RT-7000 RACK TUNER

Sabine Professional Rack Tuner Operating Guide

RT-7100 ADVANCED RACK TUNER

Quick Setup Directions

1. Power on the Sabine RT-7000 or RT-7100 Rack Tuner.
2. Plug your instrument into one of the ¼-inch input connectors.
3. Pluck the string you wish to tune—the nearest note will be displayed in the Note LED display and the distance to in-tune (in relation to that note) will be shown by the number of Flat or Sharp LEDs lit.
4. Adjust the tuning of the string until the In-Tune LED lights.

RT-7000 RACK TUNER **&** **RT-7100** ADVANCED RACK TUNER

Congratulations! You have the world's most advanced rack-mount instrument tuner. Sabine RT-7000 Series Professional Rack Tuners are road-worthy tuners that are fast, accurate, versatile and easy-to-read.

RT-7100 Features

Swoop LED Display: Gives you the best visual cue for easy tuning, especially from a distance. It works like a bar graph of your pitch, sweeping up for sharp & down for flat.

Bright & Easy to Read: The huge note indicator is visible from across the stage, even if you're wearing shades!

Dual Tuning Modes: Never again will tuning be a dreary prelude to greater things with Sabine's Dual Mode LED tuning display. Standard Mode gives you a bar graph reading of your pitch. Strobe Mode shows moving sweep of pitch. Both are more accurate than conventional needle-style displays.

Two Independent Channels: Select on front panel or with optional foot switch (model # RTPED2).

SmartSwitch™ A/B Circuit: The RT-7100 senses your input/output configuration and automatically adjusts the A/B switch to conform to your setup. Have two guitars and one amp? Or one guitar and two amps? No problem – just plug 'em in and switch between guitars or amps depending your setup!*

*NOTE: A/B switch does not **combine** signals from inputs or outputs. Only one output is active at a time.

Flat Tune: Set the tuner to any of four different flat tunings: ½, 1, 1½, or 2 steps below standard pitch. Play and tune your guitar normally but at a lower overall pitch!

Calibration: Change the overall calibration of the tuner from 435 to 445 Hz.

Mute: Mute your instrument for silent tuning – select on the front panel or with the optional foot switch.

Built-in Mic: Tunes almost any acoustic instrument.

Dual Jacks: Front and back panel input/output jacks.

Automatic Note & Sharp/Flat Sensing

Chromatic: 7-Octave range, perfect for guitar and bass; works all the way down to a low A!

Heavy-Duty Metal Case: Built for heavy road use.

Built-in power supply

Power-off Memory: Recalls previous Calibration & Flat-tune settings.

RT-7000 Features

All the same great features except:

- Standard A/B switch between channels
- Output jacks on back panel only
- Tunes via instrument plug-in only (no built-in mic)

*Both the RT-7000 & RT-7100 Professional Rack Tuners are **Made in the USA** and come with Sabine's famous two-year warranty.*

Instrument Tuning Tips

- Pluck one string at a time.
- Pluck the instrument once per second to keep the note "fresh" while you are tuning. Notes go noticeably flat a second or two after being plucked. If tuning a higher-pitched instrument (such as a mandolin), pluck a little faster; for a lower-pitched instrument (such as a bass), pluck slower.
- Do not pluck loudly. Generally light to medium volumes provide purer tones that are easier for tuners to analyze.
- Fingernails and flat picks add overtones and slow the tuning process.
- Tune from a pitch that is flat up to the pitch you desire. This procedure removes any slack in the gears of the instrument's tuning heads. If you tune from sharp to in tune, the gears will slip as you play, and the instrument will go flat after a few minutes of playing.
- If you have difficulty getting a note to register on the tuner, touch the other strings lightly to stop their sympathetic vibrations.
- Use good strings. Old strings lose their uniformity and do not vibrate evenly. Remember to stretch your new strings out; new strings stretch flat as you play.
- All sources of friction cause tuning problems. For example, if the slot in an instrument's nut is too tight, the string will be pulled flat as it is played. A tight nut (or capo) will cause the string's pitch to change in steps rather than evenly.
- Avoid pressure on the instrument while tuning. Even moderate pressure on the neck of a guitar will cause a noticeable change in pitch. Also, press the strings straight down to the fingerboard. Bending the strings sideways is very common, especially on difficult chords, but causes the strings to be pulled sharp.

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2. Plug your instrument into one of the ¼-inch input connectors.
3. Pluck the string you wish to tune—the nearest note will be displayed in the Note LED display and the distance to in-tune (in relation to that note) will be shown by the number of Flat or Sharp LEDs lit.
4. Adjust the tuning of the string until the In-Tune LED lights.

