TANGERINE AUTOMATION INTERFACE

DAW CONFIGURATION FOR THE REAPER WORKFLOW

V 1.0

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1. INTRODUCTION

This guide explains configuring your Pro Tools and Reaper for use with the Tangerine Automation Interface's Reaper Workflow. It is compatible with the following series of interfaces:

- Tangerine Automation Interface for SSL 4000 / 6000 / 8000 (VCA and Ultimation)
- Tangerine Automation Interface for Flying Faders
- Tangerine Automation Interface for GML Automation

It assumes that you have already installed and tested the functionality of your interface.

Never before could a single mix session cross multiple automation systems until now. Track your drums on a Flying Faders console in Berlin, finish your vocals on an SSL in London, and then mix on one of the 7 remaining legendary Focusrite console with GML automation; a Reaper session carrying automation data will transition your fader moves and cuts to any compatible studio, on any console.

Because of the increased set-up time required for using the Reaper workflow, THD-Labs recommends using the Injektor software suite when moving sessions between Tangerine-compatible studios.

1.1. WORKFLOW OVERVIEW

Though most users of the Tangerine Automation Interface prefer the flexibility and simplicity of the newer, more modern Injektor workflow, some specialised applications may still call for slaving a 2nd DAW to Pro Tools. Amongst other reasons, the Reaper Workflow is still the preferred workflow when controlling automation from a tape deck directly from the SSL center section without having to manipulate a DAW (Tape support for Flying Faders coming at a later date; contact us if you require this feature on your Flying Faders system).

In this workflow, Reaper directly replaces the existing automation computer and will be "Synched/Slaved" via time code to your audio source.

1.2. REQUIRED SOFTWARE

The following software is required to use this workflow:

1. Pro Tools (or your favorite DAW)
2. Reaper - available at https://www.reaper.fm/
3. The TAI Reaper driver and skin package – available at http://thd-labs.com/

2. CONFIGURING REAPER AND PRO TOOLS

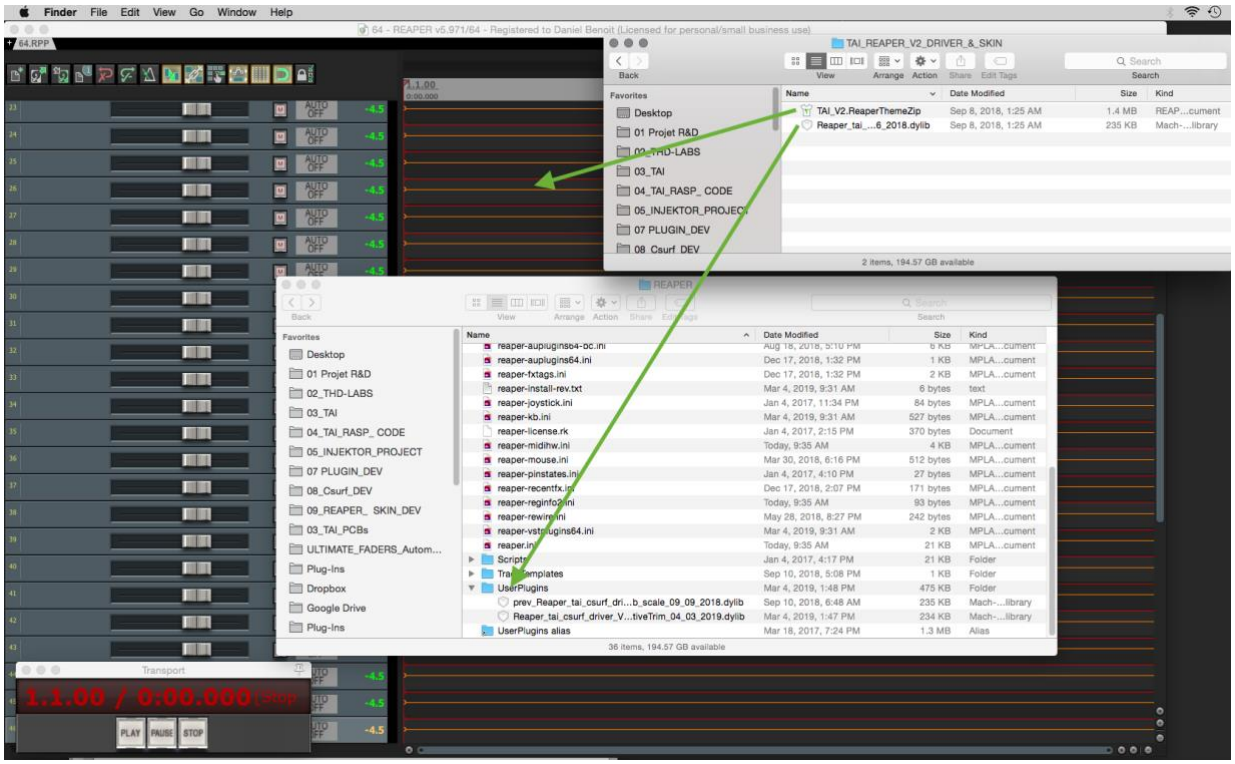
2.1. DRIVER AND SKIN INSTALLATION

The TAI Control surface driver:
To use the TAI with Reaper, the "Reaper_tai_csurf_driver_VxxX.dylib" driver file – available at thd-labs.com – must be installed in the REAPER/UserPlugins directory. This directory can be accessed from Reaper

1. **IN REAPER**, Select menu->**Option/Show REAPER resource path in explorer/finder**
2. Open the /**UserPlugins** directory.
3. **Drag and drop** the Reaper_tai_csurf_driver.dylib file in the /UserPlugins directory.
   IMPORTANT: REAPER NEEDS TO BE RESTARTED AFTER INSTALLING THE DRIVERS

The TAI SKIN:
We have designed a "Optimized for MIX automation TAI skin" to use in REAPER. To install:

1. Create a new project
2. Add a few tracks if no track are present in the project**(command+n)**
3. From the finder, drag & drop the skin file in REAPER's TRACK window.

