

RSscan & Quintic Synchronisation Tutorial

Using the SST Controller



Synchronising RSscan Footscan & Quintic Video Software

This tutorial is to be used with the following software:

Quintic Biomechanics v21

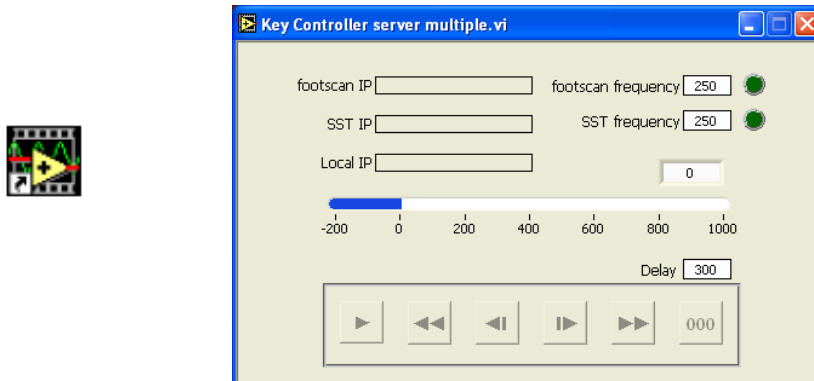
RSscan Balance

RSscan Gait

To synchronise Quintic Video footage and RSscan pressure data the SST / Key Controller (KC) software needs to be installed.

If you do not currently have the KC software installed on your computer please download it from http://www.quintic.com/tutorials_v21.htm where it is bundled in the last download labelled 'SST Tutorial'.

1. Please firstly load the SST / Key Controller icon by double clicking the shortcut on your desktop. The following window should load.

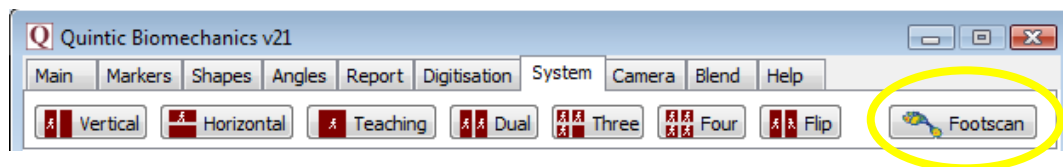


2. Once the key controller has loaded, load Quintic Biomechanics v21 Video software by double clicking on the shortcut icon on your desktop.

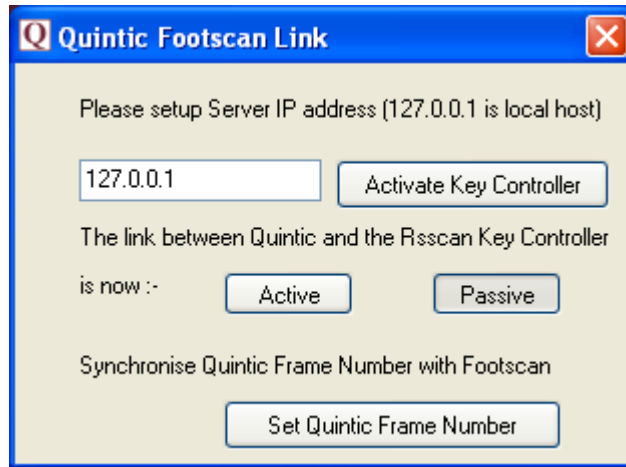


3. Load the video that you wish to synchronise by clicking on the  button.

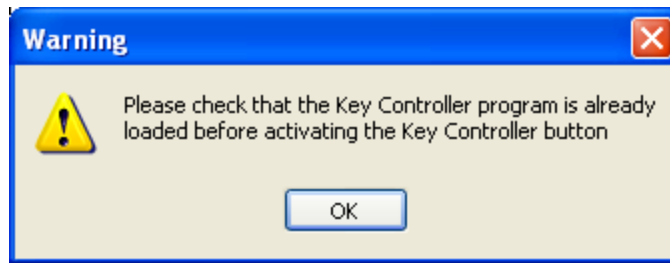
4. Once the video has loaded into Quintic click on the 'System' tab and then click the 'footscan' button.



