



win|RTA Standard QuickStart Guide

Version 2.6

AcoustX
Middletown, CA
Tel: 707-537-1310
www.acoustx.us

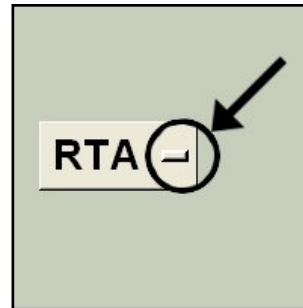
Installation

Unzip the distribution to a folder on your Desktop. Double-click on Setup and follow the directions. Start the program and open the Config menu.

Select Interfaces, then click on Select. After you have chosen the audio interface, and entered any other information you wish to save, click Save Configuration, and your settings will be saved for your next session.

Note on the software:

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.



NOTICE

© Copyright 2020 AcoustX. All rights reserved.

This manual contains confidential and proprietary information protected by copyright laws. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of AcoustX. The information furnished herein is believed to be accurate and reliable. However, AcoustX assumes no responsibility for its use, or for any infringements of patents or other rights of third parties resulting from its use. AcoustX reserves the right to modify at any time the product functionality and features where appropriate, without notice.

Version 2.6

Limited Warranty

The win|RTA software is distributed on an “as is” basis, without warranty. AcoustX makes no representation or warranty, either expressed or implied, with respect to the software programs, their accuracy, quality, or fitness for a specific purpose. AcoustX shall have no liability to the purchaser, or to any other person or entity with respect to any liability, loss, or damage caused, or alleged to have been caused either directly or indirectly by the software contained on the distribution disk. This includes, but is not limited to, interruption of service, loss of data, time, or profits, or consequential damages resulting from the use of the software. If the distribution medium is defective, you may return it for a replacement within the warranty period.

Main Screen

The screenshot shows the main interface of the WINRTA software. At the top, there is a menu bar with 'AcoustX winRTA Standard' and a window control bar. Below this is a control panel with buttons for 'RUN', 'STOP', 'GO', and 'PINK'. A central display shows '84.8 dBC'. To the right of the display are fields for 'RTA' and 'Measurement units'. Below the control panel are two file selection fields labeled 'A' and 'B'. The main area is a bar chart with a vertical scale from 40 to 80 and a logarithmic frequency axis from 25 to 20k. A reference line is set at 70 dB. On the right side, there are controls for 'SLOW', '5', '1/3', 'FLAT', and 'A'. At the bottom, there is a row of function keys labeled F1 through F10.

Labels and their corresponding functions:

- Select file to display as File A (left bar when A and B selected)
- Exit winRTA
- Turn on analyzer
- Pink noise ON/OFF
- 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 countown
- 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 funtion 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)
- Shift-click and drag mouse on display to zoom view in RTA mode (click to un-zoom)
- Right-click displays edit menu when in comment
- Hold cursor over filename field to see full pathname
- Shift-click-drag moves both channel gains together in X-Y

Configuration: Profile

Configuration Options

Profile Display Mic
Interfaces Input Output

Save Configuration

Operator

Company

Room ID

Data Dir

Length Units
 Feet Meters

Window Size
 Normal Compact

Write configuration data to disk

Technician name

Name of theatre or facility

Name of auditorium

Selected data directory
Defaults to "My Documents"

Set default units
for measurements

Normal is for displays 1024x768 or larger. Compact is for smaller screens, typically 1024x600. Save Configuration and restart win|RTA to take effect.

Configuration: Display

Configuration Options

Octave Grid

Show Values

Reverse Slider

Balloon Help

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

Show bar values when cursor is moved over a bar

Set display for Cat. No. 566 test film (film projectors)

Enable Variable X-curve

Change the vertical position of the X-curve

Average data from previous measurements. This is useful to use one microphone and get results similar to using the multiplexer. Make measurements at four different positions, load the four files, and click Calculate. For best results, load the data taken at reference position into File #1 and enable Gain Leveling.

Display octave markers

Reverse the action of the Reference slider

Enable balloon help

Set length of User Average

The Variable X-Curve can either change the slope of the curve (according to SMPTE ST202) or the frequency at which the slope begins (the knee).

