

## International Amplifier Line User Manual

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### Common Features:

- Single channel all tube design
- Preamp dc heaters for low noise
- Straight signal path with simple tone stack
- Boutique capacitors and custom wound transformers
- Aluminum chassis
- Black Comet Vinyl with classic salt & pepper grill
- Low weight small size ultra portable
- Available as Head or 1x12" open back combo
- 1x10" open back combo available for low power versions only!

### Design Notes:

These amps have a simple straight forward signal path with minimum tone stack attenuation. Types, brands and values of coupling and tone capacitors have been carefully selected; these have tremendous differences in tone and feel, often boils down to ones individual taste.

If you feel you need some adjustments give us a call and we will see what we can do.

Due to the small size we chose to use a solid state rectifier and get the natural sag feel through additional circuitry in the power supply.

Most of the output transformers are wound with a single 8 ohm tap for best direct coupling the audio to the speaker. Exceptions are the higher gain models Panama and Brixton.

Tubes have been selected for best overall sound and reliability. In these simple circuits type and brand of tubes can make a big difference in sound. Don't be shy to experiment with tubes, get your old stock RCA's, Mullard's, GE's etc.....out of the closet and find your individual favorite. Power amp tubes should be matched and the bias needs to be set correctly. Preamp tubes can be exchanged without any adjusting as long as the pin layout is compatible with the 12AX7 type.

Tip: For cleaner tones try a 12AY7 on V1 and/or a 12AT7 on V2

Same applies to speakers, we selected what we think is the best overall speaker within the output power range of each amp.

### ***For your safety:***

***Make sure you turn your amp off when you switch tubes and be careful the tubes are very hot!! Do not touch tube sockets with fingers! Even after turning your amp off and unplugging it from the power outlet there could be enough voltage stored in the capacitors to give you a lethal electrical shock!***

***The Barcelona has capacitors mounted inside on the back chassis cover. The cover should be taken off only by an experienced Technician, on any amp!!***

## Panama

- 4W 6V6 Class AB power amp
- JJ ECC83s 1<sup>st</sup> and 2<sup>nd</sup> gain stage
- Chinese 12AX7B phase inverter
- Volume and 4 position Schizo tone stack gain control
- 2 position Mode and High Low out put power switch
- Single 8 ohm speaker out
- 1x10 combo Custom Eminence 8 ohm
- 1x12 combo Celestion G12H 8 ohm

The Panama was designed for extreme low volumes with the feel of a big cranked amp and we think it really works. It's not so much the 4 watts, a fully efficient 4W amp is still to loud for a 1am apartment rock out, then rater the entire design of the amp. The Panama has a lot of gain on tap which is essential to reach a nice full sound at low volumes. Clean sounds are not achievable but with single coils in the medium settings you can get Hendrix'esque and SRV crunch tones.

### Schizo Control

The Schizo control sets the overall gain and tone structure.

Pos. 1: medium gain mellow

Pos. 2: medium + gain bright open

Pos. 3: high gain

Pos. 4: high + gain bright open

### Volume Control

The Volume control comes very slow until the last 3<sup>rd</sup> of the range; this gives you a better range to find lower volume settings.

### Mode Switch

This switch has two purposes, first to cut the volume further down if needed and second to add a super high gain sound. The single "flash" symbol is the normal mode. Flip the toggle to the double "flash" symbol to engage it. You will notice a fair amount of compression with decreased dynamics; readjust the volume to your liking. Please note this mode is interactive with the schizo and volume control, from position 1 to 4 the effect of the mode switch will increase just like with higher volume settings. Basically it depends on the amount of signal going into this part of the circuit which also means the more output your pick-ups have the more the effect will increase. With single coils in position 1 and the volume cranked the effect will be minimal.

### Stand By, Hi - Low Power Switch

After you turned the amp on and let the tubes heat up a few minutes you have the choice to switch the amp off Stand by into the Hi or Low position. Hi has the full 4 watts available while Lo has only 2 watts. The difference in loudness is not so much but the amp will feel looser with more harmonics; think of it as a "variac brown sound" switch, readjust controls to your taste. Best dynamic range will be in the Hi setting.

**DIMENSIONS and WEIGHTS:** Are subject to change anytime, Please measure **your** amp carefully if a Custom Case is being made. **Add ¾ inch for each, handle and rubber feet.**

Head:	7.50"	H	18.37"	W	7"	D	16 pounds
1x10 Combo:	15"	H	19.37"	W	10"	D	37 pounds
1x12 Combo:	16.50"	H	20.75"	W	10.50"	D	43 pounds

## Troubleshooting

Make sure you read and understand the safety instructions!! Repairs should be done only by knowledgeable Technicians!! Always make sure your Cables, Guitars, Effects and Extension Cabinets are working and hooked up correctly. If you think something is wrong with your Amp, play straight into the Amp with nothing else hooked up other than a Guitar. That way you make sure it is the Amp. If you own a combo unplug the internal speaker and hook up an external speaker cabinet to make sure it's only the amp which is faulty. For noise check the appropriate preamp tubes (refer to f). Tubes are delicate and have a limited live span depending on operating time, temperature and mechanical influences. 99% of all sound and noise problems come from preamp tube failure. We let our amps run for at least two days before we ship them to make sure that the tubes work properly but since they have glass housing and delicate little plates inside them it happened that they got damaged during shipping. Please don't feel discouraged. We don't manufacture tubes and can only retest them to make sure they're okay.

## Fuses

To check the fuses, use an Ohmmeter to make sure they're blown because sometimes you can't see if they're blown. Only 3GA types are used.

The Main fuse for the Panama should be 1A slow blow.

The HT fuse should be 500mA slow blow.

The HT fuse blows usually if your power tubes are bad to protect the power amp circuit from getting damaged. If the Main fuse blows it could be just a voltage peak from your power outlet. Put a new one in and see what happens. If it blows again give us a call.

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