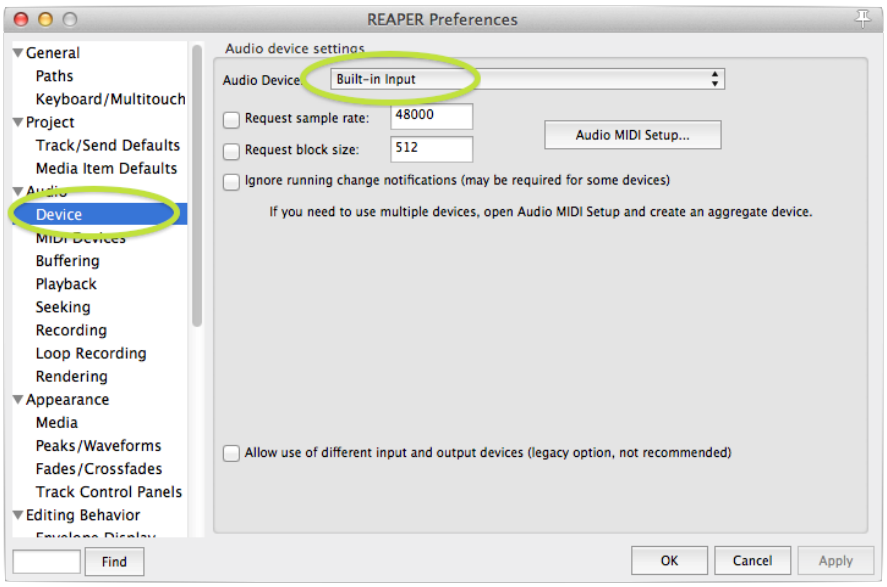


2.2. CONFIGURING REAPER PREFERENCES

At this point make sure that the TAI is powered and the USB connection is OK. Restart REAPER, and once Reaper is restarted, Go to the **REAPER/PREFERENCE** menu, adjust the following parameters:

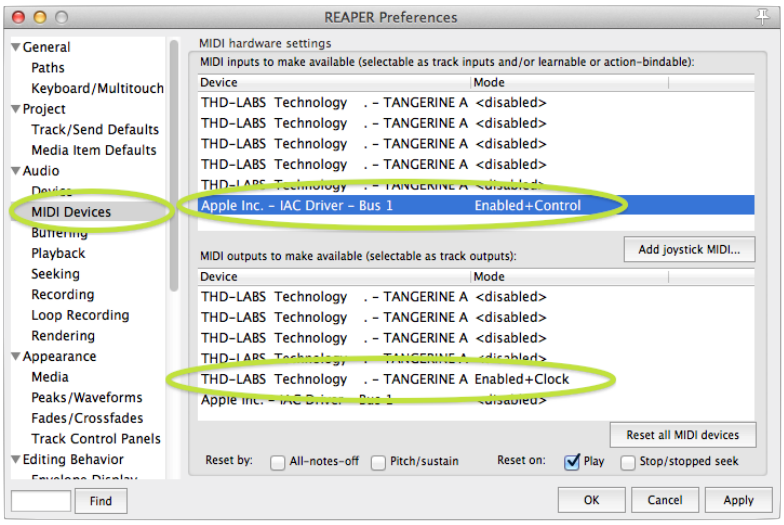
a) In Preferences/Audio/Device

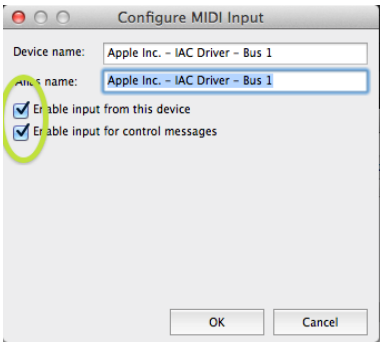
Set to: Built-in input

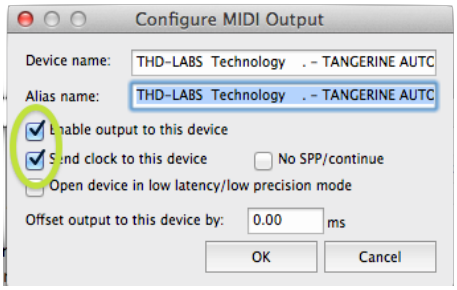


b) In Preferences/Audio/MIDI Devices

Enable MIDI input to: Apple Inc. IAC Driver = Enabled+Control
Enable MIDI output to: THD-LABS Technology - TANGERINE #5 =Enabled+Clock

