

RELAY

Technical Documentation Advanced ".ini" File Options

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1. Introduction

RELAY supports a number of options which can be enabled (or disabled) by editing the "RELAYxxx.ini" file, where xxx is the application name: VSC, VRX4, VRX8, VirtualPatchBay or StreamMonitor.

The file can be found in the "C:\ProgramData\Lawo\R3LAY\" folder on the PC running the **RELAY** service. If more than one **RELAY** product is installed, then you will see a separate ".ini" file for each application.

In each case, use the following steps to update the file:

1. Using a plain text editor, add the correct syntax to the ".ini" file.
2. Save the file, taking care to retain the same file name and folder location.
3. Stop and then restart the **RELAY** application - the software will read the ".ini" file contents and update its feature set accordingly.

An ".ini" file [template](#) can be used to distribute parameters across several workstations or **RELAY** applications.

2. Using an ".ini" File Template

A separate *.ini" file can be used to distribute parameters across several workstations or **R3LAY** applications. The template can be stored locally or on a centralized file server.

This feature works as follows. On start up, **R3LAY** always reads its local "R3LAYxxx.ini" file. If a template is specified using the syntax given below, then the template is also read and its entries appended or overwritten to the local file.

Syntax

To enable this feature, add the following syntax to the local "R3LAYxxx.ini" files:

```
[IniTemplates]
PathLocalTemplate=\\fileserver\Lawo\R3lay\R3layTemplate.ini
```

The file name used can be any, providing it matches the name and path defined above.

Implementation

Then edit the template "*.ini" file and move it to the specified folder location.

When you next stop and start the **R3LAY** application on each workstation, the software will update the local ".ini" file contents as described above.

The examples below demonstrate some of the ways you can use this feature.

Example 1: Adding Workstation Names to Stream Names

If the following syntax is added to the "R3layTemplate.ini" file, then the result will be that Bonjour is switched off, and the workstation name will be automatically added to the stream names on all connected workstations:

```
[Debug]
UseBonjour=0
StreamNameAddComputerName=0
```

Example 2: Automatic Editing of Stream Parameters

Similarly, you can use variables to define certain stream parameters. So, if the following syntax is added to the "R3layTemplate.ini" file, the first stream can have a different Name and Multicast Address:

```
[R3layVRX8\RTSPSource\0]
Instance=1
Name=R3LAY%REGISTRY:HKEY_LOCAL_MACHINE\SOFTWARE\DSA\VisTool:StationID:String%_sla
MulticastAddr=230.155.139. %REGISTRY:HKEY_LOCAL_MACHINE\SOFTWARE\Lawo\R3layVRX8:MulticastStream0:DWORD%
```

Example 3: Using Different Templates for Different Workstations and Users

It is also possible to use variables within the template name. Thus you can specify a different template for each workstation or user.

For example, if the following syntax is added to the local "R3LAYxxx.ini" files, then each workstation will read its own "*.ini" template from a centralized server:

```
[IniTemplates]
PathLocalTemplate=\\fileserver\Lawo\R3lay\R3layTemplate%REGISTRY:HKEY_LOCAL_MACHINE\SOFTWARE\DSA\VisTool:StationID:String%.ini
```

Similarly, the variable can be based on the environment variable username:

```
[IniTemplates]
PathLocalTemplate=\\fileserver\Lawo\R3lay\R3layTemplate%USERNAME%.ini
```

