Controlling Reaper from Titan on the same PC

(inspired by Oliver Waits, December 2019)

The idea is to control REaper (see Software List) in a similar way like Winamp, i.e. start, stop, pause etc.

Prerequisites

- 1. Titan PC-Suite, from v13 on (AvoKey required)
- 2. loopMIDI (see Software List, to route the MIDI signal from one program to another
- 3. Reaper (see Software List)
- 4. macros to send MMC commands, see MIDI Machine Control
- 5. at least one music track to play with

Make it run

1. loopMIDI

This needs to be started (usually: automatically when Windows starts). By default it provides a virtual MIDI port named loopMIDI Port:

IoopMIDI Konfiguration Erwe Meine Loopback I	itert Über		×
Name	1011010	Gesamtdaten	Durchsatz / Sek.
loopMIDI Port	:	0	0 Byte
+••	Neuer Port-Name: loop	MIDI Port 1	

Last update: 2020/02/13 external:examples:reaper_mmc_on_same_pc https://avosupport.de/wiki/external/examples/reaper_mmc_on_same_pc?rev=1581593226 11:27

2. Titan PC Suite

Launch Titan PC Suite, load the MMC macros and copy the macros you plan to use on buttons as you like:

Macros				
17 MMC Play	18 MMC Pause	19 MMC Stop	20 MMC Goto Start	
E		10	11	12

3. Reaper

Launch Reaper and load a track.

In the Options menu select Preferences - this opens the preferences window. Find MIDI devices in the Audio section. This should list loopMIDI Port as MIDI input:

REAPER Preferences				Ŧ×
Keyboard/Multitouch Project	*	MIDI hardware settings MIDI inputs to make available (selectable as track	inputs and/or learnat	ole or action-bindable):
Track/Send Defaults		Device	Mode	ID
Media Item Defaults Audio Device		loopMIDI Port	Enabled+Control	0
MIDI Devices Buffering Mute/Solo				
Playback	Ξ			
Seeking				
Recording		MIDI outputs to make available (selectable as trac	k outputs):	Add joystick MIDI
Loop Recording		Device	Mode	ID
Rendering Appearance				10
Media		loopMIDI Port	<disabled></disabled>	1
Peaks/Waveforms		Microsoft GS Wavetable Synth [use cautiously]	<disabled></disabled>	0
Fades/Crossfades				
Track Control Panels				
Editing Behavior				
Envelope Display				
Automation		Restrict MIDI hardware output to one thread		Reset all MIDI devices
Mouse				
Mouse Modifiers	Ŧ	Reset by: 🔽 All-notes-off 🛛 Pitch/sustain	Reset on: 🔽 Play	Stop/stopped seek
Find			OK	Cancel Apply

Right-click on loopMIDI Port input and either enable input for control messages from the menu...

REAPER Preferences	;	푸 📼	-
Keyboard/Multitouch Project	•	MIDI hardware settings MIDI inputs to make available (selectable as track inputs and/or learnable or action-bindable):	
Track/Send Defaults		Device Mode ID	
Media Item Defaults		loopMIDI Port Enabled+Control 0	
Audio			
Device		Configure input	
MIDI Devices Buffering		Input ID 🕨	
Mute/Solo			
Playback	Ξ	Forget device	
Seeking		V Enable input	
Recording		Add is sticle MIDI	
Loop Recording		Enable input for control messages ts):	
Rendering		Device Mode ID	
Appearance		loopMIDI Port <disabled> 1</disabled>	
Media		Microsoft GS Wavetable Synth [use cautiously] <disabled> 0</disabled>	
Peaks/Waveforms			
Fades/Crossfades Track Control Panels			
Editing Behavior			
Envelope Display			
Automation		Restrict MIDI hardware output to one thread Reset all MIDI devices	
Mouse			
Mouse Modifiers	Ŧ	Reset by: 📝 All-notes-off 📝 Pitch/sustain Reset on: 📝 Play 🔲 Stop/stopped seek	
FIDO		MIDI Input devices you wish to use by right-clicking on the Device OK Cancel Apply electing Enable Input.]

