

# CARR MERCURY V



## OWNER'S MANUAL

*April 2017*



## **Mercury V Instructions**

Thank you for purchasing a Carr Mercury V amplifier. The Mercury V, the bigger British cousin of our award winning Skylark, is back with an ultra evolved feature set borrowing the best of the past while rocketing into the future.

At double the power of its 8 watt predecessor, the Mercury V is highly touch sensitive with a huge range of British tones from 60s, aggressive clean thru 70s rock, and into 80s and 90s tasty crunch, so you get to decide which decade's stack you'd like to dial in. Our built-in attenuator delivers real power tube overdrive at whisper levels retaining the feel and juice of full volume fun.

Plus, you get everything Carr is known for, in-house crafted solid pine dovetailed cabinets, bleeding edge power supply components mixed with Mid-Century signal elements, and true point to point wiring. Please take time to familiarize yourself with this manual.

**16 Watts full output** ---- (*Perfect Power*)

3 Position Boost switch - British 60s thru 90s output tube overdrive - (*Authentic*)

Dual Volume controls – Classic Parallel or Modded Series toggle- (*Big Stick*)

Jupiter Mustard signal caps - (*Modern Primitive*)

Built-in switchable attenuator 16/3 to 0 watts- (*Ultra Useful*)

Analysis Plus and Transparent cable - (*Super Conductive*)

3 Band Tone Stack – Treble, Mid, Bass - (*Control*)

Recording/PA Line Out - (*Effective Communicator*)

Celestion Creamback M-65 12" speaker - (*Pistonc*)

Custom Carr Transformers – (*American*)

All NC yellow pine cabinet - (*Wood*)

Spring/Tube Reverb - (*Aquatic*)

2) 6V6 4) 12AX7 – (*Trusted*)

Carr Amplifiers began in 1998 with an irresistible passion for hand wired vacuum tube guitar amplifiers. We take inspiration from the classics of the 50s, 60s, 70s, and 80s then imagine new features, refinements in tone, reliability, and ease of operation. Essential tone with organic tactile feel is our signature.

**Man Made**

**High Volume** – Voiced for bright, thin sound. In **Parallel** mode you can blend the High Volume with the Low Volume to create the desired sonic body to suit your guitar and the drive level. In **Series** mode this volume drives the gain stage that serves the Low Volume in a cascaded fashion. You will notice that the higher this volume is set – the more sustain and rounder the tone.

**Low Volume** – Voiced for full, dark sound. In **Parallel** mode you can blend the Low Volume with the High Volume to create the desired body to suit your guitar and the drive level. In **Series** mode this volume drives the rest of the pre amp while the High Volume drives it. It is fun to try different setting of the High Volume and Low Volume in Series to achieve endless overdrive textures.

**Parallel/Series Gain toggle** – In the 60s and 70s many classic British stack amps had 4 inputs and two volume controls each voice differently for guitar and bass. Players found they could bridge these inputs and use both volumes at once to get a tailored combination of bright and bass. With the toggle up in Parallel mode this is what is happening inside the Mercury V. Each of the Volume controls has its own tube gain stage.

When you set the toggle to Series you are now running your guitar first into the High Volume gain stage then into the Low Volume gain stage – and finally out to the rest of the amp.

This adds 1 gain stage and a lot more overdrive potential. Back in the 70s many techs would mod-stack British amps for just this configuration! Now with a flick of the switch you can go from classic to modded tones.

**Boost Switch** – Select one of three pre amp gain structures post Volume control.

Setting 1 is low gain and very sweet sounding with clear ringing tones.

Setting 2 has a gain structure similar to a metal panel British amp from the 70s – aggressive!

Setting 3 adds even more drive to push the power tubes while tightening the overall sound.

**Reverb** – Controls the amount of reverb sound from none to deep and lush.

**Treble** – Varies the top end from dark to bright.

**Mid** – Varies the midrange frequencies and is very interactive with the Treble control. For a sweet smooth tone, set the Mid to 9 o'clock. 12 o'clock is a great all around setting for both clean and overdrive. The tone becomes more aggressive as you advance the Mid past 2 o'clock. When the Mid is set near full, the Treble control's effect is more subtle and the amp is easily overdriven with lots of bite.