3. ".ini" File Options

Stream Setup

Name	Syntax & Description	Values
Setup SPS Connections	<pre>[Debug] StreamingUseHitlessMerge=0</pre> <p>This option enables SMPTE ST2022-7 compatible streaming, otherwise known as Seamless Protection Switching (SPS) or Hitless Merge. Once enabled, you can transmit and receive streams using two NICs: default (NIC 1) and alternate (NIC 2). Note that SPS is NOT supported by RELAY VSC.</p>	0 or 1, default is 0
Setup Automatic Multicast Address Generator	<pre>[Streaming] MulticastIPv4Pattern=239.NIC3.NIC4.n</pre> <p>This option allows you to set your own default pattern for the multicast address generator. The value is an IPv4 pattern, where:</p> <ul style="list-style-type: none"> the number is a fixed value in the range 0 to 255. NIC3 / NIC 4 is the corresponding number of the NIC sending the stream (NIC1 to NIC4 are permitted). n is an increasing number in the range 0 to 255. x is a random number in the range 0 to 255. 	as per description
Define Offset for Second Multicast Address	<pre>[Streaming] SecondMulticastIPv4Offset=0.0.0.1</pre> <p>When sending Hitless Merge streams, you can add an offset to the multicast address for the second stream. The value is an IPv4 pattern which defines the offset for each digit.</p>	as per description
Add Support for Source Specific Multicast (SSM)	<pre>[Streaming] UseStreamSinkSSM=0</pre> <p>This option adds support for Source Specific Multicast (SSM) to the network driver. The driver version must be >= 1.4.0.11 For SSM to work, the value must be set to 1 on all IGMPv3 members. SSM is a method of delivering multicast packets in which the only packets delivered to a receiver originate from a specific source address. Thus, SSM reduces demands on the network and improves security.</p>	0 or 1, default is 0
Define Default RTP Media Payload	<pre>[Ravenna] StreamPayloadType=</pre> <p>This option defines the default RTP media payload type if it is not specified elsewhere (i.e. via Ember+).</p>	leave empty or enter value (95 to 255), default is empty
Direct Audio Switching	<pre>[Debug] UseStreamReceiverDirectConnection=0</pre> <p>This option activates direct audio routing for streams switched to stream receivers. Once enabled, the connections from the receiver itself are used as a template for how to connect the stream.</p>	0 or 1, default is 0
Define WAN Connections (in addition to LAN Connections)	<pre>[Debug] WanNICDefault= WanNICAlternate=</pre> <p>This option supports two additional WAN NICs to support stream translations between LAN and WAN. In this instance, you may have up to two NICs for WAN and two NICs for LAN.</p>	leave empty or enter NIC name
Setup Additional Values	<pre>[Debug] DialogAddStreamSourceNbChannels=1,2,4,8,12,16,24,32,48,64 DialogAddStreamSourceSamplesPerFrame=4,8,12,16,24,32,48,64,96,128,192,240,256,480,512 DialogSettingsHostSamplerates=32000,44100,48000,88200,96000</pre> <p>This option defines the values that appear in the drop-down menus when you add a stream: Channels, Frame Size (samples per packet) and Sample Rate. Any value is permitted, so please take care to enter only reasonable values. For the number of channels, any value can be added from 1 to 64. For sample rates, note that WDM drivers support only 44.1kHz and 48kHz, while ASIO clients and streaming support other options. A typical example is shown above.</p>	as per description

3. ".ini" File Options

Name	Syntax & Description	Values
Define New Stream Delay Time	<pre>[Debug] NewStreamInfoDelayMilliSec=5000</pre> <p>This option defines the time (in ms) between the arrival of a stream announcement and the stream being made available inside RELAY.</p>	enter value in ms (0 to 30000), default is 5000

