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 M				
Name		Gesamtdaten	Durchsatz / Sek.	
loopMIDI Port		0	0 Byte	
+ - Neuer Port-Name: loopMIDI Port 1				

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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	
8	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 🗧 🐺					
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 Audio Device MIDI Devices Buffering Mute/Solo Playback	ш	loopMIDI Port	Enabled+Control	0	
Seeking Recording Loop Recording Rendering		MIDI outputs to make available (selectable as trac	k outputs): Mode	Add joystick MIDI	
Appearance		loop MIDI Port	<disabled></disabled>	1	
Media Peaks/Waveforms Fades/Crossfades Track Control Panels Editing Behavior Envelope Display		Microsoft GS Wavetable Synth [use cautiously]		0	
Automation Mouse		Restrict MIDI hardware output to one thread	Parat any 💷 Di-	Reset all MIDI devices	
Mouse Modifiers	Ŧ	Reset by: 💟 All-notes-off 💟 Pitch/sustain	Nesel on: V Play	Cancel Apply	

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

🕥 REAPER Preferences 🗧 🐺					
Keyboard/Multitouch Project	*	 MIDI hardware settings MIDI inputs to make available (selectable as track inputs and/or learnable or action-bindable): 			
Track/Send Defaults Media Item Defaults		Device Mode ID loopMIDI Port Enabled+Control 0			
Audio Device		IoopMIDI Port Enabled+Control 0 Configure input 0			
MIDI Devices Buffering		Input ID +			
Mute/Solo Playback	=	Forget device			
Seeking Recording		✓ Enable input ✓ Enable input for control messages ts): Add joystick MIDI			
Loop Recording Rendering		Device Mode ID			
Appearance Media		loopMIDI Port <disabled> 1 Microsoft GS Wavetable Synth [use cautiously] <disabled> 0</disabled></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: V All-notes-off V Pitch/sustain Reset on: V Play Stop/stopped seek			
Find Enable the MIDI Input devices you wish to use by right-clicking on the Device OK Cancel Apply					

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

🕥 REAPER Prefere	nces		X I	
Keyboard/Multitouch MIDI hardware settings Project MIDI inputs to make available (selectable as track inputs and/or learnable or action-bindable):				
Track/Send Defa	Levice	Mode	ID	
Media Item Defau Audio	🕥 Configure MIDI Input 🛛 🛛 🔫	Enabled+Control	0	
Audio Device MIDI Devices Buffering Mute/Solo Playback	Device name: loopMIDI Port Alias name: loopMIDI Port Enable input from this device Finable input for control messages			
Seeking Recording Loop Recording Rendering Appearance Media Peaks/Waveform Fades/Crossfade Track Control Par Editing Behavior	Advanced MIDI event timestamp options Let REAPER timestamp events (default) High precision system timestamp (QPC) Low precision system timestamp (TGT)	outputs): Mode <disabled> <disabled></disabled></disabled>	Add joystick MIDI ID 1 0	
Envelope Display	OK Cancel			
Automation Mouse Mouse Modifiers	Reset by: All-notes-off Pitch/sustain	Reset on: 🔽 Play	Reset all MIDI devices Stop/stopped seek	
Find Enable the MIDI Input devices you wish to use by right-clicking on the 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

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