



MXC – MULTI CROSS CONVERTER

Multichannel Video Cross Convertert (Rev. 1.0)



SUMMARY

1	INTRO		3
2	CHAN	NNELS MENU	4
3	SETU	IP	4
4	VIEW	1	5
5	INTER	RFACE PANEL OF THE CHANNEL	6
5.	1	AVAILABLE VIDEO SOURCES	8
	5.1.1	<bars> – SOURCE SETTINGS</bars>	8
	5.1.2	AV DEVICE – SOURCE SETTINGS	9
	5.1.3	FILE – SOURCE SETTINGS	. 11
	5.1.4	IP – SOURCE SETTINGS	. 12
	5.1.5	NDI – SOURCE SETTINGS	. 14
	5.1.6	WEBRTC (WEB REAL-TIME COMMUNICATION)– SOURCE SETTINGS	. 16
5.	2	VIDEO SETTINGS	. 18
5.	3	AVAILABLE TARGETS	. 19
	5.3.1	A (AUDIO DEVICE) – TARGET SETTINGS	. 20
	5.3.2	AV (AUDIO VIDEO DEVICE) – TARGET SETTINGS	. 21
	5.3.3	NDI STREAM SETTINGS	. 25
	5.3.4	IP STREAM SETTINGS	. 27
	5.3.5	RTC STREAM SETTINGS	. 29
6	LOGS	5	. 32
7	LICE	NSE	. 34
8	ABOL	JT	. 35
9	FINAL	L CONSIDERATIONS & AXEL TECHNOLOGY CONTACTS	. 36



1 INTRODUCTION

The power of MULTICROSS CONVERTER is its versatility. The software is designed on different channels. Depending on the license you have acquired you will have a different number of usable channels simultaneously.

For each channel you have:

- the input selectable from SDI/NDI/IP upscaled/downscaled/converted to SDI/NDI/IP.
- SDI IN or OUT (according to installed videoboard).
- IP formats: UDP/RTMP/RTSP/HTTP.
- Multiviewer style GUI with VU Meter
- audio level adjust, crop, fields invertion.





2 CHANNELS MENU

At the top left of the home page press **Channels**, with the mouse select the desired number of channels. The available channels number depends on your Multi Cross Converter software license.

🔀 MultiCross	Converte	r	
Channels	Setup	View	Lo
Channels 3x	3		

3 SETUP

	Language	Invarian	t Language (Inv	variant Country	•	Here you can select the Language of the software. Actually the only option
	cangaage	internation	it cangaage (in	anane country		available is Invariant Language (Invariant Country)
				TCP/IP	loa	Here you can enable the logs about the TCP/IP connection and datas
						transmission. Useful if you work with IP sources or targets.
	🔲 Debug log				og	This logging mode records more information than the default Log
				Debug Verbose	log	This logging mode records more information than the Debug Log
	Real-Time	Preview	Full Rate		•	Here you can select the Rate of the preview, choose between 1/2, 1/3, 1/4, 1/5
Bars format	<a< td=""><td>uto/Not Sp</td><td>ecified></td><td></td><td>•</td><td>Here you can select the Bars Format compatibly with your video format: NTSC, PAL, HD, 2K, 4K</td></a<>	uto/Not Sp	ecified>		•	Here you can select the Bars Format compatibly with your video format: NTSC, PAL, HD, 2K, 4K
			VGA compa	tibility mode [VGA compatibility mode allows you to see the preview without any performant video board.
	AV direct o	out	Automatic		•	Direct access to a Decklink video boards. Use it only with specified decklink models. Do not enable this check if you have a Decklink Duo 2, Quad 2 and SDI 4K
			Start loca	al rtmp server		By checking this parameter you will active a RTMP server that will stream all RTMP streams with the IP address of this current PC. This option is useful for the IP streaming or for the WebRTC transmission
Relaunch at: 00:00:00			00:00:00	The Multi Cross Converter will be automatically restarted everyday at this hour		



4

4 VIEW



🗸 Name	Here you can decide to visualize or not the Channel name in the interface panels of the channels
🖌 🛛 Technical Info	Here you can decide to visualize or not the Technical Info in the interface panels of the channels
Font >	Here you can choose the Font for the Name and for the Technical Info in the interface panels of the channels
Backcolor ►	Here you can select the Backcolor of the Name and of the Technical Info in the interface panels of the channels
Forecolor ►	Here you can select the Forecolor of the Name and of the Technical Info in the interface panels of the channels.



