

# *Carol-Ann*

*Custom Amplifiers, LLC*

**OD-2 Series  
50W & 100W Amplifiers  
Operation Manual**

Manual V1.00

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## Introduction

Thank you very much for purchasing an OD2-Series Amplifier from us!

The OD2-Series Amplifiers head are available in two power ratings, 50W and 100W. The OD-2 Series Amplifier combo is available in 50W power rating only. The standard combo is fitted with a Celestion Lead 80 speaker. An EVM-12L is available as an option. Please talk to your local Dealer regarding all options available for the OD-2.

The 2-Channel foot-switchable design is based on two distinct tonal platforms or channels. Channel A is the lower gain channel and can produce clean tones that can range from crystal clean with a strong percussive attack all the way through to a wonderfully touch sensitive crunch. Channel B takes over from where Channel A finishes and ranges from a crunch to a beautiful high gain tone rich with a 3D balanced harmonic content that works equally well for single notes, multi-string passages or full chords, with perfect separation and tonal balance between the notes.

A footswitchable mid-boost further extends the tonal possibilities of both channels of this amplifier.

Please read this manual fully to get a better understanding of the design and operation of your amplifier.

Please read and understand any important safety notes relating to the operation and maintenance of your amplifier.

We hope you have a lot of enjoyment creating music through one of our amplifiers and want to extend our thanks once again for trusting us with your tone.

Alan Phillips  
President

# Operation

## Before Initial Operation:

1. Inspect to make sure all power & pre-amp tubes are intact & snugly seated in their sockets. They may have been disturbed during transit.
2. Make sure a speaker load is plugged into the correct speaker jack on the back of the amplifier (8 or 16 ohm). Failure to have a speaker connected to the amp will result in damage to the amplifier!

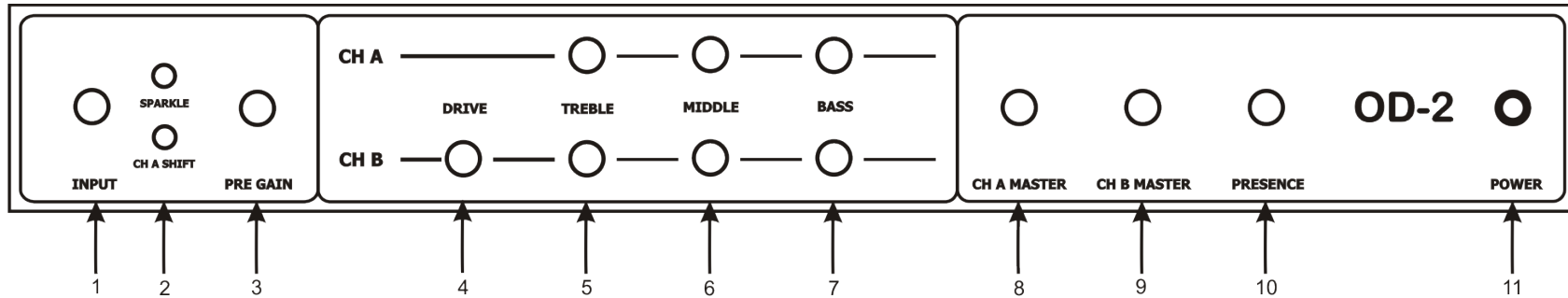
**Note: Damage caused by failing to connect the correct speaker load is not covered by the Amplifiers warranty.**

3. Ensure all VOLUME and GAIN settings are initially set to a low setting and that the EFX SEND and RETURN levels (on the back panel) are both set to around 40 – 50 %.
4. Install cable from footswitch into rear panel input marked FOOTSWITCH (3 pin XLR Socket).
5. Install instrument cable from guitar into front panel INPUT.

