

The Chandler Limited GAV19T is a cathode biased, class A, all-tube, 19-watt guitar amp in the vein of such vintage English classics as Selmer, Watkins, Marshall, and Vox. While this amp borrows some tones from the classics, the heart of the GAV19T circuits are either new circuits developed by Chandler Limited or highly modified vintage circuits.

Power Amp Tubes- 2 x EL84 (JJ recommended).

Pre Amp Tube- ECC83 (JJ recommended).

Tone Control and Phase inverter- ECC803. This is a high quality ECC83/12ax7. You can use an standard ECC83 but in some cases you can get occilation in the Tone Control when adding large amount of Treble (JJ reommended).

Rectifier- EZ81 (Electro Harmonix recommended). We do not use JJ tubes in the rectifier as we, and other companies, have a failure rate in them. Please use EH brand tube in the rectifier.

**WATTS- 19** 

FUSE- 2A Slo

AC INPUT- Preset at the factory for either 120 or 240 voltas AC.

#### SPEAKER AND CABINET RECOMMENDATIONS-

Chandler Limited uses and recommends Celstion Speakers. We have found all Celestions to work well with the GAV but in our testing favored certain speaker and cabinet combinations. Speaker and cabinet are of major importance to the sound of your setup and we highly recommend experimentation with speaker and cabinet combinations.

#### CABINFT CHOICF-

We favor two specific cabinets with the GAV. One being Marshall style 2x12 in either slant or straight front. The other being Orange 2x12s, specifically the model PPC212. The Orange has thickest sound of all of them but also tends to be darker when compared to Marshall types. You will find you set the amp different with an Orange to avoid muddiness.

In our experience the Marshall style 2x12 slant is bighter than a straight. The staright also having a touch more thickness to it

Avoid cabinets that use particle board. Select something with real wood construction. You will be very happy to did!

### SPEAKER CHOICE-

The official speaker of Chandler Limited is the Celstion Gold. It is a thick, vintage sounding speaker that matches well with the GAV. They cost roughly twice what a greenback does but we recommend saving your pennies for them! Remember it is an Alnico magnet so the tone is different from ceramic magnet green backs. Golds are also known for having a longer break in period time than other types. Other Celestions such as Greenbacks and Vintage 30s also work well with the GAV.



OUR FAVORITE SPEAKER AND CABINET COMBOs-Marshall style straight 2x12 with Celestion Golds Orange PPC212 with Celestion Golds Orange PPC212 with vintage 30s (this is the standard Orange 2x12 configuration).

I found that the best way to maximize the return from my amps was to have a couple cabinet types loaded with a couple speaker types at my disposal.

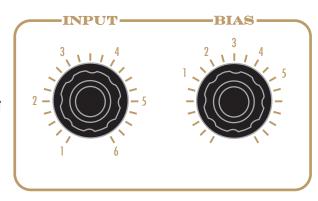
#### INPUT JACKS-

These are labeled NORMAL and HIGH which related to the amount of gain the input jack has. The inputs are voiced the same with only the impedance of each input changing the tone. The HIGH input will sound brighter as well as having more gain because of impedances.

See the settings section for examples of each.

#### INPUT CONTROL-

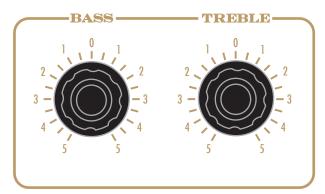
This control is audio taper, meaning that more of the gain and volume increase with be in the last 1/3 or so of its travel. So for higher gain you will want to set the GAV at 4 or higher on the input control.



#### BIAS-

The Bias effects only the bias of the pre amp tube. Allowing you

to gently tweak its overall tone separately from the power section. You can run the tube hotter or colder and change the responsiveness of the amp as well as effecting the sustain and frequency response. #1 is slightly over biased, #2 is similar to a Marshall bias, #3 is similar to a Selmer, and #4 and #5 are under biased and add sustain and character to the amp.



## Tone controls-

The Tone section of the 19T is a Baxandall style that uses an ECC803 tube. A Baxandall circuit was chosen because it was felt that this best preserved the natural tone of the amplifier. An interesting feature of this section is that it is set up to function as a treble boost pedal might. The boost is considerable and the range wide and it can be used to smoothly drive the amp and color the tone. If you are looking for a old school driven tone experient with this.

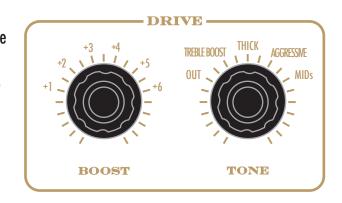


### DRIVE-

This section was designed for those of us that want more sound range than you can get from a typical 15-18w vintage style circuit.

The drive portion of the GAV is a boost or overdrive circuit that works only on the power section of the amp. It is pretty widely known that power section distortion is a pleasing type of distortion so instead of adding preamp gain and distortion we used the power amp.

The Drive has two controls. #1 is the amount of boost. #2 is the tone of the boost. You can choose four selections or bypass.



## The tone selections are-

TREBLE BOOST- As you might expect from a treble boost pedal such as the Dallas Rangemaster. Makes the amp brighter and more intense like a vintage overdriven Marshall or Vox.

FULL RANGE- Full frequency boost but with very low frequency filtered out. When you are looking for a highly overdriven tone that combines the best of modern and vintage this is your ticket.

AGGRESSIVE- Drives a wide frequency range with and emphasis in the higher mid range. Produces mid forward tone reminscent of Joe Walsh. An in your face and defined tone selection.

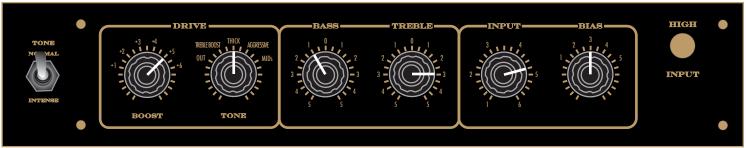
MIDS- Drives the entire circuit with an emphasis on on the lower mid range. Simlar to AGGRESSIVE but in a lower mid frequency range.

# TONE toggle switch-

Normal or Intense.

The slightly unbalances the matching of the push pull power section. It removes some low mids as well as making the tone more aggressive and adding some grit and attack to the sound.

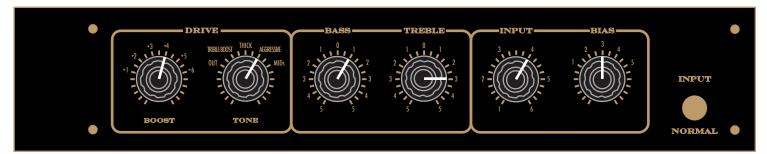




 $HUGE \ and \ OVERDRIVEN-\ Orange\ 2x12\ with\ Celestion\ Golds.\ TONE\ switch\ either\ NORMAL\ or\ INTENSE.\ Experiment\ with\ BIAS.\ 1\ and\ 2\ will\ be\ firm\ while\ 4\ and\ 5\ will\ sing\ and\ sustain.$ 



VINTAGE SUSTAIN- NORMAL input jack and drive the INPUT control as far as you can without mud. The key is combining the the low gain input with lots of amp gain and treble boost. Sustain increases dramatically with the TREBLE set above 3. Switching the Tone toggle to INTENSE and setting the BIAS at 4 or 5 will increase the sustain. Your choice of speakers.



CLASSIC ROCK- Classis rock "Fender style" Tone. Adjust to taste.



BLUES SARACENO settings.