Configuration: Microphones and Interfaces

Configuration Options

Profile Display **Mic**

Interfaces Input Output

Save Configuration

Apply Mic Calibration

Mic S/N 3001 Clear

Export comma delimiter

Import / Export frequency data

As measured

As compensation offset

Bump

0.0 ▲ ▼

Microphone response conversion

None

Pressure to free field

Free field to pressure

Enable and load microphone calibration file.

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

Most mic cal files are "As measured".

Adjust the microphone gain.

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

Configuration Options

Profile Display Mic

Interfaces Input Output

Save Configuration

Audio Interface Selection Mode

Normal Custom

Select USBPre2

Set the interface type

Select audio interface

Configuration: Input and Output

Configuration Options

Profile | Display | Mic

Interfaces | **Input** | Output

Save Configuration

Input

Line | S/PDIF

Channel

1 | 2

High Pass Filter

0 dBFS Reference

Full scale square wave

Full scale sine wave

Select Input

Select input channel

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

Select 0 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

Line | **Aux** | S/PDIF | AC3

Output Levels

Pink **mV** | dBV | dBu

Output Channels

Ch 1

Ch 2

NOTE: The functionality shown on these screens will vary depending on the audio interface. Output voltage is only correct when calibrated to interface.

Configure PINK Button behavior

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

Set units of measure and level for outputs

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

X-Y Oscilloscope

The screenshot displays the AcoustX win | RTA software interface. At the top, there are control buttons: RUN, STOP, GO, and PINK. The main window title is "AcoustX win | RTA". The interface is divided into several sections:

- Mode Select:** Located at the top right, it includes buttons for "X-Y", "XY+RTA" (which is currently selected), and "Dual".
- Channel A:** On the left, it shows a grid with a green diagonal line representing the X-Y plot. Below it are controls for channel X, including a "to RTA" button, a digital display showing "114", and unit selection buttons for "mV", "dBV", and "dBu".
- Channel Y:** On the right, it shows a similar setup for channel Y, with a digital display showing "213" and unit selection buttons.
- RTA Plot:** A large bar graph on the right side showing frequency response. The x-axis is logarithmic, ranging from 25 to 20 kHz. The y-axis is linear, ranging from -60 to -20 dBV. The plot shows a series of green bars forming a curve.
- Adjustment Sliders:** Below the channel controls, there are sliders for "Gain" and "Position" for both X and Y channels.
- Additional Controls:** On the far right, there are buttons for "SLOW", "5", "1/3", "FLAT", and "A".

Callouts with arrows point to specific controls:

- "Set channel to display on RTA" points to the "to RTA" button for channel X.
- "Set measurement units" points to the unit selection buttons for channel X.
- "Adjust X gain" points to the Gain slider for channel X.
- "Move X-Y display horizontally" points to the Position slider for channel X.
- "Adust Y gain" (note the typo) points to the Gain slider for channel Y.
- "Move X-Y display vertically" points to the Position slider for channel Y.
- "Mode Select" points to the "XY+RTA" button.

Dual Trace Oscilloscope

The screenshot displays the AcoustX win | RTA software interface. At the top, there are control buttons: RUN, STOP, GO, and PINK. The main display area shows two channels of audio data (Ch 1 and Ch 2) plotted on a grid. Channel 1 has a peak level of 188 and Channel 2 has a peak level of 173. The interface includes several callout boxes pointing to specific controls:

- Mode select:** Points to the X-Y, XY+RTA, and Dual mode selection buttons.
- Adjust Channel 1 vertical position:** Points to the vertical position slider for Channel 1.
- Adjust Channel 2 vertical position:** Points to the vertical position slider for Channel 2.
- Set measurement units:** Points to the mV, dBV, and dBu unit selection buttons for both channels.
- Set vertical gain:** Points to the gain selection buttons (10, 20, 50, 100, 200, 500, 1000, 2000, 5000) for both channels.
- Adjust refresh rate:** Points to the 20.0 Traces/Sec control.
- Adjust time base:** Points to the 6 mSec/Div control.
- Select channel for triggering:** Points to the Trig 1 and 2 selection buttons.
- Adjust trigger level:** Points to the trigger level slider.