Using your RT-7100 Rack Tuner

Inputs/Outputs

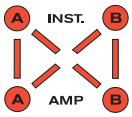
The **RT-7100** Rack Tuner has two channels (A or B) with inputs (labeled "INST") for these channels on both the front panel and back panel. **NOTE**: Only one input jack (front or back) per channel can be used at a time.

The Rack Tuner Outputs are labeled "AMP." The **RT-7100** has outputs located on the back and on the front panel. **NOTE**: only one input or output jack (front or back panel) per channel can be used at a time.

Foot Pedal

The **RT-7100** has ¼-inch TRS connectors for a two-switch pedal (model # RTPED2). Use the Foot Pedal to toggle between **Channels A** & **B** and/or to **Mute** the tuner output. Connectors are located on both the front and back panels (use only one pedal at a time). When a foot pedal is connected, all front panel switches still operate. NOTE: if you use your own pedal, the switches must be momentary, not latching.

SmartSwitch™ A/B Display



This LED array displays your input/output configuration and the signal path of the **SmartSwitch** circuit. As you plug in your guitar(s) and amp(s) you will immediately see the corresponding A or B INST or AMP LED light on the Display.

When you touch the A/B switch, the signal path LEDs will clearly show the signal routing configuration of the **SmartSwitch** (see diagrams on page 4). And, at the same time, the A or B input LED will flash to indicate the active tuner channel.

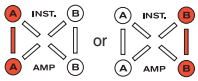
Front Panel Switches

A / B

The A/B switch performs two functions simultaneously.

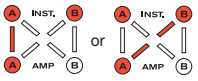
Tuner Channel Switching: Tapping the front-panel A/B button switches the tuner to either the A or B input, and the appropriate LED flashes on the **SmartSwitch** display to show you which channel is active in the tuner.

Signal Channel Routing: Tapping the A/B switch also routes the input/output signal path to match your rig. Use the **SmartSwitch** A/B circuit with any of the following configurations:

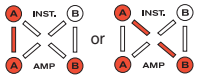


One guitar into one amp out: Simple setup, you don't need the A/B Function

Two separate rigs: 2 guitars into 2 amp outs: Switches both inputs & outputs between channels A or B



Two guitars, one amp output: Switches inputs



One guitar, 2 amp outputs: Switches outputs

FLAT TUNE

Use the front panel **Flat Tune Button** to quickly transpose your guitar down from standard tuning — great for those dark-n-heavy E♭ and D tunings. The front panel **Flat Tune Steps** scale shows the number of steps or tones below standard tuning. **NOTE**: The RT-7100 display has dedicated LEDs that show Flat Tune status. The **Flat Tune LED** for the current setting will always be lit. The "0" LED signifies standard tuning; each position to the left of zero represents ½ tone down from standard tuning. Press the **Flat Tune Button** once to move the status light one LED to the left. For example, to flat tune your guitar down two half tones, tap the **Flat Tune Button** twice. The **Flat Tune Button** will light and the **Flat Tune LED** will move two positions to the left.

STROBE

Tapping the front panel's **Strobe Button** toggles the display mode between **Standard** and **Strobe** mode.

Standard Mode: (resembles a bar graph) Up to 8 sharp or flat LEDs will light up to indicate the degree of sharpness or flatness in cents. As the played note gets closer to the note indicated by the **Note LED**, the corresponding sharp or flat LEDs will dim and turn off one by one until the green "in tune" LED lights.

Strobe Mode: LEDs strobe left to indicate flat, right to indicate sharp. Strobe speed is a function of the distance the played note is from being in tune. A pitch far from the closest note (as indicated by the **Note LED**) will strobe quickly. As the played note gets closer to the note indicated by the **Note LED**, the strobe effect will slow down and eventually stop for in tune. **NOTE**: As in all strobe tuners, it can be difficult to get the strobe effect to stop completely. This is due to the extreme accuracy of the strobe tuner and the fluctuation in string vibration frequency as it varies from "first plucked" to sustained note.

CALIBRATE

Use the Front Panel **Calibrate Button** to tune your instrument to a pitch basis other than A = 440 Hz.

NOTE: The RT-7100 display has dedicated LEDs that show calibration status. The **Calibration LED** for the current setting will always be lit. Press the **Calibrate Button** once to move the status light one LED to the right (past 445 Hz, the LED will cycle to 435 Hz). For example, if you wish to recalibrate the tuner from standard A = 440 Hz to A = 442 Hz, tap the **Calibrate Button** twice. The **Calibrate Button** and the **Calibration LED** above 442 Hz will remain lit while the tuner is calibrated to A = 442 Hz.

