

CHROMATIC TUNER CA-40

(E) (F) (G) (J) (2)

Owner's Manual

Thank you for purchasing the Korg CA-40 chromatic tuner.

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Precautions

Location

Using the unit in the following locations can result in a malfunction.

- In direct sunlight
- Locations of extreme temperature or humidity
- Excessively dusty or dirty locations
- Locations of excessive vibration
- Close to magnetic fields

Power supply

Be sure to turn the power switch to OFF when the unit is not in use.

Remove the battery in order to prevent it from leaking when the unit is not in use for extended periods.

Interference with other electrical devices

Radios and televisions placed nearby may experience reception interference. Operate this unit at a suitable distance from radios and televisions.

Handling

To avoid breakage, do not apply excessive force to the switches or controls.

Care

If the exterior becomes dirty, wipe it with a clean, dry cloth. Do not use liquid cleaners such as benzene or thinner, or cleaning compounds or flammable polishes.

Keep this manual

After reading this manual, please keep it for later reference.

Keeping foreign matter out of your equipment

Never set any container with liquid in it near this equipment. If liquid gets into the equipment, it could cause a breakdown, fire, or electrical shock. Be careful not to let metal objects get into the equipment.

THE FCC REGULATION WARNING (for U.S.A.)

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. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.
- Unauthorized changes or modification to this system can void the user's authority to operate this equipment.

Notice regarding disposal (for EU)

If this "crossed-out wheeled bin" symbol is shown on the product or in the operating manual, you must dispose of the product in an appropriate way. Do not dispose of this product along with your household trash. By disposing of this product correctly, you can avoid environmental harm or health risk. The correct method of disposal will depend on your locality, so please contact the appropriate local authorities for details.

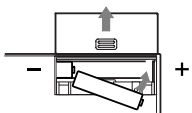
IMPORTANT NOTICE TO CONSUMERS

This product has been manufactured according to strict specifications and voltage requirements that are applicable in the country in which it is intended that this product should be used. If you have purchased this product via the internet, through mail order, and/or via a telephone sale, you must verify that this product is intended to be used in the country in which you reside.

WARNING: Use of this product in any country other than that for which it is intended could be dangerous and could invalidate the manufacturer's or distributor's warranty. Please also retain your receipt as proof of purchase otherwise your product may be disqualified from the manufacturer's or distributor's warranty.

Introduction

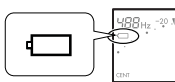
Installing the batteries



Slide and remove the battery compartment cover located on the back of the CA-40. Insert the batteries ensuring that you observe the correct polarity, and replace the cover.

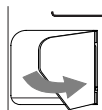
If the CA-40 malfunctions and you are unable to solve the problem by turning the power off and on again, try removing the batteries and then reinstall them.

The included batteries are provided for the purpose of verifying operation and therefore may have a shorter lifetime than usual.



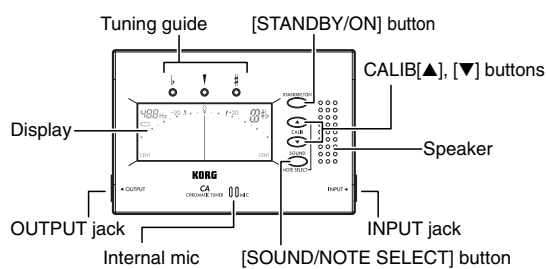
When the batteries run low, a battery indicator will appear in the left of the display. When this indicator appears, replace the batteries as soon as possible. Power-off the CA-40 before you replace the batteries.

Using the stand



By opening the stand located on the back, you can position the CA-40 at a convenient angle.

Using the tuner



Meter mode

This mode lets you tune using the meter in the display.

- 1 Connect the tuner. The connection method will depend on the type of instrument you're connecting.

When tuning an instrument that has a pickup

Be sure to use an instrument cable for connection to the CA-40's INPUT jack.

You can't use the internal mic if a plug is inserted in the INPUT jack. Connect your instrument to the CA-40's INPUT jack, and then connect your amp to the OUTPUT jack. The sound of your instrument will be sent from the CA-40's OUTPUT jack to your amp, allowing you to tune or perform while the CA-40 remains connected.