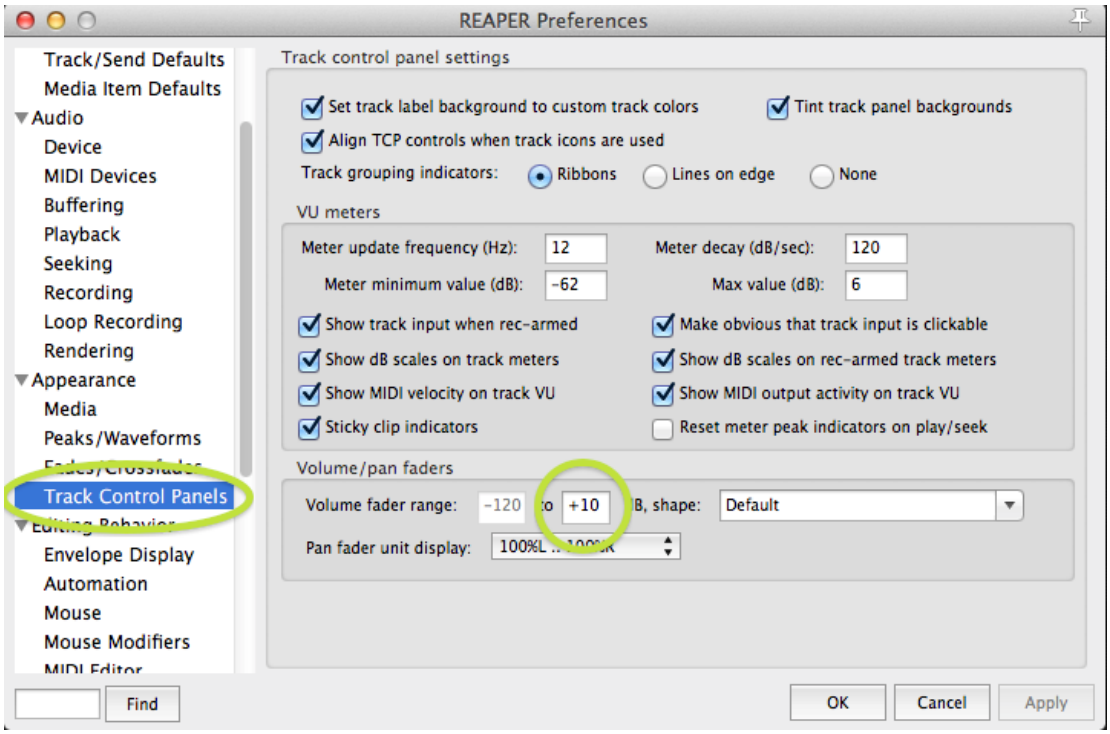






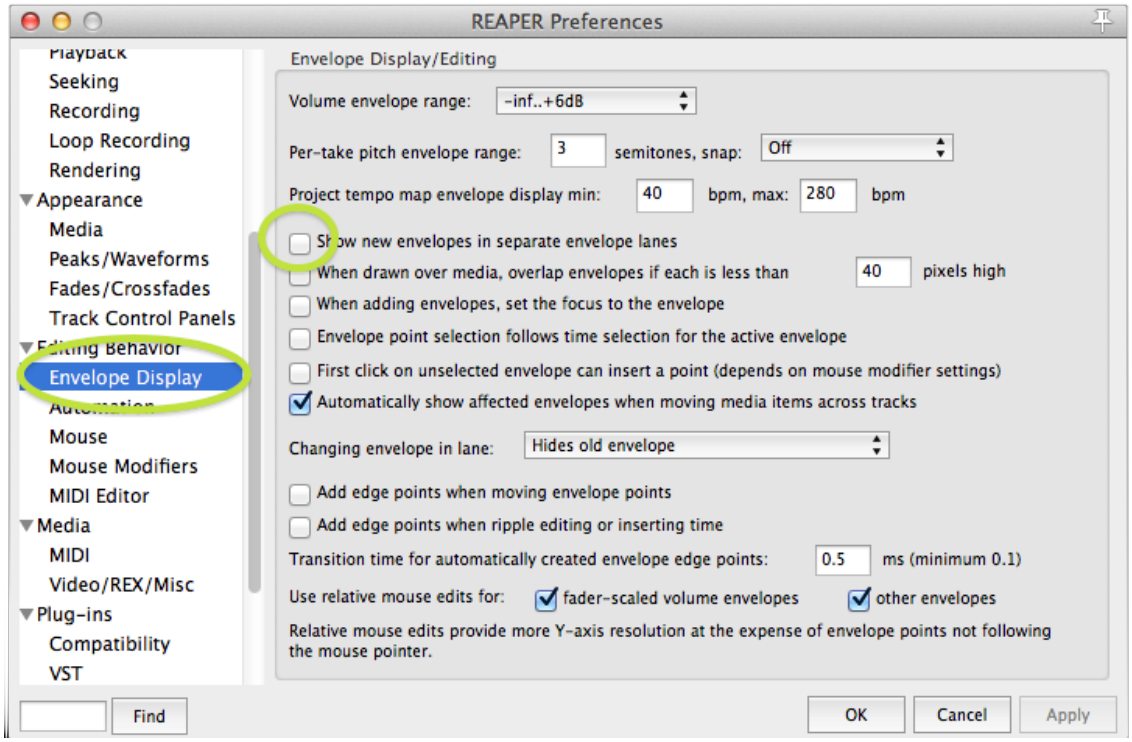
c) In Preferences/Appearance/Track Control panels

Set Volume fader range to +10dB



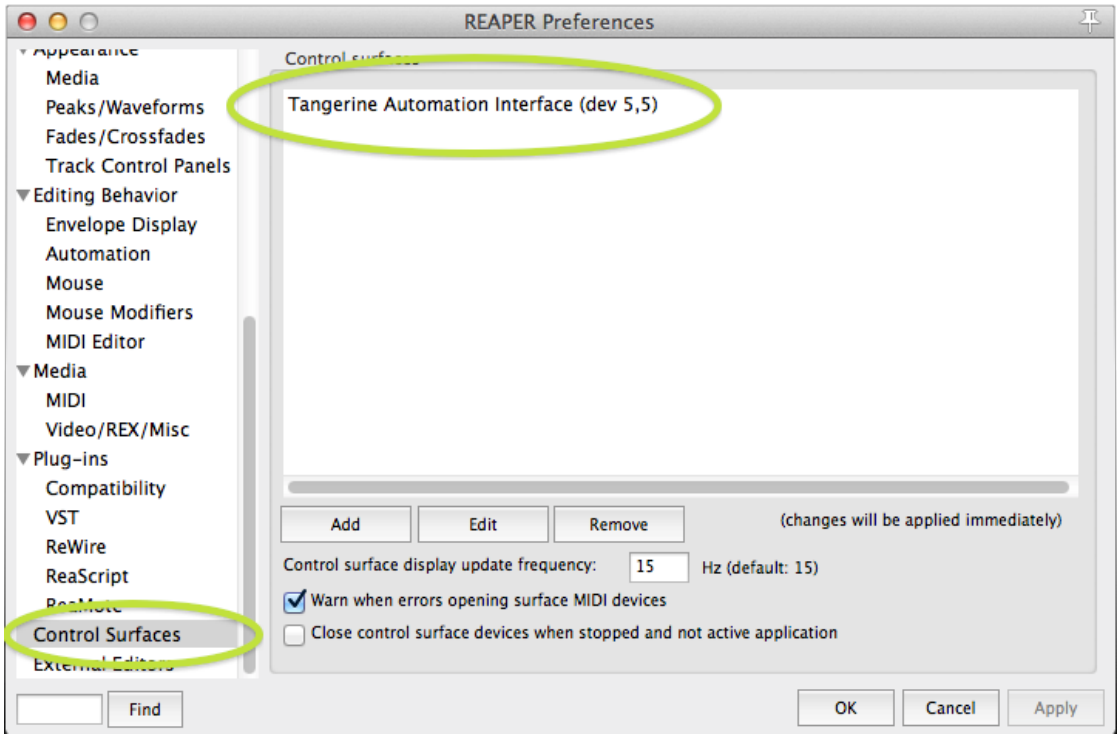
d) In Preferences/Editing Behavior/ Envelope Display

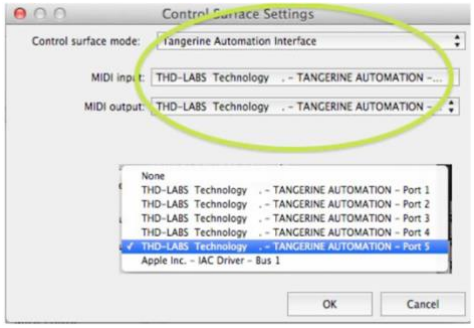
Uncheck: Show new envelopes in separate envelope lanes



e) In Preferences/Control Surfaces

Add: Control surface mode to: ‘’Tangerine Automation Interface’’
Midi input: = THD-LABS Technology - TANGERINE Port 5
Midi output: = THD-LABS Technology - TANGERINE Port 5





Once the basic parameters are setup, APPLY those changes and close the preference window.

To enable mute & Trim automation, in the tracking window, double-click the auomation status, and activate + make visible mute + trim automation.

2.3. SYNCHRONISATION

If you are using the Reaper workflow with an external DAW or tape deck playing back audio, you will need to synchronise REAPER running the automation with the audio source. The principle of synchronizing two or more devices requires setting one system as the MASTER and one or more systems as SLAVE. TIMECODE and transport commands are used to make the system work as a single unit. In the following example Pro Tools is the MASTER multi-track audio source and REAPER runs as the SLAVE Automation software.

