

Digital Message Streamer

Application User Manual

Configuring and Using Digital Message Streamer Application

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12.04.11	Draft	ASI	First draft
27.04.11	1.00	ASI	Added screenshot of the configuration page
22.09.16	1.10	SG	Format change and added new feature

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1 Introduction

1.1 About “Digital Message Streamer”

Digital Message Streamer application has been developed to allow RTP streaming of locally stored on the USB stick messages in MP3 format with possibility of local playback for monitoring. The messages are assigned to playlist files, and can be downloaded at a preconfigured time from remote FTP server, and triggered remotely either from its web interface, or locally by pressing keys.

1.2 Features

- RTP streaming and local playback of up to 8 playlists;
- Supports broadcast and multicast
- NTP time with local zone and daylight saving settings;
- Up to three configurable times for FTP download;
- Message trigger from the webUI or from local input or X8 keys;
- Realtime volume control and local directory listing from the webUI;
- Possibility for forced download in case of NTP server failure;
- Device monitoring via SYSLOG messages.

1.3 Supported hardware

The Digital Message Streamer solution is optimised for **Exstreamer 100/110**. While it may run on any Barix audio device with available USB, digital inputs and COM port, its functionality is not guaranteed in such case.

2 Configuration

2.1 Configuring MP3 messages

The messages are organized in playlists, which are mapped to the corresponding buttons, like:

- WebUI Message 1 button or local input 1 or X8 button 1 → pl1.m3u
- WebUI Message 2 button or local input 2 or X8 button 2 → pl2.m3u
-
- WebUI Message 8 button or local input 8 or X8 button 8 → pl8.m3u

Each playlist may contain unlimited number of MP3 files, which will be played one by one. The playlists names must start with **"pl"**, followed by the playlist number, for example - **pl1.m3u** for playlist 1, **pl2.m3u**, etc. The MP3 filenames in the playlist must be maximum 99 characters long. Once the files are prepared, they have to be copied to the root directory of the USB stick, or to a FTP server where the device can download them from.

2.2 Configuring the Digital Message Streamer

Open the Digital Message Streamer configuration page by clicking the APPLICATION tab from the WebUI.