5 INTERFACE PANEL OF THE CHANNEL

0



1	Enables/Disables the audio preview of the channel
2	Enables/Disables the video preview of the channel
3	Here you can select the video source. Select between, <bars>, AV DEVICE, FILE, IP,</bars>
	NDI, WEBRTC
4	Once you have selected the desired video source by the next top-down menu, you can
	press this button to enter in the source settings. Go to 5.1, 5.2, 5.3, 5.4, 5.5, 5.6
	paragraphs to read for detailed descriptions of the single source settings.
5	By clicking on this button you will open the panel with the video settings. Go to 5.7
	paragraph to read for detailed descriptions



6	From this button you enter in a window with all the stats and settings related with the video source and format.			
7	By pressing this button you will root the audio of the clip to a desired target sound card			
8	By pressing this button you will root the video to a desired target video card			
9	By pressing this button you activate the streaming of your channel through the NDI protocol.			
10	By pressing this button you can stream the channel video to an IP target: RTMP, UDP, RTSP, IIS, RTMP (FMLE), Windows Media Streaming.			
11	By pressing this button you can send the channel video to an RTC			
12	This is the Led bar of the audio of the channel			
13	By this control you can change the audio volume of the channel			
14	By this Settings button you can easily and fastly access to all channel settings.			
15	If other submenus are available you can open them by clicking on			
15	From this button you enter in a window with all the stats and settings related with your			
	channel video preview and preview format.			



5.1 AVAILABLE VIDEO SOURCES

-

 (numbered as 3 in the previous picture) you should be able to select the desired Video source for your current

5.1.1 <BARS> – SOURCE SETTINGS

By selecting <Bars> you are going to choose Video Bars generator for the current channel. Then the Video Bars will be rooted to all the selected targets. With <Bars> selection you will not have anyother parameter to set.



This <Bars> source is the only one which does not has any setting.



8

5.1.2 AV DEVICE – SOURCE SETTINGS

By selecting the AV DEVICE source you also have to set the desired device parameters. Usually here you can take Video signal from all the Video Cards connected with the PC.



By clicking on the settings 🍄 button the settings tab will be opened. Fill all the desired parameter to set all the audio and video desired settings:

AV Devic	e
Video:	DeckLink Duo 2
Line:	SDI Video & SDI Audio 🔹 R
Format:	<auto not="" specified=""></auto>
Audio:	<from video=""></from>
External	<no audio="" external=""></no>
Format:	<auto not="" specified=""></auto>
	<u>O</u> k <u>C</u> ancel

Video	Between all available Video Devices connected with this PC, select the desired one
Line	This parameter shows you the audio and video interface of the device, for any chosen AV device.
Format	By selecting Auto you automatically choose the selected Video Device video format
Audio	In this menu you can choose between <from video=""></from> and <no audio=""></no> :
	 By selecting <from video=""> the audio will be captured with the related video</from>
	- By selecting <no audio=""></no> the audio will not be captured at all. You can select the desired
	audio from an External Audio Source from the next External parameter



External Here you can choose between all the channels of all the available Audio Devices actuall connected with this PC.	
Format	Audio format selection. By selecting Auto you automatically choose the same Device audio format.

The clickable P button allows you to set for additional parameters if availables The clickable R button allows you to refresh the connection with the selected stream.

By clicking on Cancel you will not apply the setting changes. By clicking on OK you will start the Video Device capture for this channel.



5.1.3 FILE – SOURCE SETTINGS

By selecting File source, you have to select the desired file from your PC or from any folder of your NETWORK.



By clicking on the settings ¹ button the settings tab will be opened. Fill the source file path:

🐹 File	×
File: \\M	EDIA\HD\HD1080_MOV\X-Men3.mov
	NVIDIA GPU decoding 🔲
	<u>O</u> k <u>C</u> ancel
File	You can type here the whole path of your desired file source or you can select it by clicking on the button explained in the following line.
	By clicking on this button you will be able to choose your desired file from your local or network folder.
NVIDIA GPU decoding	If a NVIDIA board is connected to the current PC, this option could be selectable to free the CPU and the internal graphic engine of this Pc from the decoding stress. By checking this parameter this MultiCrossConverter channel offloads any decoding to an external NVidia device.