Both software need TIMECODE as a sync reference. The TIMECODE acts a speed and positional information signal.

- The MASTER will generate the TIMECODE
- THE SLAVE will listen to the TIMECODE

If correctly set, the SLAVE will follow the MASTER moves and locations, in relation to the received TIMECODE and setup information. This is called "RESOLVING" or "SYNCING" to TIMECODE

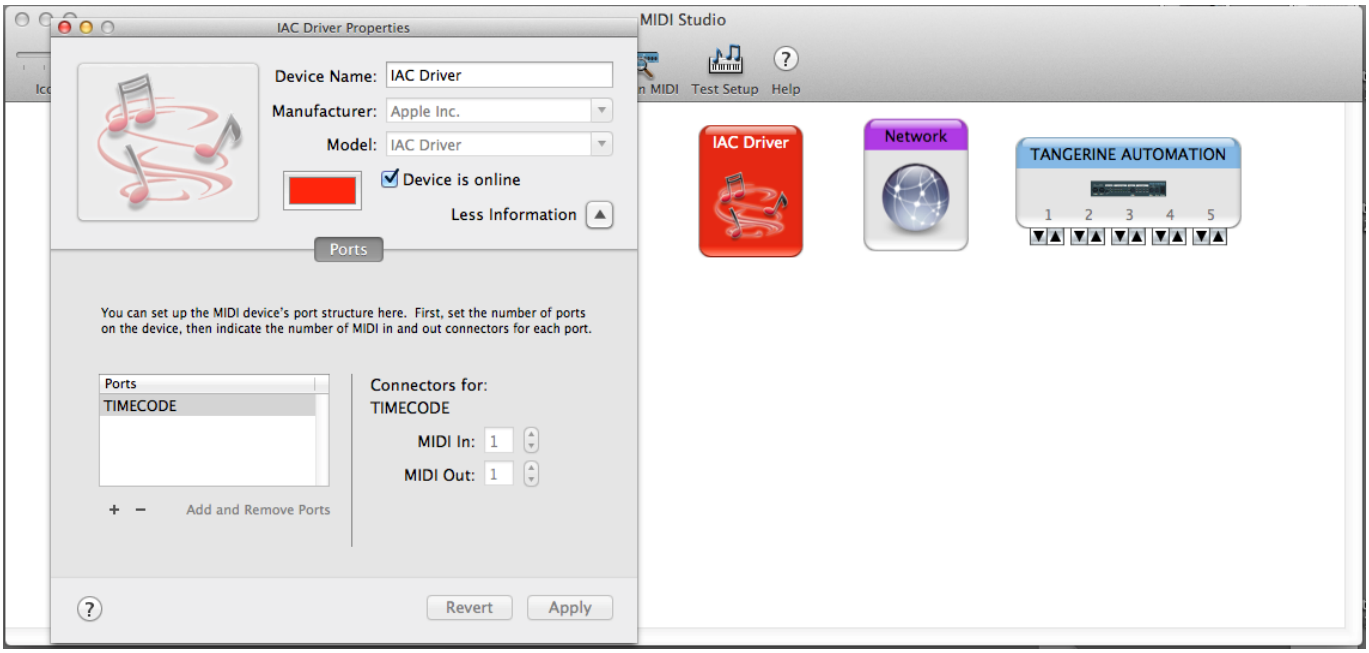
You can choose to run REAPER on a **separate computer** or on the **same computer** running Pro Tools. Separate computer setup can allow for more screens to display Pro Tools and Reaper at the same time.

For separate computer setup go to page 11.

2.3.1. SAME COMPUTER SYNC SETUP

SETTING UP TIMECODE SIGNAL

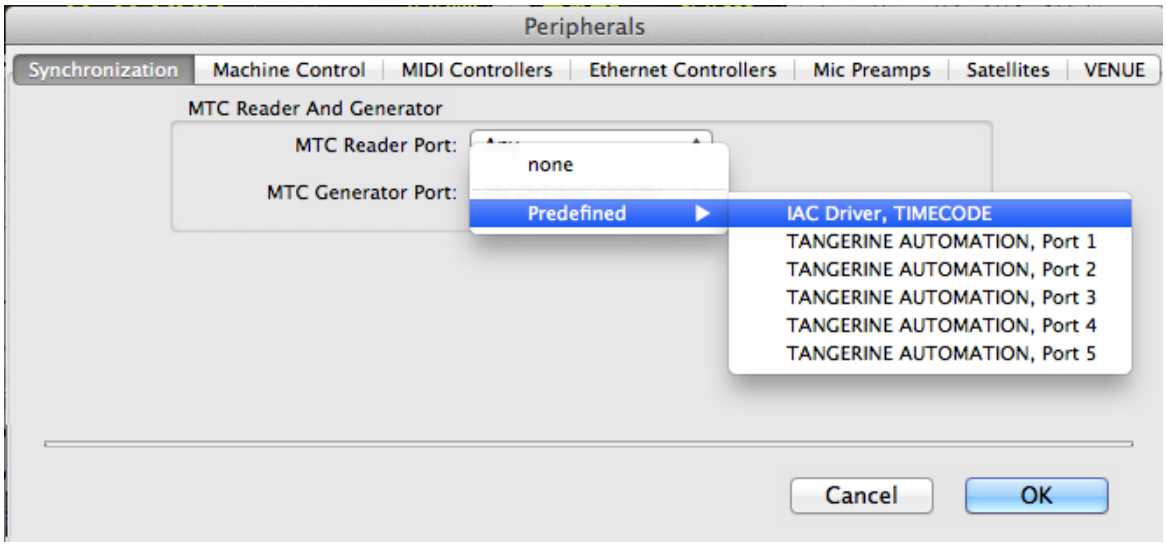
Since both software are running on the same computer, the TIMECODE can be sent via Apple's virtual routing service: Apple's "**IAC Driver**". To use the "**IAC Driver**", It must be enabled in the "**Audio MIDI setup**" application located in the Application/Utility folder. Rename the default "BUS 1" to "TIMECODE" (or another descriptive name).



