
Subject: Syncing reaper or other to paris AND external midi clock

Posted by [echopraxia](#) on Tue, 12 Oct 2010 02:21:38 GMT

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I know there are discussion about syncing paris with other daws but I am curious if any body knows how to have ,lets say, reaper sync to paris with mtc but also have reaper send or receive midi clock to drive the start and stop of the sequencers from another midi clock only sequencer which in turn would start reaper and start paris too because they are sync'd to MTC.

To say this a little different, I want to use a hardware midi sequencer that can send and receive only midi clock and be able to sync it to paris. I know paris only has MTC, but can any daw receive midi clock AND transmit MTC to paris at the same time? I would think that where your transport is at the time in reaper cubase ect., the midi clock received would start where the transport is located which is where MTC will be currently in paris and other daw. I hope I am getting my question across clearly.

As of now I am waiting to get paris working as I am a new user.

Regards,
Chris

Subject: Re: Syncing reaper or other to paris AND external midi clock

Posted by [Amos Parkinson](#) on Tue, 12 Oct 2010 20:01:59 GMT

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I've not used MTC with paris for ages! But I have previously sync'd to my T38 and VST using MTC. In that set-up a stripe track on the tape was the master with Paris and VST slaved. Sorry I can't remember much more, it was nearly 10 years ago - I'll see if I made any notes.....

Subject: Re: Syncing reaper or other to paris AND external midi clock

Posted by [kerryg](#) on Tue, 12 Oct 2010 22:24:49 GMT

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According to the manual (P. 225, which is actually 255 in the PDF version in the PARIS Reference Library over at the Wiki - grab a free account to download it) PARIS certainly seems to be able to do this. You'll probably experience some amount of cumulative lag, but it should all play in sync.

I've read up on MTC in the past and it can actually be a surprisingly good, solid sync source. The key to making MTC flow smoothly is to dedicate a cable and midi port just to MTC (since MIDI is a serial communication protocol you don't want midi performance data or sysex crowding in there and jostling the nice sync signal out of alignment).

Also try using 25 frames as the "framerate of agreement" between all parties - Mike Audet reckons he found a bug between Cubase and PARIS that caused MTC to be pretty mediocre at all other frame rates except 25 which was actually very tight. Dunno if that's PARIS or Cubase

playing the goat there.

Quote:Synchronizing PARIS to Other Devices

Synchronizing PARIS to SMPTE

Synchronizing to an External Tape-Based SMPTE or MTC Device

PARIS can be synchronized to an MTC-compliant external device such as a video deck, MDM device, or analog multi-track.

Note: When synchronizing PARIS to an external device, the conversion of SMPTE to MTC must be accomplished by external hardware, such as a MIDI interface.

To synchronize PARIS to an MTC device:

1. In PARIS' Project Window, open the MIDI Setup... dialog.
2. Select the source supplying MTC from the Select MIDI Time Code Input pop-up menu.
3. Open the Transport Window.
4. Open the Transport Window.
5. Press the "Lock" button in the Transport Window.
6. Click Play in the Transport Window, hit the spacebar on your computer keyboard or the Play button on the C16 Pro.
7. Start playback on the device that is supplying SMPTE Time Code.
8. PARIS will wait until SMPTE starts before playing back. The red LED in the Lock button will light when PARIS receives SMPTE.

Synchronizing PARIS to Another Application

PARIS can be synchronized to any application that generates MTC. To synchronize PARIS to another application:

1. In PARIS' Project Window, open the MIDI Setup... dialog.
2. Select the source supplying MTC from the Select MIDI Time Code Input pop-up menu. On a Mac OS computer, select the IAC bus (page 223).
3. Open the Transport Window.
4. Open the Transport Window.
5. Press the "Lock" button in the Transport Window.
6. Click Play in the Transport Window, hit the spacebar on your computer keyboard or the Play button on the C16 Pro.
7. Start playback on the device that is supplying SMPTE Time Code.
8. PARIS will wait until SMPTE starts before playing back. The red LED in the Lock button will light when PARIS receives SMPTE.

As to Reaper being an intermediary to translate this, I'll have to check in the Reaper manual, but it

certainly sounds do-able (or if it's not, they're such a responsive team over there I'd be surprised if they wouldn't be open to the suggestion). Let us know how this goes, I'm curious.