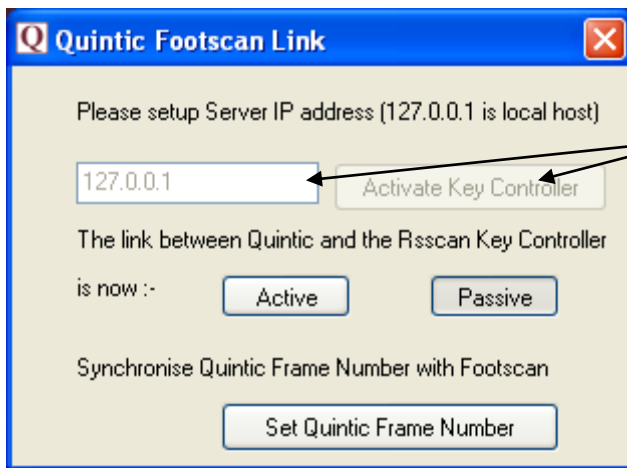
5. After clicking on the Footscan button, the ‘**Quintic Footscan link**’ window will load.



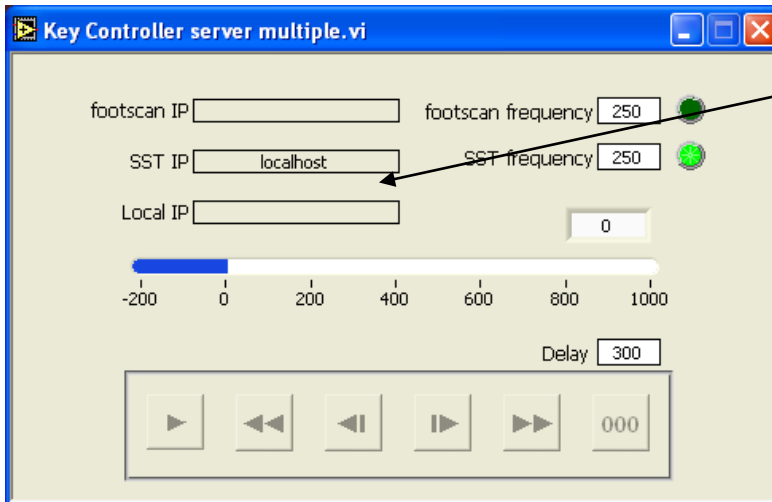
6. Click on the ‘**Activate Key Controller**’ button to connect Quintic and the KC. After clicking this button the window below will appear, click on ‘**OK**’ if the key controller is loaded, if not close down Quintic and load the KC program.



7. Once the KC has been activated the I.P address box and the ‘**Activate Key Controller**’ button will be greyed out, and a local host connection between Quintic and the Key Controller, will be visible within the KC window.



I.P Address and ‘**Activate Key controller**’ button are now greyed out.



Once the KC has recognised the Quintic software a **'localhost'** connection will appear in the SST box.

8. Now load either the Footscan Balance or Gait software.


(N.B. The pressure plate does not have to be attached – if it isn't click **'Continue Without'**).

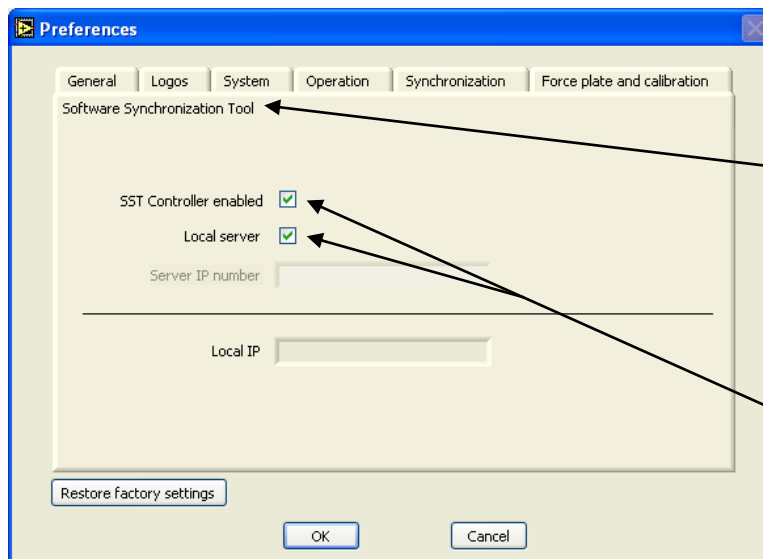


Footscan Gait



Footscan Balance

9. If the KC has not recognised your Footscan software open the preference screen by pressing F10 or clicking on the  button.