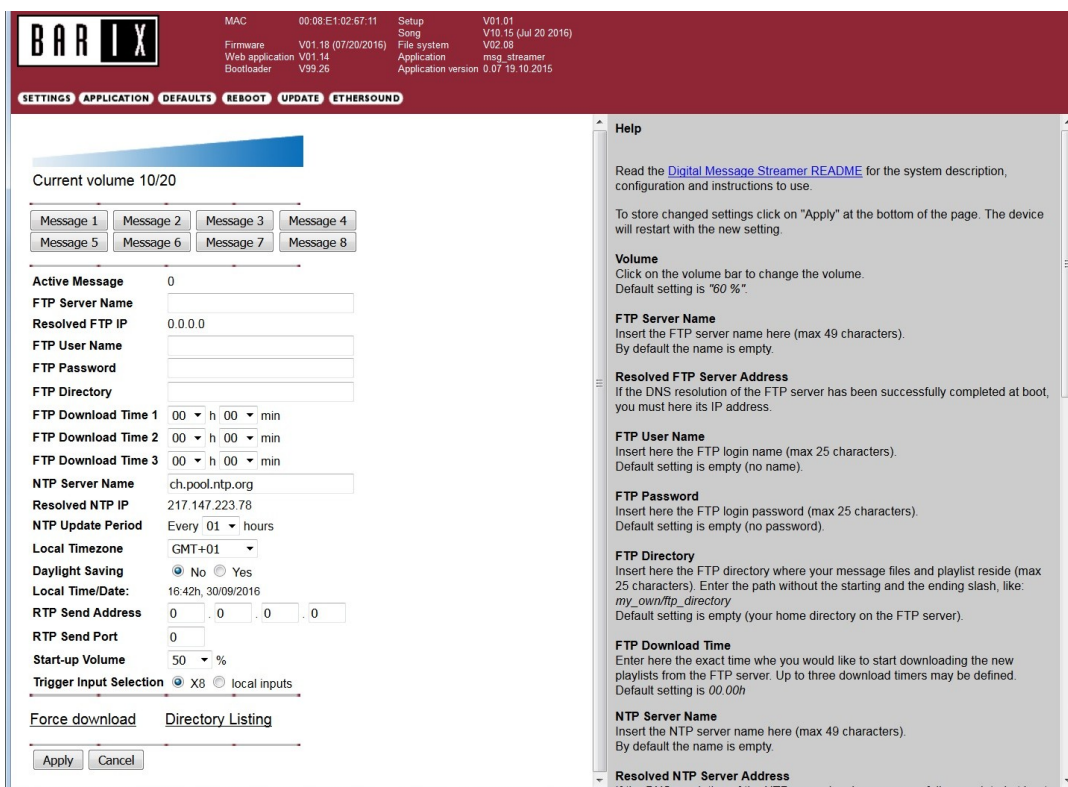


Illustration 1: DM Streamer configuration page

Configure all the listed options. Most of them are self-explanatory, and their meaning is listed on the configuration help page on the right pane of your browser window. Please also take into consideration the following important points:

- FTP server name:** The maximum length is 49 characters
- FTP user name:** The maximum length is 19 characters
- FTP password:** The maximum length is 24 characters

FTP directory: The maximum length is 64 characters

FTP username, passwd, and directory name are case sensitive

Also make a selection which inputs you will use to trigger the playlists/files.

After configuring all options as required, please click on the "Apply" button to store the settings and reboot the device.

2.3 Configuring X8

If triggering of messages on X8 button press is required, then BARIX X8 device must be correctly configured and connected to COM port 1

X8 pinout

The pinout of the X8 device is shown on the picture below:



J1		J3	
Pin	Purpose	Pin	Purpose
1	Signal GND	1	Reference GND
2	I/O 7	2	RS-485A
3	I/O 6	3	RS-485B
4	I/O 5	4	Vin (AC or DC)
5	I/O 4	5	Vin (AC or DC)
6	I/O 3	J5	
7	I/O 2		
8	I/O 7	1	Shield
9	I/O 7	2	Shield
10	Vcc (5V DC)	3	Shield

Programming X8

The X8 device provided by Barix must be configured for a special mode in order to be used for the needs of this application. Follow the procedure below to do this:

- Connect inputs I0 and I1 together (pins 9 and 8 of J1)
- Connect inputs I7 and I4 to ground (pins 2 and 5 of J1 to pin 1 of J1)
- Power up X8. The device will reconfigure itself for the special "Digital Message Repeater" mode. All LEDs will be illuminated, LED 3 will blink
- Remove the power, then remove the connections. The X8 is now ready for use.

After the restart of the X8 the left LED will be permanently on and LED 2 will blink every second. If the device does NOT blink as expected, it may be loaded with an old firmware version. In this case contact the Barix technical support for more information.

Configuring the COM port for X8

In order the X8 to function properly, open the application Settings page, and configure the following settings for COM port 1 as shown below:

Serial 1

Baud rate = 19200

Data bits = 8

Parity = no

Stop bits = 1

Handshake = none

Click "Apply" to save the settings, and reboot the device.

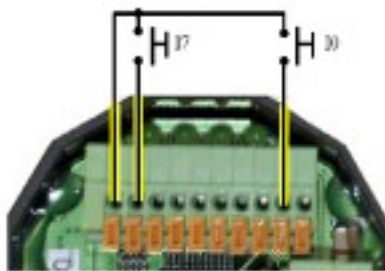
Connecting the X8 to the Exstreamer

Next, you need to connect the X8 to the Exstreamer. To do so, connect the following pins:

- PIN 5 of J3 of X8 to PIN 5 of RS-232 connector on device
- PIN 4 of J3 of X8 to PIN 4 of RS-232 connector on device
- PIN 3 of J3 of X8 to PIN 2 of RS-232 connector on device

Connecting buttons to the X8 Unit

For the purpose of this application, the most simple configuration is used. Connect your buttons or contact closures between each input and signal ground as shown in the picture below.



However, up to 70 buttons and a volume control may be connected if desired. The application also needs to be modified to support more buttons. For more information please refer to BARIX customer support.

2.4 Using local inputs

When you use a Barix audio device with local inputs, like the Annunicom100/200/1000 or the Exstreamer500/1000 then the message streaming can be triggered also via the local inputs. For that you have to enable this function in the setup. To trigger the input you have to close/short the according input on the device.

3 Legal Information

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