

印刷内容见第2、3、4页

技术规格要求：

此说明书为3页连体2折样式。

此说明书为双面印刷

展开尺寸为：500X185mm

2折后尺寸：125X185mm

版本说明：V4版，增加了折法图。

| | |
|----|-------|
| 作废 | _____ |
| 作废 | _____ |
| 作废 | V1 |
| 作废 | V2 |
| 作废 | V3 |

| | | | | | | | | |
|-----|----------|--|---------------------|-------------|------|-------|-------------|---------|
| 日期 | 10-03-18 | 名称 | MT-31GB中英文说明书V4 | | 料号 | | 版本 | V4 |
| 设计 | | 文件名 | MT-31GB中英文说明书V4.cdr | | 光盘号 | _____ | 材料 | 105g铜版纸 |
| 审核 | | 单位 | 毫米(mm) | 尺寸公差:±0.5mm | 印刷颜色 | 彩色、黑色 | 图号 | |
| 标准化 | |  深圳市蔚科电子科技开发有限公司 CHERUB TECHNOLOGY COMPANY LIMITED | | | | | 密级 | 普通 |
| 批准 | | | | | | | 第(1)页，共(4)页 | |

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Guitar & Bass Metro-Tuner

MT-31GB



Specification

Tuner Mode

- Tuning Range: A0(27.5Hz)-a3(1760Hz)
- Tuning mode: Manual tuning or automatic tuning
- Tuning Item: Chromatic, Guitar, Bass

Tone Generator Mode

- Chromatic Sound Groups Range: 2A-6A
- Guitar Strings
- Bass Strings

Metronome Mode

- Tempo Range: 30-230bpm
- Values: 1 2 3 4 5 6 7 8 9
- Beats: 0(0/4), 1(1/4), 2(2/4), 3(3/4), 4(4/4), 5(5/8), 6(6/8), 7(7/8), 9(9/8)
- Battery: 3V (2 AAA batteries)



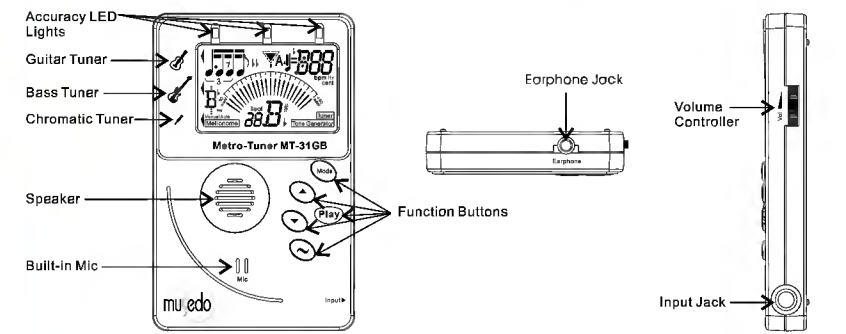
Musedo Technology Inc.

www.musedo.com

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MT-31GB Guitar & Bass Metro-Tuner Manual

1. Appearance and Operation Description



2. Power On/off

1. The tuner is power on when initially placing batteries in.
2. Under tuner mode, it will be power off automatically if no button operation or no signal detected in 5 minutes.
3. Under metronome mode, it will be power off automatically if this product is under idle state without button press.
4. Keep pressing button Play for 2 seconds to turn it on when power off.

3. Swift between tuner and metronome mode

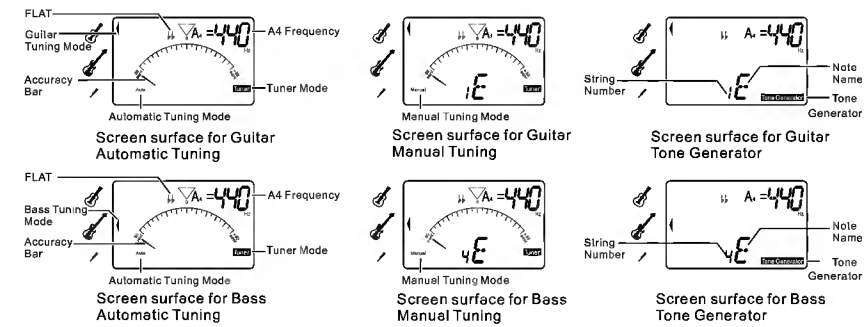
Keep pressing button Mode for 2 seconds to swift to metronome mode when it's under tuner mode; And another 2 seconds press to the same button, it will swift from metronome mode to tuner mode.