Stream Announcement

Name	Syntax & Description	Values
Setup Bonjour	<pre>[Debug] UseBonjour=INT</pre> <p>This option defines the type of Bonjour implementation or deactivates Bonjour. The default value (INT) uses the internal C++ flavour. All other values result in Apple's mDNSResponder. (From Version 3.0.0.181, the value DSA is not supported.)</p>	0, 1, TRUE, APPLE or INT, default is INT
Define Node Names	<pre>[Debug] BonjourNodeNameDefault= BonjourNodeNameAlternate=</pre> <p>This option defines the node names published to the network via Bonjour for your computer's NICs. The alternate name applies if SPS / Hitless Merge is enabled.</p>	leave empty or enter node name
Define Stream Name	<pre>[Debug] StreamNameAddComputerName=1</pre> <p>This option adds the computer name to all stream names, resulting in names like "stream01 (on xxxx)". This makes it easy to identify streams on the network.</p>	0 or 1, default is 1
Setup mDNS Announcement Rings	<pre>[Debug] UseBonjour=INT UseBonjourAddress1=224.0.0.251 UseBonjourPort1=5353 UseBonjourAddressName1=Ring 1 UseBonjourAddress2=224.0.0.252 UseBonjourPort2=5353 UseBonjourAddressName2=Ring 2 UseBonjourAddress3=224.0.0.253 UseBonjourPort3=5353 UseBonjourAddressName3=Ring 3 UseBonjourAddress4=224.0.0.254 UseBonjourPort4=5353 UseBonjourAddressName4=Ring 4</pre> <p>This option allows you to define up to four separate mDNS announcement rings. The system listens on all of the defined rings for stream announcements, and allows you to select an individual ring or rings when you add a stream. The "UseBonjourAddressName" values name the rings in the GUI.</p>	leave empty or set (as shown)
Setup SAP Support	<pre>[Debug] UseSAP=1 (default 0) UseSAPDoSDPSort=1 (default 1) UseSAPAddress1=239.255.255.255 UseSAPPort1=9875 UseSAPAddress2= UseSAPPort2=9875 UseSAPAddress3= UseSAPPort3=9875 UseSAPAddress4= UseSAPPort4=9875</pre> <p>If this option is enabled, the software listens for SAP announcements, and announce streams to the network via SAP. This provides an alternative method of stream detection to the usual mDNS/Bonjour. Up to four SAP announcement rings can be specified. The "UseSAPDoSDPSort" value affects the ordering of SDP lines within the SAP message.</p>	0 or 1, default is 0
Define TTL for mDNS Packets	<pre>[Debug] UseBonjourTTL=0</pre> <p>This option defines a TTL for outgoing mDNS UDP packets.</p>	0 to 255, default is 0 (which results in OS default TTL=1)

Name	Syntax & Description	Values
Define TTL for SAP Packets	[Debug] UseSAPTTL=0 This option defines a TTL for outgoing SAP UDP packets.	0 to 255, default is 0 (which results in OS default TTL=1)
Setup UniCast without RTSP	[Debug] StreamingUseDirectUnicast=0 This option can be used to do unicast without RTSP communication. When the option is enabled, you can enter stream destination IPs which are not multicast. Any IP address can be entered in the Multicast Address field, and there will be no test to check if the value is a valid multicast address.	0 or 1, default is 0
Define Send Multicast Join/Leave	[Debug] StreamSenderJoinMulticast=0 When this option is enabled, the stream senders issue a multicast join/leave. This can be used to avoid UDP packet flooding on certain types of network switch.	0 or 1, default is 0
Send Stream SDPs as mDNS Packet	[Debug] UseBonjourSDPExtension=0 This option supports an mDNS extension to send stream SDPs directly in a mDNS packet.	0 or 1, default is 0
Define the Media Index inside SDP	[Ravenna] NICDefaultSDPMediaSelection=MediaIndex:0 NICDefaultSDPMediaSelection=MediaID:primary This option is needed only in routed networks, such as a Nevon network. It defines the part of the SDP which should be used for the default NIC. The syntax is shown below. For the MediaIndex, enter either an index number (starting from 0) or id (defined in the SDP line "a=mid:...").	as per description
Support Static SDP Stream List	[SDPStreams] NbStreams=1 [SDPStream_1] Interface=Default Name="Rav.Out8" SDP="v=0\r\no=- 06904238260008 0 IN IP4 10.2.20.90\r\ns=Rav.Out8\r\nt=0 0\r\na=clock-domain\ :PTPv2 0\r\na=ts-refclk\ :ptp=IEEE1588-2008\ :00-0B-72-FF-FE-05-85- A8\ :0\r\na=mediaclk\ :direct=0\r\nm=audio 5004 RTP/AVP 98\r\nnc=IN IP4 239.20.90.8/5\r\na=source-filter\ : incl IN IP4 239.20.90.8 10.2.20.90\r\na=rtpmap\ :98 L24/48000/2\r\na=framecount\ :32\r\na=recvonly\r\na=ptime\ :0.66 6\r\na=sync-ime\ :0\r\na=mediaclk\ :direct=0\r\n"	as per description
Setup Search Text	[Debug] DialogAddStreamSinkUseSearchAsFilter=0 When this option is enabled, the "Search" field in the 'Available Streams' dialog box can be used to filter the list of streams. Enter your filter text into the "Search" field and press Refresh - all streams which match the filter are shown. Clear the "Search" field and press Refresh again to see the complete list. Note that the search text is case sensitive.	0 or 1, default is 0

