

φ GOLDFINGER PHI USER MANUAL φ



Please read safety instructions before you use this amplifier!!!

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!

1. Features:

- Single Channel Tube Amplifier
- Footswitch controllable Boost with a wide range level control
- Footswitch controllable Solo Boost
- Footswitch controllable Tube-buffered series FX-Loop
- 3 position send level switch and FX return level control
- FX trail mode switch
- Footswitch controllable reverb
- Bass, Middle, Treble, Presence, Gain and Loudness controls
- BAX EQ mode switch
- High and Low EQ Expand switches
- Duet of 6V6 and 6L6 each with individual Mute switches
- 3 position Standby switch for high or low power operation
- Output power of 66, 58, 33, 27, 19 or 9 watts
- Single 16 and dual selectable 8 or 4 ohm speaker outputs
- Flat frequency Line Out with level control
- Functions on footswitch: reverb, fx loop, solo, boost

OPTIONS:

- Head
- 1x12" open back pine combo
- Matching open 1x12 pine cabinet
- Matching open 2x12 pine cabinet

DIMENSIONS and WEIGHTS: Are subject to change anytime, Please measure **your** amp carefully, if a Custom Case is being made. **Add ¼ inch for each, handle and rubber feet.**

GF54 Head:	8.25" H	17" W	9.25" D	31 pounds
GF54 1x12 Combo:	21" H	21" W	10.50" D	54 pounds
1x12 open Cabinet:	21" H	21" W	10.50" D	28 pounds
2x12 open Cabinet:	23.25" H	23.75" W	10.25" D	41 pounds

2. How to use it:

Read this owner manual completely before use to fully understand your Goldfinger Phi's functions.

Unlike most tube amplifiers, the Goldfinger Phi uses two different types of power amp tubes. A duet each of 6V6's and 6L6's. You can use either type by itself or together. This unique design with the combination of running the amp on either high or low plate voltage gives you a multitude of possible power and tones!

a) Power & Standby

To operate your Goldfinger connect the power cable. If you have a head version, you need to connect a speaker cabinet, refer to **k)**. If you are planning to use the foot controller, connect it up as well, refer to **n)**.

Flip the big toggle switch located all the way on the left of the front panel from off to on. Give it a minute or two for the tubes to reach operating temperature.

Before putting the amp into the play mode it is a good idea to check the position of the power tube mute switches on the back panel, set as desired, refer to **l)**.



Your Goldfinger has a High as well as a Low power mode. Flip the toggle next to the power switch from Standby to either position. “Hi” gives max power while, “Low” is about half. Remember, power is not always about volume, it is a different feel as well. In Hi the amp has more punch with a tighter feel and the most available clean headroom. Low gives the amp a sagging loose feel, much like a tube rectifier. Below is a table which shows you power out put in watts for all possible combinations.

PowerTubes	Output Power		
	6L6+6V6	6L6	6V6
Stand By	Hi 66W	58W	19W
	Lo 33W	27W	9W

b) Presence Control

The Presence control is used to tweak the power amp high frequency response.

c) Loudness and Gain

Loudness sets the overall volume, while Gain gives you control over the preamp gain. In general, for the cleanest headroom, you would set Loudness close to max and then dial in the desired gain. For a softer feel and more preamp push, turn the gain up and the Loudness down. Different combinations for these two controls can have the same overall volume, but a different feel and preamp push. Experiment!

If you use the effects loop, please note that the Loudness control is after the loop and right before the power amp, refer to i)

d) Bass, Middle and Treble

These are your basic tone stack controls to dial in high, mid and low frequencies. There is a lot of bass on tap and it is recommended to start out on the conservative side, too much bass can over shadow other frequencies. Remember, controls have a range and it’s there to be used if needed. There is nothing wrong with having them set to, or close to, min or max, whatever sounds right!

e) Bax Eq

By turning the BAX EQ on you are changing the entire architecture of the tone stack. Essentially turning the amp into a different vintage amplifier. The change is so dramatic it pulls down the level quite a bit and you have to readjust your Bass, Mid, Treble, Gain and Loudness controls. A direct comparison via the switch does not make sense; you need to adjust the controls! Take your time to dial it in. Once you get it, you will find it useful.

In terms of tonal change, think of it as narrowing the frequency spectrum equally on both ends; less highs, less bass and at the same time, each string gets a bit more girth. The result is a very even balanced sound; more refined and articulate for clean tones; more barking mid grind on the dirty tones, which are reminiscent of the department store amps from the 60’s.

f) Expand

The Expand section gives you additional control of the EQ.

The High switch is basically a traditional bright switch, you get a brighter sound with slight more gain in the high frequencies and extended dynamics, it is a different sound and feel, versus turning up the Treble control. Try both and use what feels right to you.

The Low switch expands the low frequencies. This is a subtle effect but can be useful in certain situations, like darken the overall tone since it also dampens the higher frequencies.

Please note if the gain is maxed, both expand switches have little to no effect!

g) Solo

The Solo switch is a fixed gain boost that gives you a bolder and fatter sound. The Solo boost can be engaged via the foot-controller.

h) Boost

The Boost switch engages an adjustable gain boost that pushes the preamp harder. The little trim-pot starts out at about level volume and from there increases the boost level. The wide range of level is useful for very low volume situations. At normal to loud volumes use the boost on the lower levels unless you want to get a more fuzz tone. The boost is before the actual preamp, while the Solo function is in the preamp. Keep that in mind when adjusting the level.