4. Function and Operation under tuner mode

1. Function under tuner mode

| Function | Remark | |
|--------------------|---|--|
| Tuning Mode Select | Press button Mode to select Guitar tuner and Bass tuner and Chromatic tuner under tuner mode. | |
| Guitar tuner | Flat Half-note Tuning | Press button ~ into ↓ tuning mode. Under this mode, all the guitar strings will be flat. |
| | Manual Tuning | Press button ▲ or ▼ into guitar manual tuning mode. Under manual tuning mode, press button ▲ or ▼ to choose which guitar string you want to tune. Press button Mode to be back to guitar automatic tuning mode. |
| | Guitar Pitches | Under guitar manual tuning mode, press button Play to generate the pitch of string which number as shown in the LCD screen. Press button Play again to stop pitch sound. |
| Bass tuner | Flat Half-note Tuning | Press button ~ into ↓ tuning mode. Under this mode, all the bass strings will be flat. |
| | Manual Tuning | Press button ▲ or ▼ into bass manual tuning mode. Under manual tuning mode, press button ▲ or ▼ to choose which bass string you want to tune. Press button Play to be back to bass automatic tuning mode. |
| Chromatic tuner | Bass Pitch | Under bass manual tuning mode, press button Play to generate the pitch of string which number as shown in the LCD screen. Press button Play again to stop pitch sound. |
| | A4 Tuning Frequency | Under guitar or bass tuning mode, press button Mode to select Chromatic tuning. And then press button ▲ or ▼ to adjust A4 tuning frequency. If the frequency changed, all the musical instruments will be under a changed frequency. (Normally it is not necessary to change the A4 tuning frequency.) |
| | ♭, # Half-note Display Mode | Press button ~ under chromatic tuning mode to choose ♭ or #, then the half note detected by the tuner will be shown as ♭ or # only on the LCD screen. |
| A Pitch | Under this mode, press button Play to generate A4 pitch. Press button ▲ or ▼ to change the A pitch group. | |

2. Guitar/Bass Tuning Operation



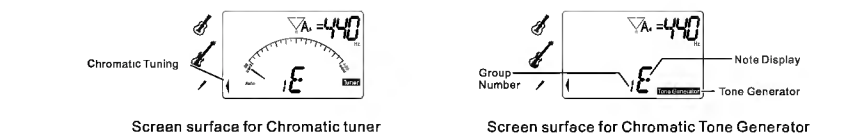
1). How to place tuner for a better tuning.
Under guitar or bass tuner mode, please place the tuner to where it easy to detect guitar or bass string sound. Or you can also insert the pickup to "Input ▶" jack to have a better sound pick up.

2). Automatic Tuning
Pick the Guitar/bass by your flesh part of finger (it's better not to use your nail). The tuner will detect sound automatically, and show the string number, note name and accuracy on the screen automatically. When the string number shown on the screen stays the same as the string you picked, and accuracy bar points to calibration "0" vertically and the green accuracy indicator LED light turns green, which means your guitar or bass is in tune.
If the string number shown on the screen is the same to the string you picked, but accuracy bar points to leftwards of calibration "0" and the left red accuracy indicator LED light turns red; or the string number shown on the screen is bigger than the string you picked, which means the note of string is lower. You have to screw the string you picked tighter.
If the string number shown on the screen is the same to the string you picked, but accuracy bar points to rightwards of calibration "0" and the right red accuracy indicator LED light turns red; or the string number shown on the screen is smaller than the string you picked, which means the note of string is higher. You have to loose the string you picked properly.
If the string number shown on the screen is far different away the string you picked, it's better picking the string one or two more times to enable the tuner to show the accuracy correctly.

3). Manual Tuning
Under guitar or bass tuner mode, press button ▲ or ▼ to select the string number which you want to tune. And then put the tuner to where it easy to detect sound or use a pickup by inserting the Input jack. Use the flesh part of your finger to pick the string. The tuner works a utomatically.
When the green accuracy LED light turns on and the accuracy bar points vertically to calibration "0", which means the Guitar/bass is in tune.
If accuracy bar points to leftwards of calibration "0" and the left red accuracy indicator LED light turns red; or the accuracy bar has no reaction, which means the note of string is lower. You have to screw the string you picked tighter.
If accuracy bar points to rightwards of calibration "0" and the right red accuracy indicator LED light turns red, which means the note of string is higher. You have to loose the string you picked properly.