Synchronization

Name	Syntax & Description	Values
Set WDM Clock to PTP	[Debug] UsePTPtoWDMClockSyncFactor=0 This option sets the WDM clock to PTP by transmitting the PTP clock factor from the application to the WDM driver. This options requires a WDM driver version >= 1.6. You can check the WDM driver version from the About menu (click on the Lawo logo and then select "About").	0 or 1, default is 0
Setup PTP Delay Request	[Debug] PTPUseSyncOnly=1 This option deactivates PTP Delay Request messages. This can slightly improve the precision of PTP. Under normal circumstances, it is not needed.	0 or 1, default is 1

Network Compensation

Name	Syntax & Description	Values
Setup Wait Time Before Processing Buffer	[Debug] SampleDataBufferTimeout=15 This option sets the wait timeout in milliseconds for data buffers before the buffer is processed.	1 to 1000, default is 15
Setup Wait Time Before Processing Connection	[Debug] SampleDataConnectionTimeout=15 This option sets the wait timeout in milliseconds for data buffers before a connection is processed.	1 to 1000, default is 15
Setup Wait Time Before Processing WDM Driver	[Debug] WDMDriverTimeout=5 This option sets the wait timeout in milliseconds for WDM drivers before the buffer is processed.	1 to 50, default is 5
Setup Window Resend Size if Packets are too late	[Debug] StreamDiscardPacketsTooLateMilliSecs=0 Packets which are too late by this amount of time are discarded and not sent. The option can be used to avoid heavy packet bursts. A value of 0 means no discarding of packets even if they are late. The time is set in milliseconds.	1 to 100000, default is 15
Define What To Do in Case Of Drifting Streams	[Debug] ClockDriftCompensation=NONE This option defines what happens if a connection needs to be corrected due to under or overruns (caused by drifting clocks or performance jitter). The possible values are "NONE", "CROSSFADE", "CHECKPHASE" or "CHECKCLOCK". The default is "NONE". <ul style="list-style-type: none"> CROSSFADE - a small crossfade is added to smooth the audio correction. CROSSFADE CHECKPHASE - the software performs a phase check to find an appropriate sample position and then adds a small crossfade. CHECKCLOCK - the software attempts to compensate for the different sample clocks by adding or dropping random samples. 	as per description
Setup Cross Fade Behaviour in Case of Drifting Streams	[Debug] DropoutCrossfadeSamples=64 In the case where a crossfade is applied, this option sets the crossfade duration (in samples).	0 to 512, default is 64
Define Search Area for Phase Auto Correction in Case Of Drifting Streams	[Debug] DropoutPhaseSearchSamples=0 In the case where a phase check is performed, this option defines the range of samples searched to find the best match for the audio correction.	0 to 512, default is 0
Define Audio Buffer Size	[Debug] SampleDataBufferSizeMilliSec=-1 This option sets the buffer size for each audio object inside RELAY. Defining a large buffer size can be used to compensate for high jitter values in the incoming or outgoing audio signals.	500 to 30000, or -1 for default