By clicking on Cancel you will not apply the setting changes. By clicking on OK you will start the Video Device capture for this channel.



5.1.4 IP – SOURCE SETTINGS

By selecting IP source you will be able to catch any IP stream.



By clicking on the settings 🍄 button the settings tab will be opened. Fill all the desired parameter to set all the audio and video desired settings:

💢 IP					×
Url:	udp://127.0.0.1:1	12345			
Params:					
Buffer:	1,0 🚖 (sec)	Reset every: 60	韋 (min)	NVIDIA GPU decoding	
		<u>O</u> k	<u>C</u> ancel		



12

| INTERFACE PANEL OF THE CHANNEL

Url	URL from which you want to catch the stream
-	By clicking on this arrow, you will be able to choose between previous available URLs
Params	Additional parameters
Buffer	Buffer seconds to destress the CPU
Reset every	Resets the connection with the typed Url every minutes decided in this field
NVIDIA GPU decoding	If a NVIDIA board is connected to the current PC, this option could be selectable to free the CPU and the internal graphic engine of this Pc from the overhead. By checking this parameter this MultiCrossConverter channel offloads any decoding to an external NVidia device.

By clicking on Cancel you will not apply the setting changes. By clicking on OK you will start the Video Device capture for this channel.



5.1.5 NDI – SOURCE SETTINGS

By selecting NDI source you will be able to catch any desired NDI feed generated by any NDI encoder. Select the desired NDI feed to set it in the current MULTICROSS CONVERTER channel.





By clicking on the settings tab will be opened. Fill all the desired parameter to set all the audio and video desired settings:

NDI		×
Video:	NDI Receiver	▼ P
Line:	VJPRODEMOROOM (PLY 2) NDI Source at 192.168.99.12:5	962 IP 🔽 R
Format:	<auto not="" specified=""></auto>	▼ P
Audio:	<from video=""></from>	•
External	<no audio="" external=""></no>	•
Format:	<auto not="" specified=""></auto>	•
	<u>O</u> k <u>C</u> ancel	

Video	Displays NDI Receiver is active	
Line	Select between available NDI streams	
Format	 If you select Auto/Not Specified the video format is always the same of the received NDI stream. If you select None the video will be disabled on all the channel targets. 	
Audio	 If From Video is selected, the audio Format is the same of the received NDI stream. By selecting No Audio and No External Audio in the following External parameter Here you can decide to don't have any audio By selecting No Audio and by selecting the desired available Audio source from next External parameter, here you can decide to have a different audio from the one of the Video 	
External	If No Audio is selected in Audio you can choose between all the available Audio Devices.	
Format	 If you select Auto/Not Specified the audio format is always the same of the received NDI stream if From Video is selected in Audio parameter. If you select Auto/Not Specified the audio format is the once captured by the selected External Audio Device. If you select None the audio will be not rooted to the channel targets. 	

The clickable P button allows you to set for additional parameters if availables The clickable R button allows you to refresh the connection with the selected stream.

By clicking on Cancel you will not apply the setting changes. By clicking on OK you will start the Video Device capture for this channel.



5.1.6 WEBRTC (WEB REAL-TIME COMMUNICATION)- SOURCE SETTINGS

By selecting WEBRTC source, for the current channel you will be able to obtain, display and root a WEBRTC video feed generated by a WEBRTC encoder.



By clicking on the settings button the settings tab will be opened. Fill all the desired WebRTC transmission data.:

💢 WebRTO	×	
Server: h	ttps://www.axeltechnology.com:8889	
Room: R	00M1	
Source: 4	CCC6A8F142201 🔽 NVIDIA GPU decoding 🔲	
	<u>O</u> k <u>C</u> ancel	
Server	You can type here the URL of the WebRTC Server by following the followir URL:PORT.	ng syntax



Room	If available type here the room name
Source	If more streams are available in the same room, type here the exact exadecimal code
Source	related with the desired source transmission.
	If a NVIDIA board is connected to the current PC, this option could be selectable to
NIVIDIA CBU deceding	free the CPU and the internal graphic engine of this Pc from the overhead. By
NVIDIA GFU decoding	checking this parameter this MultiCrossConverter channel offloads any decoding to an
	external NVidia device.

