Harley Benton

Micro Clip Metro tuner • MT-100

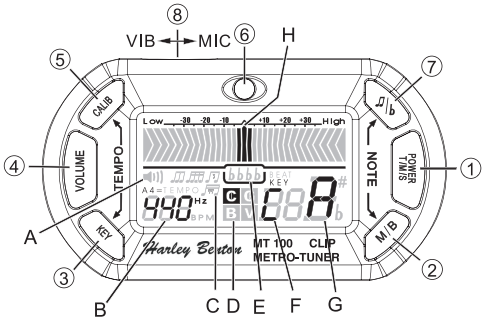
Thank you for choosing our Micro Clip Metro Tuner MT-100. Please read the user's manual carefully before using this product and operate the product according to the manual. Please keep this manual for later reference.

⚠ *CAUTION*

- Do not open the casing for any reason as this may cause short circuit or malfunction of the product.
- Do not apply excessive force to the products In the event of the product suffering breakage be careful not to damage yourself with the broken pieces.
- Do not put the unit into any liquid object.
- Keep unit away from dust extreme temperatures and humidity.
- When the unit is not in use for a long period of time remove the battery to prevent leakage.

This micro clip tuner has been constructed using state of the art technology and the finest materials The circuitry has been tested for reliability by our staff of qualified technicians under performance conditions. Simple care and maintenance will provide long life. The unit is powered by a CR2032 3V lithium battery. When the back light on LCD or LED indicator light becomes weak in colour replace the battery in order to achieve the best tuning results from the Micro Clip Metro Tuner.

Operation panel Function instruction



① Power switch, Tuner (T), Metronome (M) Sound (S)
② Mode button (M), BEAT button (B), NOTE button (downward)
③ KEY button, Tempo range (TEMPO) -downward
④ VOLUME
⑤ CALIB - Calibration button
Tempo range (TEMPO) -upward
⑥ LED Light
⑦ FLAT button (*b*), Rhythm (♪♫), NOTE button -upward
⑧ Vibration sensor or microphone selecting switch (VIB MIC)

OPERATING PROCEDURE

Keep pressing button ① for 2 seconds to turn on the power. Press it again to choose the mode for Tuner, Metronome and Tone generator. Keep pressing the button for 2 seconds again to turn the device off. The power will be turned off automatically 3 minutes later if the unit has been left unattended.

• Tuner

1. Turn it on and press ① to choose the tuner mode.
2. Select either vibration tuning or microphone tuning. Set the switch ⑧ to the left to select vibration tuning. Set the switch to the right to select microphone tuning. The vibration sensor provides tunings without any influence of surrounding noise.
3. Select any one of Chromatic (C)/Guitar (G)/Bass (B) and Violin (V) with the mode button ② according to the instrument to be tuned The selected mode is indicated on position D.
4. In the case of Chromatic (C), select a tuning scale with button ③. Four kinds of scale namely C, Bb, Eb, and F major scale can be selected. The result of your selection is indicated on position F.
*Guitar (G) and Bass guitar (B) are set on the C scale and can't be changed.
5. Set the standard tuning or a flat tuning with button ⑦. Each time pressing the button one halftone=*b*, two halftones=*bb*, three halftones= *bbb* and four halftones= *bbbb* are sequentially indicated on E position.
*Absence of *b* indication shows the standard tuning
6. For changing calibration (reference pitch): Press button ⑤, reference pitch can be varied within the range of (430Hz~450Hz) with 1Hz step of increment. Leaving the button pressed causes automatic increment. Result is indicated on position B
7. When a music instrument is played the name of the note is indicated on the display. Now tune the music instrument to get the name of the desired note on the LCD. When the tone pitch is too high or too low the needle is not in the middle and the LED light is red. Correct tuning is indicated by green LED. Then the needle is in H position.

• Metronome

1. Turn on the power and press ① to select the metronome mode.
2. Use button ④ to select volume. Volume offers four options: high, mid, low and mute. Read the actual setting on position A in the display.
3. Press button ② to select BEAT from 0 to 9. The result will be displayed on position F.
4. Press button ⑦ to choose the rhythm: ♩ ♫ ♫ ♬ ♫ ♬. The result is indicated on position C.
5. Press button ⑤ and ③ to select metronome tempo. Press button ⑤ to increase the tempo, press button ③ to decrease the tempo. Keep either button pressed, to change tempo continuously. The tempo range is from 30 bpm to 250 bpm. The current setting is shown on position B.

