



win|RTA Studio  
QuickStart Guide

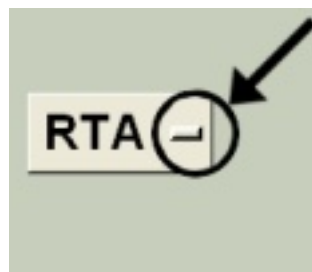
Version 2.4

AcoustX  
Middletown, CA  
Tel: 707-537-1310  
<http://acoustx.us>

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Welcome to AcoustX win|RTA Studio software. This guide will provide you with an overview of setting up and running the software and connecting it to your hardware. The QuickStart Guide serves as a basic reference.

When you see a button with a bar on the right side, this indicates that when you click on it, a drop-down menu will appear.



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Version 2.4

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# Installation Procedure

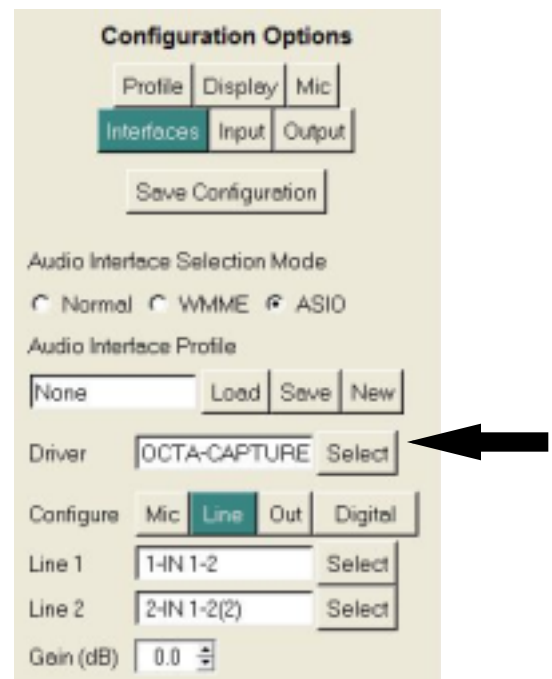
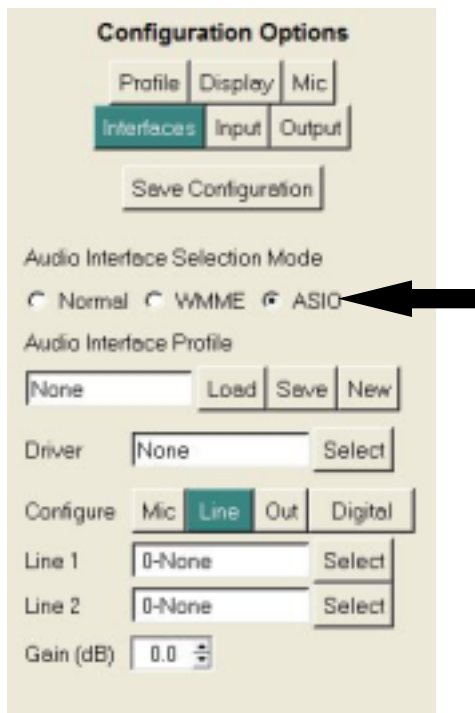
With the release of win|RTA V2.4, the software can be configured to accommodate many multichannel interfaces. For setting up a system using the MOTU 4Pre, please refer to Studio QuickStart Guide V2.2. For setting up a system using the MOTU Traveler, please refer to Studio QuickStart Guide V1.8.

This document will show the basic procedure for configuring a multichannel interface that utilizes an ASIO driver.

This example will use the Roland Octa-Capture.