The foot controller overrides the front panel Solo and Boost switch, which at that point have no function anymore!

i) FX Loop

The series FX loop is between the pre and power amp and can be used to connect effects. There is no on/off switch but as soon as a cable is inserted into the return, the loop is engaged; otherwise the entire loop circuit is out of the signal path. When the foot controller is hooked up, you can turn the effects on and off but the loop circuit stays on all the time, assuming the return is connected.

Please note the Loudness control is after the loop and therefore does not affect the send level. A three position slide switch lets you choose a low, medium or high send level. Set the amp and boost as you like it as it affects the send level, then switch from low to medium to high, turn the Solo boost on. If the input of any of your effects overload switch back to the next lower position, then use the FX Level control to balance your volume.

The loop has an effects trail function which lets the effects naturally decay even after they have been switched off via the foot controller. This is especially useful for delays and reverbs. Factory default is non trailing. Looking at the back, the mode switch is located above the line out connector behind the back grill. In order to turn the trailing mode on, you need to either take the back panel off first, or use a small screw driver through the back grill to flip the toggle to the left.

j) Reverb

The lush reverb can be dialed in via the Reverb control on the front panel. This DSP based reverb has more complexity than a short 9" reverb tank and adds a very subtle warble and delay audible just before half way and increases from there on. The added dimension is reminiscent of the beloved Memory Man delay. With no foot controller connected, the reverb is always on and can only be dialed out by turning the Reverb control all the way down. With the foot controller connected, you have the option to switch the reverb in and out.

k) Speaker Outputs

If you take the amp off Standby into play mode, make sure you have a speaker cabinet or any other load connected. Otherwise, you could damage the output transformer and power tubes. Only use a cable made for speakers. Instrument and line level cables can not be used!! The Goldfinger Phi has a single 16 ohm output as well as a set of dual outputs which are switchable to either 4 or 8 ohm. Make sure you set the impedance on the amplifier so it matches the cabinet. Remember, if you connect two speaker cabinets, they both need to have the same impedance, either both 16, or both 8 ohms. Plug them into the dual output only, then select 8 ohm for two 16 ohm cabinets and 4 for two 8 ohm cabinets. The cabinets run in parallel, which halves the total impedance!!

l) 6L6 and 6V6 Mute switch

A very useful feature of the Goldfinger Phi is the flexible tube array. The duets of 6L6 and 6V6 can be used by themselves or combined. Slide the appropriate switch to the Mute position in order to turn one of them off. If both are in the Mute position there will be no sound and no load is needed. This could be useful if you only need to use the preamp section, via the loops send (a plug would need to be inserted into the return to turn the loop on, otherwise there will be no signal coming out of the send)

The Mute switches can be operated while the amp is in play mode but without playing your instrument! However it is best to put the amp in Standby, but it is not absolute necessary.

While muting either set of tubes will create an impedance mismatch, the output transformer has been optimized to work well as is and therefore we do not recommend changing the speaker impedance.

m) Line Out

The Line Out is a flat frequency signal coming off the power amp. If the 6L6 and 6V6 are both in Mute there will be no signal coming out! The trim-pot controls the level of the signal. Perfect for a dry stereo setup or impulse response speaker simulation recording interfaces.

n) Foot Controller

It is recommended to connect the foot controller before turning the power on! Use only the supplied XLR cable which has identical plugs on each end. Align the plug properly with the foot controller's connector and push the plug in until it snaps and locks to prevent accidental detachment. Then connect the other plug to the amplifiers Foot Switch connector. To detach, press the release button on the plug before pulling on it.

Each of the 4 functions has an LED which correlates with an LED on the amplifier to tell you visually what is engaged and what is not.

Keep in mind, as mentioned before, the foot controller overrides the Solo and Boost switches on the amplifier. The FX loop return must be connected in order for the loop to work!

The Solo and Boost are located next to each other so that they can be turned on at the same time

3. Tubes

Your Goldfinger Phi comes with JJ 6L6 and JJ 6V6 power tubes.

The Goldfinger has a set of **bias adjust trim pots**. These are set by the factory and **should not be touched**, as they can make your power tubes run hot resulting to short out and fail! If you need to re-tube the power amp, have a knowledgeable technician set the bias correctly.

- V1 JJ ECC83s > check this preamp tube if your amp gets noisy or microphonic.
- V2 12AX7B > Loop
- V3 12AX7B > Phase inverter

Because of the simple straight signal path, different preamp tube brands and types with 12AX7 compatible pin layout can make a big difference in the amps tone and feel. Experiment to find your favourite tones! V1 makes the most difference but V3 can as well; especially if a lower gain 12AY or 12AT type is used!

Warning!

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!

4. Speakers and Cabinets

While you can use your Goldfinger with many cabinets, Bogner has specially designed cabinets to optimize your amp. Please make sure you match the amp's impedance with your cabinet, explained in **k**). Our 2x12 open back cabinet has a Celestion G12H30 and Creamback 65 at 8 ohms total impedance, while the 1x12 combo and cabinet uses a Celestion Creamback 16 ohms. Subject to change, depending on availability of Speakers!

5. 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 connected correctly. If you think something is wrong with your amp, play straight into the amp with nothing else connected other than a guitar. That way you make sure it is the amp. If you own a combo, unplug the internal speaker and connect an external speaker cabinet to make sure it's only the amp that is faulty. For noise, check the appropriate preamp tubes (refer to 3.). Tubes are delicate and have a limited life 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 a glass housing and delicate little plates inside them, it is possible 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.

6. 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 5x20mm types are used. The Main fuse for 100 and 117 volt models should be 3A (2A for 220-240 volt). The HT fuse should be ½ A. The HT fuse usually blows 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.

Reinhold Bogner