Ember+

Name	Description	Values
Setup Stream Switching via Ember+	[Streaming] UseEmber=0 This option allows stream parameters to be read and controlled via Ember+. For example, to switch streams to and from RELAY.	0 or 1, default is 0
Define EMBER+ Stream Interval	[Interfaces] EmberStreamInterval=50 This option sets the number of milliseconds until a new value is sent for Ember+ streams (i.e. peakmeter values).	10 to 5000, default is 50
Improved Performance for Large Matrix	[Debug] UseSinkSourceEmberMatrix=0 This option switches the SourceToSink matrix to an Ember+ matrix for each streaming connection. It can be used to improve the performance of a large matrix.	0 or 1, default is 0

3. ".ini" File Options

Name	Description	Values
VRX: Setup Extended EmBER+ Tree for GUI	<p>[Debug] UseJadeStudioFullEmber=0</p> <p>This option applies to RELAY VRX4 and VRX8. When enabled, the Ember+ tree is extended to allow control of the complete GUI.</p>	0 or 1, default is 0
VPB: Define Additional EmBER+ Matrix View	<p>[GUI] EmberMenuCommands=0</p> <p>This option applies to RELAY VirtualPatchBay. It allows you to add individual inputs, outputs and summing points to the Ember+ tree (via the context menu in the VPB routing matrix).</p>	0 or 1, default is 0

Diagnostics

Name	Syntax & Description	Values
Setup Alert Manager	<p>[Debug] UseAlertManager=0</p> <p>This option activates the Alert Manager to monitor events that are not obvious to the user. Once enabled, a dialog box appears if an alert is detected. The Alert Manager detects the following situations:</p> <ul style="list-style-type: none"> • NICs using more than one IP address. • Suddenly missing UDP stream packets. • Duplicated multicast addresses. 	0 or 1, default is 0
Setup AlarmLog and Matrix Server Connections	<p>[Interfaces] AlarmLogActive=1 AlarmLogNIC1= AlarmLogIPAddress1=x.y.z.t AlarmLogPort1=18200 AlarmLogNIC2= AlarmLogIPAddress2=x.y.z.t AlarmLogPort2=18200 AlarmLogMatrixServerActive=0 AlarmLogMatrixServerIDOffset=0</p> <p>This option supports connections to a DSA Alarmlog PC and/or Matrix Server.</p> <p>The "AlarmLogActive" and "AlarmLogMatrixServerActive" values can be set to either 0 or 1, the default is 0.</p> <p>The "AlarmLogIPAddress1" and "AlarmLogIPAddress2" values define the IP address of the main and redundant Alarmlog PC. In each case, enter either an IP address or name.</p> <p>The "AlarmLogMatrixServerIDOffset" sets a general offset for all IDs from 0 to 65535.</p>	as per description
Setup Latency Measuring	<p>[Debug] UseLatencyMeasuring=0</p> <p>This option should only be used by an administrator in the case of latency issues. It can be used to measure and define the total latency of samples received in a stream and sent to a stream.</p>	0 or 1, default is 0

SysLog

Name	Syntax & Description	Values
Setup SysLog	<p>[Interfaces] SysLogActive=0</p> <p>Activates the sending of some syslog messages.</p>	0 or 1, default is 0
Define SysLog IP	<p>[Interfaces] SysLogIPAddress=127.0.0.1</p> <p>Defines the IPv4 address of the syslog server.</p>	enter IP address
Define SysLog Port	<p>[Interfaces] SysLogPort=514</p> <p>Defines the port number of the syslog server.</p>	enter port number

Virtual Machine (VM)

Name	Syntax & Description	Values
Setup VM Mode	<pre>[Debug] UseVMWareAPI=0</pre> <p>When this option is enabled, the software tries to load a vmware dll to detect whether it is running on a Virtual Machine and improve migration.</p>	0 or 1, default is 0
Fallback Monitor Rate in VM	<pre>[Debug] UseMonitorRefreshRateFallback=0</pre> <p>This option may be needed if the software is running on a Virtual Machine and the monitor refresh rate cannot be detected. If the VM shows an error message such as "The monitor refresh rate could not be detected...", then the option should be set to 1.</p>	0 or 1, default is 0