In the WEBRTC settings you can type the following URL , in example the following free Axel Technology WEB RTC server: https://www.axeltechnology.com:8889

In case you would not be able to connect through the internet, inside the MultiCrossConverter you can set a local server. To set it go to Setup>Settings>Start local signaling server as shown by the following picture:

Setup	2
General	
Language Invariant	t Language (Invariant Country 🔽 🔲 TCP/IP log 📄 Debug log 📄 Debug Verbose log 0:00 💽 📄 Start minimized 📄 Enable WatchDog service
Settings	
Real-Time Preview	Full Rate 💽 VGA compatibility mode AV direct out Automatic 💌
Bars format	<none></none>
🔲 Start local rtmp se	rver
👿 Start local signalin	g server (requires node js installed)
Folder Width 320 Control 100 Control 1000 Co	 Height 180
	ОК

As you can read it is required an installed node js.



5.2 VIDEO SETTINGS

On each channel it is possible to set some Video trimming and conversion parameters which affect the Video before it will be sent to all the selected targets:

NDI		×
H Crop		
V Crop		
Stretch	Stretch	•
Aspect ratio	Auto	•
Interlacing	Auto	•
Convert Video	<no conversions=""></no>	•
Convert Audio	<auto not="" specified=""></auto>	+
Color Space	Auto	•
	<u>O</u> k <u>C</u> ancel	

H Cron	Set the Herizental grap for the dip $(0 - nc \operatorname{grap} 100 - may \operatorname{grap})$
нстор	
V Crop	Set the Vertical crop for the clip (0 = no crop, 100 = max crop)
Stretch	 Set the clip stretch option by choosing between: Stretch, Crop, Preserve AspectRatio and Preserve AspectRatio Full. Stretch: the video will be stretched to fit in the whole target resolution without respecting the original aspect ratio Crop: the video will be exactly the original one (No Scale mode) without adding black bars Preserve aspect ratio: preserves the original aspect ratio independently of the target aspect ratio. Preserve aspect ratio full: preserves the original aspect ratio but the video will be
A 	exactly filled in the target aspect ratio by adding black bars in needed.
Aspect ratio	Set the desired aspect ratio. Choose between: Auto, 4:3, 16:9. If auto is set the aspect ratio will be the ones defined on the source. Select 4:3 to force AR manually. Select 16:9 to force AR manually.
Interlacing	Set the desired one Interlacing mode by choosing between: Auto, Top, Bottom, Progressive. If Auto the Interlacing mode will be taken from the original source. By choosing Top the fields scan will be forced to start from the top. By choosing Bottom the fields scan will be forced to start from the bottom. By choosing Progressive the field scan will follow the fields progression.



Convert Video	By this parameter it will be possible to have a real-time conversion of the Video format for all the selected targets. Open the drop-down menu and select the conversion to the desired Video Format. By selecting <no convertion=""></no> the original Audio/Video format of the source will be kept. It will not be possible to select any conversion to different Video formats or Audio formats. By selecting <auto not="" specified=""></auto> the original video format of the source will be kept without changes. It will be possible to select a conversion to a different Audio Format through the next Convert Audio menu.
Convert Audio	By this parameter it will be possible to have a real-time conversion of the Audio format for all the selected targets. Open the drop-down menu and select the conversion to the desired Audio Format. By selecting <auto not="" specified=""></auto> the original Audio format of the source will be kept without changes.
Color Space	Select between available Color Spaces the desired one to organize colors in the most suited way. By selecting Auto the original Color Space of the source will be kept without changes.

5.3 AVAILABLE TARGETS

Multi Cross Converter most important feature is to root the Video to a desired target or to multiple targets.

In fact, if needed, more targets could receive the same video simultaneously.

On each channel you can select and set the desired targets from this useful TARGET BAR:



The color of the single target name refers to a target state. In this example we are going to consider the NDI target, but all the colors have the same meaning for all the available targets:



white color of the target name means that the target is not selected



red color of the target name means:

1. In the case of Audio or Audio/Video device could be related with the absence of proper devices

2. In the case of other targets could be related with wrong settings or with the absence of connection to a LAN network



yellow color of the target name could mean:

1. there are available Audio/Video devices usable as A or AV targets

2. On other 3 network targets, it means the yellow one is well-set and the presence of a good connection to a LAN network.

