

Harley Benton

MT100 Tuner

Quick start guide

This quick start guide contains important instructions for the safe operation of the unit. Read and follow all safety notes and all instructions. Keep the quick start guide for future reference. If you pass the device to another person, please pass this quick start guide with it.

Safety instructions

Intended use

This device is used for the tuning of musical instruments. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

Danger for children



Ensure that plastic bags, packaging, etc. are properly disposed of and are not in the reach of babies and young children. Choking hazard! Ensure that children do not detach any small parts (e.g. knobs or the like) from the product. They could swallow small parts and choke!

Incorrect handling of lithium batteries can result in injury

- In the event of a short circuit, overheating or mechanical damage, lithium batteries can cause severe injuries.
- Store devices with lithium batteries in a cool, dry place, away from heat sources, ideally in the original packaging.
- Lithium batteries are hermetically sealed. Never attempt to open lithium batteries.
- Only use powder extinguishers or other suitable extinguishing agents to extinguish a burning device containing lithium batteries.

Risk of fire due to incorrect polarity

Incorrectly inserted batteries may destroy the device or the batteries. Ensure that proper polarity is observed when inserting batteries.

Possible damage by leaking batteries

Leaking batteries can cause permanent damage to the device. Take batteries out of the device if it is not going to be used for a longer time period.

Where to use the product

- Never use the product
- in direct sunlight
- in conditions of extreme temperature or humidity
- in extremely dusty or dirty places
- at locations where the unit may become wet
- near magnetic fields

General handling

- To prevent damage, do not exert force on the device while operating the controls.
- Do not immerse the unit in water. Wipe only with a clean and dry cloth. Do not use liquid cleaners such as benzene, thinners or flammable cleaning agents

Keep foreign substances from the unit!

Keep the device away containers with liquid. Should liquid fall into the unit, this could lead to its destruction or fire. Be aware that no metallic parts come inside the device.

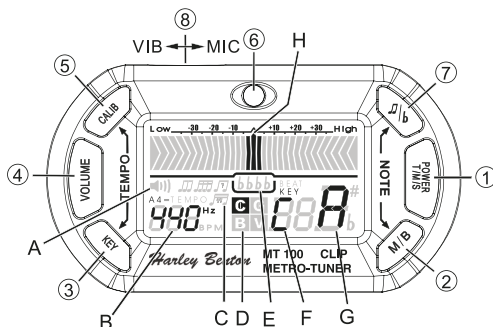
Features

- Clippable
- Big illuminated display, rotatable
- For chromatic tuning of guitars, basses and violins
- Built-in microphone and vibration sensor
- Calibration 430 - 450 Hz
- Tuning scales: C major, Bb major, Eb major, F major (in mode *chromatic*)
- Flat tuning with 4 semitones
- Tuning range from A0 (27.5 Hz) to C8 (4186.0 Hz)
- Tuner accuracy +/- 1 cent
- Metronome function from 30 bpm - 250 bpm
- Automatic shutdown
- Incl. battery (CR2032)

Technical specifications

Tuning modes:	chromatic, guitar, bass, violin
Tuning range:	A0 (27.5 Hz) - C8 (4186 Hz)
Tuning accuracy:	± 1 cent
Reference tone range:	430 - 450 Hz
Tuning scales:	C major, Bb major, Eb major, F major (in mode <i>chromatic</i>)
Flat tuning:	1 - 4 semitones
Tone detection:	Vibration sensor, built-in microphone
Generated tones:	E1 (41.2 Hz) - A5 (880.00 Hz)
Tempo range metronome:	30 bpm - 250 bpm
Automatic shutdown:	after 3 minutes of inactivity
Battery type:	Button cell CR2032 (3V)
Dimensions (W x H x D):	60 mm x 33 mm x 22 mm
Weight:	41 g

Controls and functions



1	Power switch, Tuner (T), Metronome (M), Sound (S)
2	MODE button (M), BEAT button (B), NOTE button (downwards)
3	KEY button, tempo range (TEMPO, downwards)
4	VOLUME
5	CALIB (calibration button), tempo range (TEMPO, upwards)
6	LED
7	FLAT button (b), rhythm (J), NOTE button (upwards)
8	VIB/MIC: Vibration sensor or microphone selecting switch

Operating the device

Hold the power switch ① pressed during 2 seconds to turn on the device. Press the power switch again to select the operating mode *Tuner (T)*, *Metronome (M)* or *Tone generator (S)*. Hold the power switch ① pressed again during 2 seconds to turn off the device. The device will be turned off automatically after 3 minutes of inactivity.