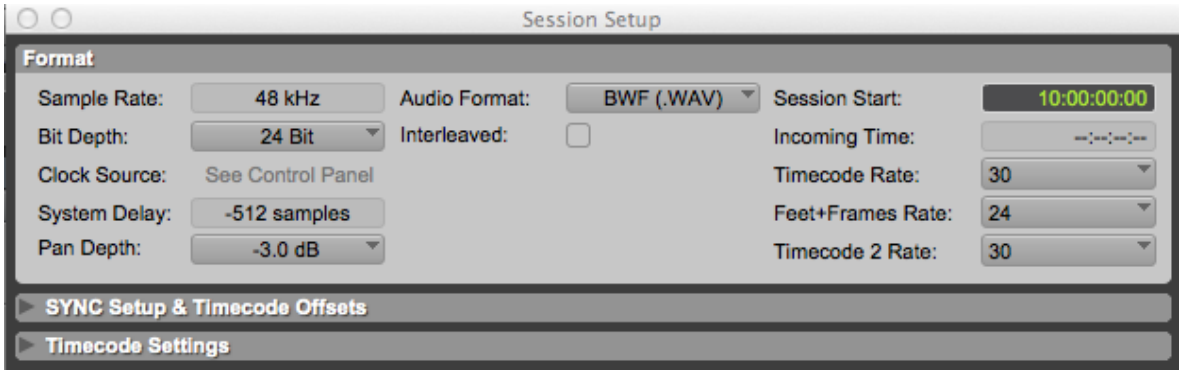
SETTING PRO TOOLS TO SEND TIME CODE

The following steps must be taken to enable Pro Tools to send TIMECODE when in PLAY.

1. Assign the "IAC Driver" as the TIMECODE communication channel



2. Set the TIMECODE frame rate and session start time



NOTE

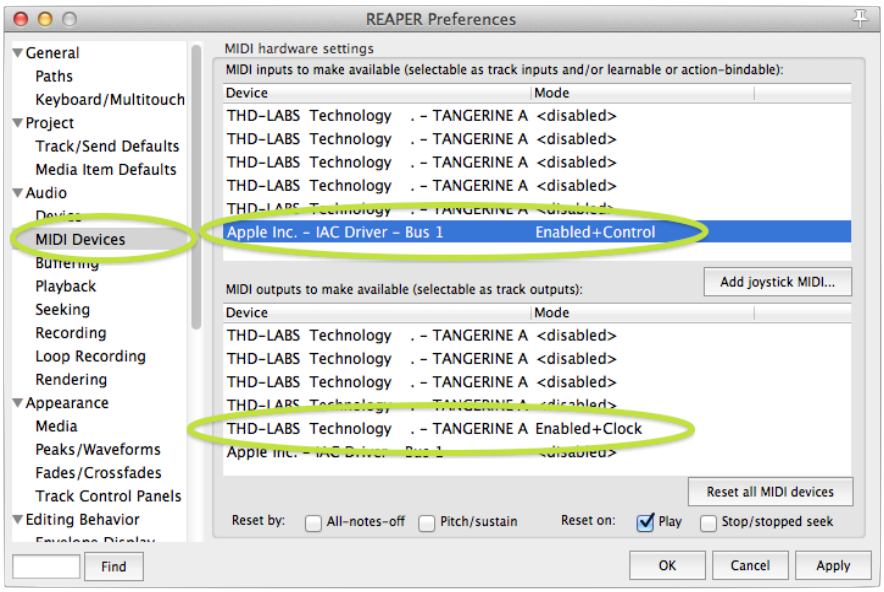
- Session start time should never set to 00:00:00:00, standard practice uses 01:00:00:00 or 10:00:00:00.
- If no video is involved Timecode Rate can be 30FPS

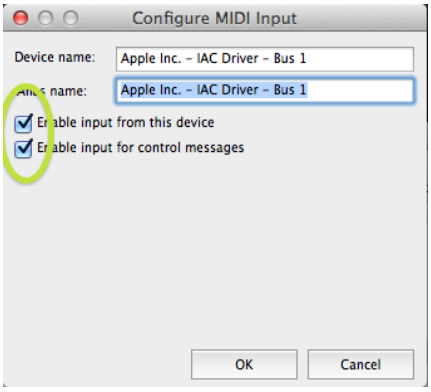
3. Enable TIMECODE generation

SETTING REAPER TO RECEIVE AND SYNC TO TIME CODE

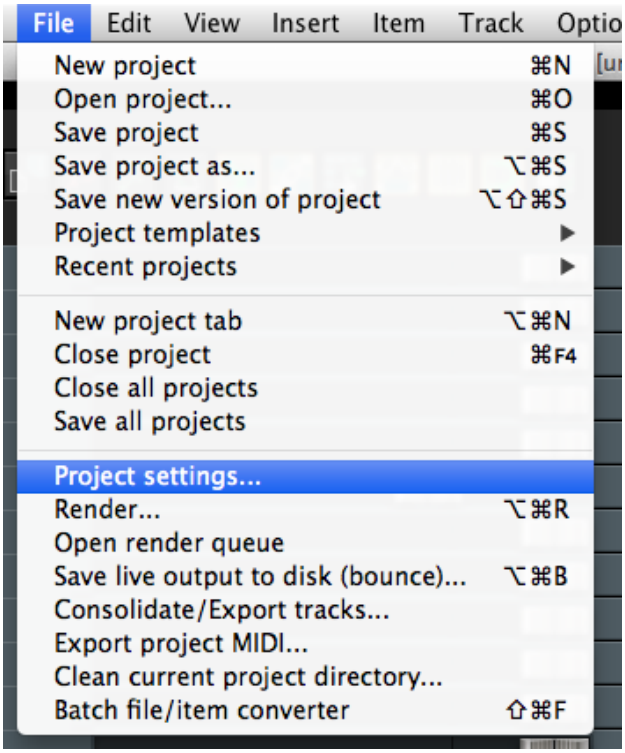
The following steps must be taken to configure and enable REAPER to receive and sync to TIMECODE when Pro Tools is in PLAY.

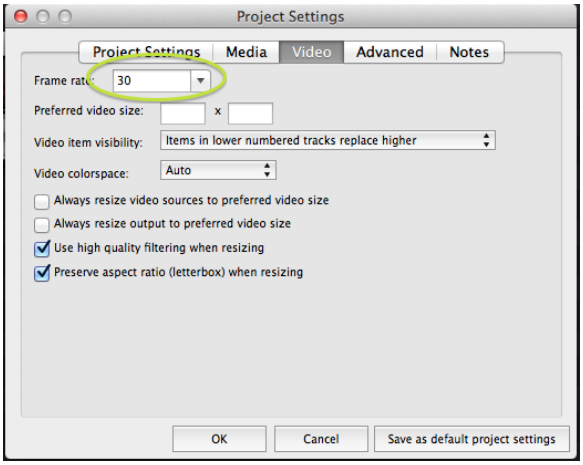
1. <u>Assign the "IAC Driver" as the TIMECODE communication channel</u>