For each available target, by clicking on the 🚺 button you will open a tab with all the stats and parameters of the related target.



5.3.1 A (AUDIO DEVICE) – TARGET SETTINGS

If you want to use an Audio Device as your channel target enable the button



By selecting this target you will route only the audio of the Video assigned to this MULTICROSS CONVERTER channel .

to enter in the Audio Target settings: Press

Audio De	evice			×
Audio:	Default Audio D)evice		•
		<u>O</u> k	<u>C</u> ancel	

By expanding Audio drop-down menu you will be able to select the desired Audio Device between all the available ones:

Audio De	vice	×
Audio:	Default Audio Device	-
	Default Audio Device	
	Realtek Digital Output (2- Realtek High Definition Audio)	
	Speakers (Blackmagic DeckLink Duo 2 (1) Audio)	
	Speakers (Blackmagic DeckLink Duo 2 (2) Audio)	
	Speakers (Blackmagic DeckLink Duo 2 (3) Audio)	
	Speakers (Blackmagic DeckLink Duo 2 (4) Audio)	

By clicking on Cancel you will not apply the setting changes. By clicking on OK you will start the Video Device capture for this channel with the current parameters.

if the desired audio target is set correctly the D A O button turns to yellow.



5.3.2 AV (AUDIO VIDEO DEVICE) – TARGET SETTINGS

If you want to use a Video Device as your channel target enable the button **EXAMPLE**. By selecting this target you will route the entire Video Signal assigned to this MULTICROSS CONVERTER channel..

AV to enter in the Video Target settings: Press

AV Devi	ce	×
Video:	DeckLink Duo 2	▼ P
Line:	SDI	R
Format:	HD1080-50i HDYC 1920x1080@25.00iT 16:9	• P
Audio:	48000 Hz, 2 Ch, 16-bit	•
Key:	Off	•
	<u>O</u> k <u>C</u> ancel	

AV

By expanding Video drop-down menu you will be able to select the desired Video Device between all the available ones:





By **Line** field you will be able to read the signal type:

AV Devic	e	×
Video:	DeckLink Duo 2	▼ P
Line:	SDI	R
Format:	SDI	P
Audio:	48000 Hz, 2 Ch, 16-bit	
Key:	Off	•
	<u>O</u> k <u>C</u> ancel	

By expanding Format drop-down menu you will be able to select the desired video format between all the available ones:

V Devid	e	×
/ideo:	DeckLink Duo 2	• p
ne:	SDI	💌 R
nat:	HD1080-50i HDYC 1920x1080@25.00iT 16:9	🔽 p
	HD1080-50i HDYC 1920x1080@25.00iT 16:9	^ .
υ.	HD1080-59i HDYC 1920x1080@29.97iT 16:9	
	HD1080-60i HDYC 1920x1080@30.00iT 16:9	
	HD1080-50p HDYC 1920x1080@50.00p 16:9	
_	HD1080-59p HDYC 1920x1080@59.94p 16:9	
	HD1080-60p HDYC 1920x1080@60.00p 16:9	
	2K-DCI-23p HDYC 2048x1080@23.98p 256:135	
	2K-DCI-24p HDYC 2048x1080@24.00p 256:135	
	2K-DCI-25p HDYC2048x1080@25.00p 256:135	
	2K-DCI-50p HDYC 2048x1080@50.00p 256:135	~



By expanding Audio drop-down menu you will be able to select the desired sample rate value (including channels number and bit depth) between all the options available:

Video:	DeckLink Duo 2	• P
.ine:	SDI	R
ormat:	HD1080-50i HDYC 1920x1080@25.00iT 16:9	• p
Audio:	48000 Hz, 2 Ch, 16-bit	
(ev:	48000 Hz, 4 Ch, 16-bit	^
	48000 Hz, 6 Ch, 16-bit	1
	48000 Hz, 8 Ch, 16-bit	
	48000 Hz, 10 Ch, 16-bit	
-	48000 Hz, 12 Ch, 16-bit	
-	48000 Hz, 14 Ch, 16-bit	
	48000 Hz, 16 Ch, 16-bit	
	48000 Hz, 1 Ch, 16-bit	
	44100 Hz, 2 Ch, 16-bit	
	44100 Hz, 4 Ch, 16-bit	~



By expanding Key drop-down menu you can choose between 3 available channel options regarding alphacannel and key. Off: with this option, the original alphachannel of the input video will be lost. It will not be possible to have overlay features on the targets.