Never disconnect the plug from the INPUT jack while the OUTPUT jack is connected to your amp. When you disconnect the plug, the internal mic will be used automatically. If sound is received by the internal mic at this time, acoustic feedback will occur, possibly damaging your amp.

When tuning an acoustic instrument

If you're using a separately sold Korg CM-100 contact mic, connect the CM-100's plug to the CA-40's INPUT jack. If you're using the internal mic, don't connect anything.

- 2 Press the [STANDBY/ON] button. The CA-40 will be in Meter mode. The upper left of the display shows the calibration (reference pitch) you specified most recently. The power will turn off automatically if the tuner is not used for approximately twenty minutes.
- 3 If you want to change the calibration setting, press the CALIB [▲] or [▼] buttons. The calibration setting will change in steps of 1 Hz. If you hold down the button, the calibration setting will increase or decrease continuously.
- 4 Play a single note on your instrument. The name of the note closest to the note you played will appear in the upper right of the display. Tune your instrument so that the desired note name appears.
 - ▲ If you're using the internal mic, position the mic as close as possible to your instrument, and ensure that extraneous background sounds are not picked up by the mic while tuning.
- 5 While playing a single note, tune your instrument so that the indicator in the center of the tuning guide is lit. The left indicator of the tuning guide will light if the pitch of your instrument is too low, and the right indicator will light if the pitch is too high.
- 6 If you want to tune to a pure major third or pure minor third above a certain note, use the "♯" (-13.7 cent) or "♭" (+15.6 cent) marks of the meter.
 - Tuning to a pure major third or pure minor third**
 - If you want to tune your instrument to a pitch that is a pure *major* third above A (0 cents), make the note name indicator read C#, and tune your instrument so that the meter indicates the "♯" position. If you want to tune your instrument to a pitch that is a pure *minor* third above A (0 cents), make the note name indicator read C, and tune your instrument so that the meter indicates the "♭" position.

Sound Out mode

This mode lets you listen to a reference tone while you tune your instrument.

- 1 Perform steps 2 and 3 of "Meter mode."

2 Press the [SOUND/NOTE SELECT] button. The CA-40 will be in Sound Out mode, and the speaker will play a reference tone.

Hold down the [SOUND/NOTE SELECT] button, and use the CALIB [▲] [▼] buttons to change the pitch of the reference tone that is audible from the speaker. The pitch will change in the following order.

A + B# + B + C (C5) + C (C4) + C# + D + Eb + E + F + F# + G + G# + A + ...

- 3 Tune your instrument to match the reference tone.

Specifications

Scale:	12-note equal temperament
Detection range:	A0 (27.50 Hz) – C8 (4186.01 Hz): for a sine wave
Reference tone:	C4 (261.63 Hz) – C5 (523.25 Hz): 1 octave
Tuning mode:	Meter mode (AUTO), Sound Out mode (MANUAL)
Calibration range:	A4=410 Hz–480 Hz (1 Hz steps)
Detection accuracy:	±1 cents or better
Tone accuracy:	±1.5 cents or better
Connectors:	INPUT jack (1/4" mono phone jack) OUTPUT jack (1/4" mono phone jack)
Speaker:	Dynamic speaker (28 mm diameter)
Power supply:	Two AAA batteries (3 V)
Battery life:	Approximately 85 hours (Meter mode, continuous A4 input, zinc-carbon batteries)
Dimensions:	100mm (W) x 67mm (D) x 17mm (H) 3.94" (W) x 2.64" (D) x 0.67" (H)
Weight:	69g (without batteries), 88g (with batteries) 2.43oz. (without batteries), 3.10oz. (with batteries)
Included items:	Owner's manual, two AAA batteries for verifying operation

The calibration setting and the Sound Out reference pitch are remembered even when you turn off the power. However when you replace the batteries, these settings will be initialized to the default values; the calibration will return to 440 Hz, and the Sound Out reference pitch will return to A.

Even if the pitch is within the range of detection, the CA-40 may be unable to detect the pitch if the sound contains numerous overtones (such as the low and high notes on an acoustic piano) or if the instrument has a rapid decay.

* Specifications and appearance are subject to change without notice for improvement of the product.

