



AC20DELUXE

INSTRUCTION MANUAL

Congratulations on purchasing your new Morgan Amp!

Joe Morgan started designing amplifiers to create solutions to the problems he was facing as a guitarist.

Joe Designed the AC20 to be reminiscent of the best of the early 60s class A British amplifiers. Don't let the simple control panel fool you, there is an amazing palate of tones to choose from.

The AC20 takes pedals very well and loves Fuzzes, boosts, OD's, phasers, flangers, tremolos, wahs, and all types of delay pedals. This amp was designed to interface with all of your pedals modern or vintage.

- Incredibly versatile single channel amp
- ¼ - 20-watt 2X EL84 Power Tubes
- 2x 12ax7s
- 1x EF86
- 1x 5AR4 Rectifier Tube
- Power level control ¼ - 20W
- Cut control
- Bass cut switch
- Bright switch
- Custom transformers and capacitors.
- Volume control

PLUGGING IN

One of the best features of the AC20 is that you can't get a bad sound out of it.

We recommend that you start with the power scaling all of the way up and the volume all of the way down. Cut control set to 12 o'clock and the switches set to the down or "normal" position. The EF86/12AX7 switch set to 12AX7.

From here you can gradually bring up the volume until you reach the desired level of gain. Once you have this set you can change the Power Level control to achieve the level of volume you require.

Now that you have your gain and volume set experiment with the bass and treble, and bright switches. Increasing the cut control clockwise will add high frequencies to your signal.

We know you will love your new AC20 Deluxe. If you have any questions or help don't hesitate to email us at info@morganamps.com or call Morgan Amplification at 714 841 5302.

INSTRUCTIONS

Please keep this instruction manual for future reference and for the duration of owning this Morgan Amplifier. Please carefully read and understand the instructions inside this user's manual before attempting to operate your new amp. This instruction manual includes essential safety information regarding the use and maintenance of the amplifier. Take special care to heed all warning symbols and signs inside this manual and those printed on the amplifier itself.



WARNING!

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THE AMPLIFIER TO WATER OR MOISTURE. DO NOT OPERATE NEAR ANY WATER SOURCE



WHAT'S THE MEANING OF THIS?

The lightning flash with an arrow triangular symbol is intended to alert the user to the presence of non-insulated "dangerous voltage" within the products enclosure, and may be of sufficient magnitude to constitute a risk of electric shock



WHAT'S THE MEANING OF THIS?

The exclamation point triangular symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the user manual accompanying this amplifier!

1. Read Instructions – All the safety and operating instructions should be read before this product is operated.

2. Retain Instructions – The safety and operating instructions should be retained for future reference.

3. Heed Warnings – All warnings on the amplifier and in the operating instructions should be adhered to.

4. Follow Instructions – All operating and use instructions should be followed.

5. Water and Moisture – The amplifier should not be used near water – for example, a bathtub, washbowl, kitchen sink, laundry tub, wet basement, or near a swimming pool, and the like.

6. Carts and Stands – The amplifier should be used only with a cart or stand that is recommended by the manufacturer.

An amplifier and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the amplifier and cart combination to overturn.

7. Wall or Ceiling Mounting

– The product should never be mounted to a wall or ceiling.

8. Heat – Amplifier should be situated away from heat sources such as radiators, heat registers, stoves, or other amplifier (including amplifiers) that produce heat.

9. Power Sources – This product should be operated only from the type of power source indicated on the rating label.

If you are not sure of the type of power supply to your home, consult your product dealer or local power company.

10. Grounding or Polarization

– This product may be equipped with a polarized alternation-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

11. Power-Cord Protection

– Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to the cord in correspondence

of plugs, convenience receptacles, and the point where they exit from the amplifier.

12. Cleaning – The amplifier should be cleaned only as recommended by the manufacturer. Clean by wiping with a cloth slightly damp with water. Avoid getting water inside the amplifier.

14. Non-use Periods – The power cord of the amplifier should be unplugged from the outlet when left unused for a long period of time.

15. Object and Liquid Entry

– Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

16. Damage Requiring Service

– The amplifier should be serviced by qualified service personnel when:

A. The power-supply cord or the plug has been damaged; or

B. Objects have fallen, or liquid has been spilled into the amplifier; or

C. The amplifier has been exposed to rain; or

D. The amplifier does not appear to operate normally or exhibits a marked change in performance; or

E. The amplifier has been dropped, or the enclosure damaged.

F. The amplifier needs tube replacement or biasing

17. Servicing – The user should not attempt any service to the amplifier beyond that described in the operating instructions.

All other servicing should be referred to qualified service personnel.