4). Tone Generator
Under Manual Tuning mode, please press button ▲ or ▼ to select the string number. The sound of the string you selected will generate automatically by press button Play. And press button Play again, the sound will stop, and it is back to Manual Tuning mode.

3. Chromatic Tuning



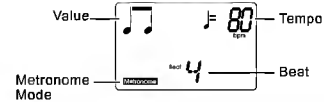
① After select A4 tuning frequency, please put the tuner to where it easy to detect instrument sound. (The A4 frequency is pre-set 440Hz. Normally, it's not necessary to change this frequency.) Please plug the pickup into "Input ▶" jack to ensure a better tuning effect if you tune the instrument under a noisy circumstance.

② Make a sound by the instrument you want to tune, then the tuner will detect sound automatically, and show note name and accuracy on the screen automatically. When the note name shown on the screen stays the same as the sound from the instrument, and accuracy bar points to calibration "0" vertically and the green accuracy indicator LED light turns green, which means your instrument is in tune. If the note name shown on the screen is not the same as the correct sound from your instrument, please lower the pitch of instrument firstly, and then heighten the pitch gradually until that the note name shown on the screen keeps the same as the correct sound of instrument.

③ Chromatic Tone Generator
Under Chromatic Tuning mode, press button Play to generate sample sounds. Press button ▲ or ▼ to select the note group. Press button Play again to stop generator, and it is back Chromatic Tuning mode at the same time.

4. How to Use Pickup
The pickup works by vibration. So it's better to put the pickup to where your instrument has an apparent vibration when playing. (The place to put the pickup should not affect playing instrument.)

5. Metronome Picture and Operation Surface



6. Metronome Function

| Function | Operation |
|---------------|---|
| Metronome On | Under Tuner mode, press button Mode for 2 seconds into metronome mode. And press button Play to start. |
| Metronome Off | Press button Play to stop when metronome on. |
| Beat Select | Press button Mode to select beats including 0(0/4), 1(1/4), 2(2/4), 3(3/4), 4(4/4), 5(5/8), 6(6/8), 7(7/8), 9(9/8). |
| Tempo Setup | Press button ▲ or ▼ to setup tempo ranging from 30bpm to 230bpm. |
| Value Select | Press button ~ to select different values including ♩ ♪ ♫ ♬ ♭ ♮ ♯ |

7. Specifications

- Tuner Mode**
- Tuning Range A0(27.5Hz)-a3(1760Hz)
 - Tuning mode: Manual tuning or automatic tuning
 - Tuning Item: Chromatic, Guitar, Bass
- Tone Generator Mode**
- Chromatic Sound Groups Range: 2A~6A
 - Guitar Strings
 - Bass Strings
- Metronome Mode**
- Tempo Range: 30~230bpm
 - Values: ♩ ♪ ♫ ♬ ♭ ♮ ♯
 - Beats: 0(0/4), 1(1/4), 2(2/4), 3(3/4), 4(4/4), 5(5/8), 6(6/8), 7(7/8), 9(9/8)
 - Battery: 3V (2 AAA batteries)

8. Accessories

- 2 AAA batteries
- Manual
- Pickup

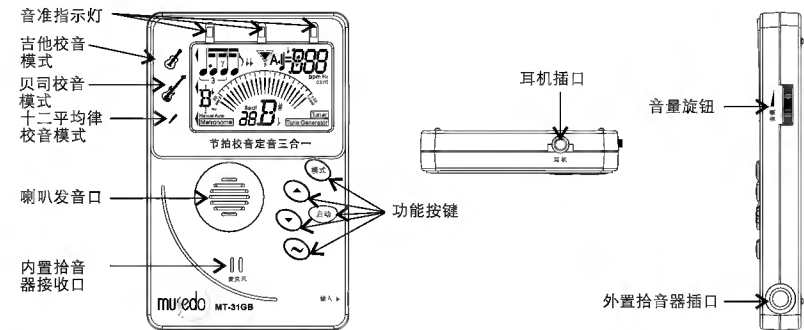
9. Remarks

- Please replace new battery when the screen shows unclear.
- If anything unusual happen, please take out the battery and put in again in 10 seconds.
- Modification to this product has no information in advance.
- Please use a pickup when you tune your instrument under a noisy circumstance.



