

Product Name

Waves Tracks Live



Product Description

Instructions for use of Waves Tracks Live on a computer for audio playback / recording with a Cadac digital mixing console

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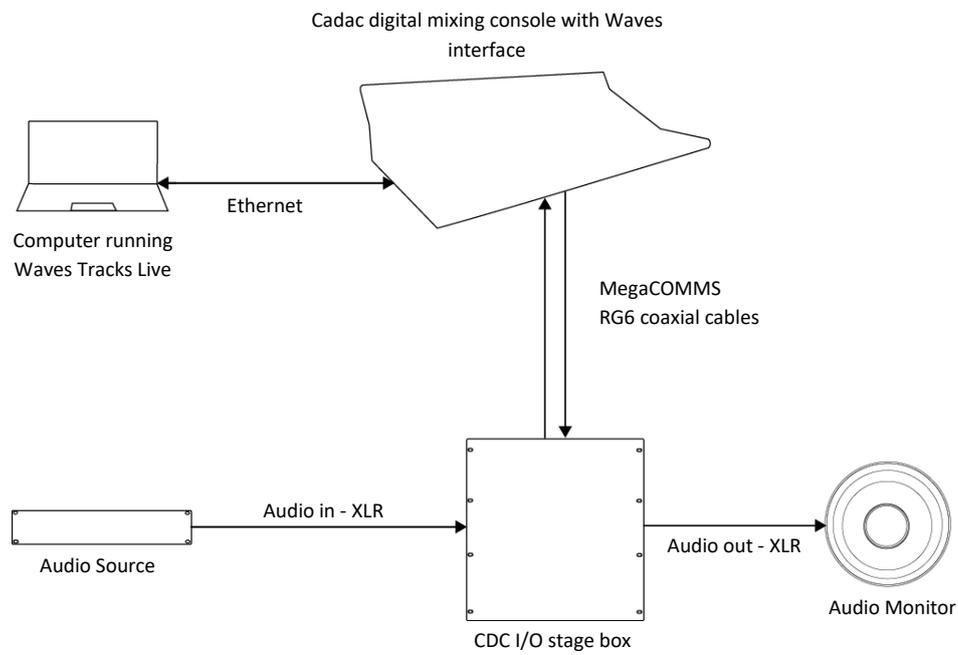
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Introduction

AIM: To demonstrate the use of Waves Tracks Live for audio playback /monitoring on a computer.



This will allow the record and playback of audio on a CDC five, CDC six or CDC seven-s to a separate PC or Mac computer.

Any test audio needs to be supplied to and from the console via a CDC I/O rack.

This use of Tracks Live describes the Cadac console without the use of Waves plug-ins as this would require a Waves SoundGrid server.

This document describes connecting audio in Tracks to the console via the Waves SoundGrid network where SoundGrid Studio is running on the Computer.



Equipment

Equipment:

- PC / MAC with Waves Tracks Live installed
- CDC eight, seven-s, seven, six or five consoles with Waves audio card fitted
- Ethernet cable
- Cadac driver – available from Waves Central

Optional: Only required for sourcing / monitoring audio to / from the console:

- CDC I/O stage rack
- Audio source
- Audio speaker

Minimum PC Requirement

CPU	Intel i5
RAM	8 GB
Operating System	Windows 7 64 bit / Windows 8.1 64 bit / Windows 10 64 bit
Screen Resolution	1024 x 768 32-bit
Network	Gigabit Ethernet

Minimum Mac Requirement

CPU	Intel Core i3
RAM	8 GB
Operating System	10.9.5 - 10.11.3 / 10.8.5 for ProTools 10 only
Screen Resolution	Minimum: 1024 x 768 Recommended: 1280 x 1024 / 1600 x 1024 USB displays are not supported as the primary display
Network	Gigabit Ethernet

Set-up



Attach the Cadac console to the computer (PC or Mac) using single ethernet cable. (The SoundGrid card of the CDC six is shown below.)

Any of port - 1, 2 or 3 - may be used to connect the computer:



Connect CDC I/O stage rack to the console using RG6 coaxial cables for the MegaCOMMS network

Connect the audio source to an input on the CDC I/O stage rack

Connect speaker to an output on the CDC I/O stage rack

Note: The computer Ethernet connection to the console should not be shared with any other network element such as an internet connection. A switch may be present but not required.



