

KORG LMA-120 DIGITAL METRONOME Owner's manual

Thank you for purchasing the Korg LMA-120 digital metronome. Before you use the LMA-120 please read this owner's manual carefully, and use the LMA-120 as directed. Keep this manual for future reference.

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.

CE mark for European Harmonized Standards

CE mark which is attached to our company's products of AC mains operated apparatus until December 31, 1996 means it conforms to EMC Directive (89/336/EEC) and CE mark Directive (93/68/EEC).
And, CE mark which is attached after January 1, 1997 means it conforms to EMC Directive (89/336/EEC), CE mark Directive (93/68/EEC) and Low Voltage Directive (73/23/EEC).
Also, CE mark which is attached to our company's products of Battery operated apparatus means it conforms to EMC Directive (89/336/EEC) and CE mark Directive (93/68/EEC).

IMPORTANT NOTICE TO CONSUMERS

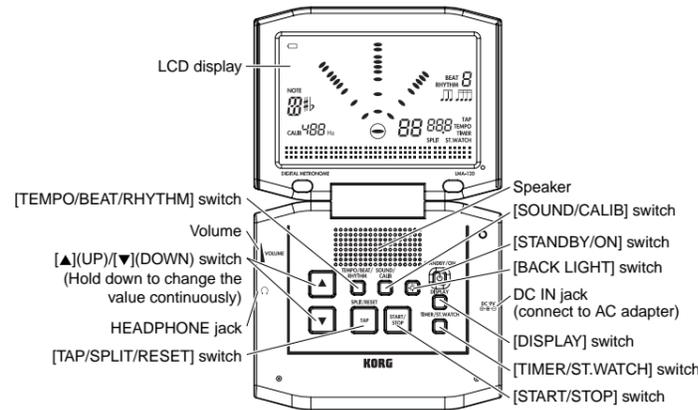
This product has been manufactured according to strict specifications and voltage requirements that are applicable in the country in which it is intended that this product should be used. If you have purchased this product via the internet, through mail order, and/or via a telephone sale, you must verify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

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Features of the LMA-120



Turning the power on

Turning the power on

Open the LMA-120 and press the [STANDBY/ON] switch to turn on the power.

Turning the power off

Press the [STANDBY/ON] switch once again to turn off the power. The power will also turn off if you close the LMA-120. If you are using batteries, the power will automatically turn off if the metronome, stopwatch and timer is not used for approximately 20 minutes. The following settings are remembered when you turn off the power.

Settings remembered when the power is off	Available range	Factory setting
Tempo	♩ =30...252	♩ =120
Beat	0...9	4
Rhythm	♩, ♪, ♫, ♬, ♭, ♮, ♯, ♭, ♮, ♯	♩
Display indication	Conducting, L/R, Conducting and L/R	Conducting
Tempo step	PENDULUM, FULL	FULL
Calibration range	410...480 Hz	440 Hz
Reference tone	C4...C5	A4
Timer range	1...99 minutes	1 minute

Using the metronome

Setting the tempo

1. Press the [TEMPO/BEAT/RHYTHM] switch so the LCD indicates "TEMPO."
2. Hold down the [TEMPO/BEAT/RHYTHM] switch for approximately one second, and the indication will change between "PENDULUM STEP" and "FULL STEP." The "PENDULUM STEP" and "FULL STEP" indications will alternate each time you hold down the [TEMPO/BEAT/RHYTHM] switch for approximately one second.
3. When "PENDULUM STEP" is shown, you can use the [▲] or [▼] switches to increase or decrease the tempo in the same steps as on a mechanical metronome.

PENDULUM STEP									
30	32	34	36	38	40	42	44	46	48
50	52	54	56	58	60	63	66	69	72
76	80	84	88	92	96	100	104	108	112
116	120	126	132	138	144	152	160	168	176
184	192	200	208	216	224	232	240	252	

When "FULL STEP" is shown, you can use the [▲] or [▼] switches to increase or decrease the tempo in steps of 1.

Tempo Range [30...252]

Setting the beat

1. Press the [TEMPO/BEAT/RHYTHM] switch so the LCD indicates "BEAT."
2. Use the [▲]/[▼] switches to set the beat (time signature).

Beat [0...9]

Setting the rhythm

1. Press the [TEMPO/BEAT/RHYTHM] switch so the LCD indicates "RHYTHM."
2. Use the [▲] or [▼] switches to set the rhythm.

Rhythm [♩, ♪, ♫, ♬, ♭, ♮, ♯, ♭, ♮, ♯]

Starting / Stopping

1. Press the [START/STOP] switch to start the metronome.
2. Press the [START/STOP] switch once again to stop the metronome.

Tap tempo

This lets you set the tempo by tapping in a desired interval.

1. Press the [TAP/SPLIT/RESET] switch at least twice.
The tempo will be set to the interval at which you tapped the switch.

