

International Amplifier Line User Manual

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!!



Barcelona

- 40 watt 2x6CA7 Class AB power amp
- 40 or 20 watt operation via 3 position Standby switch
- JJ ECC83s 1st and 2nd gain stage
- JJ ECC83s phase inverter
- Gain with pull fat switch, can be used as pull bright
- Volume, Bass and treble control
- 3 position midrange selector
- Single 8 ohm speaker out
- 1x12 combo Celestion Vintage 30 8 ohm

The Barcelona was designed for a very nice high headroom clean sound. 6CA7 power tubes were chosen for their nice balanced tone. These have the same output impedance as an EL34 so you can use EL34's in your Barcelona with just a rebias.

Gain Control

The gain control sets the gain, over all the amp stays pretty clean. The knob can be pulled to engage the pull fat mode. This will give you more overall bass as well as slightly more gain.

The pull fat mode can also be used similar to a bright switch. If you set the gain to a desired level, pull the control and then turn the gain down so the overall volume is the same as before you will see that you have a more dynamic brighter sound with slightly more bass. The response has more spank with a softer feel.

Treble, Bass Control and Mid Eq Switch

The Treble and bass controls let you set the high and low frequencies. The 3 position mid switch gives you the choice to further shape the sound, it also affects the feel. The low position has a more scooped sound reminiscent of the old blackface amps. The mid and high position gets it more compact and in your face, better for higher gain. With a 1x12 speaker, mid switch set to low and then toggled to the mid position reminds one of a 2x10 or 4x10 speaker configuration.

Volume Control

The Volume sets overall loudness. If you want maximum openness from the amp turn it all the way up and adjust gain and Eq as desired. For maximum clean headroom best to set it at notch or two below max, depends on where the gain is set.

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 40 watts available while Lo has only 20 watts. The difference in loudness is not equivalent to half the power, maybe a third less. The amp will feel looser in the Lo position; readjust controls to your taste.

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:	8.25" H	18.37" W	7" D	23 pounds
1x12 Combo:	20.75" H	20.75" W	10.50" D	53 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 Barcelona should be 2A slow blow (1A for 220-240 volt models).

The HT fuse should be 500mA slow blow in all models.

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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