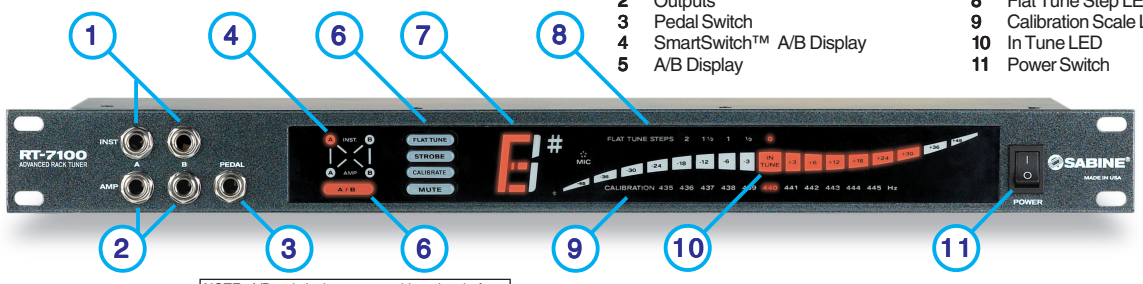
MUTE

The **Mute Button** mutes both outputs for silent tuning. The mute function can also be operated with a foot switch.

Front Panel Microphone

The front panel of the RT-7100 is equipped with a microphone for acoustic instrument tuning without a ¼-inch cord. This microphone is disconnected whenever any of the inputs has a connector plugged into it. **Signal from the microphone will not pass to any of the outputs.**

RT-7100 Front Panel



1	Instrument Inputs (See NOTE on last page)	6	Function Buttons
2	Outputs	7	Note Display
3	Pedal Switch	8	Flat Tune Step LEDs
4	SmartSwitch™ A/B Display	9	Calibration Scale LEDs
5	A/B Display	10	In Tune LED
		11	Power Switch

NOTE: A/B switch does not combine signals from inputs or outputs. Only one output is active at a time.

Quick Setup Directions

1. Power on the Sabine RT-7000 or RT-7100 Rack Tuner.
2. Plug your instrument into one of the ¼-inch input connectors.
3. Pluck the string you wish to tune—the nearest note will be displayed in the Note LED display and the distance to in-tune (in relation to that note) will be shown by the number of Flat or Sharp LEDs lit.
4. Adjust the tuning of the string until the In-Tune LED lights.

Using your RT-7000 Rack Tuner

Inputs/Outputs

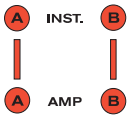
The RT-7000 Rack Tuner has two channels (A or B) with inputs (labeled "INST") for these channels on both the front panel and back panel. **NOTE**: Only one input jack (front or back) per channel can be used at a time. The Rack Tuner Outputs are labeled "AMP." The RT-7000 has Outputs for channels A and B located on the back panel of the unit.

Foot Pedal

The **RT-7000** has ¼-inch TRS connectors for a two-switch pedal (model # RTPED2). Use the Foot Pedal to toggle between **Channels A & B** and/or to **Mute** the tuner output. Connectors are located on both the front and back panels (only one pedal should be used at a time). When a foot pedal is connected, all front panel switches still operate. **NOTE: if you use your own pedal, the switches must be momentary, not latching.**

A/B Switch Display

This LED array displays your input/output configuration and the signal path of the **A/B** circuit. As you plug in your guitar(s) and amp(s) you will immediately see the corresponding A or B INST or AMP LED light on the Display.



When you touch the A/B switch, the signal path LEDs will clearly show the input/output configuration. And, at the same time, the A or B input LED will flash to indicate the active tuner channel.

Front Panel Switches

A / B The front-panel **A/B Button** (or optional pedal switch) toggles the tuner between A or B input/output. The current selection is displayed on the **A/B Switch Display**.

FLAT TUNE Use the front panel **Flat Tune Button** to quickly transpose your guitar down from standard tuning — great for those dark-n-heavy E♭ and D tunings. **NOTE**: The **RT-7000** display uses the tuning indicator LEDs in conjunction with the Flat Tune Steps legend to display Flat Tune status. The LED below the "0" of the Flat Tune Steps legend signifies standard tuning; each position to the left of zero represents ½ tone down from standard tuning. The current Flat Tune status will be displayed briefly the first time the **Flat Tune Button** is pressed. While the status LED remains lit, each subsequent pressing will move the setting one LED to the left. For example, to flat tune your guitar down two half tones, press the **Flat Tune Button** once to display the current setting, and then two more times to lower the setting two half tones. The LED below the current flat-tune setting will remain lit briefly. The **Flat Tune Button** will remain lit whenever the tuner is set to other than standard tuning.

