SEIKO CHROMATIC TUNER SAT1100
INSTRUCTION MANUAL

NAMES OF PARTS


Note indicator LED

LCD display

Tuning meter

Tuning guide LED

Built-in Microphone

Power button

Mode button

Sound button

Pitch UP/DOWN button

Note UP/DOWN button

Output jack

Input jack

Backlight button

[LCD display]

Battery reserve indicator

Backlight mode mark   Mode indication   Pitch indication
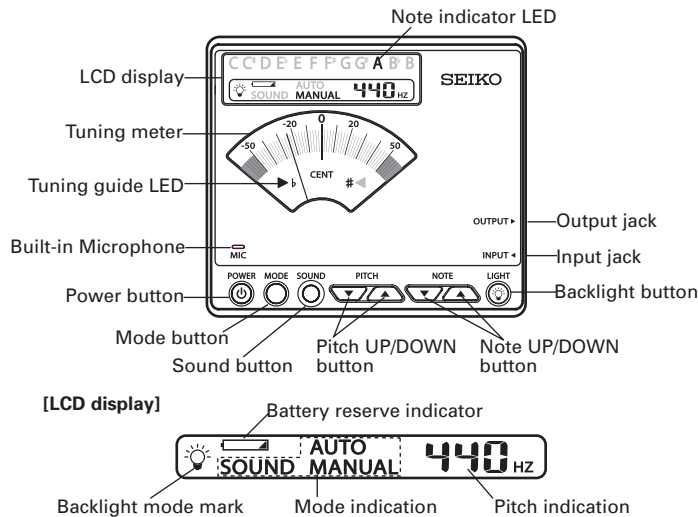
BEFORE USING YOUR TUNER

1. Remove Tuner cover.

   First, detach lower corners "b" of Tuner cover from corners "B" of Tuner by releasing respective hooking portions one by one. Then, detach upper corners "a" of Tuner cover from corners "A" of Tuner one by one.

   ● To attach Tuner cover to Tuner, first, set the protrusions inside upper corners "a" of Tuner cover to the concaves of corners "A" of Tuner one by one, and then, set lower corners "b" of Tuner cover to corners "B" of Tuner one by one.

   * Tuner cover also serves as a stand and hanging tool for Tuner. For details, see "CONVENIENT USE OF TUNER COVER" below.
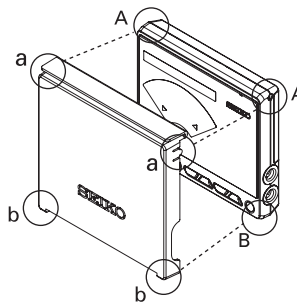
   ● To attach, first set "a" to "A".
   ● To detach, first remove "b" from "B".

2. Unpack batteries. Open battery hatch, and insert batteries into the battery compartment, checking that their (+) and (-) terminals are properly aligned.

   Note: Batteries included with your tuner are monitor batteries, and their battery life may be shorter than the specified period.

   * For battery replacement, see "BATTERY CHANGE" below.

HOW TO USE TUNER

When tuning electric or electronic instruments, or when using the contact microphone sold separately (STM20) for tuning, insert the plug of the instrument or microphone into Input jack.

While a plug is connected with Input jack, the Built-in microphone is disabled.

● **Auto mode (AUTO)**

   When a note is played, Tuner automatically identifies it, and indicates the note closest to it on LCD display. It also indicates discrepancy between the input note and the note shown on display by Tuning meter and Tuning guide LED.

   1. Press Power button to turn on Tuner.
   2. Press Mode button to select "AUTO" on LCD display.
   3. Play a note on the instrument.
      * When tuning is made through the Built-in microphone, choose a quiet environment, and bring instrument close to Tuner.
   4. Tune instrument so that the note you wish to tune to is indicated on LCD display.
   5. Tune instrument further until the pointer of Tuning meter indicates "0".
      * When discrepancy between the input note and the note indicated by the Note indicator LED is within the range of ±3 cents, both Tuning guide LEDs remain lit up.

