



ASSISTENT 30

Integrated stereo tube amplifier

This handcrafted product was special made for your high demands, to display the music in its finest way.

We guarantee, that this amplifier was carefully produced and tested in all details.

Congratulations on your decision to become the proud owner of the **ASSISTENT 30** tube amplifier.

This owner manual has been prepared to help you to understand the operation of your amplifier and to provide some information about its design and the variety of ways it may be used.

We have designed and manufactured this amplifier to faithfully and accurately reproduce music. This hand build instrument should give a lifetime of pleasure and with a little care and a full understanding of the operation recommendation in this manual the **ASSISTENT 30** should provide trouble free performance.

Please take time to read this manual thoroughly before using your amplifier.

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thoroughly before using your amplifier**

Introduction to AudioValve

All AudioValve products are designed by Helmut Becker and feature advanced, modern circuitry, combined with the superb sound of valves. Now it is no longer necessary to sacrifice one to get the other. Combining the finest in modern valve technology with sophisticated smartbias circuitry, AudioValve brings you the best of both worlds - and more.

With contemporarily-styled chassis built from 3 up to 5 mm laser-cut steel, every amplifier and pre-amplifier we manufacture utilises double sided PC boards and automatic bias regulators to ensure a continuously uniform current flow to and a perfect match between all the valves throughout their entire life, even as the various valves decay at different rates.

Unlike other valve amplifiers, where a certain amount of guesswork and experience is required to know when valves need to be replaced, with AudioValve amplifiers not only do valves not have to be removed prematurely (prior to burn out), but when burnt out does occur, only the bad valves need to be replaced. The amplifier will automatically adjust and distribute the total current flow to optimally match the new configuration.

AudioValve amplifiers always deliver nothing but the most advanced, economical, high quality valve sound. Power output valves in most models may be varied among several different types with no modifications to the units, so that an appreciable degree of sonic system matching and user preference may be accommodated.

No matter what combination of valves one uses (differing valves, new valves, old valves), one will experience at all times the balanced and coherent sound of amplifiers working with brand new, perfectly matched valves. The bonus is that there is never any need to use a meter or screwdriver to adjust bias on any valve in any condition of

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operation. AudioValve`s smart - bias circuitry is the best and most unobtrusive available in the world also in your Assistent 30 !!!

The ASSISTENT 30 amplifier represents exceptional value for money. We have designed and manufactured this power amplifier to faithfully and accurately reproduce music. The high quality of components used and advanced valve operational principles employed in this design ensures that you will enjoy the superb audio performance and pride of ownership, inherent in such a hand-crafted product as this, for many years to come.

BIAS AND PCB

Traditionally, valve biasing is performed with a screwdriver to adjust the bias current to the valve. Any such adjustment can only be optimum for an instant as valves, even selected ones or a matched set, cannot hold a consistency of performance in the long term. Each valve will deteriorate individually and, if in a set, not necessarily in the same way as others in that set. A matched pair or quad will therefore only remain matched for a relatively short period of time!

Helmut Becker of AudioValve has developed a absolute unique valve biasing circuit that automatically monitors, biases and controls each valve independently thereby maintaining any number of valves at their optimum performance level. These valves do not even have to be of the same type or condition. This is AudioValve`s Automatic Bias Regulator (ABR) circuit, a feature that AudioValve considers essential to deliver optimum performance from any multiple power valve amplifier and, in particular, to get the very best from the stunning QQE 02-12. AudioValve`s ABR therefore delivers a long awaited dream - to combine the operational convenience of solid-state amplifiers with the sonic benefits of pure triodes. True 21st century valve-technology!

The PCB

All electronic components of the ASSISTENT 30 are mounted on one double sided mil-spec printed circuit board created from a pure copper covered panel using CAD/CAM software to produce a circuit board completely free from solder bridges or point-to-point wiring. All signal and power tracks are separated by grounding tracks to minimise cross-talk and noise and the overall construction is designed to ensure low microphony and excellent conductivity.

The advantage of this approach is a consistency and reliability of performance and the certainty that all production examples of any AudioValve model will be exactly like its reference sample! This is in stark contrast to amplifiers that employ hardwired components, where the sonic outcome will depend upon the construction technicians ability to solder all joints to a consistent standard and place the components in the same position and orientation as those of the reference sample to ensure consistency of interaction with other components.

AudioValves PCB ensures that all components receive the same accuracy

of assembly and that electro-dynamic interactions between components are constant in all aspects of the construction. Only the use of a well thought out and calculated printed circuit can achieve this.

WARNINGS & PRECAUTIONS

The ASSISTENT 30 amplifier operates in a floating class-A and is therefore capable of generating moderate to high temperatures. This may have an adverse effect on other equipment, furniture and fittings close by and you will need to position the amplifier carefully to avoid this.

Do not remove the top cover or the metal top from this amplifier whilst it is in operation or connected to the mains supply as you will be exposed to potentially lethal voltages.