MT-31GB 吉他贝司节拍校音器使用说明书

一、操作面板示意图



二、机器开关机

- 初次装入电池后即为吉他校音模式的开机状态。
- 校音器模式下5分钟内无任何按键操作或未检测到有效声音信号则自动关机。
- 节拍器模式下5分钟内未启动节拍演示或无按键操作则自动关机。
- 关机状态下按住启动键保持2秒可开机。

三、校音器模式与节拍器模式切换

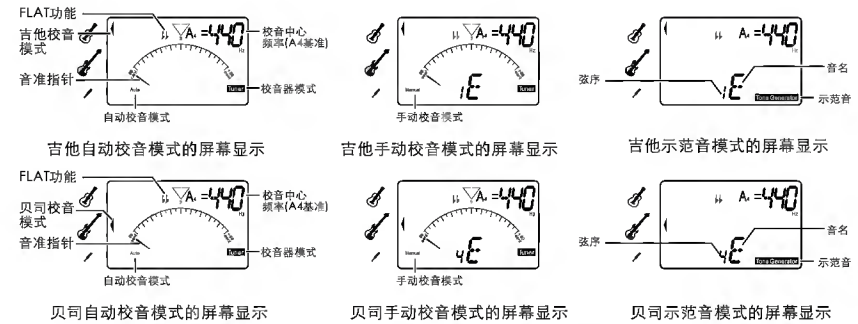
校音器模式下按住模式键保持2秒可切换至节拍器模式；节拍器模式下按住模式键保持2秒可切换至校音器模式。

四、校音器模式功能简介与使用方法

1、校音器模式功能简介

| 功能简要 | 操作方法 |
|----------|--|
| 校音模式项目选择 | 校音模式下按模式键可选择校音项目，选择范围：吉他 → 贝司 → 十二平均律。 |
| 吉他校音模式 | <ul style="list-style-type: none"> Flat功能 按~键使屏幕显示↓，当显示↓时为校音后吉他所发音的音高降低1个小二度。 手动校音 按▲或▼键可进入手动校音，进入后再按▲或▼键可选择所需校准的弦序。手动校音模式下按模式键可回到吉他自动校音模式。 示范音 进入手动校音后按启动键可发当前所选弦序的示范音，再按启动键则停止示范音。 |
| 贝司校音模式 | <ul style="list-style-type: none"> Flat功能 按~键使屏幕显示↓，当显示↓时为校音后贝司所发音的音高降低1个小二度。 手动校音 按▲或▼键可进入手动校音，进入后再按▲或▼键可选择所需校准的弦序。手动校音模式下按模式键可回到贝司自动校音模式。 示范音 进入手动校音后按启动键可发当前所选弦序的示范音，再按启动键则停止示范音。 |
| 十二平均律模式 | <ul style="list-style-type: none"> 校音中心频率调整 吉他、贝司校音模式下按模式键进入该模式后按▲或▼键可调整校音器的校音中心频率，使乐器校音结果整体偏移。（注：此功能一般不作调整。） ♭ # 显示模式 该模式下按~键可选择校音时，机器所检测到的半音音名用♭或#方式显示 示范音 该模式下按启动键可使机器发示范音，机器发出示范音后按▲或▼键可选择示范音的发音组序。 |

2、吉他、贝司专用校音模式下使用方法



① 校音器的放置

将校音器设置到吉他或贝司专用校音模式后，放置在容易检测到琴音的位置，或从"输入▶"插口插入外置拾音器，以确保校音器可以有效拾取该乐器之声音。

② 自动校音操作方法

用肉指拨动琴弦（切勿用指甲），此时校音器会自动检测，在屏幕上显示出该弦序、音名及音分偏差。当自动检测到的弦序与实际所拨弦序一致，且中间绿色音准指示灯亮，音分指针指向屏幕中间刻度"0"处时则该弦已校准。

若自动检测到的弦序与实际所拨弦序一致，但左边红色音准指示灯亮，音分指针指向屏幕刻度"0"左侧，或者指示弦序大于实际弦序时，则该弦音偏低，此时应适当旋紧该弦，以提高该弦音高。