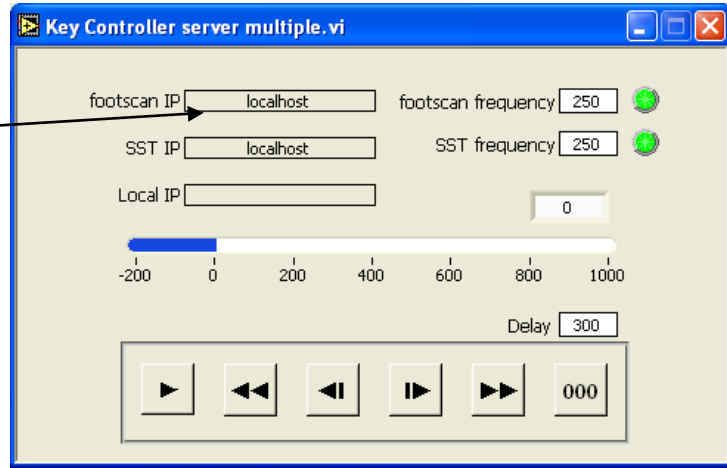


Select the 'Software Synchronization Tool' Tab.

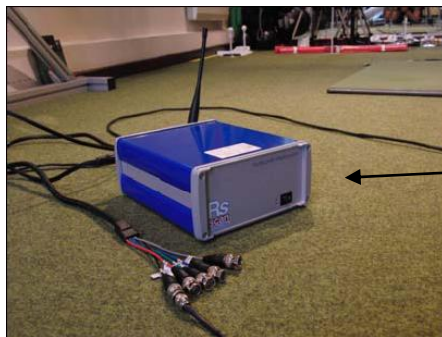
Make sure both the SST and the local server are selected.

- Once the balance or gait software has loaded and the preferences are set correctly the KC software should have recognised and connected to the Footscan I.P.

Once the KC has recognised the RSscan software a localhost connection will appear in the Footscan connection box.



- Computer firewalls can also block the connection of the Footscan software and the KC. If your software isn't connecting, then it is necessary to TURN OFF any firewalls. This can be done by going to: Start, Control Panel, Security Centre, looking for the settings within your antivirus software.
- Once the Quintic and Footscan software have both connected to the KC we can start to synchronise both the video and pressure data.
- Load up the desired Footscan data file by clicking on the button and selecting the desired patient.
- If the force platform has been synchronised through an RSscan interface Box scroll both the pressure and video data to frame zero (see image below).



RSscan Interface Box with trigger/sync leads connected

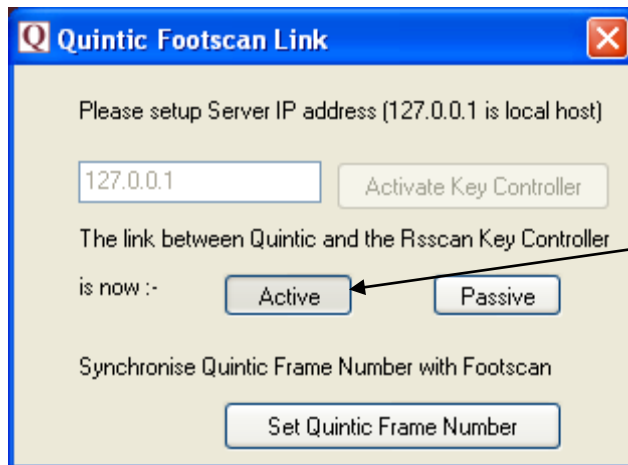
15. If the video footage and RSscan data haven't been synchronised through a 3D Box, it is recommended that an external visual cue such as an LED light or a audio cue is used at the start of the movement so that the video can be trimmed allowing both the video and pressure data to be synchronised accurately.

N.B. If using Footscan Gait then heel strike can be used to manually synchronise the video and pressure data.



RSscan Interface Box with LED lit (see Quintic for more info on LED use).