● **Manual mode (MANUAL)**

   Set note you wish to tune to, and then, play a note. Tuner indicates discrepancy between the input note and the note you have set by Tuning meter and Tuning guide LED.

   1. Press Power button to turn on Tuner.
   2. Press Mode button to select "MANUAL" on LCD display.
   3. Press Note UP (▲)/DOWN (▼) button to choose the note you wish to tune to from notes indicated on LCD display (C ~ B).
   4. Play a note on instrument.
      * When tuning is made through the Built-in microphone, choose a quiet environment, and bring instrument close to Tuner.
   5. Tune instrument until the pointer of Tuning meter indicates "0".

   * When discrepancy between the input note and the note indicated by note indicator LED is within range of ±3 cents, both Tuning guide LEDs remain lit up.

● **Sound mode (SOUND)**

Tuner gives out note you have set. Tune the instrument by using it as reference.

1. Press Power button to turn on Tuner.

2. Press Sound button. "SOUND" is indicated on LCD display.

3. Press Note UP (▲)/DOWN(▼) button to choose the note you wish to tune to from notes indicated on LCD display (C ~ B; range of sound generation : C4 ~ B4).

4. Tune instrument by using the note given out by tuner as reference.

   * To stop sounding of notes, press Sound button or Mode button.

● **How to change the reference pitch (frequency of A4):**

Press Pitch UP (▲)/DOWN (▼) button to set the desired pitch.

(Settable range: A4=410 ~ 450 Hz)

BACKLIGHT FUNCTION

For easy viewing in the dark, press the Backlight button. Backlight mode mark is shown on LCD display.

• With a press of Backlight button, LCD display is illuminated for 5 seconds.

• While in AUTO/MANUAL mode, the LCD display and Tuning meter are illuminated for 5 seconds every time a note is input.

   * To turn off the backlight, press Backlight button again, or press Power button to turn off Tuner.

   * Frequent use of the backlight function will shorten battery life.

AUTO POWER-OFF FUNCTION

To save battery energy, Tuner is automatically turned off if no button operation or note input is made for a certain period of time (AUTO/MANUAL mode: approximately 20 minutes; SOUND mode: approximately 10 minutes).

* To turn on Tuner again, press Power button.

MEMORY BACKUP FUNCTION

Even after Tuner is turned off, the settings you have made are stored in memory and can be used repeatedly unless you change them.

If the battery is replaced with a new one, Tuner will return to the following initial settings.

1. Tuning mode	[AUTO]
2. Pitch shift	[440 Hz]
3. Note	[A]

BYPASS FUNCTION

The tuner outputs the signal input from the instrument connected with Input jack to an amplifier and other devices through Output jack.

● **Precautions on using Output jack**

When connecting Tuner to an amplifier or speaker, be sure to set the volume controls of both the instrument and amplifier or speaker to the lowest level and turn them off, to prevent the malfunction of the instrument or damage to the amplifier or speaker. Then, connect them properly to Tuner.

After connecting the amplifier or speaker properly, set their volume controls to the lowest level, and then, turn on Tuner, followed by the instrument and amplifier or speaker.

While the output jack is used with the volume control set at the lowest level, noise may be given out when Tuner is turned on. This is not a malfunction. When playing the instrument, however, be sure to turn off Tuner to prevent the hum noise from being generated.

CALIBRATION OF POINTER POSITION

In case of a drastic change in temperature or a shock caused by dropping Tuner, or after years of service, the pointer of Tuning meter may not be reset to the "0" position. In such case, calibrate the "0" position of the pointer following the procedure below:

1. Turn off Tuner, and while keeping both the pitch UP (▲) and DOWN(▼) buttons pressed, press Power button to activate the pointer calibration mode.

2. If the pointer does not indicate the "0" position, turn the pointer calibration screw on the rear of Tuner using a small precision screwdriver to return it to the "0" position.

3. After the calibration is completed, press Power button to turn off Tuner, and press the button again to turn it on.

   * Use only a precision screwdriver for watch repair and other uses, and take care not to turn the screw forcibly. Otherwise, a malfunction will result.

