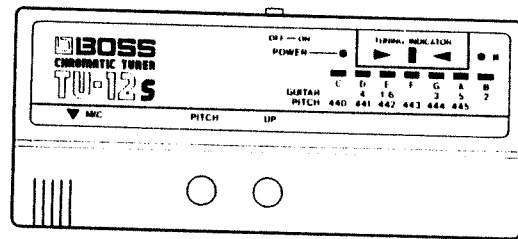


BOSS

TU-12S

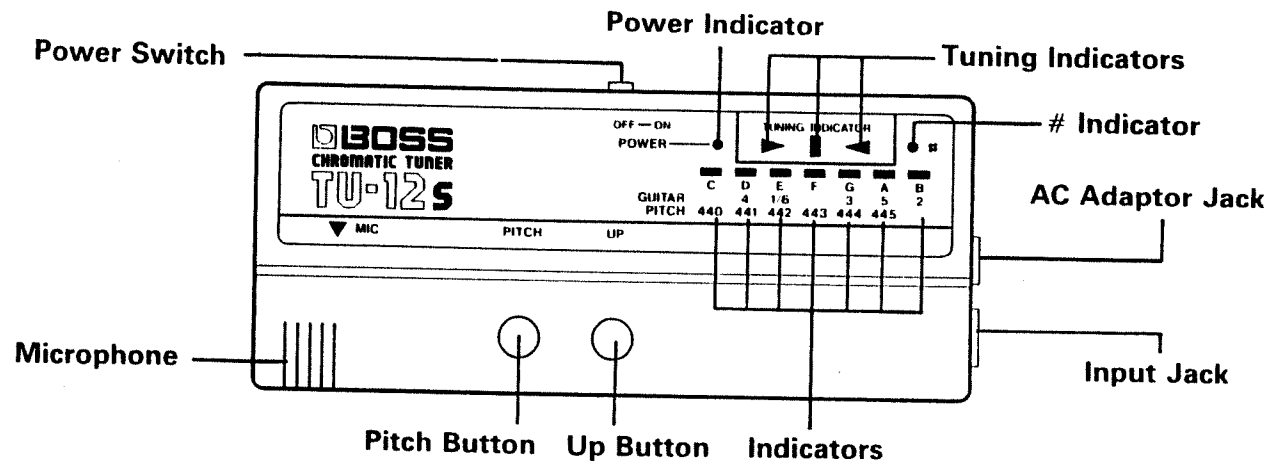
CHROMATIC TUNER

Chromatic Tuner

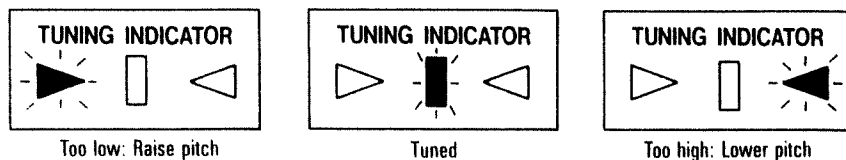


INSTRUCTIONS

■ PANEL DESCRIPTION



[How to look at the Tuning Indicator]



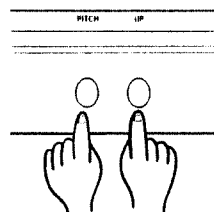
[Selecting a Standard Pitch]

The standard pitch of the TU-12S is set to A=440Hz, but this can be altered in 1Hz step up to 445 Hz.

- ① Hold the Pitch Button down, and the 440 indicator flashes.
- ② While still holding the Pitch Button down, push the UP Button until the indicator of the desired pitch flashes.
- ③ Release the Pitch Button.

The pitch you select here will be retained until the unit is switched off.

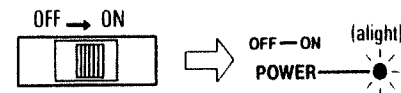
		TUNING INDICATOR						
GUITAR PITCH		C	D	E	F	G	A	B
		4	1/6			3	5	2
		440	441	442	443	444	445	



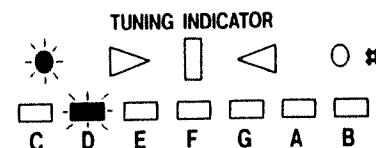
(while holding down)

■ OPERATION

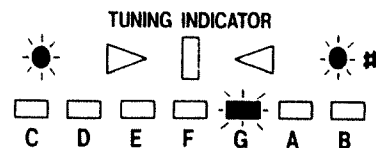
- ① Switch the TU-12S on.
- ② To tune an acoustic musical instrument, place it close to the microphone on the tuner, and to tune an electronic/electric musical instrument, connect it to the Input Jack, then play the instrument.



(e.g.) When a sound around D is fed in.



(e.g.) When a sound around G# is fed in.



* Be sure to play single note.

The indicator nearest to the played pitch will light up.

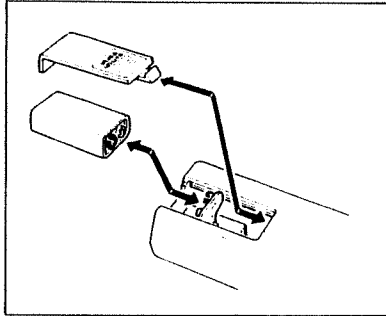
How to tune the Guitar

- 1) Before tuning a guitar with the TU-12S, please roughly tune the guitar by adjusting the strings.
 - 2) Then, play the string to be tuned, adjust the string so that the relevant indicator on the tuner lights up, then make finer adjustment with the aid of the Tuning Indicator.
- * The TU-12S allows the tuning of a different octave, therefore a bass guitar can also be tuned similarly.