**Bass** – Varies the low end from lean to full. To retain clarity, turn the Bass down at higher volumes.

**Attenuator toggle and Attenuator** – When the toggle points up to the left the Attenuator is out of the signal path and the amp delivers its full 16 watts to the speaker. When the toggle is down the Attenuator is active and you can continuously vary from 4 down to ~ 0 watts.

**Line Out** – ¼ inch mono guitar cable output which is always active. We have tailored the sound to simulate a speaker roll-off and response. You can run this into an A/D converter then into your computer to record or run it into a mixer/PA for live sound in addition to the amps speaker. If you want to record silently – turn on the attenuator and set it to minimum.

**Standby – Off – Play** – The toggle switch baton in the middle position is Power Off. To play set the amp to Standby (switch baton *down*). After 1 minute of warm up, switch the Power baton *up* to Play. The amp is ready to be played. Using the Standby setting every time the amp is turned on will prolong tube life.

## **Bottom Panel**

**Fuse** – In the unlikely event that a tube fails, the Mercury V is protected by a 1.5 Amp slow blow fuse for 120v and 100v (North America and Japan) models or a 0.75 Amp slow blow fuse for 220v and 240v (Europe and Asia) models. Please consult us or a qualified tech for assistance in the event of a fuse blowing. The fuse is located on the bottom of the chassis by the power cord.

**Speaker output jack** – The speaker output jack is located between the third and fourth pre amp tubes on the chassis (see *Chassis Diagram*). The Mercury V is designed to drive an 8 ohm load. Maximum tone will be realized when connected to a 8 ohm speaker or cabinet. The speakers in Mercury V combos and extension cabinets are configured to provide the amplifier with an 8 ohm load.

To run an external cabinet, turn the Mercury V OFF, unplug the internal speaker (combo amps) and plug in the external cabinet's speaker cord. Alternatively, a "Y" speaker cord can be used to run a 16 ohm external cabinet along with the internal speaker(s) of a combo amp without damage to the amp (the total impedance or speaker load in this case will be 5.3 ohms – see the previous paragraph).

Damage will result from operating the Mercury V without a speaker load or into a 4 ohm load. The Attenuator is designed to operate with an 8 ohm load only.

## **Biassing your Carr Mercury V**

The Mercury V is a partial cathode bias (self bias) amplifier and as such does not require a bias adjustment when changing tubes. Please use matched pairs of output tubes for maximum performance. The Mercury V can only use matched pairs of 6V6 power tubes.

*Carr Amplifiers selects and tests the finest current production tubes specifically for each amplifier model. Caution should be used when buying replacement tubes from any dealer who does not have a return policy as all tubes can have problems (NOS tubes are susceptible to microphonics and failure too).*

**Recommended Settings** (These give you a place to start – the Mercury V has a huge range of possible tones – have fun experimenting and remember that guitar pickups vary a lot and you will need to tweak to your guitar and ear!) –

*-----Parallel/Series Toggle Up in Parallel-----*

Sound	High Volume	Low Volume	Reverb	Treble	Mid	Bass
Spacey Lush Boost 1						
Angus Beef Boost 2						
Does Your Dog Bite? Boost 3						
Vintage Grind Boost 1						

*-----Parallel/Series Toggle Down in Series-----*

Sound	High Volume	Low Volume	Reverb	Treble	Mid	Bass
Allman Joy Boost 1						
Ziggy + Boost 2						
All Teeth Boost 3						
Cello Bowa Boost 3						

# CARR AMPLIFIERS CHASSIS DIAGRAM



Power Connection

100 VAC - Japan

120 VAC - North America

220, 240 VAC - Europe & Asia

Fuse - slow blow

1.5A - 100, 120 VAC models

0.75A - 220, 240 VAC models

Reverb Return Jack  
(on speaker side of chassis)

Speaker Output Jack - 8 ohms

Reverb Send Jack  
(on speaker side of chassis)