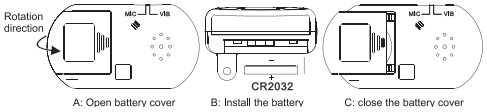
• Tone generator

1. Turn on the power and select any one of Chromatic (C), Guitar (G), Bass Guitar (B), or Violin (V) with button ②, the result of your selection is indicated on position D.
*This selection cannot be change in tone generator mode.
2. Select the tone generator using button ①.
3. Use button ④ to select the desired volume. Volume offers four options: high, mid, low and mute. Read the actual setting on position A in the display.
4. If you've selected „Chromatic" (C), choose a tuning scale with the key button ③. The result will be displayed on position F. Four kinds of scales, namely „C", „Bb", „Eb" or „F major" can be selected. Usually the C major scale should be used for guitar tuning.
*Guitar (G), Bass (B) and Violin (V) are set on the C scale and cannot be changed.
5. To change the calibration (reference pitch) press button ⑤, reference pitch can be varied within the range of 430Hz~450Hz with steps of 1Hz increment. Leaving the button pressed causes automatic increment. The result is indicated on position B.
6. NOTE is raised by pressing ⑦ button and lowered by pressing button ②. Select your desired note when it is indicated at position G.

Caution: Be sure to dismount the unit from the instrument after tuning is finished. If the unit is left attached for a long time there is the threat of damaging the surface of instrument.

• Battery replacement

When the LCD back light diminishes, the end of battery's life has come. Then replace the button battery CR2032 with a new one. Take care not to confuse its polarity. When the unit is not used for a long time remove the battery from the unit to prevent damage by leakage.



Technical Specifications

Power source:	1 x Button battery CR2032 (3V)
Autom. power off:	after 3 min. when left unattended
Display :	back light LCD
Tuning modes :	Chromatic, Guitar, Bass, Violin
Measuring range:	A0 (27.5Hz) ~ C8 (4186.0Hz)
Measurement accuracy:	± 1 cent
Calibration range:	A4 = 430Hz ~ 450Hz
Tuning scales:	C major, Bb major, Eb major, F major
Flat tuning:	1~4 semitones
Assist indicator	LED
Sound detection:	Vibration sensor, built-in microphone
Tones generated:	E1 (41,2Hz) ~ A5 (880,00Hz)
Beat:	0~9
Tempo range:	30 ~ 250 bpm
Rhythm:	♩ ♫ ♫ ♬ ♫ ♬
Volume:	high, mid, low, mute
Dimensions:	60 (W) x 33 (H) x 22 (D) mm
Weight:	approx. 41 g

Specifications and appearance subject to change without prior notice.

Disposal

Do not dispose of the device in your normal domestic waste. This device is subject to the European Guidelines 2002/96/EG.

Micro Clip Tuner

- Have the unit or parts of it disposed of by a professional disposal company or by your communal disposal facility.
- Observe the currently applicable regulations. In case of doubt contact your disposal facility

Batteries/rechargeable battery packs

- Used batteries/rechargeable battery packs may not be disposed of in household waste.
- Batteries can contain poisons which are damaging to the environment. Therefore, dispose of the batteries/rechargeable batteries in accordance with statutory regulations.
- Every consumer is legally obligated to surrender batteries/rechargeable batteries to a community collection centre in their district or to a dealer. The purpose of this obligation is to ensure that batteries are disposed of in a non-polluting manner.
- Only dispose of batteries when they are fully discharged.
- Dispose of packaging materials in an environmentally responsible manner.

⚠ *CAUTION!*

- Batteries should not be allowed to fall into the hands of children. Children can put batteries into their mouths and swallow them. If a battery is swallowed medical assistance must be sought immediately.
- For the handling of batteries please observe the following:

⚠ *Risk of explosion!*

- Do not throw batteries into a fire.
- Do not recharge the batteries.
- Never open batteries, never solder or weld batteries. The risk of explosions and injuries exists!
- Regularly check the condition of the batteries. Leaking batteries can cause damage to the device.
- In the event of the batteries leaking acids, wear protective gloves. Then clean the battery compartment and the battery contacts with a dry cloth.