STROBE Tapping the front panel's **Strobe Button** toggles the display mode between **Standard** and **Strobe** mode.

Standard Mode: (resembles a bar graph) Up to 8 sharp or flat LEDs will light up to indicate the degree of sharpness or flatness in cents. As the played note gets closer to the note indicated by the Note LED, the corresponding sharp or flat LEDs will dim and turn off one by one until the green "in tune" LED lights.

Strobe Mode: LEDs strobe left to indicate flat, right to indicate sharp. Strobe speed is a function of the distance the played note is from being in tune. A pitch far from the closest note (as indicated by the Note LED) will strobe quickly. As the played note gets closer to the note indicated by the **Note LED**, the strobe effect will slow down and eventually stop for in tune.

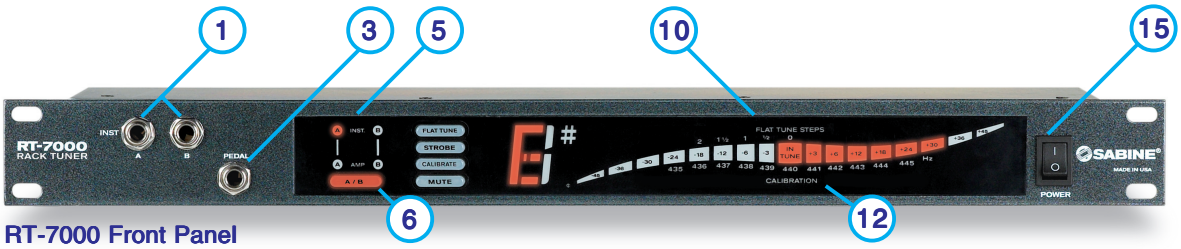
NOTE: As in all strobe tuners, it can be difficult to get the strobe effect to stop completely. This is due to the extreme accuracy of the strobe tuner and the fluctuation in string vibration frequency as it varies from "first plucked" to sustained note.

CALIBRATE Use the Front Panel **Calibrate Button** to tune your instrument to a pitch other than A = 440 Hz, or if you want to use alternate scales. **NOTE**: The RT-7000 display uses the tuning indicator LEDs in conjunction with the Calibration Legend to display calibration status. The current calibration status will be displayed when the **Calibrate Button** is pressed once. While the status LED remains lit, each subsequent pressing will move the status light one LED to the right (past 445 Hz, the LED will cycle to 435 Hz). For example, if you wish to recalibrate the tuner from standard A = 440 Hz to A = 442 Hz, tap the **Calibrate Button** once to display the current setting (A = 440 Hz), and then twice more. The 442 Hz LED will remain lit briefly. The **Calibrate Button** will remain lit whenever the tuner is calibrated to other than A = 440 Hz.

MUTE The **Mute Button** mutes both outputs for silent tuning. The mute function can also be operated with a foot switch.

1 Instrument Inputs (See **NOTE** on last page)
2 Outputs
3 Pedal Switch
4 SmartSwitch™ A/B Display
5 A/B Display
6 A/B Switch
7 Function Buttons
8 Note Display
9 Flat Tune Step LEDs (RT-7100 only)
10 Flat Tune Step markers (RT-7000)
11 Calibration Scale LEDs (RT-7100 only)
12 Calibration Scale Markers (RT-7000)
13 In Tune LED
14 AC Power Cord & Fuse Holder
15 Power Switch

NOTE: A/B switch does not combine signals from inputs or outputs. Only one output is active at a time.



RT-7000 Front Panel

NexFX™

Evolution couldn't get this far.
Step on the NEX Revolution in Pedal Effects!

NexFX Pedal Tuner | NexFX FuzzStortion™ | NexFX Overdrive | NexFX StereoChorus | NexFX Compressor

NexFX Pedal Tuner (NEX-5000)
The Sabine NEX-5000 Pedal Tuner captures notes fast and accurately, and holds them longer for quick and easy tuning. The NexFX Pedal Tuner has an 11-LED display simulates a bar graph that sweeps to the right or left showing how sharp or flat the note is, a Flat-Tune function that lets you quickly transpose from standard tuning and a Calibrate function allows for tuning to other than A = 440 Hz, and two parallel outputs—that means the same signal can split to different sound processing equipment or to other Sabine NexFX Pedals.

NexFX FuzzStortion™ (NEX-5100)
From warm and fuzzy to head-crushing, this one has all the distortion you need! Blend the perfect mix, from 60s fuzz tone to end-of-the-millennium bombast. Carve out a heaping scoop of midrange while leaving a sparkling top and a thunderous bottom—or leave the mids intact and tweak the treble. You'll love the buzz from this fuzz!