General

Name	Syntax & Description	Values
Setup Defaults for Silence Detection	<pre>[Debug] SilenceDetectionThresholdHigh=-20 SilenceDetectionTimeoutHigh=0 SilenceDetectionThresholdLow=-50 SilenceDetectionTimeoutLow=5</pre> <p>This option sets the default values for silence detection.</p> <p>This feature can be used to indicate when the signal on a channel falls below a certain level. The silence detection Active state is published to the network via Ember+ (if Ember+ is enabled), and be used by an Ember+ consuming device.</p>	enter threshold in dBFs (-90 to 0), enter timeouts in seconds (0 to 60), default values are as shown.
Setup Audio Plug-in	<pre>[Debug] UseAudioFilterFileSource=0</pre> <p>Adds the possibility to add a plug-in that can playback linear PCM wave files and be controlled via Ember+ (if Ember+ is enabled).</p>	0 or 1, default is 0
Setup Double Touch Event Delay	<pre>[GUI] SuppressDoubleTouchMilliSecs=100</pre> <p>This option determines what happens when the user presses the same button in quick succession. If the time between presses is less than, or equal to, the value, then the software responds only to the first press. If the time between presses is greater than the value, then the software responds to the second press and actions another event. The time is set in milliseconds.</p>	50 to 2000, default is 100
Setup Process Priority	<pre>[Host] ProcessPriority=REALTIME</pre> <p>This option defines the processing priority of RELAY. You can use this to increase the CPU resources allocated to RELAY compared to other PC tasks. The possible values are "NORMAL", "ABOVENORMAL", "HIGH", "REALTIME". The default is "REALTIME".</p>	as per description
Define SRC for ASIO (CPU Load)	<pre>[Debug] ASIOClientSRC=BEST_QUALITY</pre> <p>This option defines the quality of Sample Rate Conversion (SRC) for ASIO clients running at a different sample rate. Note that a higher quality results in a higher CPU load. The possible values are "BEST_QUALITY", "MEDIUM_QUALITY", "FASTEST", "ZERO_ORDER_HOLD" and "LINEAR". The default is "BEST_QUALITY".</p>	as per description
Setup WLAN NICs	<pre>[Debug] UseNIC=ALL</pre> <p>Enables the use of WLAN NICs.</p> <p>ATTENTION! Only for testing purposes as Admin.</p>	leave empty or set (as shown)
Setup Custom AutoMix Parameters	<pre>[Debug] AutoMixAttackMilliSecs=5 AutoMixReleaseMilliSecs=250 AutoMixFloorDb=-45</pre> <p>This option can be used to define custom parameters for the AutoMix function:</p> <ul style="list-style-type: none"> • Attack Time in ms, from 1 to 1000 (default is 5) • Release Time in ms, from 1 to 2000 (default is 250) • Floor Level in dB, from -100 to 0 (default is -45) <p>Note that AutoMix is NOT supported by RELAY VSC.</p>	as per description

3. ".ini" File Options

Name	Syntax & Description	Values
Activate Windows Mixer Volume	<p>[Debug] WDMDriverUseMixerVolume=0</p> <p>This option activates the Windows mixer volume for all WDM driver instances. It allows you to use the Windows volume control to adjust the level to RELAY.</p> <p>The WDM driver version must be 1.8.0.5 or later.</p>	0 or 1, default is 0

RELAY VSC

Name	Syntax & Description	Values
Maximum Connection Latency	<p>[VSC] MaxConnectionLatencyWDMToStream=1024 MaxConnectionLatencyASIOToStream=1024 MaxConnectionLatencyStreamToWDM=1024 MaxConnectionLatencyStreamToASIO=1024</p> <p>This option applies to RELAY VSC. It defines the maximum latency for each type of connection. If a value is entered, then this overrides the settings-defined value: "short", "medium" or "long".</p>	leave empty or enter value (64 to 16384), default is empty
Define Fixed RTSP Ports	<p>[Streaming] VSCUseFixedRTSPPortPerSlot=0</p> <p>This option applies to RELAY VSC. It assigns a fixed RTSP port for each connection slot.</p>	0 or 1, default is 0