Internal: with this option, the original alphachannel of the input video will be preserved and the overlay can be achieved by the connected videoboard itself in "video in/ video out" mode.

External: with this option, the original alphachannel of the input video will be preserved and will be sent to the videoboard using key and fill outputs or to other targets.

AV Devic	e	×
Video:	DeckLink Duo 2	▼ p
Line:	SDI	▼ R
Format:	HD1080-50i HDYC 1920x1080@25.00iT 16:9	• P
Audio:	48000 Hz, 2 Ch, 16-bit	*
Key:	Off	
	Off	
	Internal	
	External	

The clickable P button allows you to set for additional parameters if availables The clickable R button allows you to refresh the connection with the selected stream.

By clicking on Cancel you will not apply the setting changes.

By clicking on OK you will start the Video Device capture for this channel with the current parameters.



if the desired video target is set correctly the

button turns to yellow.



5.3.3 NDI STREAM SETTINGS

If you want to generate a NDI stream enable the button By selecting this target you will generate a NDI stream with the Video Signal assigned to this MULTICROSS CONVERTER channel.



Press to enter in the NDI Target settings: The Video field shows you NDI Renderer is enabled.

The Line field in NDI target is disabled.



By expanding Format drop-down menu you will be able to select the desired video format between all the available ones:

NDI

NDI		
Video:	NDI Rengerer	*
Line:	1	
Format:	HD1080-50i HDYC 1920x1080@25.00iT 16:9	
Audior	HD1080-50i HDYC 1920x1080@25.00iT 16:9	^
Audio.	HD1080-59i HDYC 1920x1080@29.97iT 16:9	
	HD1080-60i HDYC 1920x1080@30.00iT 16:9	
	HD1080-50p HDYC 1920x1080@50.00p 16:9	
	HD1080-59p HDYC 1920x1080@59.94p 16:9	
	HD1080-60p HDYC 1920x1080@60.00p 16:9	
	2K-DCI-23p HDYC 2048x1080@23.98p 256:135	
	2K-DCI-24p HDYC2048x1080@24.00p 256:135	
	2K-DCI-25p HDYC 2048x1080@25.00p 256:135	
	2K-DCI-50p HDYC 2048x1080@50.00p 256:135	~



By expanding **Audio** drop-down menu you will be able to select the desired configuration that includes: sample rate, channels number and bitrate.



The clickable ^P button allows you to set for additional parameters if availables The clickable ^R button allows you to refresh the connection with the selected stream.

By clicking Cancel you will not apply the setting changes.

By clicking OK you will start the Video Device capture for this channel with the current parameters.





5.3.4 IP STREAM SETTINGS

If you want to generate an IP stream enable the button

By selecting this target you will generate a NDI stream with the Video Signal assigned to this MULTICROSS CONVERTER channel.

IP



to enter in the IP Target settings:

IP			×
Target	udp:// 127.0.0.1:1023 4		Import
Format	UDP Streaming 🔽 🗜		Export
Video Codec	MPEG-2 Video 🔽 🖣 Vid	deo BitRate 5M	Export
Audio Codec	MP3 Lame (MPEG audio layer 3) 🔽 🖡 🛛 Au	udio BitRate 128K	
Extra parms		_	
		4	
Encoder string	lec='mpeg2video' 🛛 🔨		
	video::b='5M' audio::codec='libmp3lame'	~	
	<u>O</u> k <u>C</u> ancel		

Before typing the streaming URL select the desired streaming protocol from Format menu:



AxelTech

After streaming protocol selection, type in Target field the desired streaming URL. In this example we have chosen the UDP protocol and we typed this UDP Url: <u>udp://127.0.0.1:1023</u>



By expanding Video Codec menu select the desired format:



If needed, type extra parameteres:

Extra parms	, p
-------------	-----

In the following no editable field you can read a resume of the all previous set parameters:

Encoder string format='flv' protocol='rtmp://' merge_tracks='true' video::b='5M' / audio::codec='libmp3lame' audio::ar='44100'

if IP target is set correctly the





5.3.5 RTC STREAM SETTINGS

If you want to start a WebRTC transmission enable the button



By selecting this target you will generate a WebRTC transmission with the Video Signal assigned to this MULTICROSS CONVERTER channel.