First, select Config->Interfaces->ASIO

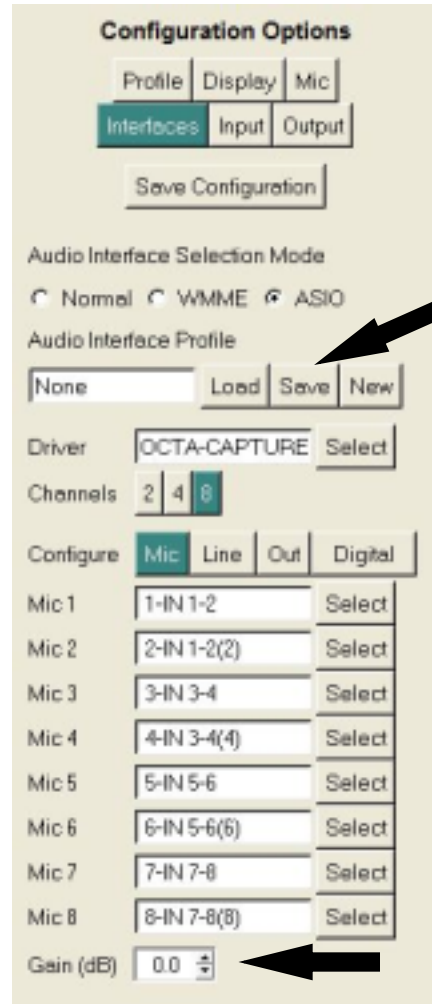
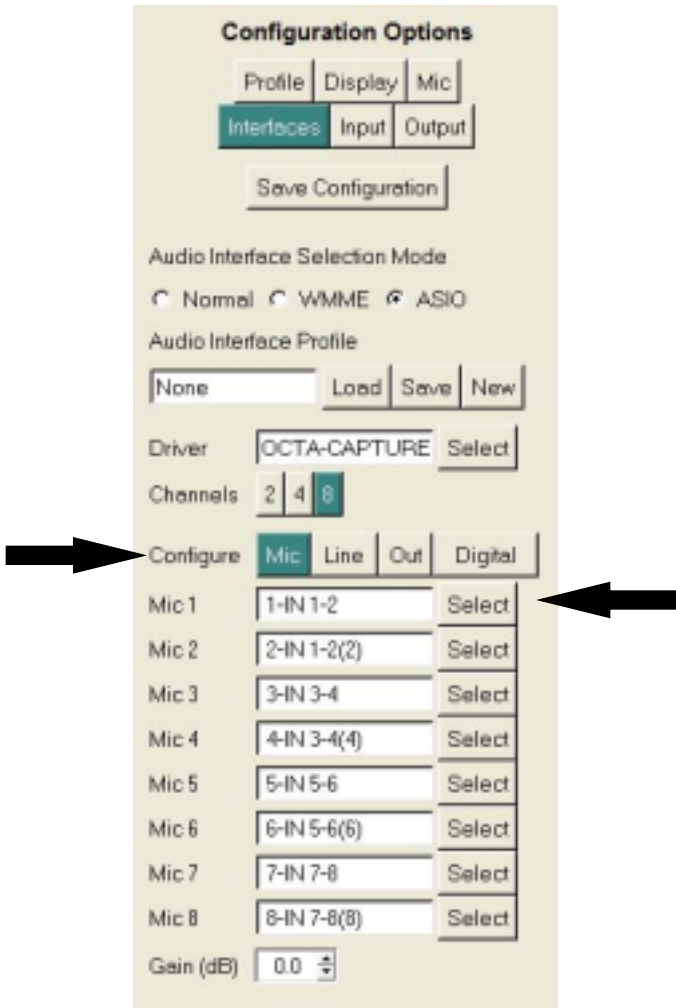
Next, select the driver.



Click on the Mic button to configure the microphone inputs.

Set the microphone gain using the Gain spinbox. In this case, the device was set for 28 dB gain. For best results, use a microphone calibrator to set the gain.

Click Save to save and load the ASIO configuration (AIX file in program directory)



# Configuration: Microphones and Interfaces

**Configuration Options**

Profile | Display | **Mic**

Interfaces | Input | Output

Save Configuration

Apply Mic Calibration

Mic 1 S/N	5001	Clear
Mic 2 S/N	5002	Clear
Mic 3 S/N	5003	Clear
Mic 4 S/N	5004	Clear
Mic 5 S/N	5005	Clear
Mic 6 S/N	5006	Clear
Mic 7 S/N	5007	Clear
Mic 8 S/N	5008	Clear

Microphone response conversion

None

Pressure to Free

Free to Pressure

Export comma delimiter

	Bump	Disable	EAI
Mic 1	0.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mic 2	0.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mic 3	0.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mic 4	0.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mic 5	0.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mic 6	0.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mic 7	0.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mic 8	0.0	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Enable and load microphone calibration files.

Change the response type of the microphone. For a discussion of this topic, see the AcoustX website.

When exporting a mic cal file using Shift-click Clear (Export), insert a comma after the frequency.

Adjust the gain of individual microphones.

Disable one or more microphones

If the loaded mic cal files are configured for EAI, a check will appear in the EAI checkboxes. To use EAI, either these boxes must be checked, or one of the mic cal files must be exported (SHIFT-click Clear) and loaded into the external software. For more information on EAI, see <http://acoustx.us/eai.html>.

# Configuration: I/O

**Configuration Options**

Profile | Display | Mic

Interfaces | **Input** | Output

Save Configuration

Input

**Mic** | Line | Digital

Channel

**1** | 2

Plex Rate (per second)

**1** | 2 | 3

High Pass Filter

0 dBFS Reference

Full scale square wave

Full scale sine wave

Select Input

Select input channel  
(Mic selection is on main screen)

Set Plex rate

Enable 22 Hz high pass filter for  
FLAT, Line In, S/PDIF

Set dBFS reference. There is a 3 dB  
difference between settings.

