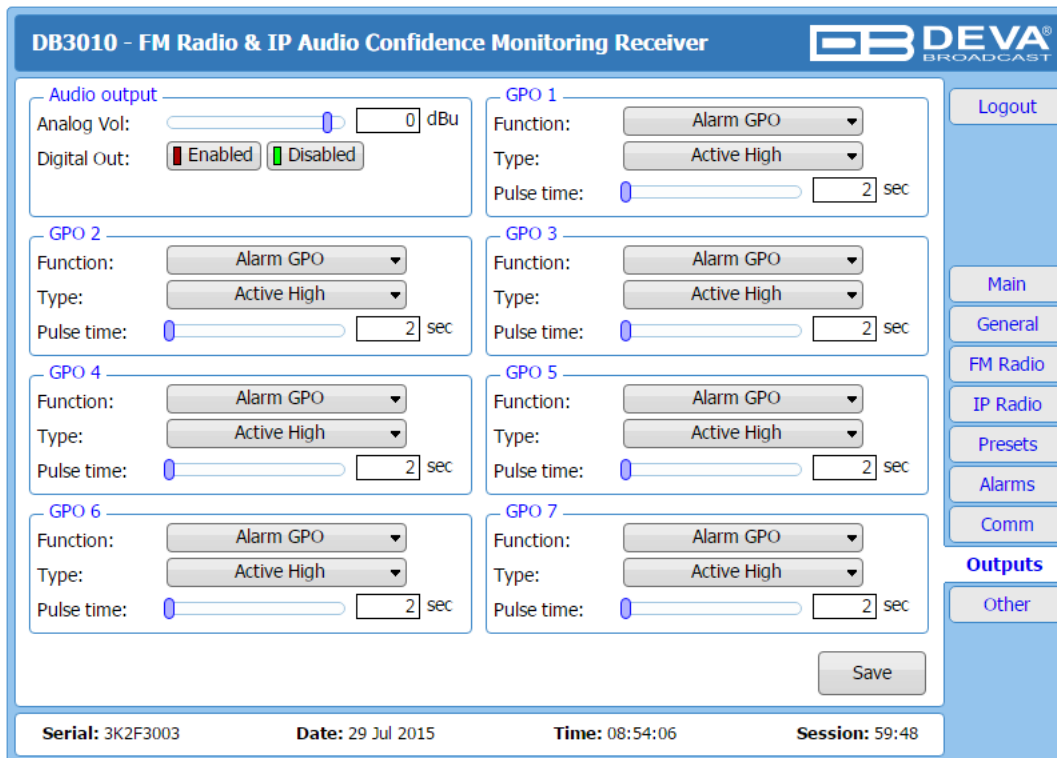
If you experience difficulties in the set-up, or would like to use DEVA account for sending of alarm email notifications, press the [DEVA] button option, and complete the recipient emails (E-mail 1 and E-mail 2) only. The other fields must be left blank, otherwise the email notification option will not be working. Event though using the DEVA account eases the set-up process, we recommend user account to be used for sending of email notifications, and the DEVA account for test purposes. When using DEVA account, please note that the stable 24/7 connection depends on the mail service provider and cannot be guaranteed.

We recommend you to use the [Test] button and generate a test e-mail, which upon success will be delivered to the specified E-mail 1 and/or E-mail 2.

Example of Test E-mail Message:

```
DB3010 Test Message.  
Please do not reply to this e-mail.
```

Outputs



The general purpose outputs settings are applied through this page. The *Audio output* section allows *Audio Vol* for the analog output to be set, and the *Digital Out* to be [Enabled] or [Disabled].

Function, *Type* and *Pulse time* for each of the GPOs could be set individually. You can choose between the following *Functions*: **Alarm GPO**, **RDS Lock**, **TA Flag** and **TP Flag**. *Type* is used for specifying of the active level or active pulse polarity. When a GPO assigned event is triggered the output can change the level to Active High/Low or to generate High/Low Pulse for the specified duration.

PLEASE NOTE that if the GPO's function is not assigned as Alarm GPO and the selfsame is chosen as a preferred alarm, notifications will not be indicated, nevertheless one is being generated.

Other

The screenshot displays the web interface for the DB3010 device. The title bar reads "DB3010 - FM Radio & IP Audio Confidence Monitoring Receiver" and includes the DEVA BROADCAST logo. The interface is organized into several sections:

- Firmware Update:** Includes a "Firmware file:" field with a "Browse..." button and "No file selected." text, an "Upload" button, and system information: DSP: 1.4.1607 2018/03/19, TUN: 10.1.0, and LIB: 1.4.1603 2018/03/19.
- Storage:** Shows "Used Space: 256.00 KB" and "Free Space: 1883.53 MB" with a "Format" button.
- System Log:** Features a "Clear" button.
- Factory Defaults:** Contains two buttons: "Retain Presets & IP" and "Retain IP".
- Reboot Device:** Includes a "Reboot" button.

On the right side, there is a vertical menu with buttons for "Logout", "Main", "General", "FM Radio", "IP Radio", "Presets", "Alarms", "Comm", "Outputs", and "Other" (which is highlighted). At the bottom, a status bar displays: "Serial: 3K1F8002", "Date: 20 Mar 2018", "Time: 14:18:23", and "Session: ∞".

Firmware Update

To update the device firmware, press [Browse] and select the new firmware file. After having pressed the [Upload] button, a dialog window will appear. Confirm the firmware update and wait for the process to complete.

Storage

Information about the device storage space is found in this section. The internal storage could be deleted by pressing the [Format] button.

System Log

By pressing the [Clear] button, all recorded in the system log information will be deleted.

