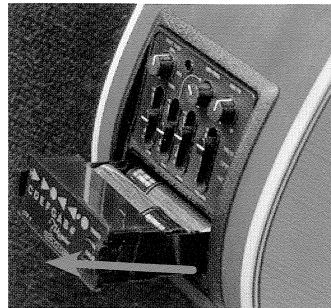


## Changing Batteries

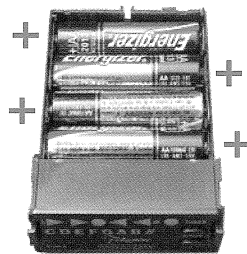
The CTP-2 is powered by 4 AA alkaline cells located in the tuner/battery tray. To replace the batteries, pinch the two tray tabs ( **g** ) and pull out the tray. Replace the batteries carefully observing polarity. Re-insert tray. See the illustrations below.



1. Pinch Tabs and Pull



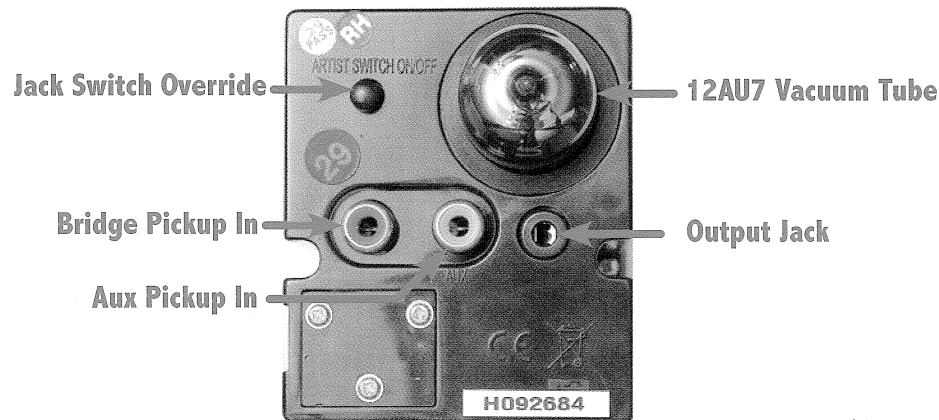
2. Remove Tray



3. Replace Batteries

## On the Flip Side

On the back of the CTP-2, there are no normally used controls or interfaces. Referring below, please note the Aux input jack. This is the RCA receptacle into which you may choose to connect an additional pickup which will be controlled by the Aux pot on the front panel. Please note that use of the Jack Switch Override is not recommended in most cases since it will not allow plug removal to switch off the electronics, thereby draining your batteries prematurely.



