

APN-17001 STL configuration

Document Information

Author	Dragan Brander
Intended use	Customer information
Classification	OFFICIAL

Document version

Last edit	Jan 17, 2017 16:51
Document version	v. 11

Document history

Ver.	Date	Changes by	Changes
v.11	16 Jan 2017	Dragan Brander	First release

Table of content

1. Scope
2. Hardware version differences
3. Factory defaults
4. Configuration
5. Configuration alternative

1. Scope

This application note covers the configuration settings of the "Studio Transmitter Link" application (STL) running on Barix Exstreamer 500 Hardware Version 1.x and Version 2.x. This allows for seamless operation with any mix of the two versions, while operating at the same input sensitivity and same audio output levels.

2. Hardware version differences

The Barix Exstreamer hardware version 1.x was sporting the Barix audio module IPAM100, whereas the new hardware version 2.x comes with the audio module IPAM102.

The main difference is the audio codec chip used changing from "Micronas MAS3587F" to the "VLSI VS1063".

The IPAM 100 had to be set to Auto which reduced the Output Audio Level by 3 dB.

As the IPAM102 has a higher output (+ 1 dB) this has to be adjusted.

3. Factory defaults

When applying factory defaults the following settings are applied.

Setting	Ex500 HW1.x	Ex500 HW2.x
Input Gain	0 dB	0 dB
Output Audio Level	+3 dB	+3 dB
Output Audio Level Offset	Auto	Auto

See next chapter on how to configure the correct setting for both hardware versions in order to achieve equivalent audio output levels.

4. Configuration

To achieve the maximum settings for input sensitivity and output levels use the corresponding values from the following table .

Parameter	Ex500 HW1.x	Ex500 HW2.x
Input Gain	0 dB	0 dB
<i>Input Clipping level</i>	15 dBu 12.32 V _{PP} 4.356 V _{RMS}	15 dBu 12.32 V _{PP} 4.356 V _{RMS}
Output Audio Level	0 dB	+2 dB
Output Audio Level Offset	Auto	Auto
<i>Output Level @ Full Scale</i>	15 dBu 12.32 V _{PP} 4.356 V _{RMS}	15 dBu 12.32 V _{PP} 4.356 V _{RMS}

5. Configuration alternative

As a configuration alternative one can set the following on a new Exstreamer 500 (HW2.x).

Parameter	Ex500 HW2.x
Output Audio Level	-1 dB
Output Audio Level Offset	0 dB
<i>Output Level @ Full Scale</i>	15 dBu 12.32 V _{PP} 4.356 V _{RMS}