Do not attempt to connect any input of this amplifier to any of its outputs otherwise damage to components will result.

Do not earth any output terminal or connect any of these terminals together without following the instructions in this manual or seeking qualified assistance.

Do not connect any voltage source, short circuit, earth/ground or appliance (other than a suitable Hi-Fi quality loudspeaker) to any output terminal.

Repair work should only be undertaken by a suitably qualified service engineer.

Be sure that you understand the requirements fully before you make any connection to this amplifier or switch ON !!

This amplifier **ASSISTENT 30** operates in **class - A** and is

therefore capable of generating a moderately high temperature which requires care full placing to avoid any effect this heat may have on other equipment, furniture and fittings etc.

Do not remove the top cover from this amplifier. Hazardous voltages are present. Any repair work should be refer to a suitable qualified and experienced service person.

Do not attempt to connect any input of this amplifier to any of its outputs.

Do not earth any output terminal or connect any of these terminals together without following the instructions in this manual or seeking qualified assistance.

Do not place this amplifier in any position where liquids or any foreign material may accidentally enter it.

Do not disconnect any in / output wire, the power cord or the connecting cables between the amp and the power supply , while the amplifier is operating.

Some preamplifiers, processor, CD players etc produce large switching pulses when switched on or off, causing a loud click through the loudspeakers. For this reason, **turn off your power amplifier at first** when you plan to **switch off your audio device**.

Turn on your power amplifier at last when you plan **to switch on your audio device**.

All handling at the open amplifier has to be done when the main power plug is **disconnected** .

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Please notice that you never exceed the mains voltage in the prescribed value shown at the label of the serial number on the rear side. If you can't provide the amplifier with the exact shown main voltage, please use a voltage stabilizer - particularly for the US (115 VAC) market and Mainland China

The amplifier needs a certain time to form the brand new components (capacitors) otherwise they can be destroyed.

Use the Stand - By mode for warm hold periods (tube heating) when you aren't listening. Please switch OFF the amp while leaving the house or sleeping !

Please only do use your amplifier while listening to music.

UNPACKING & SET UP

Ideally your dealer will carry out this process for you. If you wish to unpack and set-up the amp yourself please follow the following steps carefully.

Each ASSISTENT 30 comes in its own stable carton and weighs 15kg unboxed.

To remove the ASSISTENT 30 from its crate first undo the plastic wrapping. Each person should then grab the outer rim of the Perspex top and lift the amplifier until it can be rested on the edge of the crate. Any further lifting should be carried out holding the bottom of the amplifier chassis. Do not lift the amplifier using the protective grille!

We suggest you leave all packaging in the crate and re-fix the top so you can use it again in the unlikely event that you need to return the unit under warranty (see warranty conditions at the end of the manual) or place the unit in storage.

It is possible that the driver valves already on the circuit board may have been vibrated loose in transit, so first check that they are securely in place - if not, push them firmly home. Once you have done this, remove the power valves from their packing one at a time and fit them into the vacant sockets. Take care to align the pins correctly before pushing them fully into position otherwise the socket may be damaged requiring a return of the unit to the factory for repair.

Once all 8 power valves have been installed, clean any finger marks off them and the driver valves with a tissue or lint-free cloth and replace the top plate assembly. This assembly is decoupled from the amplifier's chassis by plastic washers. When you re-fit the cover do not over-tighten the knurled nuts or the decoupling will be reduced. It is sufficient to tighten the nuts until they touch the top plate and then tighten one half-turn more only.

The amplifier is now ready for connecting into your audio system. Experience has shown that these amplifiers benefit from resting on a solid surface rather than carpet. Your AudioValve dealer will be able to recommend a suitable support that ensures adequate airflow around and through the amplifier. Do not place this amplifier in a position where liquids or any hard objects may accidentally enter it.

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MAINS VOLTAGE

CHECK that the mains voltage printed on the rear of this amplifier is similar to the mains voltage normally supplied to your area. If in doubt, please consult your AUDIOVALVE dealer. Please notice that you never exceed the mains voltage in the prescribed value shown at the label of the serial number on the rear side. If you can't provide the amplifier with the exact shown main voltage, please use a voltage stabilizer - particulare for the US and Mainland China market.

FRONT PANEL

The ASSISTENT 30 is **NOT** remote controlled designed. You have on the front panel installed the volume control, input selection and power ON or OFF.



On the right side of the ASSISTENT 30 front panel is located the volume potentiometer by the 2 section ALPS potentiometer guaranteed a high accurate analog volume control .

REAR PANEL



INPUT TERMINALS

The 5 pair RCA are standard terminals for the use of unbalanced input signals coming from the signal sources . The ASSISTENT 30 uses for all inputs female jackets and for the TAPE output one pair of RCA jackets too.

The 5 RCA INPUTs are standard RCA terminals for the use of unbalanced input signals coming from most signal sources .