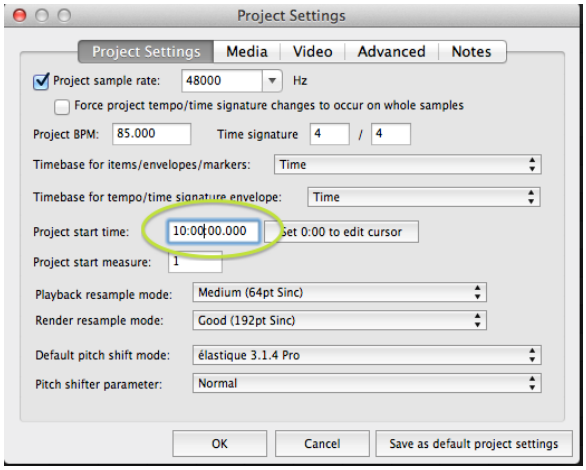




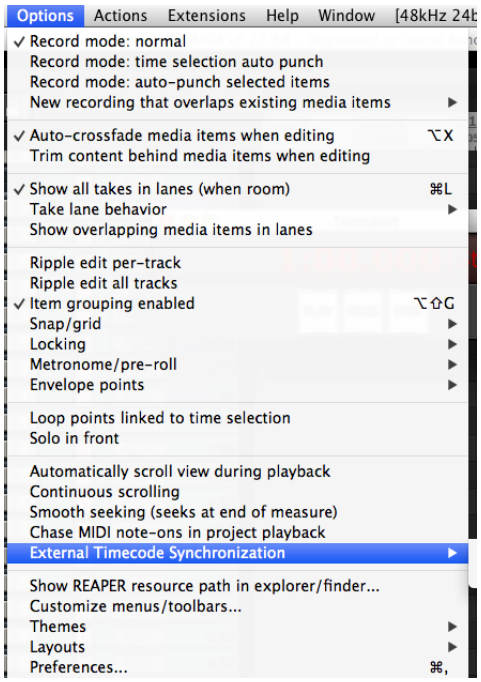
2. <u>Set the TIMECODE frame rate and Start Time</u>

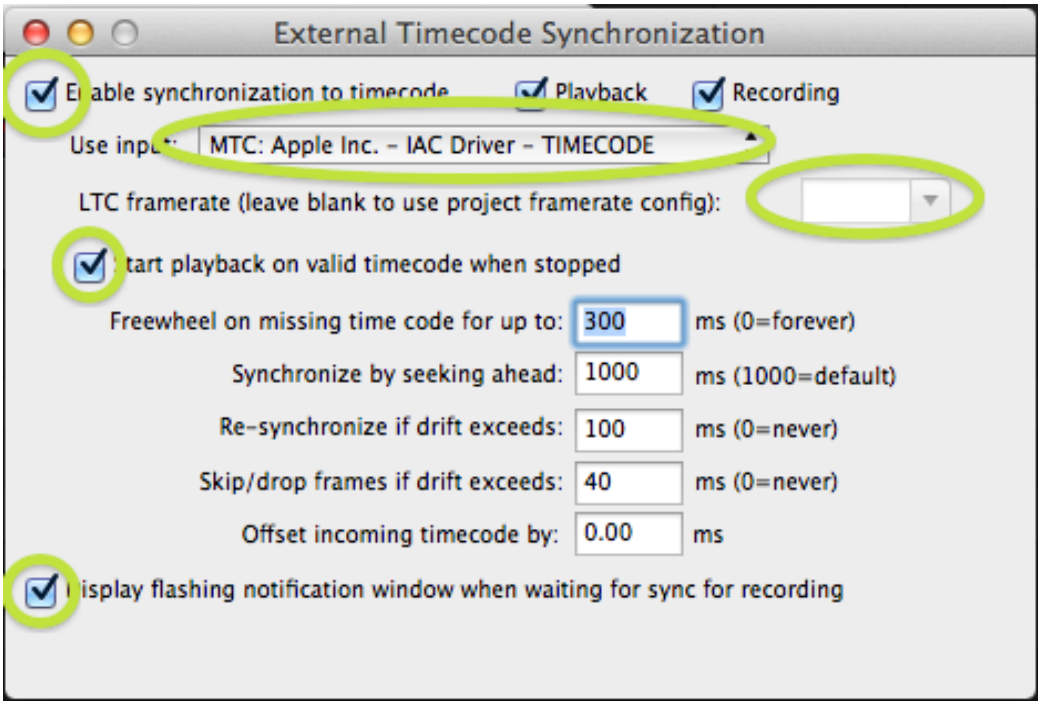






3. <u>Enable receive and sync to TIMECODE</u>





SYNCING

At this point, the system can be synched. When Pro Tools is in PLAY mode, REAPER will start and synchronize to Pro Tools in less than 1 second. From now, both software are considered one synched system.

2.3.2. SEPARATE COMPUTER SYNC SETUP

If Pro Tools and Reaper are running on separate computers, the TIMECODE can be sent via Apple's "Network MIDI service". Both computers must be on the same network. For best performance, a wired, direct or "thru a single router", connection should be used.

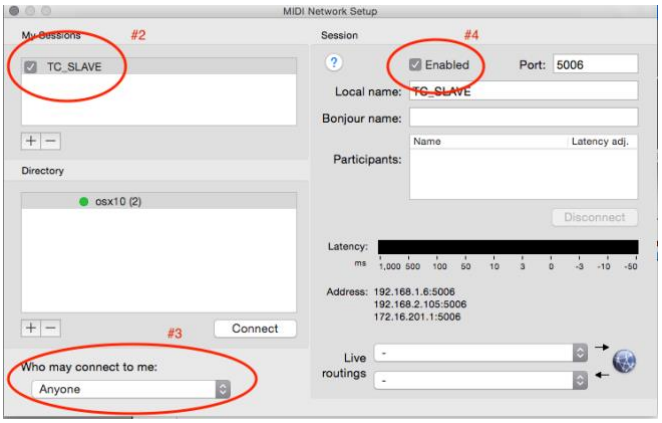
The following steps must be followed to create the network session between both computers:

<u>On the Pro Tools computer</u>

1. In the "Audio Midi Setup" application, open the "Network" icon.
2. In the "My session" pane, press the "+" key to create a new session and name it "TC Master".
3. Select "anyone" in the "Who may connect to me" pull-down menu.
4. Select the "Enabled" button

<u>On the Reaper computer</u>

1. In the "Audio Midi Setup" application, open the "Network" icon.
2. On the "My session" pane, press the "+" key to create a new session and name it "TC Master".
3. Select "anyone" in the "Who may connect to me" pull-down menu.
4. Select the "Enabled" button