18. Ventilation – Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack.

19. Attachments – do not use attachments not recommended by the product manufacturer as they may cause hazards.

20. Accessories – Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product.

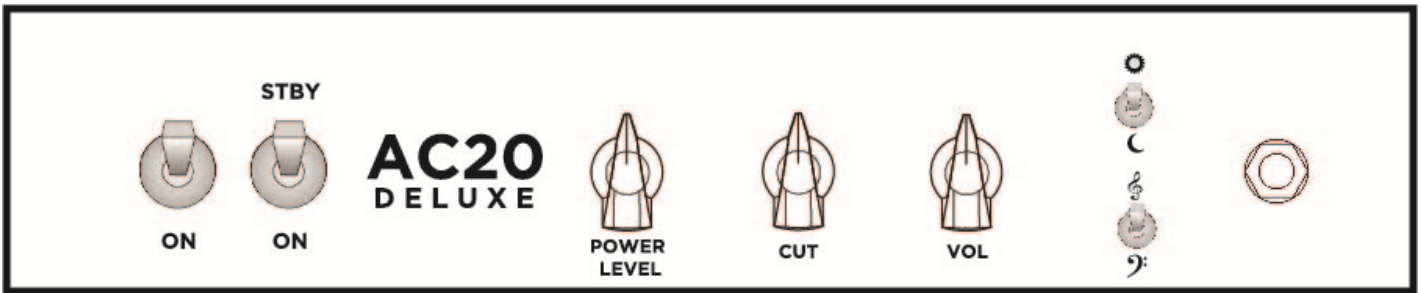
21. Lightning – For added protection for this product before a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the product due to lightning and powerline surges.

22. Replacement Parts – When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

23. Safety Check – Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

24. FUSES – Always use the correct rating and type of fuse as indicated on the rear panel. Note the proper rating fuse is determined by the AC line voltage in the country this unit is being operated.

FRONT PANEL



POWER SWITCH: Turn this ON to power the amplifier. Turn on this switch and the standby switch at the same time for optimal tube life.

STANDBY SWITCH: Turn ON this switch to put the amp in play mode. This switch should be utilized to put the amp into a wait state for extended periods of rest. It removes high voltage from your tubes.

Vol: This controls how much gain you have. As you increase it over about 10 o'clock you will be increasing the amount of overdrive the amp has. Regardless of how high this volume control is, a clean tone is available by simply turning down the volume control on your guitar.

Cut : Turning this knob counter clockwise will remove high frequencies from the power section of the amplifier. Think of it as a tone control.

Power Level : Turning this knob counter clockwise will decrease the voltage available in the output section of the amplifier. Think of this like a zoom lens for volume. It allows you to go between $\frac{1}{4}$ a watt and 20 watts. Set your gain level with your Vol control and then lower the Power Level to the volume you require.

Bright switch: (sun and moon) This switch in the up position adds high frequencies.

Bass and Treble switch: This switch cuts the bass when in the up position.

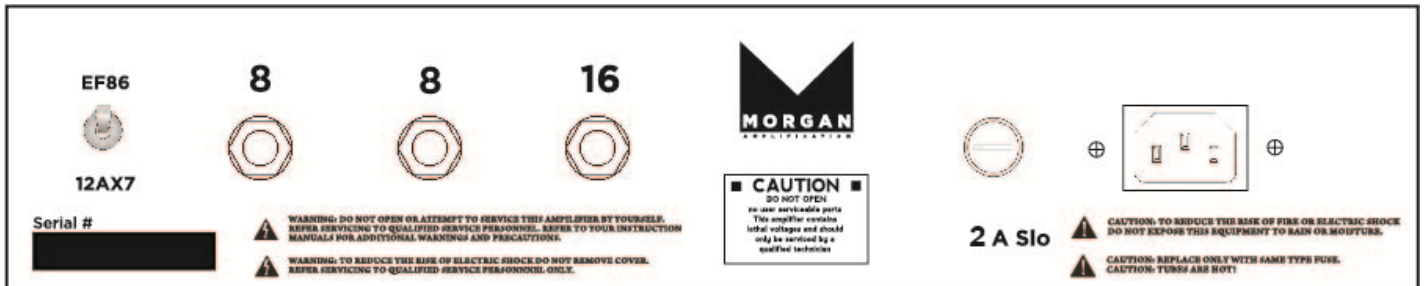
Modes:

Bright switch down + bass/treb switch down = Normal Mode

Bright switch up + bass/treb switch up = Brilliant Mode

INPUT: This is where you plug your guitar cable in.

REAR PANEL



EF86/12AX7 switch: This switches between the EF86 or 12AX7 preamp tube. The EF86 is a sharp cutoff pentode tube. It has much higher gain than the 12AX7. EF86 tubes have a tendency to be a bit unstable and may squeal at higher volume levels. It has been equipped with 3 tube dampeners to lessen the chance of instability. If you do notice ringing with the EF86 it may be time to replace that tube.