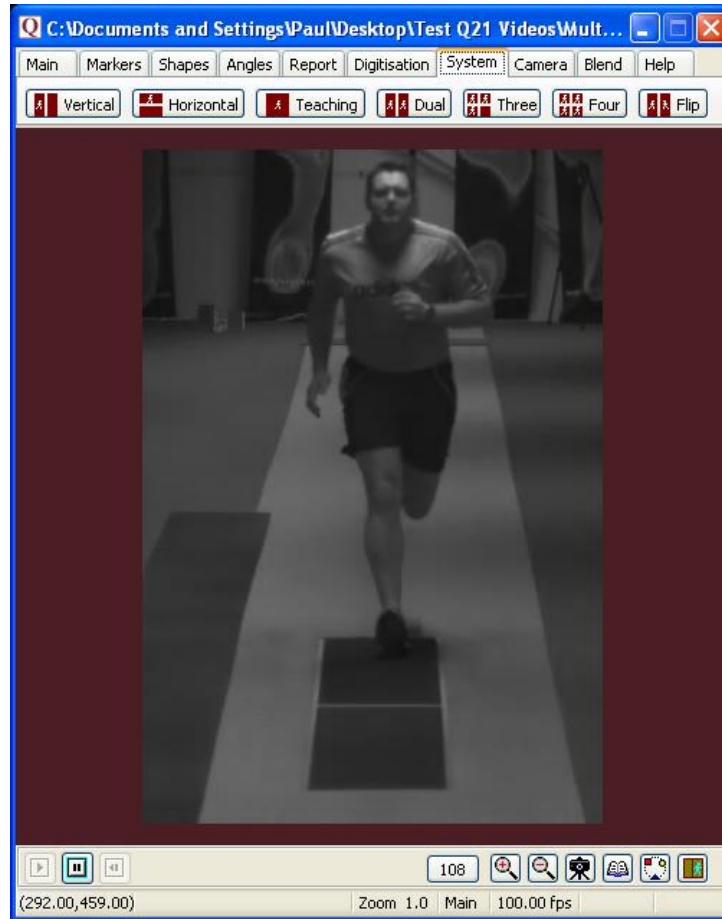
16. Once both sets of data have been set to frame 0 open the **'Quintic Footscan link'** window and click on **'Active'**.



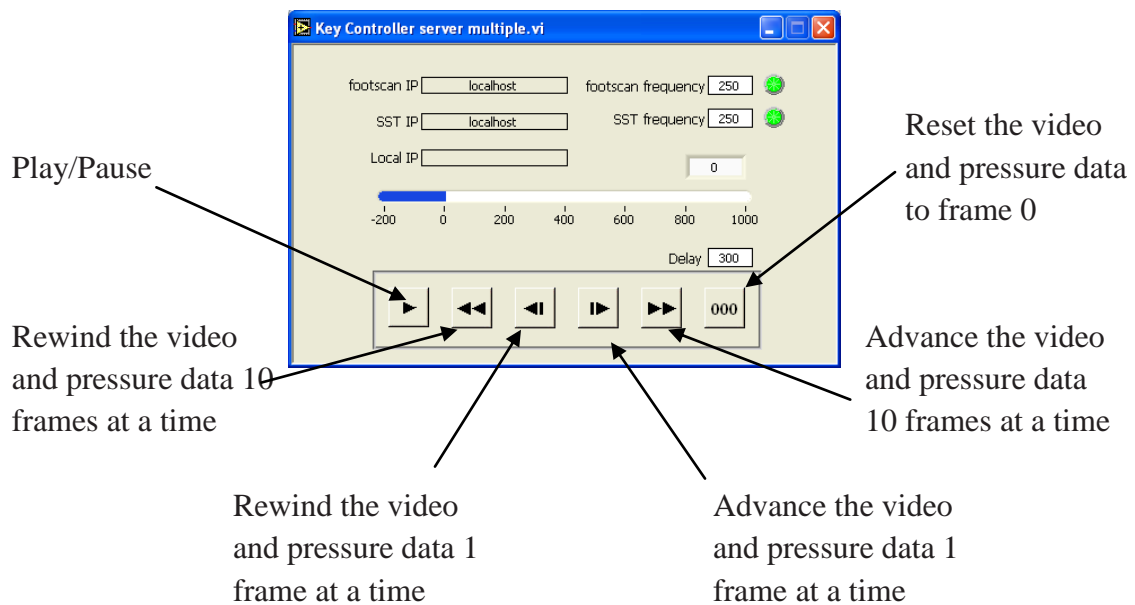
By clicking the **'Active'** button, both programs become synchronised at frame 0.

Use **'Set Quintic Frame Number'** when using an LED light/heel contact to indicate the point at which the Footscan starts recording. This allows you to manually scroll to and indicate which frame number of the video represents frame 0 on the RSscan (i.e. the first frame the LED is lit).

17. Once active, the video play controls now disappear from within the Quintic software and both the pressure data and video data is now controlled from the Key Controller Window.