RELAY VRX

Name	Syntax & Description	Values
Define Preset Workflow with Open Faders	<p>[Debug] MuteChannelOnPresetSwitch=0</p> <p>This option applies to RELAY VRX. When enabled, a channel with an open fader mutes when the user changes the signal processing preset.</p>	0 or 1, default is 0
Define User Keys for Stream Connects	<p>[Debug] UseJadeStudioStreamReceiveConnect=0</p> <p>This option applies to RELAY VRX. When enabled, VRX user keys can be defined to connect an incoming stream to a stream receiver.</p>	0 or 1, default is 0
Define User Keys to Open Sources	<p>[Debug] UseJadeStudioOpenSource=0</p> <p>This option applies to RELAY VRX. When enabled, VRX user keys can be defined to open and close source channels. On opening, the fader returns to its last known position.</p>	0 or 1, default is 0
Define User Keys to Talk	<p>[Debug] UseJadeStudioTalkDirect=0</p> <p>This option applies to RELAY VRX. When enabled, VRX user keys can be defined to talk to the direct out.</p>	0 or 1, default is 0
Define PPM	<p>[Debug] PeakmeterType=PPM10</p> <p>This option applies to RELAY VRX and affects the PPM metering in the Taskbar. It sets the peak meter characteristics to match those used in Lawo's mc² Audio Production Consoles. The possible values are "PPM0", "PPM1", "PPM10" and "VU". The default is "PPM10".</p>	as per description
Setup PPM Level for Red Marker	<p>[Debug] StudioRedLevel=-6</p> <p>This option applies to RELAY VRX and affects the PPM metering in the Taskbar. It sets the level at which the meter color turns red. The value is set in dBFS from -32 to 0. In VRX8, the default is -6. In VRX4, the default is -3.</p>	as per description
Define Range for Pop-up Arrows	<p>[RELAYVRX8\Settings\Global\GUI] ButtonUnfoldHeightPercent=50</p> <p>This option applies to RELAY VRX. It applies to the four User Keys in the headline of the GUI which support a second function via the pop-up arrow. It defines how much of the button is used for the arrow and how much is left for the main function. When the value is set to 50%, the button is split equally. i.e. users must click on the upper half of the button to action the User Key function, and click on the lower half to open the drop-down menu. If you wish to make it easier to operate the User Key functions, then reduce the value to make the arrows smaller.</p>	enter value (10 to 90), default is 50

Name	Syntax & Description	Values
Enable switching Fullscreen / WindowMode	[Debug] R3LAYVRXnUseWindow=0 (n = 4 or 8) This option applies to R3LAY VRX. It is a special option which prevents the application switching into full screen view. To activate, click on the TASKBAR icon while pressing left SHIFT + CTRL + ALT.	0 or 1, default is 0
Setup Extended EMBER+ Tree for GUI	[Debug] UseJadeStudioFullEmber=0 This option applies to R3LAY VRX. When enabled, the Ember+ tree is extended to allow control of the complete GUI.	0 or 1, default is 0
VRX4: Define Default Support Channel in Taskbar	[R3LAYVRX4\Settings\Global\General] StartupAppBarChannel=PHONES This option applies to R3LAY VRX4. It defines the default channel assigned to the "Channel Selection" box in Taskbar View.	"Phones", "Speaker" or leave empty, default is empty
VRX8: Setup Processing for PGM and REC Bus	[Debug] UseVRX8OutputProcessing=0 This option applies to R3LAY VRX8. It allows you to assign signal processing presets to the PGM and Record busses (in Admin Mode).	0 or 1, default is 0
VRX8: Show Options: Copy RTSP Link & Copy SDP	[Debug] UseStreamClipboardCopy=0 This option applies to R3LAY VRX8 and VPB. By default, the option is disabled. When enabled, it reveals two additional buttons when you add streams to VRX8: Copy RTSP Link and Copy SDP. These options copy the selected information to the clipboard, so that it can be used to setup a new stream. For example, via the Add Stream URL or Add Stream SDP windows in R3LAY VRX8.	0 or 1, default is 0
VRX8: Setup Additional Values for Number of Channels to/from ASIO Client	[Debug] DialogSettingsNbAsioChannels=1,2,4,8,12,16,24,32,48,64 This option applies to R3LAY VRX8. It defines the values that appear in the Number of Inputs and Number of Outputs menus for the R3LAY ASIO Driver (in the Global Settings -> Audio tab). Any value from 1 to 256 is permitted, so please take care to enter only reasonable values. A typical example is shown above.	as per description

