**CHROMATIC TUNER**

**USER'S MANUAL**

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### Caution

1. To avoid short circuit, electric shock or malfunction:
   - Do not disassemble or repair.
   - Do not operate in high temperature and humid space such as electric heater, direct sunlight, bathroom, wet floor etc.
   - Do not place in excessive vibration.
   - Do not place in dusty or dirty space.
   - Do not operate the tuner with wet hands.
2. To avoid breakdown:
   - Do not handle all controls with excessive power.
   - Do not drop the tuner.
3. Cleaning:
   - Do not use thinner or alcohol for cleaning.
   - Use only dry and clean cloth.
4. To prevent battery loss:
   - Remove the battery when the tuner is not in use for a long time.
   - Turn the power button off when the tuner is not in use.
5. Battery:
   - Use only 3V battery : AAA(R03, LR03, L30) x 2

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### Features & Functions

- **POWER button** for On/Off
  - The power will be On & Off by each press of POWER button.
  - This tuner will be turn off automatically if it is not in use for 20 minutes.
- **MODE button** for AUTO/MAN selection
  - Following modes will be indicated on LCD in order by each press of MODE button.
- **NOTE button** for Tuning Note selection
  - When you wish to tune MAN mode, you can select the note you wish to tune by each press of NOTE button.
- **PITCH button** for reference pitch setting
  - You can set the calibration by each press of PITCH button.
- **Liquid Crystal Display (LCD)**
  - @ Initial setting : mode=AUTO, calibration=440Hz

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### Tuning Procedure

For Accurate Tuning

1. **Do not operate the tuner nearby sound equipment such as Radio or TV, if possible.** These units can be interposed in reception of exact sound by internal microcomputer.
2. **Locate the volume level of instrument at center for reasonable sound input.**
3. **Do not play loudly and heavily.**
4. **If you want quick tuning of next string, press all string with finger lightly after current tuning to cut sound input of current tuning string.

#### Auto & Manual Tuning Procedure

1. **Electric instruments**:
   - Connect output of the instrument to the INPUT jack of tuner and if possible, adjust the volume level of the instrument to center position.
2. **Acoustic instruments**:
   - Locate the instrument near the MIC in tuner.
3. **Press the POWER button to turn the tuner On.**
4. **The LCD lights up and will be initial setting.**
5. **Adjust the reference pitch by PITCH button,** if necessary.
6. **(AUTO) Try the tuning from the low frequency,**
7. **(MAN) Press the NOTE button one time,**
8. **MAN & AUTO will be indicated on LCD.**
9. **Then, select the note you wish to tune by each press of NOTE button.**
10. **The tuning.**
11. **(AUTO) Adjust the instrument until the tuning note you wish to tune is indicated on LCD.**
12. **If the pitch of the instrument is greater than -50 or +50 cents, adjust the instrument until one of the LEDs lights up.**
13. **If the pitch of the instrument is within -50 or +50 cents, adjust the instrument steadily until to approach the needle of meter to the center "0".
14. **When the needle of meter stops in the center "0", middle LED lights up and b & # will be indicated simultaneously on LCD. This point is exact sound of the instrument.**

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### Specifications

- **Mode**: Auto & Manual
- **Note**: C, C#, D, D#, E, F, F#, G, G#, A, A#, B
- **Accuracy**: ±0.5 cent
- **Calibration**: 435 - 445Hz (1Hz step)
- **Indicator**: LCD & SLEDS
- **Input**: Microphone, 1/4" Input jack
- **Dimensions**: 94mm(W) x 53mm(D) x 17mm(H)
- **Weight**: 80g (including battery)
- **Power**: 3V = AAA(R03, LR03, L30) x 2

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### Installation & Replacement of Battery

1. **White pressing on the tabs marked push on side, open the bottom case.**
2. **Insert the batteries being careful to observe the correct polarity.**
3. **Close the bottom case on the contrary.**
4. **Battery life may differ according to the condition of use.**
5. **If the unit malfunction, and turning the power OFF and then On does not resolve the problem, remove and then reinstall the battery.**

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This is to certify that Chromatic Tuner FT-2000 is in conformance with:


**Applicable Standards**:

- EN55022:1-1 : 01.92
- Electromagnetic Compatibility - Generic emission standards.
- Part 1 : Residential, commercial and light industry.
- EN55022:2-1 : 01.92
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- Part 1 : Residential, commercial and light industry.