## Powering up and down:

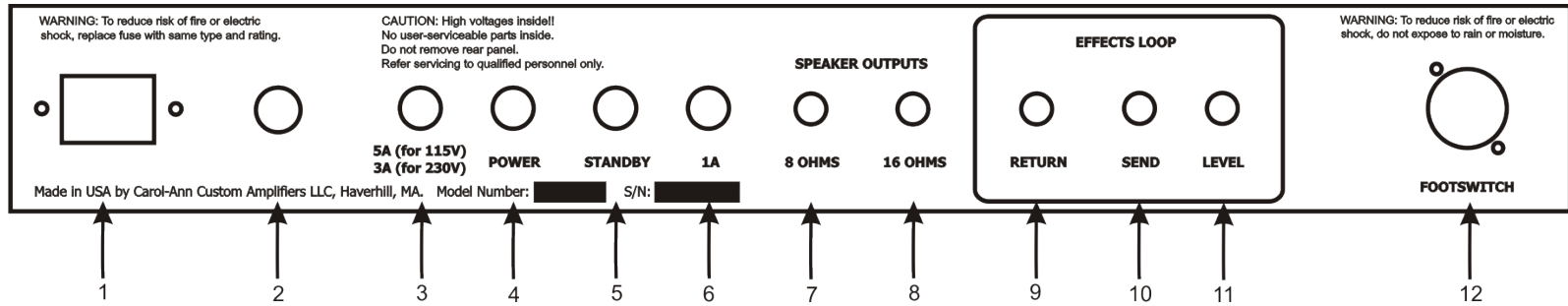
1. Ensure both POWER and STANDBY switches (rear panel) are in the DOWN position.
2. Plug the amplifier into a wall outlet.
3. POWER UP the amplifier by flipping POWER switch UP. WAIT at least 1 minute for tubes to warm up.
4. Flip STANDBY switch UP. The amplifier is now fully on and ready to use. Feel free to adjust all controls as needed.
5. **TO PUT AMP IN STANDBY MODE-** Simply flip the STANDBY switch DOWN.
6. **TO PUT AMP IN PLAY MODE-** Simply flip the STANDBY switch UP.
7. **TO TURN AMP OFF** Flip the STANDBY switch DOWN. Wait at least 30 seconds and then flip the POWER switch down.

## Front Panel



1. **Input Jack** – Guitar input jack.
2. **Bright Switch** – Adds upper harmonics to both Channels.  
**Shift Switch** – This switch is used to change the tone stack used on Channel A. In the up position, the clean Channel has more midrange and gain, in the down position it is much flatter with less overall gain.
3. **Pre-Gain** – This control sets the overall input gain for both Channels.
4. **Drive** – This control sets the amount of Overdrive present in Channel B.
5. **Treble** - Controls the higher frequency content.
6. **Middle** – Controls the mid frequency content.
7. **Bass** - Controls the bass frequency content.
8. **CH A Master** – This control sets the overall volume of Channel A.
9. **CH B Master** – This control sets the overall volume of Channel B.
10. **Presence** – This control sets the overall high frequency content for both Channels.
11. **Power Indicator** – Illuminates when power is applied to the amplifier.

## Rear Panel



1. **IEC Connector** – Mains power connector.
2. **Supply Selector** – Set the Amplifier to run on 115V~ or 230V~.
3. **Power Fuse** – Fast Blow. 50W – 3A, 100W – 5A.  
*Warning: Always replace fuse with correct type and rating.*
4. **Power Switch**
5. **Standby Switch**
6. **HT Fuse** – Slow Blow. 50W – 0.5A, 100W – 1A  
*Warning: Always replace fuse with correct type and rating.*
7. **Speaker Output** – 8 ohm Speaker Output
8. **Speaker Output** – 16 ohm Speaker Output
9. **Effect Loop Return Jack** – Connect to the output of the effects you want to run in the effects loop.
10. **Effect Loop Send Jack** – Connect to the input of the effects you want to run in the effects loop.

## Rear Panel (cont)

11. **Effects Loop Send Level** – Set according to the devices used in the loop to match the input level correctly. *Note:* This control can be used to attenuate the overall volume of the amplifier, even when no effects devices are connected to the loop and is useful to help get more range on the master volume controls. This is really useful when when playing small clubs or for practicing quietly.
  
12. **Footswitch Connector** – The footswitch is attached to the amplifier via a standard 3 pin XLR-XLR Microphone cable; therefore it is easily possible to extend the length of this cable. However, to ensure reliable performance keep the maximum length from exceeding 100 feet. The left hand switch on the footswitch (Amber LED) operates the Mid-Boost. The right hand switch on the footswitch (Red LED) operates the channel selection.

# Maintenance

## Important Safety Information



**SERIOUS INJURY OR DEATH CAN OCCUR AS A DIRECT OR INDIRECT RESULT OF ELECTROCUTION.**

**There are lethal voltages present inside the chassis on multiple exposed terminals.**

**Under certain circumstances this Amplifier is capable of storing lethal charges, even if it has been disconnected from the wall outlet for weeks. Always fully discharge power supply capacitors before commencing any work inside the chassis.**

**Under no circumstances attempt to make any adjustments while holding a guitar that is plugged in to the Amplifier.**

**Never work inside a live chassis with both hands. Place one hand behind your back at all times. This action may help prevent a fatal shock in the event of accidental electrocution.**

**Adjustments MUST ALWAYS be made by a qualified knowledgeable assistant using the correct insulated tools. Never attempt to make any adjustments on your own.**

**Note: Circuit boards may contain areas covered with an insulating non-epoxy compound to help reduce induced noise from sources such as fluorescent lights, stage lights etc. This potting compound can be removed in the event of Amplifier service by using an electrical heat gun on a low setting to make the compound pliable.**

## Replacing Tubes

50W Model: 2 x EL34, 3 x 12AX7, 1 x 5751

100W Model 4 x EL34, 3 x 12AX7, 1 x 5751

With average usage we recommend changing your preamp tubes every three years. Only buy the best quality tubes from a reputable supplier. We can supply tubes to you.