R3LAY VPB

Name	Syntax & Description	Values
Define Loop Visibility	[GUI] PreventClientLoops=1 This option applies to R3LAY VPB. When enabled, any connections in the routing matrix that could result in loops are hidden from view.	0 or 1, default is 1
Setup AutoMix Context Menu	[Debug] UseAutoMix=0 This option applies to R3LAY VPB. It adds the AutoMix function to the context menu for summing points, in the routing matrix, so that users can apply automatic level adjustment.	0 or 1, default is 0
Setup Stream Statistics	[Debug] UseShowStatisticsInContextMenu=0 This option applies to R3LAY VPB. It activates a context menu option to open a stream statistics window for the selected stream. To open the statistics window, right-click on a stream and select "Show Statistics...".	0 or 1, default is 0
Show Options: Copy RTSP Link & Copy SDP	[Debug] UseStreamClipboardCopy=0 This option applies to R3LAY VRX8 and VPB. By default, the option is disabled. When enabled, it reveals two additional context menu options in the VPB "Routing" view when you right-click on a stream: Copy RTSP Link and Copy SDP. These options copy the selected information to the clipboard, so that it can be used to setup a new stream. For example, via the Add Stream URL or Add Stream SDP windows in R3LAY VPB.	0 or 1, default is 0

3. ".ini" File Options

R3LAY Stream Monitor

Name	Syntax & Description	Values
Open App as Window	<p>[Debug] R3LAYStreamMonitorUseWindow=0</p> <p>This option applies to R3LAY Stream Monitor. When enabled, the application opens as a window that can be resized, minimized, etc. By default the option is disabled so that the application opens in full screen.</p>	0 or 1, default is 0
Disable Loudness Measurement	<p>[Debug] UseStreamMonitorLUFS=1</p> <p>This option applies to R3LAY Stream Monitor. It can be used to switch off the loudness measurement to reduce the demand on the computer's CPU. In this instance, the stream monitoring window shows only the peak level metering (in dBFS). By default, the loudness measurement is turned on and so both dBFS and LUFS are shown.</p>	0 or 1, default is 1

OnAir4

Name	Syntax & Description	Values
Setup OnAir4	<p>[Interfaces] OnAir4Active=0 OnAir4UseFixedIPAddress=1 OnAir4FixedIPAddress=a.b.c.d</p> <p>This option activates the connection to an OnAir4 (supported by R3LAY VRX4, VRX8 and VPB).</p>	0 or 1, default is 1
VRX8: Setup All Headphones for OnAir4	<p>[Interfaces] OnAir4UseMultiHeadphone=1</p> <p>This option applies to R3LAY VRX8. It activates all four headphone outputs on the OnAir4 with independent level control from the GUI, and via Ember, for each output.</p>	0 or 1, default is 0 for existing and 1 for new installations
Setup Image Check on OnAir4	<p>[Interfaces] OnAir4CheckImageVersion=1</p> <p>This option suppresses the image check of the OnAir4 (when the value = 0). ATTENTION! Only for testing purposes as Admin.</p>	0 or 1, default is 1