Subject: Re: Syncing reaper or other to paris AND external midi clock

Posted by [echopraxia](#) on Thu, 04 Nov 2010 17:49:49 GMT

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I have not been successful getting reaper to slave to paris with MTC (using paris as master MTC). In the midi devices dialog in Paris, I have right clicked on my midi "A" output port to select MTC. I then have that physical midi cable going into a different midi "B" input and tried setting reaper's MTC sync source as either all inputs and just midi "B".

Reaper external sync is enabled.

Should I be doing it this way? Or should I use a program like midi-ox or midi yoke? I have tried the lock button on and off in the transport of Paris as well.

Is there anything I am missing? I believe I followed the directions correctly. Does any one have a step by step they could walk me through.

I have tested sending midi clock out from reaper to in on my drum machine successfully. So If I can just get reaper to start when I hit play on the Paris transport I will be good to go.

And just to be clear. I am not trying to sync audio between Reaper and Paris. Only MTC sync. I am trying to play my midi synths using my hardware midi sequencer as the trigger source and recording the bars into paris but I need everything to start at the same time.

i am gonna post this question to the reaper guys also.

Thank you for taking the time to read this.

Subject: Re: Syncing reaper or other to paris AND external midi clock

Posted by [echopraxia](#) on Tue, 09 Nov 2010 18:05:55 GMT

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Ok I just realized that I did not have the paris midi driver installed! I installed all of mike's drivers and forgot that it is not part of the package.

So I finally got it to work after enabling the paris midi driver in reaper and going into reapers external sync mode and selecting "paris midi in". You have to hit play on reaper so it can wait for the mtc to arrive from paris.

I am still having trouble getting paris to start reaper at the same time though. There is a delay before reaper and the external midi sequencer start. I don't think it has anything to do with the external sequencer as reaper is not starting fast enough by itself.

I have made sure that both reaper and paris are at the same tempo and are set to 30 framerate. Reapers "time base for items" (in project settings) is set to beats and I have bar view set in paris (I think).

When looking at the paris editor I see that the beats are hitting the bars.

i see that there is a offset incoming timecode setting in reaper but its in milliseconds. I set it to 100ms and it did work sort of but it seems impossible to nail the sync down. And its confusing because paris goes through 3 bars while reaper and the external sequencer go through 4 bars.

I just adjusted the synchronize by seeking ahead to about 2800ms ans am now getting a little better sync but not perfect and it still goes through 3 bars in paris and 4 in reaper.

Is there a way to compensate for the delay in paris and set the engine to start after the mtc is sent to reaper when hitting play? Or something else maybe?

In my Paris.cfg file, should I have Use32BitWinMTC=1 set like this?
Also should I have MIDIPlayDisabled=0 like this?

Please help! I am getting close!

Subject: Re: Syncing reaper or other to paris AND external midi clock
Posted by [kerryg](#) on Thu, 11 Nov 2010 09:28:26 GMT
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OK, some quick notes -

1) Yep, didn't realize the midi driver wasn't in there - I think you need it for the MTC. MidiPlayDisabled should be set to =1 since that only controls PARIS' onboard sequencer and AFAIK has no effect on MTC. Since the sequencer in 3.0 introduced some nasty issues most people leave it off (ie MidiPlayDisabled=1).

2) Mike Audet found a bug between Cakewalk and PARIS that rendered MTC pretty sloppy at framerates *other than 25 frames* - 25 frames seemed to work very well on the other hand. We don't know yet if this is a PARIS bug or a Cakewalk bug, so if you don't absolutely need to work at another framerate, give 25 a try as the "framerate of agreement" between the three.

3) Think of PARIS as a great big tapedeck - PARIS' bars and beats are arbitrary and pretty much "display only" and they have no connection with any sort of MIDI clock, you could set PARIS to a tempo of 120 and your Reaper RPP to 80 and PARIS would never know the difference. You have to set the PARIS tempo independently in the Project Window, manually, and hope things stay lined up pretty close "wild" - which you can usually achieve with a little juggling of decimal points (PARIS can work to four decimal places of tempo though). Also, watch out for the PARIS grid, it has 80 samples of "slop" in the display so the barlines should be treated as "approximate" - more info here. Basically cuts on bar lines are kind of "more or less" on the bar lines.

4) I'd try the 32-bit flag both on and off and see if there's a difference.

5) IIRC Mike's been looking at revamping the MTC in PARIS, so you might consider contacting him. He's not got time right now to be very active on the forums but as of our last talk a week or two ago he's still raring to go on the PARIS coding.

Looks like you're really close to nailing this, keep us posted!

- K
