



DUENDE USER MANUAL

1. Features:

- Two channel all tube design
- Channels can be combined or used separately via footswitch
- Ch.a : Gain with pull Bright, Treble, Bass and Volume
- Ch.b : Gain, Volume with pull Gain function
- Common master EQ Air post treble and Body post bass
- Tube Reverb with independent level controls for each channel
- Tube-buffered series FX-Loop
- Tremolo with Speed and Depth controls
- 24W 6V6 Class AB power amp
- 5AR4 tube rectifier, 1x10 combo 5Y3
- 3 position Standby switch for 12 or 24 watt operation (9 or 18 with 5Y3)
- Line Out with high cut filter
- Functions on footswitch: channel select, channel combine and tremolo

Please note the 30W 6L6 Duende is discontinued as of January 2012!

Available as:

- Mono or Stereo Head (Seco Mojado, features a 2nd 6V6 18W power amp)
- 1x10 open back Combo with an Eminence custom speaker
- 1x12 open back Combo with a G12H30 Celestion speaker
- 2x12 open back Combo with a G12H30 and GB25 Celestion speaker
- 12/2x8 Stereo Combo (Seco Mojado) with G12H30 Celestion and two Webber 8" speakers

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:	10" H	20.75" W	10.25" D	31lbs
Stereo Head:	12.50 H	20.75" W	10.25" D	41lbs
1x10 combo:	15.25" H	20.75" W	10" D	44lbs
1x12 combo:	20.75" H	20.75" W	10.50" D	45lbs
2x10 combo:	22.25" H	20.75" W	10.50" D	50lbs
2x12 combo:	20" H	27.25" W	10.50" D	65lbs
12/2x8 combo:	21.50" H	23.50" W	10.50" D	75lbs

2. How to use it:

Read this owner manual completely before use to fully understand your Duende's functions. Special functions for the **Seco Mojado are under 3.**

The power switch is on the back panel next to the power cable socket, let the tubes warm up for a minute or two, then flip the Stand by switch to either high, 24W, or low, 12W, operation.

a) Master EQ

The “air” control acts as overall treble and the “body” as overall bass control. These are shared by both channels. Set both of them to 12 o’clock as a starting point. Experiment with them, try to turn both all the way down or just slightly up, gives you a more vintage clean sound, you can compensate the bass and highs with a bit more gain.

b) Pull Functions

Channel a has a pull bright function which is engaged by pulling “gain a”. The higher you set “gain a” the less you notice the bright function.

Channel b has a pull gain function which is engaged by pulling “volume b”.

c) Effects Loop

This is a series none bypass able tube buffered effects loop between pre- and power amp. The “send” connects to your effects input and the “return” to your effects output. This loop is designed to work with instrument level pedals. Line level effect units that feature in- and output level or at least one of those controls should work just fine as well.

On the Seco Mojado you can run a cable from the “send” to the bottom amps auxiliary input in order to route the dry sound also through the side speakers, with the auxiliary control you can control the level of the signal. You can also put an effects unit in between so you have the front speaker for the dry sound and the side speakers for the external effects unit, just like the reverb. Or you can hook up an effects unit with stereo outs, one into the top amps return the other into the bottom amps auxiliary so you have real stereo between the front and the two side speakers.

d) Reverb

The reverb is not bypass able. Each channel has its own control but if both channels are engaged at the same time without the footswitch connected, “reverb a” control is the only one working. If the footswitch is connected, the reverb control working when both channels are engaged depends on how the channel select, a v b right side, is set. If set to a, reverb a -, if set to b, reverb b control is working.

On the Seco Mojado the reverb signal is routed to the bottom amp which powers the two side speakers or if hooked up an extension cabinet. You can set the reverb signal for each channel on the top amp like on the standard models but you also need to turn up the reverb level on the bottom amp in order to hear the reverb signal, use this control to balance it to the front speaker’s volume. The reverb signal by itself sounds very thin and unusual, don’t worry about it. Experiment with different combinations between the top controls and the bottom reverb level control, it will give you different results.

e) Tremolo

Depth controls the intensity of the effect and speed sets the rate of the oscillator. To engage the effect pull the depth control or press the appropriate footswitch button. This tremolo was designed so that there is no coloration of the basic amp tone. No matter how intensive you set the depth, if the effect is engaged the volume level won’t feel boosted or ducked.

On the Seco Mojado the tremolo effect is only on the front speaker.

Amps shipped before August 2007 with serial number xx7095 or lower have a photo-cell based tremolo which ducks the overall volume at extreme depth settings!

f) Power Amp Filter Switch

This switch gives you the choice of different filtering settings for the power amp. Set to “modern” gives you a tighter more focused sound. The “swamp” position is looser and has more sag (there is a slight hum in this mode due to the weak filtering) >>>

Amps shipped after August 2007 with serial number xx7096 or higher do not have this feature anymore!

g) Footswitch

Your amp comes with a 3 button footswitch. One button is for switching between the two channels (a v b, right side), one for engaging both channels at the same time (a + b left side) and one for the tremolo (center). The footswitch jacks are located on the back panel. The top one is labeled “trem/rev”, the bottom one “ch select”. The stereo (tip, ring, sleeve) ¼" plug goes in the “ch select” jack. The mono ¼" plug (ring, tip) goes into the “trem/rev jack. If you don't know the difference between mono and stereo plugs look at them and you will notice the difference (Mono=tip, ring and Stereo=tip, ring, ring). The 3-position rotary switch on back panel is only active when the footswitch is not plugged in. This rotary switch allows you to activate either: Position 1 = channel a or Position 2 = channel b or Position 3 = channel a+b. The tremolo can also be engaged without the footswitch plugged in by pulling the “depth” control. Please note the tremolo needs to be turned off on the amp when the footswitch is used, otherwise it is always on and can not be switched off via the footswitch.

