

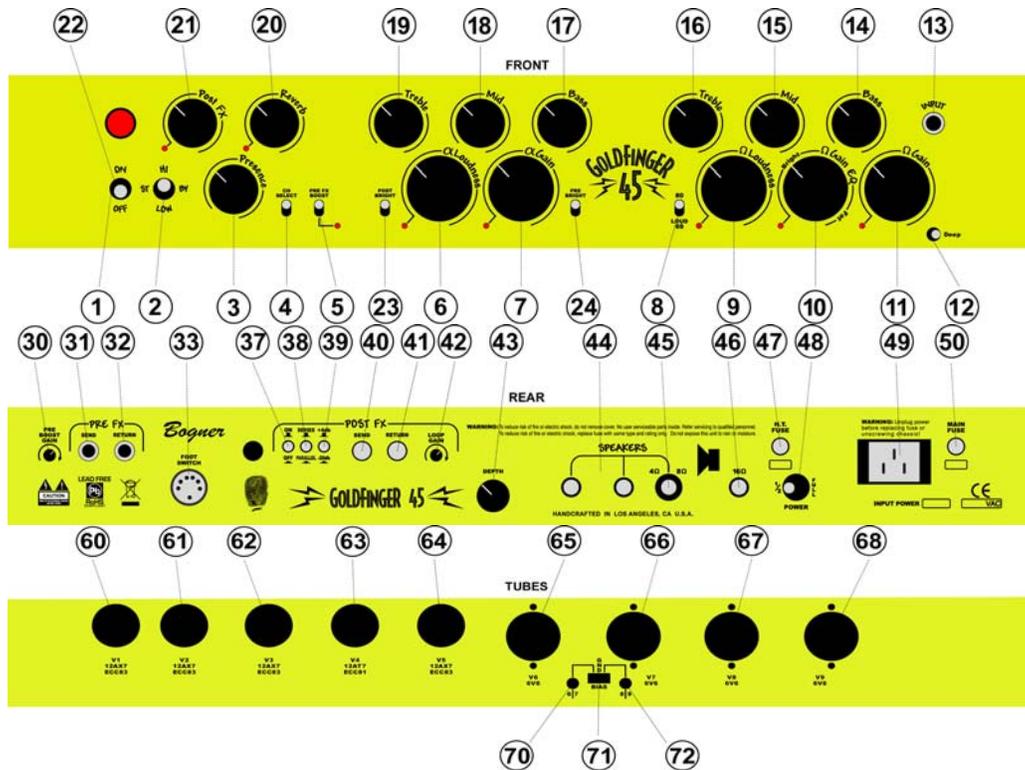
α GOLDFINGER Ω SUPER LEAD Ω USER MANUAL α

Revision SUPER LEAD 2018



α Vintage Valve Ω Guitar System α

**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) power on/off switch         | 30) $\Omega$ boost gain + switch | 60) V1               |
| 2) standby hi/low              | 31) $\alpha$ gain boost          | 61) V2               |
| 3) presence                    | 32) $\Omega$ boost volume        | 62) V3               |
| 4) channel select              | 33) footswitch connector         | 63) V4               |
| 5) boost                       | 37) post fx on/off               | 64) V5               |
| 6) $\alpha$ loudness           | 38) post fx series/parallel      | 65) V6               |
| 7) $\alpha$ gain               | 39) post fx +4/-20db             | 66) V7               |
| 8) $\Omega$ 68 - 77 - 81 mode  | 40) post fx send                 | 67) V8               |
| 9) $\Omega$ loudness           | 41) post fx return               | 68) V9               |
| 10) $\Omega$ gain eq           | 42) post fx loop gain            | 70) V6/7 bias adjust |
| 11) $\Omega$ gain              | 43) N/A                          | 71) bias test point  |
| 12) $\Omega$ fat               | 44) dual speaker outs            | 72) V8/9 bias adjust |
| 13) instrument input           | 45) ohm selector for 44)         |                      |
| 14) $\Omega$ bass              | 46) 16 ohm speaker out           |                      |
| 15) $\Omega$ mid               | 47) h.t. fuse                    |                      |
| 16) $\Omega$ treble            | 48) $\frac{1}{2}$ Pwr Switch     |                      |
| 17) $\alpha$ bass              | 49) power cable connector        |                      |
| 18) $\alpha$ mid               | 50) main fuse                    |                      |
| 19) $\alpha$ treble            |                                  |                      |
| 20) reverb                     |                                  |                      |
| 21) post fx                    | 23) $\alpha$ deep                |                      |
| 22) pilot lamp power indicator | 24) $\alpha$ pre bright          |                      |