Speaker Jacks: Your amp is equipped with one 16 ohm and two 8 ohm speaker outputs. The amplifier should only be operated with a SPEAKER cable connected to the proper impedance output. The two 8 ohm jacks are wired in parallel. If you want to run 2 cabs they need to be 16 ohms and each connected to the two 8 ohm output jacks

MAIN FUSE: Replace with a 2 Amp slo blow fuse for 120V or 1.5 Amp slo blow for 230V. If this fuse blows the most likely the result of a bad tube. Constant blowing of this fuse (even when using new tubes) is an indication that something could be seriously wrong with your amp. STOP and call us so we may help you diagnose.

MAINS INPUT: Plug the supplied IEC power cord here and into a 115v wall outlet to power the amplifier.

tube amplifiers, have extremely high voltages that can cause serious injury or death. Do not remove the chassis from the amplifier. All repair and service work must be performed by Morgan or an authorized service center of Morgan. ANY UNAUTHORIZED REPAIRS WILL VOID YOUR WARRANTY.

MORGAN LIMITED LIFETIME WARRANTY

Thank you for choosing Morgan. Morgan manufactures some of the world's most reliable hand-wired, all-tube amplifiers and speaker cabinets. Morgan takes great pride in an extremely thorough testing procedure which is implemented on each product prior to shipment. In the unlikely event that you have a problem with your amplifier, please refer to warranty below. Morgan stands behind our products like no other and we're here to help you!

AMPLIFIERS: Morgan offers a limited lifetime warranty to the original purchaser that a Morgan amplifier will be free from defects in material and workmanship. A dated sales receipt will establish coverage under this warranty, PLEASE KEEP YOUR PROOF OF PURCHASE TO USE YOUR WARRANTY. This warranty does not cover service or parts to repair damage caused by accident, neglect, abuse, normal & wear, disaster, misuse, abuse, over-powering, negligence, inadequate packing or shipping procedures and service, repair or any modifications to the product which have not been authorized or approved by Morgan in writing. **ANY MODIFICATION TO THE AMPLIFIER WILL VOID YOUR WARRANTY.** If this product is defective in materials or workmanship as warranted above, your sole remedy shall be repair or replacement by Morgan as provided below.

CAUTION: Do NOT attempt to repair, modify or service your amplifier by yourself!!! Please read the instruction manual for all safety notifications, warnings and instructions. Morgan Amps, like all

TUBES: Morgan warrants the original purchaser that the specific tubes used in Morgan will be free from defects in material and workmanship for a period of 90 days from the original date of purchase. A dated sales receipt will establish coverage under this warranty. This tube warranty will automatically terminate 90 days after the original retail sales date. This tube warranty is in lieu of all other expressed warranties. If tubes fail within the 90 day warranty period your sole remedy shall be replacement of tubes as provided below.

RETURN PROCEDURES: In the unlikely event that a defect occurs please call us at 714-841-5302. In most cases we can help you diagnose the problem over the phone. If a product must be sent to us, please follow the procedure outlined below.

- Defective products must be shipped, together with proof of purchase, freight pre-paid and insured to the Authorized Morgan Service Center or directly to Morgan.
- If a product must be returned to Morgan for warranty replacement/repair, a Return Authorization Number must be obtained from our Customer Service Department prior to shipping the product.
- Please contact Morgan Customer Service Department for the Authorized Morgan Service Center nearest you.
- Products must be shipped in their original packaging or its equivalent; in any case, the risk of loss or damage in transit is to be borne by the purchaser.
- The Return Authorization Number must

appear in large print directly below the shipping address.

- Always include a brief description of the defect, along with your correct return address and telephone number.
- When calling to inquire about a returned product, always refer to the Return Authorization Number.
- If Morgan determines that the unit was defective in materials or workmanship at any time during the warranty period, Morgan has the option of repairing or replacing the product at no additional charge, except as set forth below.
- All replaced parts become a property of Morgan. Products replaced or repaired under this warranty will be returned via ground shipping within the United States or Canada - freight prepaid.
- Morgan is not responsible for costs associated with expedited shipping, either to Morgan or the return of the product to the customer.

All warranty repairs outside the United States and Canada must be directed to the dealer or distributor from which you purchased the product.

INCIDENTAL OR CONSEQUENTIAL DAMAGE: In no event will Morgan be liable for any incidental or consequential damages arising out of the use or inability to use of any Morgan product, even if a Morgan dealer has been advised of the possibility of such damages, or any other claim by any other party. Some states do not allow the exclusion or limitation of consequential damages, so the above limitation and exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which may vary from state to state.

FOR YOUR PROTECTION: Please complete the warranty registration online at www.morganamps.com within (10) ten days of the date of purchase so that we may contact you directly in the event a safety notification issued in accordance with the 1972 Consumer Product Safety Act.

CUSTOMER SUPPORT: Our dedicated and friendly staff is ready to help you with any warranty or product questions you may have. Please call us at 714-841-5302 – Monday – Friday 9AM-5PM (Pacific Standard Time)

Thank you again for choosing Morgan and we look forward to a long relationship!



www.morganamps.com