- **Fuzz and Distortion in one pedal**
- **Two tone controls for optimal sonic contouring**
- **Broad range of sound, from light crunch to thick metal distortion**

NexFX Overdrive (NEX-5200)
Boost it! Crunch it! This NexFX is fat, lean, clean, mean, dirty, sweet, and in-between. With squeaky clean Sustain or pumped up Overdrive, plus Mid, Treble, and Level controls, you can change moods faster than a jilted lover on a bad hair day. Make your leads sing!

- **Rippin' analog overdrive sound**
- **Sustain control for extra punch in your lead**
- **Threshold control for touch-sensitive effect**

NexFX StereoChorus (NEX-5300)
The greatest event in the history of swirl since chocolate met vanilla in a Kansas twister. Lush swirling choruses with control for Depth, Speed, Wet/Dry Mix (no, not for your dog), Tone, and Sabine's unique Stereo Auto-Pan. Your head will spin as your guitar gently whirls. It's Tabernacle Choir awesome!

- **True stereo effects; two outputs**
- **AutoPan function sweeps between outputs at adjustable rate**
- **Mix control let's you balance effect and dry sound**

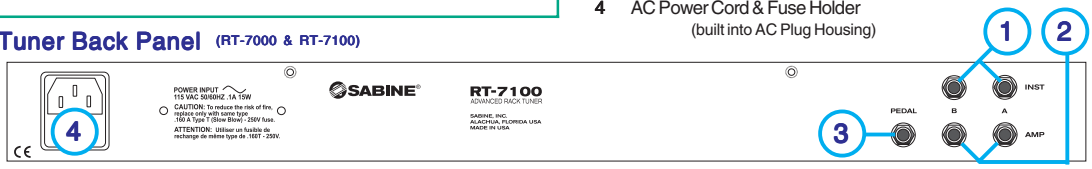
NexFX Compressor (NEX-5400)
Now you can cut through the mix like a silk knife or a raging chain saw, without overpowering the rest of the band. Ratio, Threshold, Level, Attack, and Tone Controls allow you to put 10 tons of whammy into a 1 pound mix. Add punch without distortion—your sound will be clean, fat and chillin'. Like your first kiss in the back of the movie theatre, it's so smooooth and drawn out!

- **Famous Sabine compressor**
- **Control Ratio, Threshold and Attack**
- **Clean sustain for punch without distortion**

RT-7000 Series Back Panel

1 Instrument Inputs (See NOTE)
2 Outputs
3 Pedal Switch
4 AC Power Cord & Fuse Holder
(built into AC Plug Housing)

Rack Tuner Back Panel (RT-7000 & RT-7100)



NOTE: use either **Front** or **Back** panel inputs per channel, **NOT BOTH**

SABINE TWO-YEAR WARRANTY

If your RT-7000 or RT-7100 Professional Rack Tuner fails because of a manufacturing defect within TWO YEARS from the date of original purchase, please return, postage prepaid, to SABINE for a replacement with a new or reconditioned product. This warranty does not cover damage caused by accident or misuse. You must include your full name, address, proof of purchase and the nature of the defect. This warranty is in lieu of all other warranties, expressed or implied. This warranty gives you specific legal rights which vary from state to state. Applicable in the USA and Canada only.

SPECIFICATIONS

Range:	Chromatic, 7 octaves (piano: 1st octave A to 6th octave C)
Accuracy:	± 1 cent (quartz crystal)
Power Input:	100 - 130 VAC, 50/60 Hz, 0.1A 15 Watt input 200 - 240 VAC, 50/60 Hz, 0.1A 15 Watt input
Fuse:	100 - 130 VAC models: 0.100 A Type T slow blow fuse 200 - 240 VAC models: 0.050 A Type T slow blow fuse
Dimensions:	1-U rack mount; 19 x 1.75 x 4.5 inches nominal (rack mountable); 48.3 x 4.45 x 11.43 cm nominal
Weight:	3.75 lbs. (1.7 kg) nominal
Scale:	Even-tempered, 12 notes per octave
Inputs:	RT-7100: A & B channels, ¼-inch front & back RT-7000: A & B channels, ¼-inch front & back
Outputs:	RT-7100: A & B channels, ¼-inch front & back RT-7000: A & B channels, ¼-inch back only

Specifications subject to change without notice.

FCC Statement:
This device complies with Part 15, Class B, of the FCC Rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference; and (2) This device must accept any interference received, including interference that may cause undesired operation. *Warning:* Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

CE SABINE

Register your Sabine Product Online at
Sabine.com

MADE IN USA

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