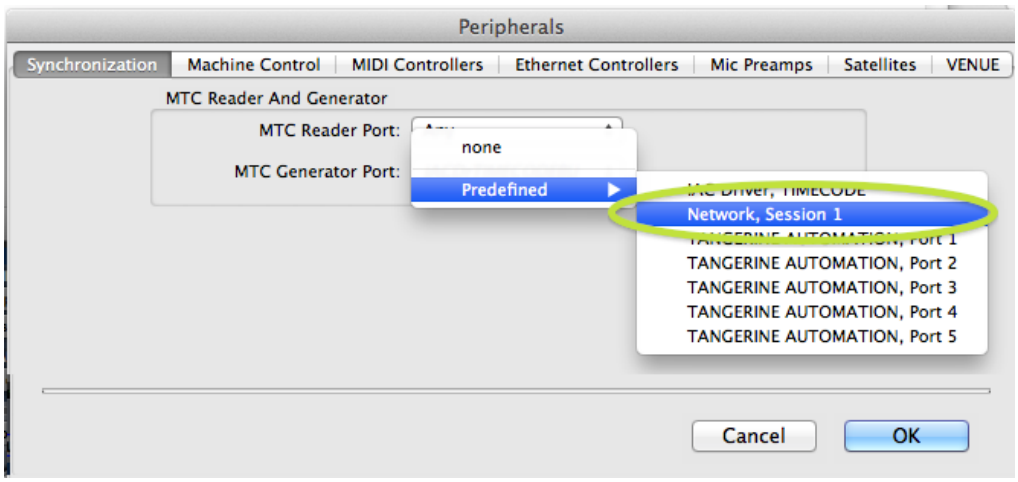
At this point, in the "Directory" Pane, the computers should see each other. Press the "Connect" button to enable the network connection. The other computer session name should then appear in the "Participants" pane.

Restart Pro Tools and Reaper on each computer to update the new midi configuration.

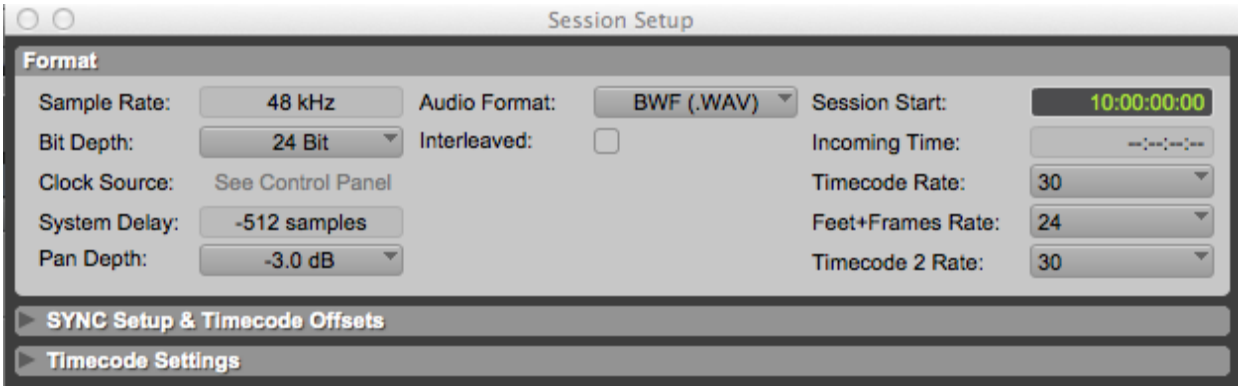
SETTING PRO TOOLS TO SEND TIME CODE

The following steps must be taken to enable Pro Tools as a MASTER that will send TIMECODE when in PLAY (see next page)

1. Assign "NETWORK Session" as the TIMCODE communication channel



2. Set the TIMCODE frame rate and session start time



NOTE:

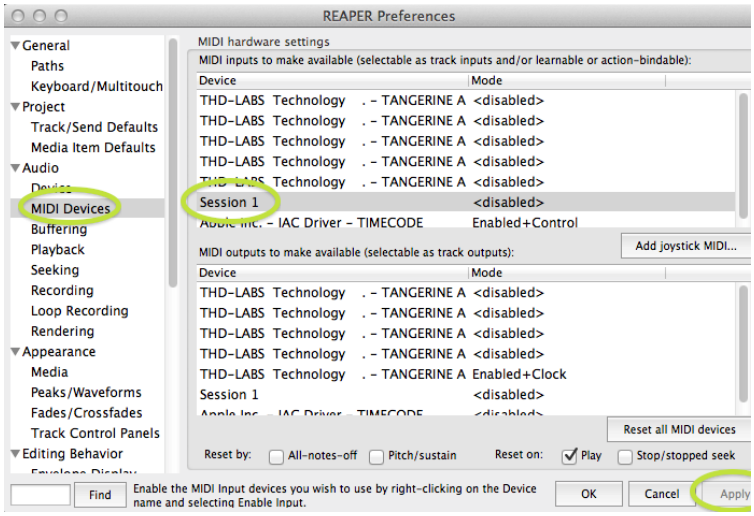
- Session start time should never set to 00:00:00:00, standard practice uses 01:00:00:00 or 10:00:00:00.
- If no video is involved Timecode Rate can be 30FPS

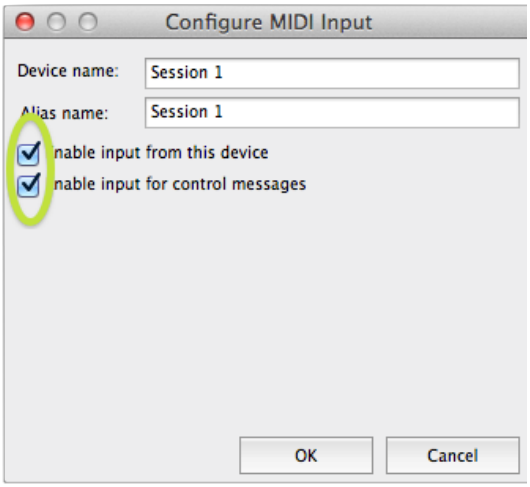
3. Enable TIMECODE generation.

SETTING REAPER TO RECEIVE AND SYNC TO TIME CODE

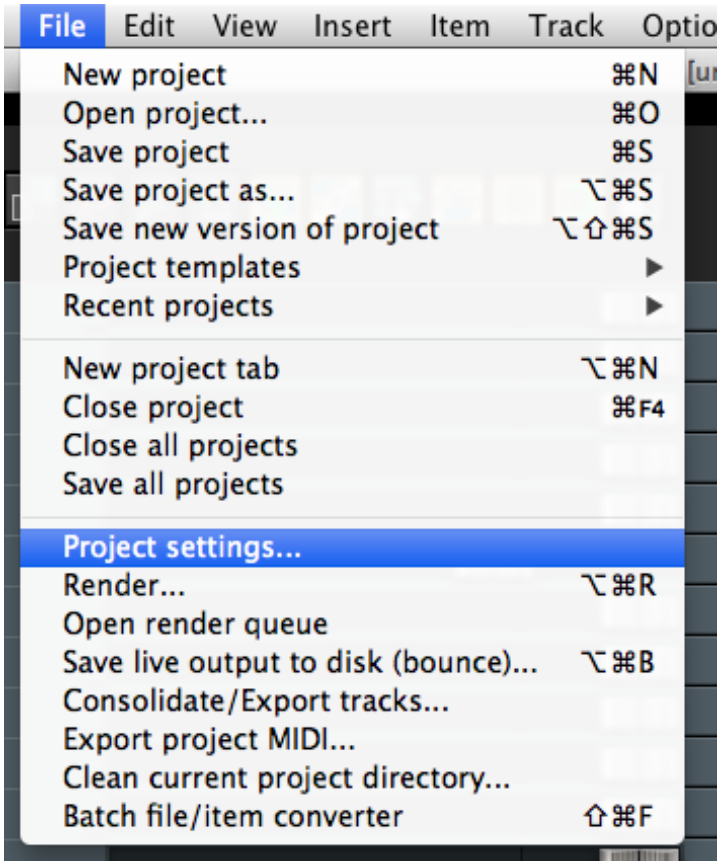
The following steps must be taken to configure and enable REAPER as a SLAVE that will sync to TIMECODE with Pro Tools running on a different computer.