若自动检测到的弦序与实际所拨弦序一致，但右边红色音准指示灯亮，音分指针指向屏幕刻度"0"右侧，或者指示弦序小于实际弦序时，则该弦音偏高，此时应适当旋松该弦，以降低该弦音高。

若自动检测到的弦序与实际所拨弦序偏差甚远，建议多拨一到两次，以消除误差，准确地判断该弦是偏高还是偏低。

③ 手动校音操作方法

吉他或贝司专用校音模式下按上或下键选择被校弦的弦序后，将机器放置在容易检测到琴音的位置或使用外置拾音器。用肉指拨动被校琴弦，此时机器自动检测。

当中间绿色音准指示灯亮，音分指针指向屏幕中间刻度"0"处时则该弦已校准。

当左边红色音准指示灯亮，且音分指针指向屏幕刻度"0"左侧，或音分指针无动作，则该弦音偏低，此时应适当旋紧该弦。

当右边红色音准指示灯亮，且音分指针指向屏幕刻度"0"右侧，则该弦音偏高，此时应适当旋松该弦。

④ 示范音操作方法

吉他或贝司校音模式下按▲或▼键选择弦序，按启动键可发当前所选弦序的示范音，再按启动键则停止示范音并回到手动校音模式。

3、十二平均律模式下使用方法



- 将调整好A4(中心频率)的校音器放置在容易检测到乐器声音的位置，（注：该机默认值为"440Hz"，一般不作调整）若校音场所较嘈杂时，请从"输入▶"插口插入外置拾音器，以确保校音器可以有效拾取该乐器之声音，
- 使所需校准的乐器发出声音，此时校音器会自动检测并显示出所发声音的音名及音准度，如该机此时自动显示的音名与所发声音的音名一致，音准指针指向中间刻度"0"处，且绿灯亮则该音为准确状态。若所显示的音名与所

发声音的音名不一致，则先调低需校准乐器的音高，使之低于标准状态下该乐器所发声音的音高，然后再逐步将该音提高，直至该校音器自动显示的音名与之对应。

4、拾音器的使用说明

因本拾音器靠拾取乐器发声时的振动频率来取得信号，请将拾音器夹在乐器振动明显之部位，以利于拾音夹良好接收振动信号。（注：所夹部位以不影响乐器发音为准）

五、节拍模式显示示意图



六、节拍器模式功能简介

| 功能简要 | 操作方法 |
|----------|--|
| 启动节拍演示 | 校音器模式下按住模式键保持2秒进入该模式后，按启动键可启动节拍演示 |
| 停止节拍演示 | 节拍演示状态下按启动键可停止演示 |
| 拍子调整 | 该模式下按模式键可调整节拍演示类型。拍子选择范围：0(0/4), 1(1/4), 2(2/4), 3(3/4), 4(4/4), 5(5/8), 6(6/8), 7(7/8), 9(9/8). |
| 节拍演示速度调整 | 该模式下按▲键或▼键可调整节拍演示速度。速度调整范围：30~230拍/分钟 |
| 时值调整 | 该模式下按~键可调整节拍演示时值时值选择范围：♩ ♪ ♫ ♬ ♭ ♮ ♯ |

七、技术规范

- 校音器模式**
- 校音范围：A0(27.5Hz)-a3(1760Hz)
 - 校音方式：手动校音或自动校音
 - 校音项目：十二平均律、吉他、贝司
- 定音器模式**
- 十二平均律示范音选择范围：2A~6A
 - 吉他空弦音示范
 - 贝司空弦音示范
- 节拍器模式**
- 节拍速度调整范围：30~230拍/分钟
 - 时值选择范围：♩ ♪ ♫ ♬ ♭ ♮ ♯
 - 拍子选择范围：0(0/4), 1(1/4), 2(2/4), 3(3/4), 4(4/4), 5(5/8), 6(6/8), 7(7/8), 9(9/8)
 - 电源：3V (AAA电池2粒)

八、随机包装附件

- AAA电池2粒
- 操作说明书
- 合格证
- 拾音器

九、注意事项

- 显示混暗时请更换新电池
- 若出现异常显示现象请取出电池等待10秒后重新装入
- 本产品设计如有变更恕不另行通知
- 在较嘈杂的场所校音时请选用外置拾音器

折法图

第一步



第二步