... or select Configure input... and make the settings there:

🕥 REAPER Prefere	nces		a a a a a a a a a a a a a a a a a a a
Keyboard/Multitou Project	MIDI hardware settings MIDI inputs to make available (selectable as track in	nputs and/or learnable	e or action-bindable):
Track/Send Defa	Lievice	Mode	ID
Media Item Defau	🕥 Configure MIDI Input 🛛 🛛 🕰	Enabled+Control	0
Audio		Linabled+Control	
Device	Device name: loopMIDI Port		
MIDI Devices	Alias name: loopMIDI Port		
Buffering Mute/Solo	Allas hame.		
110107 0010	Enable input from this device		
Playback Seeking	Enable input for control messages		
Recording	Advanced MIDI event timestamp options		Add joystick MIDI
Loop Recording		putputs):	Add Joystick MIDT
Rendering	 Let REAPER timestamp events (default) 	Mode	ID
Appearance	High precision system timestamp (QPC)	<disabled></disabled>	1
Media	Low precision system timestamp (TGT)	<disabled></disabled>	0
Peaks/Waveform	Timestamp precision should be set to match this MIDI input	<usableu></usableu>	v
Fades/Crossfade			
Track Control Par	timestamp MIDI events.		
Editing Behavior			
Envelope Display	OK Cancel		
Automation	Restrict MIDI hardware output to one thread		Reset all MIDI devices
Mouse	Reset by: V All-notes-off V Pitch/sustain	Reset on: V Play	Stop/stopped seek
Mouse Modifiers	Althoused by Althoused Prich/sustain	ridget on. Mr Fidy	Joroh/srohhen seek
Find	Enable the MIDI Input devices you wish to use by right-clicking on the name and selecting Enable Input.	Device OK	Cancel Apply

Confirm the settings with OK to close the preferences window.

4. Try it out

Essentially this should work staright away: in Titan, fire the macro MMC Play and Reaper should immediately start playing - but see below. This also works together with Reaper sending Timecode back into Titan, like described in Sending Timecode from Reaper to Titan on the same PC

Some caveats I found:

- it looks like Reaper wants to be started internally at first before listening to MMC. Thus, you at first need to hit Play in Reaper and stop this with MMC after this you can play/pause/stop from MMC as you like
- reaper seems to be ignorant to device IDs: when changing the macros to a designated device ID (by defaukt it sends to 7F which is All Devices) Reaper still listens and reacts, even with another ID selected in Reaper

5. How to debug

If things do not work as expected there some tools which help finding the fault:

5.1 loopMIDI

loopMIDI shows the number of transmitted data. This number increases with every command. If this number does not increase then Titan doesn't send data.

Konfiguration Erweitert Über Meine Loopback MIDI-Ports Name Communitien IoopMIDI Port 1874	Durchsatz / Sek. 0 Byte
Name	
+ - Neuer Port-Name: loopMIDI Port 1	

AVOSUPPORT - https://avosupport.de/wiki/

5.2 USB Expert Console

Open the USB Expert Console. This must show loopMIDI Port 1 as connected panel (top-left). Select the MIDI tab top-right, click Watch MIDI, in the MIDI watcher window select MIDI Input an Raw MIDI. Now, as you send a command, it is shown in the MIDI watcher:

USB Expert Console 6.7.71.5 File Tools Remote Help Info Service Test Bench MIDI Timecode **bern Events** Reset 💥 Suspend Show / Hide Fiber Connected Panels HoopMIDI Port 1 Mid Watcher ✓ Leds
✓ Fader Vectors Watch MIDI EDE Watcher - Is opMIDI Port 1 **MDIInput** - Rev MIDE . Data 2 Data 1 FO 7F 7F 06 02 F7 • 0 0 ÷ Status Messages Filter Cear ACW USB service connected.

From: https://avosupport.de/wiki/ - **AVOSUPPORT**

Permanent link: https://avosupport.de/wiki/external/examples/reaper_mmc_on_same_pc?rev=1581593226

Last update: 2020/02/13 11:27

