

## A revolution in acoustic guitar pickup technology



In 2013 after years in development the AP5 PRO finally arrived. It Immediately became the go to pick up for some of the worlds greatest acoustic guitar players. Including of course long time Maton player Tommy Emmanuel. Eric Johnson described the AP5 PRO as his "Favourite amplifying system for acoustic guitar".

The AP5 has been held in the highest regard for over a decade by players all over the world. It was with this in mind that we began development of its successor -The AP5 PRO.

The AP5 PR0 now features separate Microphone and Piezo input controls allow for blending of both microphone and piezo levels prior to sending the actively combined signals through to the master volume. Highly selective cardioid microphone system allows for much greater microphone level before feedback in live environments. This newly upgraded microphone is direct mounted to the preamp casing via an adjustable arm, which permits easy final tweaking of microphone position to suit the individual artists style.

The entire audio path has been scoured of electrolytic capacitors as these are known to effect high-quality audio. As a result, the sound of the AP5 PRO is much cleaner, with less 'fur' in the sound and does not suffer from tonal quality degradation with time.

All controls are now at your fingertips, and their 'resistance curves' have been specially designed and manufactured expressly for the AP5 PRO. As a result, the BASS, TREBLE and MID are now much more 'linear' in feel. The AP5 PRO also has improved battery terminals - both terminals are identical and now made from phosphor bronze – the same material as used in ships propellers – it is extremely corrosion resistant, so should the batteries develop a leak, the terminals can be easily cleaned to restore them to 'as new' operation.

The entire AP5 PRO system has been designed with easy maintenance in mind. All connectors are gold-plated RJ11 (telephone type) click-in connectors, from the pickup right through to the output jack. If any replacement parts are required, they can be easily fitted without needing special tools, and the plugs are 'locked-in' so that they cannot work loose with time and the vibration of travel.

The AP5 PRO piezo pickup has also undergone transformation. The pickup channel material is now made from 6061 T6 alloy super light, super strong, the same alloy used in rock-climbers crampons & fittings. The updated channel assembly now has a new, more rigid, gold-plated PCB allowing smoother sound, improved detail and sharper transients than ever before.

The AP5 PRO, designed in house at Maton guitars, has found it's place on the world stage.

The most natural sounding pickup I have heard!

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Jon Emman (50

TOMMY EMMANUAL CGP

 The AP5 PR0 is my most favorite amplifying system for acoustic guitar. It is very realistic and usable at higher levels onstage.

- Individual Microphone and Piezo Volume Controls lead to a Master Volume Control. Create your perfect blend and control the overall volume level without effecting the blend.
- Specially developed Cardioid Microphone direct mounted to preamp via adjustable arm. Find that acoustic "sweet spot" or play with mic placement for different effects.
- Tight component packing means the complete circuit is on one PCB. This assists noise reduction and enhances durability and reliability.
- New, easier to use linear type controls allow even greater accuracy when adjusting tone.
- Enhanced Midrange Sweep 600Hz 2.4kHz
- Improved system connections. All input / output connectors are the new "Click" type eliminating any potential for connection failures and making component replacement quick and easy.
- Lighter and stronger Pickup Channel. 6061 T6 alloy (as used by rock climbers for "crampons" and fittings) reduces the impact of weight on the acoustic performance of the guitar while the increased strength guarantees amplified string balance.

MIC INPUT FROM INTERNAL MICROPHONE - ADJUSTABLE TO FULL PZ: INPUT FROM PIEZO PICKUP - ADJUSTABLE TO FULL MIC PZ **AP5 PRO** VOL MID **INCREASED MID-RANGE FREQUENCY CONTROL - 600Hz TO 2.4kHz** MID-RANGE LEVEL - 8dB TO +16dB MASTER VOLUME TREBLE: 6dB BOOST OR 12dB CUT STARTING AROUND 2kHz BASS: 12dB BOOST OR CUT STARTING AROUND 250Hz

## **How to find 'your' voice using the AP5 PR0** (User Guide)

Each control on the AP5 Pro except for the Master Volume has a notched "mid-point" which is the "flat" position, or the setting we feel most faithfully represents our acoustic Maton tone. Our default setting has the Bass, Treble, Mid & Frequency controls set "flat" (in the notched position).

This does not apply to the Piezo and Mic Volume controls. Although they have a notched mid-point this is not a default setting. Our default setting for these two controls is the Piezo Control set at 75% and the Mic Control at around 25%.

The Master Volume slider should be set at around 75%. This allows the player to boost the signal if necessary. The function of the Master Volume is to control the overall volume of everything in the mix. It overrides all other controls.

Bass and Treble are fairly simple to use. If the guitar is "boomy" in the lower notes a slight cut in the bass slider should fix the problem. If the guitar lacks brightness the treble can be increased to compensate.

The Mid and Frequency controls are a bit more complicated to use. Basically, if you are happy with the "flat" sound of the midrange, leave the controls in the flat position.

The Mid control cut and boosts the mid-range volume while the Freq control sweeps between 600 Hz and 2.4KHz. The best way to understand what this does is to boost the Mid control to 100% (all the way clockwise) and sweep from left to right with the Freq control. Any unpleasant mid-range frequency will stand out with this setting. Once you have identified the frequency, bring the Mid control back until the frequency is absorbed within the overall sound of the guitar. Advanced users sometimes use the Mid control the opposite way. This is to emphasize those frequencies in order to "stand out in a mix" when playing with other musicians. Experimentation is the key here. If you don't have time to work this out (an open mic show for example) the best option is to set both Mid & Freq controls to flat. This setting will always deliver an acceptable sound.

The most complex element of the AP5 Pro is the Mic. It is designed as an additional sound source and has been set so as to not interfere with the signal from the piezo pickup (which should be your main source of signal). The most common system for setting the Mic level is to set the piezo sound first, including Bass, Treble, Mid and Freq controls. Then with the Piezo level at 75% and the Master Volume at 75% slowly wind the Mic level into the mix, listening for the "sweet spot" where the Mic enhances the treble sound of the guitar without becoming "scratchy" and unpleasant. If the Mic begins to feed back or sound unpleasant, back it off until it sits nicely in the mix without being overly apparent. The Mic is "rolled off" below 1 KHz so has no impact on the lower mids or bottom end of the guitar. It is not designed to be used alone and has no connection to any of the tone controls on the AP5 Pro. The Mic can be used with a Feedback Eliminator. Some players use it with great effect while a Feedback Eliminator is fitted.

Lastly, there is no substitute for experimenting with the controls. You cannot damage the system using the controls and you can always return to the notched, flat position if you get "out of control".