Precision screwdriver


Pointer calibration screw
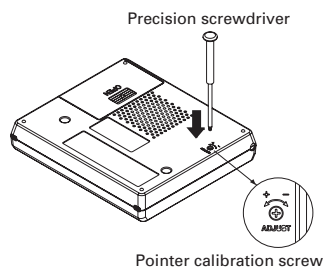
BATTERY CHANGE

When battery nears its end, the battery reserve indicator flashes to indicate that battery change is necessary. In that case, replace battery with a new one immediately. Otherwise, a malfunction will result.

1. Make sure that Tuner is turned off.

2. Slide battery hatch on the rear of Tuner in the direction of the arrow to remove it.

3. Insert two R03/LR03 (AAA) dry batteries, checking that their terminals are properly aligned.

4. Turn on and off Tuner by pressing Power button to check that it operates properly.

   * Replace the two batteries at the same time. It is recommended that two batteries of the same make be used.

   * When disposing of old batteries, observe regulations of the authorities concerned.
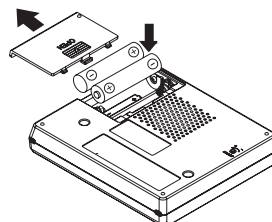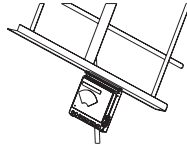
CONVENIENT USE OF TUNER COVER

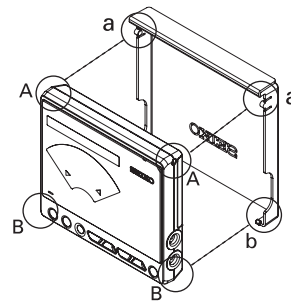The tuner cover can serve the following purposes when attached on its rear.

• **Prop-up stand:**

It serves as a stand to prop up Tuner by forming an appropriate angle with it.

• **Hanging tool:**

By inserting the edge of the music stand into the slit of Tuner cover, a Tuner can be hung on it.

● To attach, first set "a" to "A".
● To detach, first remove "b" from "B".

* When using Tuner cover for hanging Tuner on the music stand, check that the edge of the music stand is inserted sufficiently into the slit of Tuner cover lest Tuner should drop.

* Do not attach or detach Tuner cover forcibly, as this will damage it.

CAUTIONS ON USING THE TUNER

● Tuning meter of the Tuner is a precision gauging instrument, and bringing it close to strong magnetic fields or applying strong shock to it will damage it. Handle Tuner with sufficient care.
● The Tuner may pick up noise from the surrounding environment or the hum noise generated by electric appliances, and shows indications as if a note is played. This is not a malfunction, the Tuner operates properly when a note is input.

SPECIFICATIONS

1. MODE	: Auto mode/Manual mode • Sound mode
2. TUNING RANGE	: A0 (27.5 Hz) ~ C8 (4186.0 Hz) (when A4 is set to 440 Hz)
3. REFERENCE NOTE	: C4 ~ B4 (12 notes)
4. TUNING ACCURACY	: ±1 cent
5. PITCH SHIFT	: A4 = 410 Hz ~ 450 Hz (at 1 Hz steps)
6. ADDITIONAL FUNCTIONS	: Auto power-off, backlight, memory backup, power reserve indicator, and pointer position calibration
7. POWER SUPPLY	: R03/LR03 (AAA) dry battery, 2 pieces (3 V)
8. TERMINAL	: Input jack (ø6 mm), output jack (ø6 mm)
9. OVERALL DIMENSIONS	: 105.5 (W) x 92 (H) x 19.3 (D) mm (Tuner only; excluding protrusions)
	109.5 (W) x 103 (H) x 21.5 (D) mm (including Tuner cover)
10. WEIGHT	: 150 g (including batteries)
	170 g (including batteries and Tuner cover)
11. ACCESSORIES	: Tuner cover, 1 piece; monitor batteries R03/LR03 (AAA), 2 pieces; and instruction manual

* The design and specifications are subject to change without prior notice for product improvement.