Software Instructions

There are several aspects to this.

- There is a common computer **'Tracks Live'** software setup required.
- The SoundGrid network itself has to be setup, which links audio from the console to the Tracks live software. This is where there are two options, affecting what software is run on the console and computer.
- Finally the console GUI has to be setup to link audio/to from its Waves hardware.

All must be set up correctly in order to pass audio between the DAW and the console.

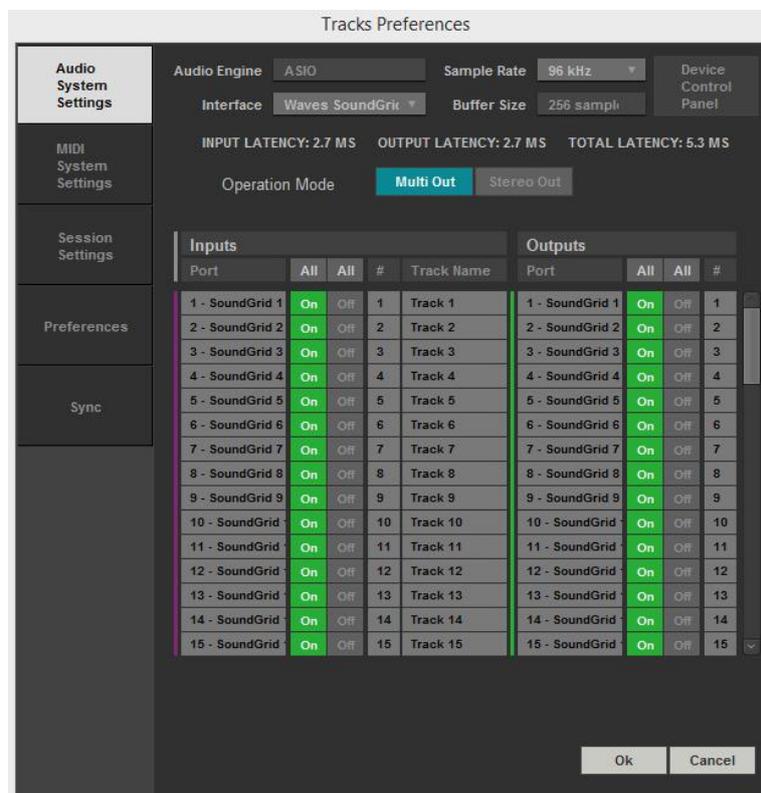
The Tracks software

The computer requires a program called **'Tracks Live'**.

Tracks Live is run by selecting the Icon:



Following start-up, select the system settings button the following screen appears:



Note: That no licence is required to run this software.

The '**Waves Tracks**' track numbers should be assigned to SoundGrid numbers, so there are 1 - 64 SoundGrid inputs assignments AND 1 - 64 SoundGrid output assignments

- Audio engine should be set to '**ASIO**' (or "**CoreAudio**" if you are using a Mac)
- Interface should be set to '**Waves SoundGrid ASIO**'
- Sample rate should be set to '**96 kHz**'

Once this is configured, the project settings may be saved and the program started and used as required.



The SoundGrid Network: Using SoundGrid Studio on a Computer

Console Setup

There is no need to run any software on the console.

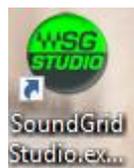
Note: There are Waves SoundGrid drivers running in the background but this should happen automatically every time the console powers up.