3. Duende Seco Mojado (seco = dry, mojado = wet in Spanish)

The Seco Mojado is a Duende with a second 18W 6V6 power amp in one enclosure for a wet dry or true stereo experience.

The main amp has the exact functions like the Duende, except the power switch will also power up the bottom amp which has its own individual standby switch. While you can choose to run the Duende at 12 or 24 watts, the bottom amp operates only in 18.

The tremolo comes only through the front speaker, the reverb signal only through the side speakers. The reverb signal by itself sounds very thin and unusual but if blended at the right level with the dry amp it will make sense again. Be aware that extreme settings can start oscillating.

If you also want to mix the dry signal through the side speakers you can do so by connecting the “send” from the effects loop to the auxiliary “in” on the bottom amp, use the auxiliary control to adjust the level. This can give you a more 2x10 type of sound as the two 8” and the one 12” speaker blend.

In general the setup with the side speakers works well in smaller to mid size rooms where the side speaker's sound can bounce off the walls and mix with the front speaker. This will give a more dimensional spacey sound. Experiment with different positions of the amp in the room.

For a more direct sound or a bigger sound in general hook up an extension cabinet to the bottom amps speaker out, best for live stage situations. Plugging in an extension cabinet will automatically disconnect the side speakers.

For hooking up external effects through the loop you have a few different choices.

One, normal between loop “send” and “return” which will have the effects coming out through the front speaker and the side or extension speaker remains dry, except the Duende reverb.

or two, between the “loop send” and the “auxiliary in” of the bottom amp which will have the effects coming out through the side or external speaker; >>>



or three, real stereo by connecting the “loop send” into the effects unit input and then the right out to the “loop return” and the left out into the “auxiliary in” on the bottom amp. The sound will be real stereo, of course assuming the effects unit used is stereo. Stereo between the front and the side speakers or front and external speaker.

If you are into Leslie/Rotary type of sounds you will find out that this amp setup will sound very close to the real deal, even just hooked the wet dry way.

You could also use the bottom amp as a separate amp by plugging your guitar direct into the “auxiliary in” or through an AB box so you can A B between the main amp and the bottom amp.

The sound of the bottom amp is very clean, a bit lifeless because it does not have a real tone and gain shaping preamp but if you hookup a good overdrive/boost/distortion pedal in front then you will get very good results.

Hey run your iPod into the auxiliary and jam along. We hope you enjoy the amp.

4. Tubes

Your 24W 6V6 Duende comes with a 5AR4 (V8) rectifier tube except for the 1x10 combo where a 5Y3 rectifier tube is used. This lowers the wattage to 18 and 9. Feel free to experiment with different rectifier tubes. A pair of matched JJ or other brand 6V6 power amp tubes are used.

Five 12AX7 tubes are used in the preamp, see tube chart for the individual functions.

Please note that the 15W and the 6L6 30W model is discontinued as of January 2012!

Note: If you want to experiment with different type or brand preamp tubes the first 3 tubes are the most noticeable ones sound wise. The less gain the tube has and the earlier the tube is in the sound chain (V1, V2...) the less noisy your amp is. Different brand rectifier tubes of the same type can change the amps feel dramatically from tight to loose or to higher or lower headroom. A solid state rectifier will have the least sag and most headroom; the plate will be higher, keep in mind the amp was designed for a tube rectifier for reliable operation!

Make sure you turn your amp off when you switch tubes and be careful the tubes might be 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.

5. Speakers

The 1x12" combo is loaded with a 8 ohm Celestion G12H30 and the 1x10" with an 8 ohm custom Eminence speaker. The 2x12 combo is loaded with a Celestion G12H30 and a Celestion Greenback 25 wired parallel to 8 ohm total load. The Seco Mojado is loaded with a 8 ohm Celestion G12H30 for the main amp and two 16 ohm Webber 8" wired to 8 ohm for the bottom amp. If an extension speaker is plugged into the bottom amp it will disconnect the two internal 8" speakers.

Subject to change depending on availability of Speakers.

Speakers are part of an amps tone shaping and can have a dramatic effect on tone and feel. The speakers we select are for best overall sound and reliability. Speakers are changed easily; feel free to try any speaker but make sure it has the right impedance and wattage.

6. Fuses

To check the fuses, use an Ohmmeter to make sure they're blown because sometimes you can't see if they are. **Amps shipped after August 2007 with serial number xx7096 or higher** have one main fuse type **5x20mm slow blow**. To remove the fuse you need to pull the black panel up from the left side and it opens like a door and then you need to pull out the red insert which holds the fuse. A little screwdriver comes in handy. **Previous Duendes** had two main fuses, type: **5x20mm slow blow**, both of them need to be good in order for the Amp to work. They are located between the power cable connector and the power switch.

To release the fuse holder you need to push the top and bottom latch with your finger nails towards each other and pull the insert out. If you can't get it out this way, use a little screw driver and pull first one then the other latch, the insert snaps out and you be able to pull it out. On 100 - 120 volt models use a 1.5A fuse, 1A on 220-240 volts. The Seco Mojado at 100-120 volts uses a 2A, 1A for 220-240 volts. The HT fuse is a **3AG Slow Blow** type and should be 1/2 A on all models. You can get those from Radio Shack. 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.

7. Troubleshooting

Make sure your 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 3. a). 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. Every Amplifier has a three stage testing protocol before we ship them to make sure that the tubes work properly, but since they have a glass housing and delicate little plates inside them they could be damaged during shipping. Please don't feel discouraged. We don't manufacture tubes and can only retest them to make sure they're okay.

There you have it! It's all up to you now, be creative and push your musical imagination...For Questions call or check out our webpage: www.bogneramplification.com