■ Battery Replacement

If the Power Indicator lights dimly or does not light at all, battery replacement is required.

[How to replace the battery]



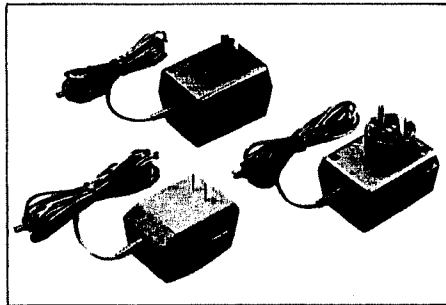
* Use a 6F22 9V DC battery.

- ① Push down the cover of the battery housing at the bottom of the unit, and remove it by sliding it outward
- ② Take out the exhausted battery, and disconnect it from the snap cord.
- ③ Connect a new battery to the snap cord. (Be sure that the polarity is correct.)
- ④ Replace the cover securely.

■ IMPORTANT NOTES

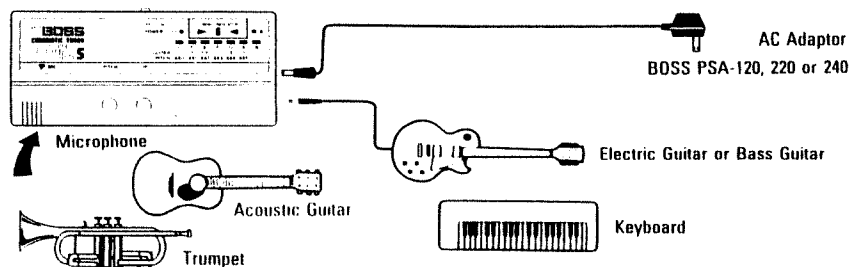
- If the tuner is not to be used for a long period of time, remove the battery from the battery housing to prevent the trouble caused by battery leakage.
- When the tuner is connected to a unit featuring a tuner output jack, noise may be heard from the unit. Please switch the tuner off when it is not being used

■ AC ADAPTOR (OPTION)



For AC operation, be sure to use the BOSS AC Adaptor PSA-120, 220 or 240 depending on the voltage system in your country. Using any other adaptor may cause breakdown.

■ CONNECTION



RADIO AND TELEVISION INTERFERENCE

Warning – This equipment has been verified to comply with the limits for a Class B computing device, pursuant to Subpart J, of Part 15, of FCC rules. Operation with non-certified or non-verified equipment is likely to result in interference to radio and TV reception.

The equipment described in this manual generates and uses radio-frequency energy. If it is not installed and used properly, that is, in strict accordance with our instructions, it may cause interference with radio and television reception.

This equipment has been tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J, of Part 15, of FCC Rules. These rules are designed to provide reasonable protection against such a interference in a residential installation. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by the following measure:

- Disconnect other devices and their input/output cables one at a time. If the interference stops, it is caused by either the other device or its I/O cable.
- These devices usually require Roland designated shielded I/O cables. For Roland devices, you can obtain the proper shielded cable from your dealer. For non Roland devices, contact the manufacturer or dealer for assistance.

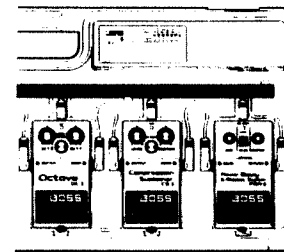
If your equipment does cause interference to radio or television reception, you can try to correct the interference by using one or more of the following measures:

- Turn the TV or radio antenna until the interferences stops.
- Move the equipment to one side or the other of the TV or radio.
- Move the equipment farther away from the TV or radio.
- Plug the equipment into an outlet that is on a different circuit than the TV or radio. (That is, make certain the equipment and the radio or television set are on circuits controlled by different circuit breakers or fuses.)
- Consider installing a rooftop television antenna with coaxial cable lead-in between the antenna and TV.

If necessary, you should consult your dealer or an experienced radio/television technician for additional suggestions. You may find helpful the following booklet prepared by the Federal Communications Commission:

"How to Identify and Resolve Radio-TV Interference Problems"
This booklet is available from the U.S. Government Printing Office, Washington, D.C., 20402, Stock No. 004-000-00345-4.

■ Fitting the TU-12S in the Carrying Case BCB-6



■ SPECIFICATION

Power	9V DC 6F22 × 1, AC Adaptor BOSS PSA-120, 220 or 240
Power Consumption	Max. 15mA
Tuning Range	C ₁ (32.70Hz) to B ₅ (987.77Hz)
Accuracy	± 1 cent
Master Oscillator	Quartz (3,579545MHz)
Standard Pitch	440 to 445Hz (1Hz step)
Jacks	Input, AC Adaptor
Dimensions	129 (W) × 27 (H) × 52 (D) mm / 5 1/8" × 1 1/8" × 2"
Weight	120g/4oz

*Specifications are subject to change without notice.



 Roland®

17049776

Bescheinigung des Herstellers/Importeurs

Hiermit wird bescheinigt, daß der/die/das

BOSS CHROMATIC TUNER TU-12S

.....
(Gerät, Typ, Bezeichnung)

in Übereinstimmung mit den Bestimmungen der

Amtsbl. Vfg 1046 / 1984

.....
(Amtsblattverfügung)

funk-entstört ist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt.

Roland Corporation Osaka/Japan

.....
Name des Herstellers/Importeurs

UPC 17049776



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