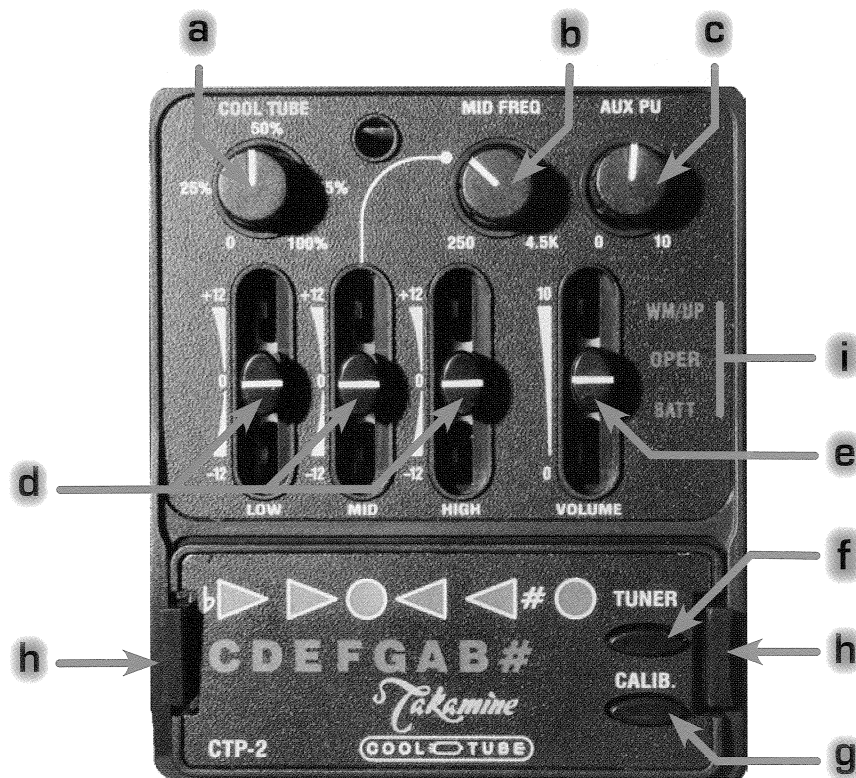
## What Makes the CoolTube Hot

The Takamine CoolTube preamp is unique among acoustic guitar preamps. Finally, some of the characteristics of the electron vacuum tube that have made it an integral part of the electric guitar scene for over a half century, are now employed on behalf of the acoustic guitarist to bring hip new sounds never before available from an acoustic-electric guitar!

The key to this breakthrough is Takamine's "cool tube technology." Normally, a vacuum tube requires significant current to heat up the elements in the tube to create electron flow. Takamine's engineers found a way to vastly reduce the amount of current and heat needed to make the tube function, resulting in a battery-powered preamp with portability and the "warm" sound created by analog tube technology.

## The Anatomy of the CTP-2

The Takamine CoolTube preamp is designed to be easy to use, yet flexible enough to dial in just the sound you're looking for. Please refer to the figure below which will provide you with an easy reference for the function and use of each control.



- a Cool Tube:** Lets you set the amount of the guitar's pickup signal that is applied to the CTP-2's vacuum tube. Turning this control clockwise increases the "tube effect."
- b Mid Freq.:** Tunes the midrange EQ center frequency (see below) from 250Hz to 4500Hz. This gives you the flexibility to enhance or reduce the midrange content of your signal at just the right segment of the sound spectrum. The dot on the control legend represents the preferred frequency for most players.
- c Aux Pickup:** Adjusts the level or blend of a secondary pickup which may be used with the CTP-2. Using an input on the rear of the preamp lets you blend a medium impedance pickup with the signal from your built in saddle pickup. (See below)
- d EQ Controls:** The CTP-2 features a three-band equalizer with an adjustable frequency midrange control (see above). Each slider enables you to increase or decrease the power of sound in a designated spectrum. The "Low" controls works in the bass range, the "High" works in the treble range, while the "Mid" control will allow you to adjust the boost/cut at the working frequency in conjunction with the Mid Freq. knob.
- e Volume:** This one is easy... Raise the slider for more output, lower it for less. This control also affects the Aux In (optional secondary pickup).
- f Tuner:** This button controls the built-in tuner on/off function. Simply press the button and the tuner will activate (even if the guitar is not plugged in) and the tuner LED will light. When you play a string the tuner will illuminate the LED which will name the note you're playing. Then simply adjust your strings using the red flat or sharp arrow LEDs until the green "in-tune" LED lights. That's it - you're in tune. Press the tuner button again and the tuner will turn off.
- g Calib.:** When the tuner is active, this button enables you to tune to a arbitrary reference pitch. For example, if you are attempting to play with some other out-of tune instrument, tune one string of your guitar to that instrument while the tuner is on. Once tuned, press the Calibrate button and the tuner will adjust its reference frequency allowing you to tune the rest of your strings accurately. When the tuner is turned off, it will revert to the standard A=440Hz setting.
- h Battery Tray Releases:** Pinching these tabs toward each other will release the battery compartment tray - please refer the "Changing Batteries" section below.
- i Status LEDs:** These LEDs indicate preamp status. WM/UP: tube warming, preamp not ready; OPER: preamp operational; BATT: batteries low - need replacement.