V1 – Use a balanced, low noise, low microphonics 12AX7.

V2 - Use a balanced, low noise 12AX7.

V3 – Use a low noise 5751.

V4 – Use a balanced 12AX7

With average use we recommend changing your power tubes every 12 to 18 months. Always use a matched set of power tubes from a reputable supplier. We can supply these tubes to you.

When new power tubes have been fitted the Amplifier will require the new tubes biasing. This is usually a job undertaken by a Qualified Technician. However, the OD Series does not require the chassis to be removed in order to adjust the bias, and providing the owner has a suitable bias probe, this job can be carried out with little difficulty. However if you do not feel confident in any way, then always leave the job to a qualified Technician.

1. Remove the chassis from the cabinet.
2. Remove the old power tubes
3. Replace the power tubes, with the bias meter attachment connected to one of the tubes.
4. Turn the Amplifier Power switch ON, leave the Standby switch off for now.
5. Let the Amplifier warm up for 1 minute.
6. Using a small flat blade screwdriver Locate the bias adjustment screw. It can be found located between the power tubes as a recessed screw pot.
7. Turn the Standby Switch ON and watch the meter reading.
8. Once the reading has settled, adjust the screw pot so the meter reads 35mA (per tube) for the 100W version or 40mA (per tube) for the 50W version.
9. Leave the Amplifier on for approx 30 minutes, then recheck and adjust if needed.

# Warranty

Your Carol-Ann Custom Amplifiers, LLC warranty covers defects in material and workmanship in Carol-Ann Custom Amplifiers Products purchased and serviced in the USA and Canada.

## **What our warranty does not cover:**

The warranty does not cover;

- (1) Damage caused my accident, misuse, abuse, improper installation or operation, rental, product modification or neglect.
- (2) Damage occurring during shipment.
- (3) Damage caused by repair or service performed by persons not authorized by Carol-Ann Custom Amplifiers.
- (4) Products on which the serial number has been altered defaced or removed;
- (5) Products not purchased by an authorized Carol-Ann Custom Amplifiers dealer.

## **Who this warranty protects:**

This warranty protects only the original retail purchaser of the product.

## **How Long this warranty lasts:**

The warranty begins on the date of purchase by the original retail purchaser. The duration of the warranty is as follows;

Amplifiers, Preamplifier & Power Amplifiers chassis and Circuit - 2 years

Enclosures and Cabinets - 1 year. Excludes normal wear and tear.

Power Tubes – 6 Months

Preamp Tubes – 12 Months

## **What Carol-Ann Custom Amplifiers will do:**

We will repair or replace (at Carol-Ann Custom Amplifiers discretion) products covered by warranty at no charge for labor or materials. If the product or component must be shipped to Carol-Ann Custom Amplifiers for warranty service, the consumer must pay initial shipping charges. If the repairs are covered by warranty, Carol-Ann Custom Amplifiers will pay the return shipping charges (UPS ground only).

## **How to get warranty service:**

Ship defective item, prepaid, to Carol-Ann Custom Amplifiers ([www.carolannamps.com](http://www.carolannamps.com)). Include a detailed description of the problem, together with a copy of your sales receipt or other proof of purchase as evidence of warranty coverage. Also provide a complete return shipping address.

## **Limitation of Implied Warranties**

Any implied warranties, including warranties or merchantability and fitness for a particular purpose, are limited in duration to the length of this warranty. Note: Some states do not allow limitation of how long an implied warranty lasts, so the above limitation may not apply to you.

## **Exclusions of Damages;**

Carol-Ann Custom Amplifiers liability for any defective product is limited to the repair or replacement of the product, at Carol-Ann Custom Amplifiers Amps' option. If we elect to replace the product, the replacement maybe be a reconditioned unit. Carol-Ann Custom Amplifiers Amps shall not be liable for damaged based on inconvenience, loss of use, lost profits, lost savings, damage to any other equipment or other items on the site of use, or any other damages whether incidental, consequential or otherwise, even if Carol-Ann Custom Amplifiers has been of the possibility of such damages.

Note: Some states do not allow the exclusion or limitation of incidental damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

If you have any questions about this warranty or service received or if you need assistance, please contact the Carol-Ann Custom Amplifiers Service Center at 978-857-9026.

Due to a constant improvement process, features and specifications are subject to change without notice.

**End of Manual**