## 1. Features:

- 2 Channel Tube Amplifier
- Foot controllable tube-buffered series or parallel FX-Loop
- Foot controllable Spring Reverb\*
- $\alpha$  Ch.: Bass, Middle, Treble, Gain & Loudness controls, Bright & Deep switch
- Foot controllable Boost function with level control
- $\Omega$  Ch.: Bass, Middle, Treble, Gain EQ, Gain & Loudness controls, Fat switch
- Unique three position voicing switch, 68/77/81
- Foot controllable Boost function with Gain and Volume controls
- 45W 6V6 power amp section
- Full and Low output power switch
- Functions on footswitch:  $\alpha/\Omega$  ch. select,  $\alpha$  boost,  $\Omega$  boost, reverb, post-fx
- ½ Output Power Mode – 4 Step- from 45W to 15W

## OPTIONS:

- Available as a Head or 1x12" open back combo
- Matching open 1x12 cabinet
- Matching open or closed 2x12 cabinet

**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.**

GF45 Head:	9" H	25.50" W	10.25" D	42 pounds
GF45 1x12 Combo:	19.50" H	25.50" W	10.75" D	66 pounds
1x12 open Cabinet:	19.50" H	25.50" W	10.75" D	43 pounds
2x12 open Cabinet:	24.50" H	25.75" W	10.25" D	60 pounds

## 2. How to use it:

Read this owner manual completely before use to fully understand your Goldfinger's functions. This manual is written for the 45 Karat Goldfinger. If you have the 90 Karat version keep on reading as almost all the functions are the same and then refer to **i)** for additional information.

### a) Power, Standby and Half Power

*1), 2), 48), 49)*

To operate your Goldfinger connect the power cable. If you have a head version you need to connect a speaker cabinet, refer to **j)**. 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.

Your Goldfinger has a Hi (howdy) high as well as a Low power mode, flip the toggle next to the power switch from Stand By to either position. Hi gives you the full power available while Low gives you approximately 1/3 less. Remember it is not always necessarily 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.

On the back panel is a Half Power switch to disengage two of the power tubes.



Goldfinger	4x 6V6	Output Power	
		Full	1/2 Pwr
Stand By	Hi	45W	23W
	Low	30W	15W

## b) Presence Control

The Presence control works in both channels, use to tweak power amp high frequency response.

## c) The Alpha $\alpha$ Channel

6), 7), 17), 18), 19), 23), 24)

You can refer to this as your clean channel. You have your commonly known EQ controls Treble, Middle and Bass as well as a gain control. Loudness sets your Volume. A Bright switch gives you a very dynamic open bright feel. The Deep switch lets you extend the low end; this is a subtle effect but can be useful in certain situations, like darken the overall sound as it also dampens the high frequencies.

Please note, both the Bright and Deep function get less effective the higher the gain is set.

*Hint*, generally in a musical situation using both channels you will most likely have the volumes balanced. If the clean channel is the most important for your style it is probably best to set it first and then go to the dirty channel and find the balance; or vice versa, dirty first if that is more important.

## d) The Omega $\Omega$ Channel

8), 9), 10), 11), 12), 14), 15), 16), 73)

This will be your gain oriented channel. You have your commonly known EQ controls Treble, Middle and Bass. With the Gain EQ you set the overall feel. In the first half it gives you a bright open tone, while in the second half it increases fullness for fatter tones. This control affects both Gain and EQ. The other Gain control increases the gain while going clockwise; it has a very wide range. Loudness sets your Volume.

The three position gain voicing switch gives you different options for the overall tone and feel. 68 is best for vintage sounds and better for higher volume as it stays tighter with a bigger sound. 77 is better for modified sounds, has more bottom excursion, fuller at lower volumes. 81 has the most gain therefore best for really compressed sounds even at very low volume.

For an even bigger sound engage the Fat switch, fuller sound at lower volumes.

Hint, start out with the gain control at lower settings to hear the tonal difference best.

## f) Boost Functions

5), 30), 31), 32)

The Super Lead features a new developed boost circuit with its own tube. The controls are on the back right side looking at the amp from the front.

The Alpha channel has a single level control while the Omega channel has its own gain and volume with the addition of a voicing switch.

The wide range of the Omega gain control makes it rather a pseudo third channel than just a boost.

The voicing switch is subtle and more of a feel thing. Please note that the range of the volume control gets slightly smaller the higher the Loudness control on the front is set!

***With the foot controller connected the panel boost switch (5) has no function!***

## **g) Post FX Loop or Volume Boost**

21), 37), 38), 39), 40), 41), 42)

This loop is between pre and power amp and can be used to hook up further effect units or you can use it as a volume boost.

To avoid coloration of your tone and feel, it is important to set the levels correctly. The loop has a push button switch for +4db or -20db level, commonly -20db is used for input sensitive effects like pedals while +4db works well for line level and rack effects.

You have the choice of either using the loop in parallel or series mode. In parallel your effects get mixed via the Post Fx control to the internal dry signal. In series the entire preamp signal gets routed through the effects unit and the Post FX control works as a volume control.

Please note that volume pedals only work in the series mode.

