RL256 Updating Firmware V1.04

(rev a 23/11/21)





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Checking the Current versions

Check the current version(s) of the firmware on each of the Ports on your product

Network Firmware	S/W version : 1.2.0b46038					Jump to Boot-Loader		
Power System	CPU Jun 22 2021 16:08:05 - Version 1.01	FPGA 1.00	DSP 		Port 2	Port 3	Port 4	Х

Compare this to the latest firmware in the Downloads section of the Nixer website https://www.nixerproaudio.com/Downloads/

Downloading the latest firmware(s)

If there are updates available follow the steps below

- If you do not have the Nixer BLM.exe program download and install the latest version of Nixer BLM.exe (V1.5) from https://www.nixerproaudio.com/resources/Nixer-BLM V1.5.exe
- Next download the CPU firmware (.hex file)



• If it has also been updated download the (.hexout file)



Updating the CPU firmware

- Next attach the RL256 to the PC via a USB cable and turn it on
- You will have five new USB devices attached to your PC
- Navigate to the Update Menu in the System menus select Port 1 and press the button to enter Boot Loader Mode. You will see a countdown of dots before the screen goes blank ALWAYS update Port 1 first

• For Ports 2 through to 4 the screen will not go blank when the respective Port is put into Bootloader mode, instead once the countdown dots finish the screen will jump back to Port 1

Network Firmware	ZMAN Ravenna card S/W version : 1.2.0b46038 State Monitor version : May 28 2021 1	0:33:53 - V	/ersion 1.00			Jum	p to Boot-L	oader
Power System	CPU Jun 22 2021 16:08:05 - Version 1.01	FPGA 1.00	DSP 1.00	Port 1	Port 2	Port 3	Port 4	Х

- A new USB device called USB HID Bootloader #xx will connect to your PC
- Your RL256 is now ready to update Port 1
- Run the Nixer BLM program on your PC

Nixer BLM v1.5		×
Communication Settings USB VID PID 0x4D8 0xF1F	B Enable	^
Commands Device Screen Flash	✓ Connect	
Device Screen Flash	Connect	

• Once the program is running change "Screen Flash" to "Main CPU" via the dropdown menu and click connect

Communication Settings USB VID PID Device connected	×
Device connected	
0x4D8 0xF1FB Enable Commands Disconnect	
Device Main CPU Disconnect Version/Tag Load Hex File Verify Erase-Program Run Main	

- You will now see that it says device connected in the status window
- Click on Load Hex File. Next navigate to and load in the .hex file that you downloaded from ww.nixerproaudio.com
- Note for Dante Ports load the firmware that has Dante in the name for example RL256_CPU_Dante_V104.hex
- Note for Ravenna Ports load the firmware that has Ravenna in the name for example RL256_CPU_Ravenna_V104.hex

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 Loading the incorrect version into a Port will cause abnormal behaviour of the product

N N	ixer BLM v1.5			×	
Cor	Nopen 🕈				×
	← → 🗸 🛉 📕 « 211°	119 > RL256 V1.4 v ひ	,∕⊂ Sear	rch RL256 V1.4	
	Organise • New folder			· .	?
Co	 3D Objects Desktop 	Name RL256_CPU_Dante_V104.hex		Date modified 19/11/2021 16:53	
	 Documents Downloads Drive 	RL256_CPU_Ravenna_V104.hex		19/11/2021 16:52	
	 Music Pictures 				
	■ Videos Local Disk (C:) ✓ Dropbox for Busi				
	🛫 Dropbox on 'Ma 🗸	<			>
	File nam	ne: RL256_CPU_Z_211119c_unified.hex >	CPU File (* Open		×

• Click the Erase-Program Button and your device will be reprogrammed. You will see the progress in the status window and by the status bar which will gradually fill as the device is programme

Nixer BLM v1.5			×
Communication Settings USB VID PID 0x4D8 0xF1FB	C Enable	Device connected Hex file loaded successfully Erasing Flash Erased	^
Commands Device Main CPU Version/Tag Load Hex File	Disconnect Verify	Programming	
Erase-Program	Run Main		~

• When the device has been programmed the status window will say "Programming completed. Click Run Main and your unit will reboot with its updated software

ID IxF1FB	🗹 Enable	Device connected Hex file loaded successfully Erasing	^
~	Disconnect	Programming Programming completed	
oad Hex File	Verify		
am	Run Main		<u> </u>
)	vxF1FB	xF1FB Enable Disconnect Disconnect	xF1FB ⊡ Enable Device connected Hex file loaded successfully Erasing Flash Erased Programming Programming completed

• This procedure will now need to be repeated for Ports 2 through to 4 if fitted. The order of updating is not important for these Ports. First select the Port required then press Jump to Boot-Loader as noted earlier at the end of the countdown dots the screen will jump back to Port 1. The Nixer BLM program can now be used to update the firmware in the Port that has been put into Boot-Loader mode by following the instructions above

Updating the FPGA firmware

• To update the FPGA firmware, start the Nixer BLM program

Network Firmware	ZMAN Ravenna card S/W version : 1.2.0b46038 State Monitor version : May 28 2021 1	0:33:53 - V	ersion 1.00		Jum	p to Boot-L	oader
Power System	CPU Jun 22 2021 16:08:05 - Version 1.01	FPGA 1.00	DSP 1.00	Port 1	2 Port 3	Port 4	Х

- Go to the firmware page and select Port 1 and Jump to Boot-Loader
- Select FPGA Flash from the pull-down menu and click connect

Nixer BLM v1.5			×
Communication Settings USB VID PID 0x4D8 0xF1FB	Imable	Hex file loaded successfully Erasing Flash Erased Programming	^
Commands Device FPGA Flash ✓	Disconnect	Programming completed DONE Programming completed Device disconnected	
Version/Tag Load Hex File	Verify	Device connected Device disconnected Device connected	
Erase-Program	Run Main		~

• Once connected click Load Hex File and navigate to and open the .hexout file you have downloaded

Open						>
← → ✓ ↑ 🖡 « 211	119 > RL256 V1.4 ~	Ū,	O Search	n RL256 V1.4	ļ.	
Organise • New folder						?
3D Objects ^	Name			Date modifie	ed	
📃 Desktop	RL256_FPGA_V103.hexout		C	8/11/2021	10:29	
Documents						
Downloads						
🙏 Drive						
🗖 Music						
Pictures						
🔲 Videos						
失 Local Disk (C:)						
🥪 Dropbox for Busi						
🛫 Dropbox on 'Ma 🗸 🗸	<					
File nan	ne:	~ FF	PGA File (*.I	nexout)		~
	e.		Open	_	Cancel	

• Click Erase-Program

		×
🗹 Enable	DONE Programming completed Device disconnected	^
Disconnect	Device disconnected Device connected Hex file loaded successfully Erasing	- 1
Verify	Programming	
Run Main	Programming completed	~
	Disconnect Verify	✓ Enable Programming completed Device disconnected Device connected Device disconnected Device connected Disconnect Hex file loaded successfully Erasing Flash Erased Verify Programming completed

- Once the status window says Programming complete click Run Main and your RL256 will reboot
- When the Splash Window starts you will see confirmation of the Main CPU firmware followed by the FPGA version
- You will now need to repeat this procedure for Ports 2 through to Port 4 (where fitted)

Support

Additional information about Nixer products, updates, manuals etc can be found at

www.nixerproaudio.com

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