18. Both the video & pressure data playback are now controlled by the KC.



19. If you wish to change the Footscan or Quintic frequencies click in the relevant boxes and input desired value.

N.B. Normal Quintic capture = 50fps PAL/60 NTSC

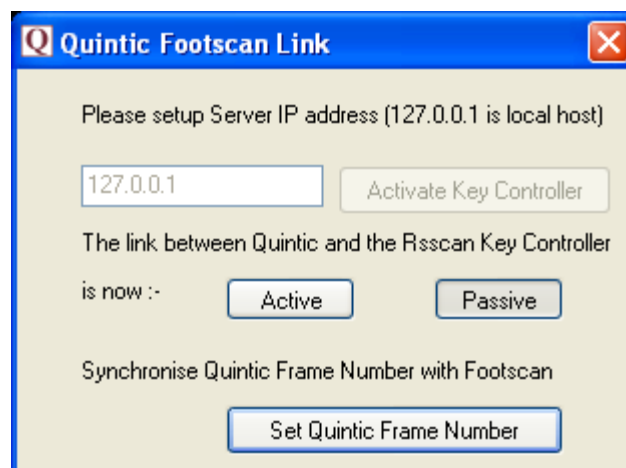
Footscan Frequency	Quintic (Frequency)	Ratio
500 ^a	500 (High speed camera Redlake/Photron)	1:1
250	250 (High speed camera Redlake/Photron)	1:1
300 ^a	300 (Casio F1)	1:1
210	210 (Casio FH25)	1:1
50-500	100-250 (Quintic USB 2.0)	*
200	100 (Basler Camera)	2:1
120	60 NTSC (Standard Quintic Capture)	2:1
250	50 PAL (Standard Quintic Capture)	5:1
200	50 PAL (Standard Quintic Capture)	4:1
100	50 PAL (Standard Quintic Capture)	2:1
50	50 PAL (Standard Quintic Capture)	1:1

N.B. The slower the frequency with RSscan, the longer the capture time.

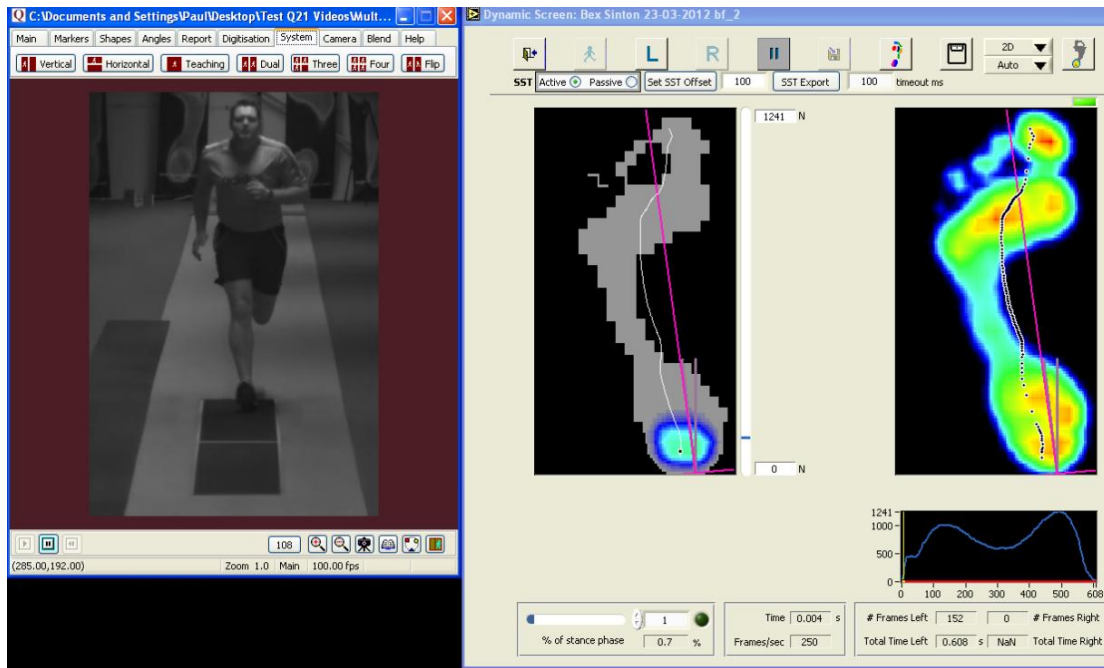
***For best results use a 1:1 ratio or a simple ratio where Footscan frequency is higher than the Quintic frequency.**

^a **Only possible in Gait Footscan when using a ½m plate size.**

20. To unsynchronise the pressure and video data click open the ‘**Quintic Footscan link**’ window and click on ‘**Passive**’. This will allow the user to control both sets of software individually as well as select new video or pressure data.



Example: Footscan and Quintic synchronised on frame 108 at the heel strike.



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