



win|RTA Standard
QuickStart Guide

Version 2.4

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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.



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Main Screen

The screenshot shows the main interface of the WINRTA software. At the top, there is a menu bar with 'AcoustX win|RTA Standard' and a toolbar with buttons for 'RUN', 'STOP', 'GO', and 'PINK'. A central display shows '80.2 dBC'. Below this is a large bar chart with a vertical scale from 40 to 80 and a horizontal axis for frequency resolution from 25 to 20k. The chart displays a series of green bars representing the frequency response. To the right of the chart is a control panel with various settings like 'Measurement units', 'Open Config window', 'Set length of timed average', 'Timed average countdown', 'Reference line', 'Change Reference line', 'Screen response', 'Vertical resolution', and 'Frequency resolution'. At the bottom, there are function keys labeled F1 through F10 with corresponding settings like '1/3', '1/6', '1/12', 'FLAT', 'XOVL', 'RUN', 'PINK', 'GO', 'Save', and 'File A'. Numerous callout boxes provide detailed instructions for each part of the interface, such as 'Select file to display as File A', 'Exit win|RTA', 'Turn on analyzer', 'Pink noise ON/OFF', 'Stop all processes', 'Print screen', 'Save the current measurement', 'Clear screen and reset to default settings', 'Select file to display as File B', 'Filename for File B', 'SPL/ Main reading window', 'Set analyzer mode', 'Start selected test', 'Vertical scale', 'Filter band center frequencies', 'User definable function keys', 'File view mode', 'Display offset', 'Measurement units', 'Open Config window', 'Set length of timed average', 'Timed average countdown', 'Reference line', 'Change Reference line', 'Screen response', 'Vertical resolution', and 'Frequency resolution'.

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

Profile **Display** Mic

Interfaces Input Output

Save Configuration

Octave Grid

Show Values

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

Calculate

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 if you wish 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

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 | 5001 | Clear

Microphone response conversion

None

Pressure to Free

Free to Pressure

Export comma delimiter

Bump

0.0

Enable and load microphone calibration file.

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 microphone gain.

Configuration Options

Profile | Display | Mic

Interfaces | Input | Output

Save Configuration

Audio Interface Selection Mode

Normal WMME ASIO

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

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.

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

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 a dropdown menu currently set to "X-Y" and buttons for "X-Y", "XY+RTA", and "Dual".
- Channel Selection:** Two input channels, A and B, are visible at the top. Channel A is selected.
- RTA Plot:** A large bar graph on the right side shows the frequency response. The y-axis ranges from -60 to -20 dBV, and the x-axis shows frequency components from 25 to 20 kHz. The plot shows a relatively flat response with some variations.
- X-Y Oscilloscope:** A smaller plot on the left shows a green diagonal line, indicating a strong correlation between the X and Y channels.
- Measurement Units:** Below the X-Y plot, there are two sets of controls for X and Y channels. Each set includes a display showing a value (114 for X, 213 for Y) and three unit selection buttons: mV, dBV, and dBu.
- Gain and Position Controls:** For each channel (X and Y), there are two vertical sliders labeled "Gain" and "Position".
- Additional Controls:** On the right side of the RTA plot, there are buttons for "SLOW", "5", "1/3", "FLAT", and "A".

Callouts with arrows point to specific controls:

- "Mode Select" points to the "X-Y" dropdown menu.
- "Set channel to display on RTA" points to the "to RTA" button for channel X.
- "Set measurement units" points to the unit selection buttons (mV, dBV, dBu) 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" points to the "Gain" slider for channel Y.
- "Move X-Y display vertically" points to the "Position" slider for channel Y.

Dual Trace Oscilloscope