Press **RTC** to enter in the RTC Target settings:

WebRTC		×
Server: https://www.a	xeltechnology.com:8889	
Room: MXC	Source: 0C9D9280182701	Video Bitrate: 2M
Video Enc.: H264	Audio Enc.: opus	Audio Bitrate: 128k
Video: NTSC UYVY 72	0x486@29.97iB 4:3	▼ P
Audio: 48000 Hz, 2 Ch	ı, 16-bit	•
	<u>O</u> k <u>C</u> ancel	

In the Server field type the URL of your WebRTC server if you have your own one available,

If you do not have one, you can use Axel WebRTC server by typing in this parameter the following link: <u>https://www.axeltechnology.com:8889</u> as shown in the following picture:

|--|

Room parameter is a sort of transmission lable. MXC automatically assign a default one, but you could change it with a desired customized one:



Source parameter is an automatic 14 digits exadecimal code generated by MultiCross Converter to identify this specific stream inside multiple streams of the same Room:

Source:	0C9D9280182701

Inside Video Bitrate if needed you can change the current value and the unit prefix:

Video Bitrate: 2M



By opening the **Video Enc.** drop-down menu you can change and select the desired Video Coding format:

Video End	.: H264 🔽	Aud
Video:	VP8	Ð
	VP9	-
Audio:	H264	
	Nvidia GPU H264	4 J

Audio Enc. parameter is set on OPUS codec by default:

Audio Enc.:	opus	🔽 Auc
29.97iB 4:3	opus	

Inside Audio Bitrate, if needed you can change the current value and the unit prefix:

Audio Bitrate: 128k

By opening the **Video** drop down menu you can choose the desired Video Standard:

Video:	NTSC UYVY 720x486@29.97iB 4:3	P	×
Audio	NTSC UYVY 720x486@29.97iB 4:3		
Autio.	NTSC-23p UYVY 720x486@23.98p 4:3		<u> </u>
	NTSC-16x9 UYVY 720x486@29.97iB 16:9		
	PAL UYVY 720x576@25.00iT 4:3		:
	PAL-16x9 UYVY 720x576@25.00iT16:9		P
	HD720-50p HDYC 1280x720@50.00p 16:9		
h	HD720-59p HDYC 1280x720@59.94p 16:9		
1	HD720-60p HDYC 1280x720@60.00p 16:9		
-	HD1080-23p HDYC 1920x1080@23.98p 16:9		
	HD1080-24p HDYC 1920x1080@24.00p 16:9	/	



By opening the Audio drop-down menu you can choose the desired configuration that includes sample rate, channel numbers and audio bit-rate:

Audio:	48000 Hz, 2 Ch, 16-bit	-
	48000 Hz, 2 Ch, 16-bit	^
	48000 Hz, 4 Ch, 16-bit	
	48000 Hz, 6 Ch, 16-bit	
-	48000 Hz, 8 Ch, 16-bit	
	48000 Hz, 10 Ch, 16-bit	
	48000 Hz, 12 Ch, 16-bit	
	48000 Hz, 14 Ch, 16-bit	
	48000 Hz, 16 Ch, 16-bit	
	48000 Hz, 1 Ch, 16-bit	
	44100 Hz, 2 Ch, 16-bit	~



6 LOGS

From this useful section you can read all the MULTICROSS CONVERTER logs.