**Configuration Options**

Profile | Display | Mic

Interfaces | Input | **Output**

Save Configuration

Test Signal Type

**Pink** | Sine |  Norm |  500-2k

Test Signal Output

**Analog** | Digital | AC3

Output Levels

Pink  **mV** | dBV | dBu

EAI  **dB**

Output Channels

Ch 1

Ch 2

Configure pink noise button behavior

Select test signal output port (optional AC3 encoder is shown)

Set units of measure and level for outputs

Enable outputs. In Analog mode, the  
channels can be named.

# Configuration: Profile

**Configuration Options**

Profile | Display | Mic

Interfaces | Input | Output

Save Configuration

Operator

Company

Room ID

Data Dir

Edit Mode Menu

CTT Profile

Cinema  Mix  Home

Length Units

Feet  Meters

Window Size

Normal  Compact

Write configuration data to disk

Technician name

Organization

Name of theatre

Selected data directory  
Defaults to "My Documents"

Set which modes are available in Mode menu

Set software options for type of room under test

Set default units for measurements

Set size of win|RTA main window

# Configuration: Display

**Configuration Options**

Profile **Display** Mic

Interfaces Input Output

Save Configuration

Octave Grid

Show Values

Show EAI msg

Balloon Help

Show Pass/Fail

Cell Uniformity

User Avg Time

Variable X-Curve

ST202  # Seats

Sliding Knee  Room Length

X-Curve Position

Data Averaging

File #1	<input type="text"/>	Clear
File #2	<input type="text"/>	Clear
File #3	<input type="text"/>	Clear
File #4	<input type="text"/>	Clear

Gain Leveling

Calculate

Display octave markers

Show bar values when cursor is moved over a bar

Show EAI mic config warning message

Enable balloon help

Show PASS/FAIL limits in CTT

Set display for Cat. No. 566 test film

Set length of User Average

Enable Variable X-curve

Lower X-Curve position

Select files for to calculate a multiplexed response from individual microphone data.



# Main Software Screen

The screenshot shows the WINRTA software interface. At the top, there is a menu bar with buttons: 1, 2, 3, 4, 5, 6, 7, 8, PLEX, RUN, STOP, GO, PINK. A digital display shows '85.0'. Below the menu bar is a toolbar with buttons: CLEAR, CONFIG, and a dropdown menu. The main display area shows a frequency spectrum graph with a vertical scale from 40 to 80. The x-axis is labeled with frequency bands: 10, 32, 40, 50, 63, 80, 100, 125, 160, 200, 250, 315, 400, 500, 630, 800, 1k, 1.2k, 1.6k, 2k, 2.5k, 3.15k, 4k, 5k, 6.3k, 8k, 10k, 12.5k, 16k, 20k. The y-axis is labeled 'Vertical scale'. A reference line is shown at 70 dB. The bottom of the screen has a row of function keys: F1 Mic 1, F2 Mic 2, F3 Mic 3, F4 Mic 4, F5 Plex, F6 RUN, F7 PINK, F8 GO, F9 Save, F10 File A.

Labels and their corresponding functions:

- Select file to display as File A (left bar when A and B selected)
- Microphone select
- Exit win|RTA
- Pink noise ON/OFF
- Turn on analyzer
- Stop all processes
- Save the current measurement (Shift-Click to export as text)
- Print screen
- Clear screen and reset to default settings
- Select file to display as File B (right bar when A and B selected)
- Filename for File B
- SPL/ Main reading window
- Set analyzer mode
- Measurement units
- Open Config window
- Set length of timed average
- Timed average countdown
- Reference line
- Change Reference line
- Screen response
- Vertical resolution
- Frequency resolution
- Start selected test
- Vertical scale
- Filter band center frequencies
- User definable function keys. Shift key enables new row of keys. Click on F-key number to display and set function choices.
- File view mode
- Display offset

## SPECIAL KEYS AND FUNCTIONS

- ESC key kills all processes
- PgUp/PgDn or mouse wheel moves reference line
- Shift shows new row of function keys
- Shift-click on Save button to export as text (.TXT)
- Click and drag mouse on display to zoom view in RTA mode
- Right-click displays edit menu when in comment
- Hold cursor over filename field to see full pathname

## CTT MODE KEYS

- Up/Down arrow moves among menu selections
- Left/Right arrow moves in or out of current menu
- Alt-Left Arrow moves up one level when in a data entry field
- Shift-click on Home CTT Coverage test button to rename