Tuner

1. Turn the device on and select the operating mode *Tuner (T)*.
2. Slide the switch *VIB/MIC* ⑧ to the left (vibration tuning) or to the right (microphone tuning) to select the tuning mode.
The vibration sensor provides tunings without any influence or surrounding noise.
3. Press *M/B* ② to select the instrument to be tuned: *chromatic (C)*, *guitar (G)*, *bass (B)* or *violin (V)*. The selected instrument is shown on position *D* in the display.
In case of *chromatic (C)* press *KEY* ③ to select the tuning scale (*C, Bb, Eb, F*). The selected tuning scale is shown on position *F* in the display.

Note

The tuning scales for guitar (G) and bass (B) are set on C and can't be changed.

4. Use \sharp/b ⑦ to select between standard tuning and flat tuning. Each time pressing the button on semitone (*b, bb, bbb, bbbb*) is shown on position *E* in the display.

Note

Absence of *b* indication shows the standard tuning.

5. Press *CALIB* ⑤ to change the calibration (that is reference tone).
The reference pitch can be varied within the range of 430 - 450 Hz with 1 Hz step of increment. Hold *CALIB* ⑤ pressed to advance the frequency automatically. The selected calibration is shown on position *B* in the display.
6. When the instrument plays a tone, this tone will be shown in the display.
7. Tune the instrument to get the name of the desired note shown in the meter display.
If the tone is too high or too low, the needle is not in the middle of the meter display and the LED lights red. When the tuning is correct, the LED lights green and the needle is on position *H* in the meter display.

Metronome

1. Turn on the device and select the operating mode *Metronome (M)*.
2. Use *VOLUME* ④ to select the desired volume in four steps.
The selected volume is shown on position *A* in the display.
3. Use *M/B* ② to select the desired Beat from 0 to 9.
The selected beat is shown on position *F* in the display.
4. Use \sharp/b ⑦ to select the desired rhythm (♪ ♪ ♫ ♫♫ ♫♫♫ ♫♫♫♫).
The selected rhythm is shown on position *C* in the display.
5. Press *CALIB* ⑤ to increase the tempo, press *KEY* ③ to decrease the tempo.
Hold *CALIB* ⑤ or *KEY* ③ pressed to increase or decrease the tempo continuously in a range from 30 - 250 bpm.
The selected tempo is shown on position *B* in the display.

Tone generator

1. Turn the device on and select the operating mode *Tuner (T)*.
2. Press *M/B* ② to select the instrument to be tuned: *chromatic (C)*, *guitar (G)*, *bass (B)* or *violin (V)*. The selected instrument is shown on position *D* in the display.
Note: This selection can not be changed in the tone generator mode.
3. Press the power switch ① to enable the *Tone generator (S)*.
4. Use *VOLUME* ④ to select the desired volume in four steps.
The selected volume is shown on position *A* in the display.
In case of *chromatic (C)* press *KEY* ③ to select the tuning scale (*C, Bb, Eb, F*). The selected tuning scale is shown on position *F* in the display.

Note

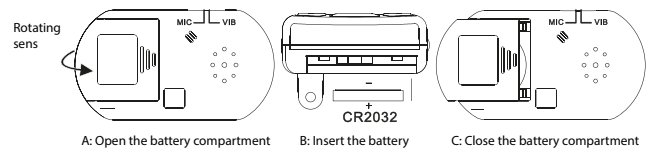
The tuning scales for guitar (G) and bass (B) are set on C and can't be changed..

5. Press *CALIB* ⑤ to change the calibration (that is reference tone).
The reference pitch can be varied within the range of 430 - 450 Hz with 1 Hz step of increment. Hold *CALIB* ⑤ pressed to advance the frequency automatically. The selected calibration is shown on position *B* in the display.
6. Press \sharp/b ⑦ to increase the note, press *M/B* ② to decrease the note. The selected note is shown on position *G* in the display.

! Remove the device from the instrument after tuning.
Leaving the device attached for a longer period of time may damage the surface of the instrument.

Battery replacement

! When the display brightness decreases, replace the battery.
Replace the battery with a new battery of the same type.



For the packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling. Ensure that plastic bags, packaging, etc. are properly disposed of. Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.



Remove lithium batteries from the device before disposal. Protect used lithium batteries against potential short circuits, e.g. by covering the poles with adhesive tape. Dispose the solid state lithium batteries together with the device. Please check for an appropriate reception facility.



This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) in its currently valid version. Do not dispose with your normal household waste. Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.