Factory Defaults

[Retain Presets & IP] - all settings except for the *Presets* and *Network settings* (IP addresses) will be deleted;

[Retain IP] – all settings except for the Network settings (IP addresses) will be deleted.

To restore DB3010 to its factory defaults select one of the available options (described above) and then press the button. A new window will appear - confirm that you want to restore the factory defaults and wait for the process to be completed. On completion of the process, the settings should have the proper default values.

Reboot Device

To reboot the DB3010, press the [Reboot] button. A dialog warning window will appear. Confirm that you want to reboot the device and wait for the process to be completed.

APPENDIX A

RDS: EUROPE VS AMERICA

The European Broadcasting Union (EBU) and its member countries originated the concept of “Radio Data” transmission. The European RDS specification, CENELEC Standard EN50067, was first published in 1984. It was revised in 1986, 1990, 1991 and 1992.

European RDS has grown in use following initial adoption of the Standard. RDS is nearly universal throughout Europe; it is almost impossible to find a European FM broadcasting station that does not carry a radio data subcarrier.

The popularity of RDS in Europe is very much in contrast with initial reluctance on the part of US broadcasters to embrace this technology. This can be ascribed to material differences in broadcasting practices.

Almost without exception, FM broadcasting in the United States is ‘detached’ and independent - each station originates its own programming. America’s National Public Radio might be considered as an exception, though for most of the broadcast day even NPR stations originate, or at least schedule, their own programs.

Most of European broadcasting is similar to the concept of network radio that was common in the US prior to the 1950s. In Europe, a central program originator may have many transmitting facilities of modest power situated throughout the country, at several different frequencies to blanket a designated service area. The European disposition, toward lower-power transmitters can be found on the “local radio” level, as well.

The European concept of a service area equates to the US broadcaster’s market. The subtle difference between these designations further characterizes broadcasting practices and ethics. RDS benefits the European broadcaster through almost an altruistic endeavor to be of service to his listeners. The US broadcaster is marketing his programming and is primarily interested in how he can create additional revenue from RDS.

THE RDS SYSTEM

RDS is a digital data channel, transmitted as a low-level subcarrier above the range of the composite stereo program signal in the FM baseband. The data transmission (baud) rate is comparatively low, yet it is quite robust because of data redundancy and effective error correction.

It is not within the scope of this Manual to cover the details of RDS subcarrier coding and modulation. For this, the reader is directed to the Specification appropriate to his location either the CENELEC EN50067 Specification for Europe or the United States NRSC Specification. Since the Manual will deal with specific implication of RDS implemented with the DB3010, it is assumed that the user is familiar with the RDS concept.

APPENDIX B.1

PTY Code Description Used in RBDS Mode – North America

PTY	Short Name	Description
1	News	News reports, either local or network in origin.
2	Information	Programming that is intended to impart advice.
3	Sports	Sports reporting, commentary, and/or live event coverage, either local or network in origin.
4	Talk	Call-in and/or interview talk shows either local or national in origin.
5	Rock	Album cuts.
6	Classic Rock	Rock oriented oldies, often mixed with hit oldies, from a decade or more ago.
7	Adult Hits	An up-tempo contemporary hits format with no hard rock and no rap.
8	Soft Rock	Album cuts with a generally soft tempo.
9	Top 40	Current hits, often encompassing a variety of rock styles.
10	Country	Country music, including contemporary and traditional styles.
11	Oldies	Popular music, usually rock, with 80% or greater non-current music.
12	Soft	A cross between adult hits and classical, primarily non-current softrock originals.
13	Nostalgia	Big-band music.
14	Jazz	Mostly instrumental, includes both traditional jazz and more modern “smooth jazz.”
15	Classical	Mostly instrumentals, usually orchestral or symphonic music.
16	Rhythm and Blues	A wide range of musical styles, often called “urban contemporary.”
17	Soft R and B	Rhythm and blues with a generally soft tempo.
18	Foreign Language	Any programming format in a language other than English.
19	Religious Music	Music programming with religious lyrics.
20	Religious Talk	Call-in shows, interview programs, etc. with a religious theme.
21	Personality	A radio show where the on-air personality is the main attraction.
22	Public	Programming that is supported by listeners and/or corporate sponsors instead of advertising.
23	College	Programming produced by a college or university radio station.
24	Spanish Talk	Call-in shows, interview programs, etc. in the Spanish language
25	Spanish Music	Music programming in the Spanish language
26	Hip-Hop	Popular music incorporating elements of rap, rhythm-and-blues, funk, and soul
27-28	Unassigned	
29	Weather	Weather forecasts or bulletins that are non-emergency in nature.
30	Emergency Test	Broadcast when testing emergency broadcast equipment or receivers. Not intended for searching or dynamic switching for consumer receivers. Receivers may, if desired, display “TEST” or “Emergency Test”.
31	Emergency	Emergency announcement made under exceptional circumstances to give warning of events causing danger of a general nature. Not to be used for searching - only used in a receiver for dynamic switching.

NOTE: These definitions can differ slightly between various language versions.

PRODUCT REGISTRATION CARD

- All fields are required, or warranty registration is invalid and void

Your Company Name _____

Contact _____

Address Line 1 _____

Address Line 2 _____

City _____

State/Province _____ ZIP/Postal Code _____

Country _____

E-mail _____ Phone _____ Fax _____

Which DEVA Broadcast Ltd. product did you purchase? _____

Product Serial # _____

Purchase date ____ / ____ / ____ Installation date ____ / ____ / ____

Your signature*

*Signing this warranty registration form you are stating that all the information provided to DEVA Broadcast Ltd. are truth and correct. DEVA Broadcast Ltd. declines any responsibility for the provided information that could result in an immediate loss of warranty for the above specified product(s).

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