38	Mu	ItiCros	sCon	/erter								×
Calendar 04/09/2019				04/0	9/2019	Log 70 (70)						
	 settembre 2019 		►	DatTime Application		LogType	Message	^				
lu	ın	mar	mer	gio	ven	sab	dom	04/09/2019 12:14:10	2	EXCEPTION	Fill IP input source connection exception: La directory o il file	
2	6	27	28	29	30	31	1	04/09/2019 12:13:57	MultiCrossCon	INFO	The MultiCrossConverter settings has been saved.	
	2	3	4	5	6	7	8	04/09/2019 12:13:57	1	INFO	Fill IP output source successfully.	
9	9	10	11	12	13	14	15	04/09/2019 12:13:44	MultiCrossCon	INFO	The MultiCrossConverter settings has been saved.	
	0	24	18	26	20	21	22	04/09/2019 12:13:44	1	ERROR	Fill IP output source failed.	
3	0	1	2	3	4	5	6	04/09/2019 12:13:43	MultiCrossCon	INFO	The MultiCrossConverter settings has been saved.	
Т	Today 04/09/2019						04/09/2019 12:13:27	MultiCrossCon	INFO	The MultiCrossConverter settings has been saved.		
	10003/04/05/2015				_		04/09/2019 12:12:49	MultiCrossCon	INFO	The MultiCrossConverter settings has been saved.		
	😰 Filters					_	04/09/2019 12:12:34	MultiCrossCon	INFO	The MultiCrossConverter settings has been saved.		
	NONE ^					^	04/09/2019 12:12:34	1	INFO	Fill IP output source successfully.	~	
	M INFO					~	Show Logs 🕒 🍺 🗩					
MultiCrossConverter ^ Fill IP input source connection exception: La directory o							ption: La directory o il file è danneggiato	e				
	v illeggibile. (Eccezione da HRESULT: 0x80070570)							0x80070570)				

Select from the top left calendar the desired date. In Red days you will find detected errors:

Calendar 04/09/2019									
•		sette	mbre 2		►				
lun	mar	mer	gio	ven	sab	dom			
26	27	28	29	30	31	1			
2	3	4	5	6	7	8			
9	10	11	12	13	14	15			
16	17	18	19	20	21	22			
23	24	25	26	27	28	29			
30	1	2	3	4	5	6			
Today 04/09/2019									



From Filters menu you can active some log display modes

Inside first subgroup select all the desired log types that you want to view between: NONE, INFO, ERROR, RECEIVED, SENT, EXCEPTION, TCPIP, DEBUG, DEBUG VERBOSE, WARNING.

🛒 Filters							
NONE	~						
INFO							
ER FRANCE	*						
MultiCrossConverter	^						
1	~						
☑ 1 ☑ 2	~						

Inside second subgroup select all the desired MultiCrossConverter channels for which you want to view logs: By checking MultiCrossConverter you will enable logs viewer of MultiCross Converter general settings. By checking on the numbers below you will view the logs for the selected channel numbers: 1, 2, 3, 4, 5.

The main Log tab is the logviewer:

Log 70 (70				
DatTime	Application	LogType	Message	^
04/09/2019 12:14:10	2	EXCEPTION	Fill IP input source connection exception: La directory o il file	
04/09/2019 12:13:57	MultiCrossCon	INFO	The MultiCrossConverter settings has been saved.	
04/09/2019 12:13:57	1	INFO	Fill IP output source successfully.	
04/09/2019 12:13:44	MultiCrossCon	INFO	The MultiCrossConverter settings has been saved.	
04/09/2019 12:13:44	1	ERROR	Fill IP output source failed.	
04/09/2019 12:13:43	MultiCrossCon	INFO	The MultiCrossConverter settings has been saved.	
04/09/2019 12:13:27	MultiCrossCon	INFO	The MultiCrossConverter settings has been saved.	
04/09/2019 12:12:49	MultiCrossCon	INFO	The MultiCrossConverter settings has been saved.	
04/09/2019 12:12:34	MultiCrossCon	INFO	The MultiCrossConverter settings has been saved.	
04/09/2019 12:12:34	1	INFO	Fill IP output source successfully.	4



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By selecting the desired log line, in the subwindow below you can read the full log message

Show Logs

The MultiCrossConverter settings has been saved.

Below some buttons that allow you to make some operation with the selected log:



OPEN WITH NOTEPAD

7 LICENSE

This button allows you to fastly consult all the details connected with your license and your dongle serial number.





8 ABOUT

About section gives you information about Axel Technology – MultiCross Converter developer company.





9 FINAL CONSIDERATIONS & AXEL TECHNOLOGY CONTACTS

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