The loop can be engaged via the on off switch on the back panel or via the foot controller,

***Please note that with the foot controller connected the switch (37-Loop On/Off) on the amp must be set to on (Out)! This is unique in the way that it is the opposite with all of our other amplifiers!!***

To use the Post FX loop as a volume boost, it is best to switch to parallel mode, set level to +4db and then set the desired volume boost via the Post Fx control on the front panel.

On the back panel you will find a recessed trim pot labeled Loop Gain, to change the factory setting (about 50%). It sets the loops return tube gain factor. In general the factory setting works for all applications and this should not be adjusted.

Primary use would be to adjust unity volume for loop on and off in parallel mode. To adjust, you hook up your effects unit; turn the loop on, set sensitivity via the db push button switch, set your effect to ideally 100% effect, then use the amp's Post FX control on the front panel to dial in the amount of effect you want. Then switch the loop on and off, if you do not have unity volume you can adjust it via the Loop Gain trim pot while the loop is on.

While it is meant to be for the parallel mode it is also in the circuit, in the series mode, if the range of the Post FX control is not enough, you can shift it with this trim pot.

## **h) Reverb**

20)

The lush reverb amount can be dialed in via the Reverb control on the front panel. A 17" 3 spring tank is used. With no foot controller hooked up the reverb is always on and can only be dialed out by turning the Reverb control all the way down. With the foot controller hooked up you have the option to switch the reverb in and out. Please note the 90W EL34 model does not feature reverb!

## **i) Speaker Outputs**

44), 45), 46)

If you take the amp off Stand By, make sure you have a speaker cabinet or any other load hooked up. Otherwise you could damage the output transformer and the power tubes. Only use a cable made for speakers, instrument and line level cables can not be used!! The Goldfinger 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 hook up two speaker cabinets, they need to both have the same impedance, either both 16 or 8 ohms. Plug them into the dual output only, then select 8 if two 16 ohm cabinets and 4 if two 8 ohm cabinets are used. The cabinets run in parallel which halves the total impedance!!

### Full Power

Speaker Enclosure	Amp Impedance
one 16 ohm cabinet	16 ohm output
one 8 ohm cabinet	8 ohm output
one 4 ohm cabinet	4 ohm output
two 16 ohm cabinets	8 ohm output
two 8 ohm cabinets	4 ohm output

**Switching to ½ Power creates an impedance mismatch, use the speaker output with half the impedance of the cabinet, see below!!**

### Half Power

Speaker Enclosure	Amp Impedance
one 16 ohm cabinet	8 ohm output
one 8 ohm cabinet	4 ohm output
two 16 ohm cabinets	4 ohm output

### j) Foot Controller

5), 4), 33), 37)

To connect the foot controller, align the XLR type plug properly with the foot controller's connector and then push the plug in until it snaps and you won't be able to pull it out. To detach, press the release button on the plug before pulling on it. The other connector on the cable plugs into the amplifier's Foot Switch connector on the back panel. Align the plug properly then push it in; this plug has a barrel nut to secure the connection, screw clockwise hand tight, do not over tighten!

Each of the 5 functions has a LED which correlates with a LED on the amplifier to tell you visually what is engaged and what is not. *Keep in mind, like mentioned before, the foot controller overrides the CH. Select and Pre FX Boost switches on the amplifier. The Post FX loop must be switched to "on" on the amplifier itself in order for the function to work via the foot controller.*

### 3. Tubes

60), 61), 62), 63), 64), 65), 66), 67), 68), 70), 71), 72)

Your 45W Goldfinger comes with JJ 6V6 power tubes.

The Goldfinger has a set of **bias adjust trim pots** with the according test points. 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 retube the power amp have a knowledgeable Technician set the bias correctly.

With the exception of V4 all pre amp tubes are 12AX7/ECC83. V4 uses a JJ12AT7/ECC81.

While we use the JJ brand others work as well. The Goldfinger has 5 pre amp tubes:

- V1 12AX7 Tungsol -  $\alpha + \Omega$  channel > check that one if your amp gets noisy or microphonic.
- V2 ECC803S JJ Tesla -  $\Omega$  channel > another candidate for microphonics.
- V3 12AX7B Chinese - phase inverter
- V4 ECC81 JJ Tesla - Post FX Loop, standard a 12AT7 or ECC81 type
- V5 12AX7B Chinese -  $\alpha + \Omega$  channel

Tube selection subject to change, Feel Free to experiment using different brands!

### **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 any cabinets we have special designed matching types. Please make sure you match the amps impedance with your cabinet as explained in **j**).

The 2x12 open back cabinet has a Celestion G12H30 and GB25 at 8 ohms total impedance, the 1x12 combo and cabinet uses a Celestion V30 at 16 ohms.

2x12 closed back speakers TBA at release!

Subject to change, depending on availability of Speakers!

*For Ultimate Classic Rock tones, Reinhold prefers our 4x12 cabinet loaded with Celestion Greenbacks.*

### **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 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 can 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 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 glass housing and delicate little plates inside them it can happen that they get 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**

*47), 50)*

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*