Computer Setup

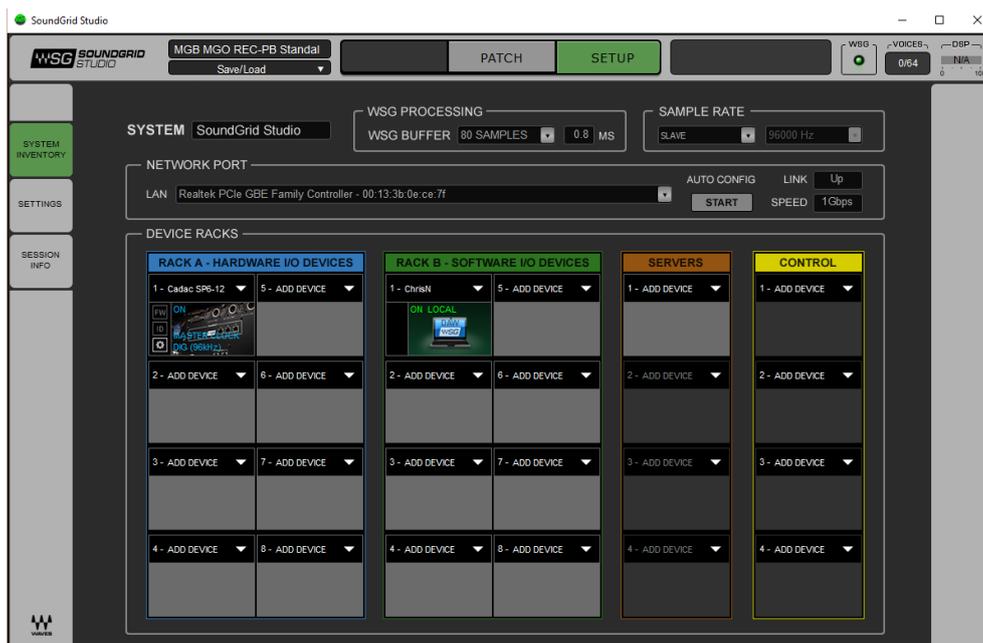
The computer must run 'SoundGrid Studio'

Note: That no licence is required to run this software.

This software is run by selecting:



The main screen should come, (select cancel if any window comes up requesting plugin directories) and ultimately must look like this:



The only select buttons that you have control over are

a) **SAMPLE** rate **MASTER/SLAVE**.

This must be selected as **SLAVE**. It should auto select 96 kHz if the console has successfully connected.

b) **START**, under Autoconfig.

This will cause the program to scan the system and should discover the console denoted 'Cadac' in the Rack A window.

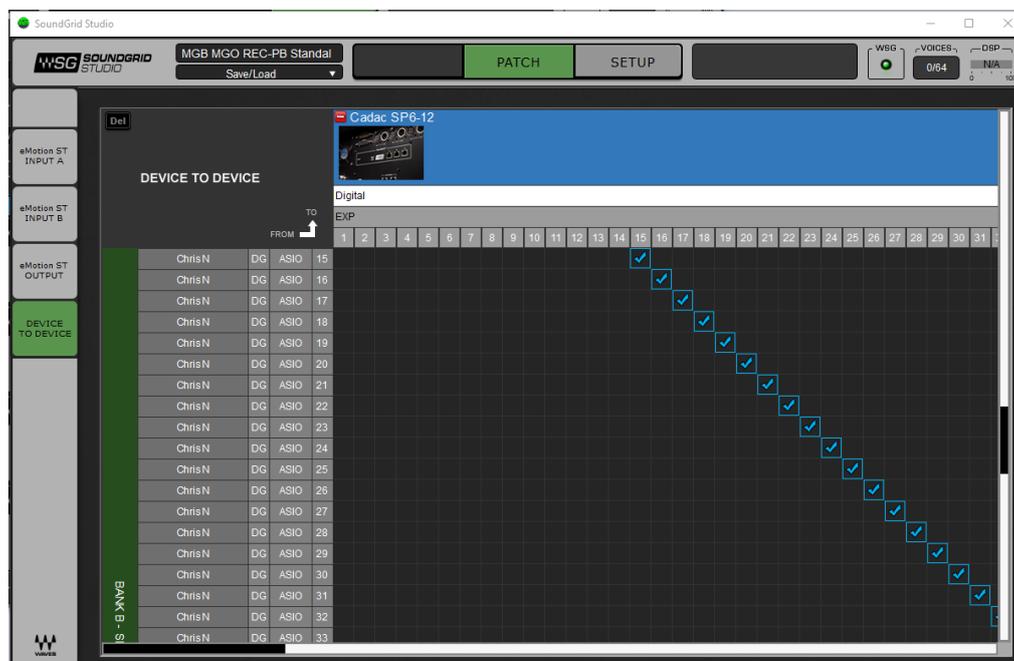
The Rack B box represents the SoundGrid / Tracks DAW.

c) **Network Port**

The appropriate network address for the Ethernet port attached to the console should be selected here.