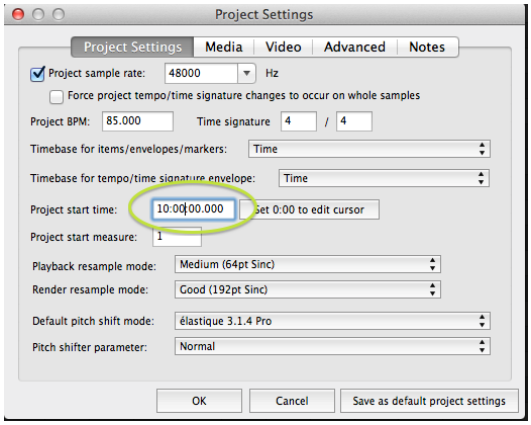
1. Assign the "Network Session" as the TIMECODE communication channel

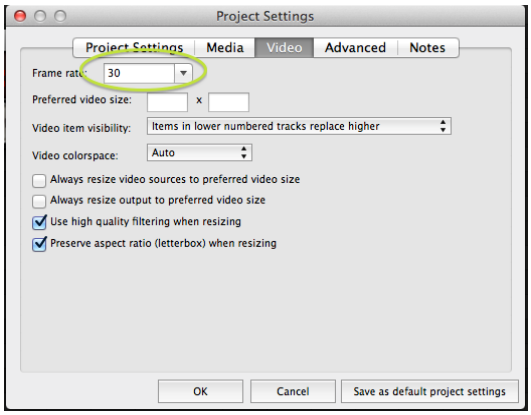




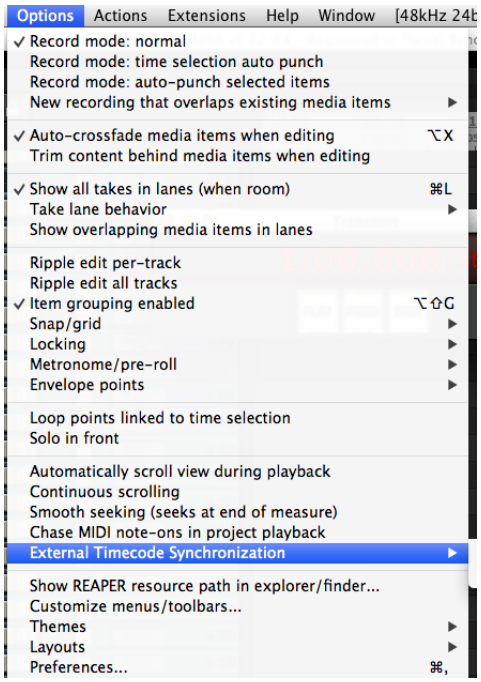
2. Set the TIMECODE frame rate and Start Time

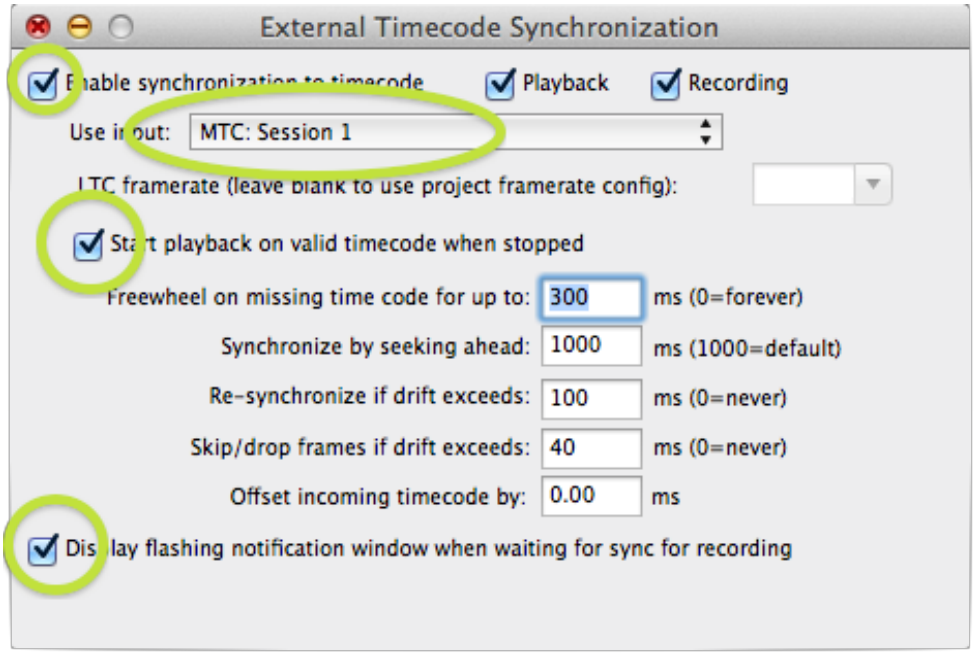






3. Enable receive and sync to TIMECODE





SYNCING

At this point, the system can be synched. When Pro Tools is in PLAY mode, REAPER will start and synchronize itself in less than 1 second. From now, both softwares are considered one synched system.

2.3.3. SETTING UP THE KEYBOARD DECODER FOR REAPER WORKFLOWS USING A SEPARATE COMPUTER SETUP

1. In Pro Tools, open the /Peripherals/MIDI Controllers panel :
   In bank #1, select: "type" = HUI
   "Receive from" = Network Session name
   "Send to" = Network session name
2. On the Pro Tools computer, go to the "Audio Midi Setup" application, and open "Network".
3. In the "Live routings" lower drop-down menu, select "Network TC_Master".
4. On the Reaper computer, go to the "Audio Midi Setup" application, and open "Network".
5. In the "Live routings" upper drop-down menu, select "Tangerine Port #1".
6. Press the SSL "Tape Enable" switch.