Selecting the display indication

1. The display indication will change each time you press the [DISPLAY] switch.
... Conducting → L/R movement → Conducting and L/R movement → Conducting ...
The conducting indication will move with accelerating motion similar to a conductor's baton.
The L/R movement will move the meter left and right at the specified tempo.

Sound Out mode

This lets you tune to an audible reference tone.

1. Press the [SOUND/CALIB] switch; the speaker will sound the reference tone you specified most recently.
The indication will change as follows each time you press the [SOUND/CALIB] switch.
... NOTE (change the reference note name) → CALIB (change the reference tone) → Off (you will exit Sound mode, and the reference tone will stop) ...

Reference tone [C4...C5]

Select the name of the desired note

1. Press the [SOUND/CALIB] switch so the LCD indicates "NOTE."
2. Use the [▲] or [▼] switches to set the name of the Reference tone.

To adjust the calibration

1. Press the [SOUND/CALIB] switch to make the LCD indicate "CALIB."
2. Use the [▲] or [▼] switches to adjust the calibration. You can adjust the calibration in steps of 1 Hz.

Calibration Range [410 ...480Hz]

Timer

1. Press the [TIMER/ST.WATCH] switch so the LCD indicates "TIMER."
2. Use the [▲] or [▼] switches to specify the duration you want to count-down.
Time range [1 ...99 minutes]
3. Press the [START/STOP] switch to start the timer countdown.
If you press the [START/STOP] switch during the countdown, the countdown will be paused. When you press the [START/STOP] switch once again, the countdown will resume from the paused time. If you press the [TAP/SPLIT/RESET] switch while paused, the setting will return to the duration you specified.
The timer will continue counting down even if you move to a different mode.
4. An alarm will sound when the specified time has elapsed. Press any switch to stop the alarm tone.

Stopwatch

1. Press the [TIMER/ST.WATCH] switch to make the LCD indicate "ST.WATCH."
2. Press the [START/STOP] switch to begin measuring the time.
If you press the [TAP/SPLIT/RESET] switch while measuring the time, the Split Time will be shown. If you press the [TAP/SPLIT/RESET] switch once again while the Split Time is shown, the Split Time indication will disappear.
The stopwatch will continue running even if you move to a different mode.
3. To stop measuring the time, press the [START/STOP] switch once again.
Press the [TAP/SPLIT/RESET] switch to reset the time display to zero.

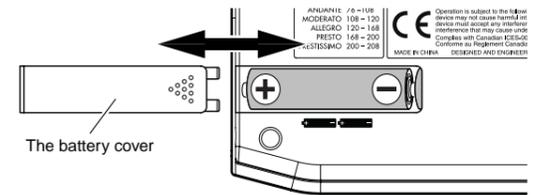
Back light

Press the [BACK LIGHT] switch to turn on the backlight of the LCD display. The backlight will automatically turn off if the LMA-120 is not in use for approximately two minutes.

Installing the batteries

- ⚠ Turn off the power switch before replacing the batteries.
- ⚠ The included batteries are for the purpose of verifying operation so they may have a shorter lifespan than normal.

1. Slide the back panel battery cover in the direction of the arrow, and lift the cover.
2. Insert two AAA batteries, making sure to observe the correct polarity (+, -).



3. Close the battery cover.

When the batteries run down, a battery symbol will appear in the left of the display. When this occurs, replace the batteries.

Restoring the factory settings

You can restore the LMA-120 to its factory settings. Doing this will overwrite all previously stored settings.

1. While holding down the [▲] switch, press the [STANDBY/ON] switch.

Specifications

Tempo range:	♩ = 30 to 252 beats/minute
Tempo setting:	PENDULUM step FULL step
Beat:	0-9 beats
Rhythm:	quarter, eighth, triplets triplets with inner beat omitted quadruplets quadruplets with inner beat omitted
Tempo accuracy:	Better than ±0.1 %
Reference tone:	C4 (261.63 Hz) to C5 (523.25 Hz) One octave
Calibration range:	A4 = 410 Hz to 480 Hz (1 Hz step)
Sound accuracy:	Better than ±1.5 cents
Connectors:	HEADPHONE jack (1/8" mini) DC IN (9V)
Speaker:	Dynamic speaker (ø23 mm)
Power supply:	Two AAA alkaline batteries (3V) or AC adapter (⊕ ⊖)
Battery life:	Approximately 90 hours (when metronome is operating with alkaline batteries, tempo = 120, beat = 4, and rhythm=♩ and Back-light off)
Dimensions:	101 (W) x 84 (D) x 22 (H) mm (folded) 3.98 (W) x 3.31 (D) x 0.81 (H) inches (folded)
Weight:	148 g / 5.22 oz. (including batteries)
Included items:	Owner's manual two AAA batteries for checking operation soft case
Option(sold separately):	AC adapter (⊕ ⊖)

⚠ The specifications and external appearance of this product are subject to change without notice for improvement.

⚠ Do not subject the LCD display to extreme pressure, impact or sharp objects. Also, don't twist or bend the tuner to avoid damage to the LCD display.