Once there is no text in **RED** then this setup is complete. There is one other window which must be configured.

Select **PATCH** then **DEVICE to DEVICE**. You will see the following screen:



On this screen you will need to select cascading '**ticks**' to indicate one to one connections for:

From **RACK B** channels 1 – 64 To **CADAC** channels 1 - 64

And

From **CADAC** channels 1 - 64 To **RACK B** Channels 1 - 64

Once this is done, then the audio channels from the console are linked to the audio channels in Tracks, in both send and receive directions

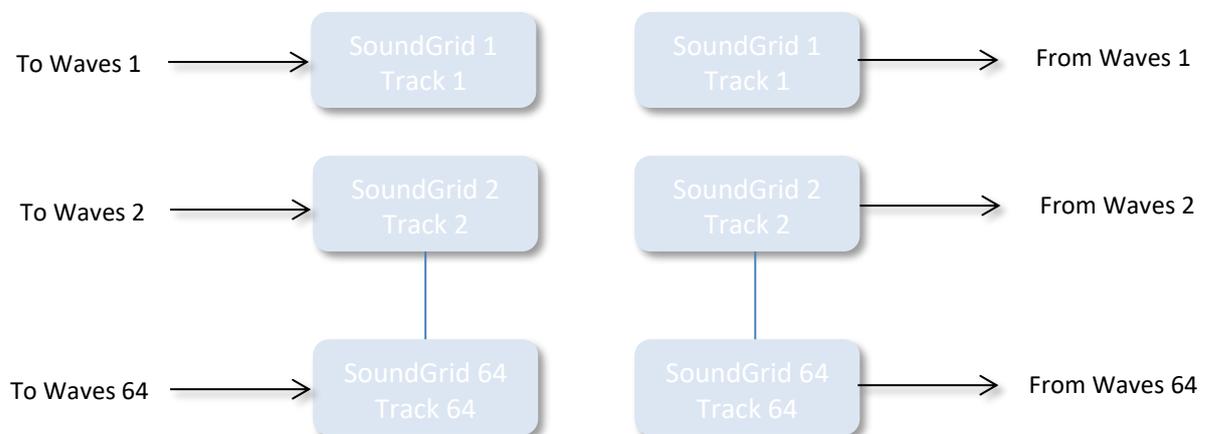


Console Audio Routing

Accessed from the main GUI window this software starts up automatically as console is powered - like the small set-up screen described earlier.

Use the main GUI to configure audio routing to / from Waves.

The actual signal path to and from the 'Waves' looks like this:



The Waves SoundGrid interface may be considered as 64 separate channels of audio between the Tracks software and the console.

When the full system is running these 1 - 64 SoundGrid input and output ports are directly connected to the Waves 1 to 64 input and output ports on the console.



The Waves ports are accessed via the assign input /send screen of each channel on the console, shown below:



Screen shot from a CDC: eight

To use Waves, the channel assignment window 'Assign input', 'Assign send' etc. may be used to configure any desired signal path / mix involved in taking audio from, or sending audio to, the Tracks DAW.

If you playback audio from Track 1 (SoundGrid 1) on the computer:

- This track may be heard when 'From Waves 1' is assigned as an input on a channel assignment on the console, and sent to the 'I/O rack' output for the speaker
- If you assign an input to another channel from 'I/O rack' input audio source on the CDC six
- Send this channel to 'To Waves 2' then this may be monitored/recorded at Track2 on the computer.

Note: It is important to note that the console's local I/O or AES ports, and the Waves I/O ports 1- 16, share the same internal resource on the CDC six. In addition, Waves output 63 and 64 are not available as they internally used for the headphone outputs.

Be aware of this selecting which SoundGrid channels/track numbers you use. It is easy to get some loud distortion or feedback paths by accident....



Fault Finding

If no audio is heard it may be necessary to repeat some of the above steps.

Note the following:

SoundGrid

- If no Cadac hardware appears in Rack A or it is in **RED** or the Autoconfig start scan finds no devices.

Check you are on the correct network port.

The console may not be running SoundGrid drivers properly, which implies the console has not had waves software installed properly or the software need update.

- A simple restart of the PC/Console may also cure the problem.

As a general note, software installations prior to mid-2016 will likely need updating, as all the Waves software prior to this has had major revisions.