OUTPUT TERMINALS

Speaker terminals - 8 Ohm - are located on the rear panel, close to the input sources. Two pairs of heavy duty gold plated binding posts for each channel are supplied.

CONNECT your loudspeaker positive terminal to the amplifier (+) output terminal. Connect your loudspeaker negative terminal to the (-) output terminal.

POLARITY - PHASING

Quality of the connections must be examined to ensure a high performance trouble free operation is enjoyed. Check that the connections are tight, but do not overtighten with excessive use of spanners etc. If bare wires are used, make sure that no loose

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strands of wire short across to the other terminals or the amplifier chassis. When using plugs such as Banana, be sure to use good quality one`s with a firm fit.

Please remember that the AUDIOVALVE **Assistent 30** amplifier is a high quality electronic instrument capable of an exceptional level of performance.

PLACEMENT AND VENTILATION

This AudioValve **ASSISTENT 30** amplifier is designed to operate at a moderately high temperature. The ideal location is on the rigid stand or floor mounted away from direct contact with any objects, materials or deep pile carpets which may be effected by the heat or which may interrupt the flow of air around the amplifier.

When operating the amplifiers quite a lot of heat is generated which should be allowed to dissipate without restriction. Make sure that no objects are placed on the top of the amplifier. Always ensure adequate ventilations.

INSTALLATION AND OPERATION

MAIN VOLTAGE and Main Power Plug (fuse) and Main Switch

MAIN POWER connection is via supplied plug-in lead. The standard IEC socket connects the mains power at the amplifier end while a local mains plug is required at the wall end. In the event where a "local" plug needs to be fitted to the wall end of the lead, ensure that the plugs is wired correctly by a suitable qualified or experienced person.

Ensure the amplifier is disconnected from the main voltage before attempting any modification of the main connection.

The heavy square duty rocker switch for the main voltage ON /OFF is located on the front panel. The main fuse is next to the main plug, the value is 3,15 amp sb. for 115VAC or 1,6 amp. sb as for 230VAC.

DO DISCONNTCT the main power cord from the voltage when you check the fuse !

MAINS VOLTAGE

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Please switch OFF the main power while leaving the house or sleeping, the red light in front will be go off !

Make sure that your home voltage is the same as the printed voltage on the table of the rear side of the power supply.

Please notice that you never exceed the main voltage in the prescribed value shown on the table of the serial number on the rear side.

If you can't provide the amplifier with the exact shown main voltage, please use a voltage stabilizer - particulare for the US or Taiwan (115 VAC, max. 120 V AC) and Mainland China market with 230 V AC.

MAIN FUSE

The Mains fuse is fitted in the IEC Main / Line socket on the rear of the power supply.

The fuse must has the value 1,6A for 230 VAC and 3,6 A for 115 VAC slow blow.

If the fuse keeps blowing up the amplifier must be checked by a professional technician.

DO NEVER FIT A FUSE WITH HIGHER RATING.

INSTALLATION AND OPERATION

PLACEMENT AND VENTILATION

This AudioValve **ASSISTENT 30** amplifier is designed to operate at a moderately high temperature. The ideal location is on the rigid stand or floor mounted away from direct contact with any objects, materials or deep pile carpets which may be effected by the heat or which may interrupt the flow of air around the amplifier.

When operating the amplifiers quite a lot of heat is generated which should be allowed to dissipate without restriction. Make sure that no objects are placed on the top of the amplifier. Always ensure adequate ventilations.

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Ensure the main switch of the rear side of this amplifier is OFF before attempting any modification of the mains connection.

MAINS FUSE

A Mains fuse is fitted within the IEC Mains / Line socket on the rear of the amplifier. A small draw at the bottom of this socket may be removed **(after the IEC plug is removed)** by levering it out with a flat blade screw driver. The fuse fitted should be razed at no greater than 1,6A for 230 VAC and 3,15A for 115 VAC slow blow.

In the unusual event that this fuse should blow, you must first establish the cause of this failure, cure the fault and then replace the fuse with one of the same type.

DO NOT FIT A FUSE WITH HIGHER RATING.

AUTOMATIC BIAS CONTROL FUNCTION (ABR)

Every QQE 03/12 power tube is controlled by an unique complete automatic bias regulator for each system in the tube.

When the amplifier is warmed up, the red ABR - led next to each power tube will not shinning by correct function the power tube. Only when a tube is faulty the red LED shinning up, then you have to chance its tube.

CHANGING VALVES AND POWER VALVES

IMPORTANT before changing a valve you must remove the mains lead from the IEC socket and allow the valves to cool down. Touching a hot valve can cause very serious burns.

Standard power valve type: QQE 02-12.

Automatic Bias Regulator (ABR) function and interpretation

Each power valve is controlled by an ABR for each circuit within the Valve.

There are two LEDs right side each power valve circuit. These LED`s indicate the status of the valve when the amplifier is in OPERATE mode and will light if the valve malfunctions in some way.

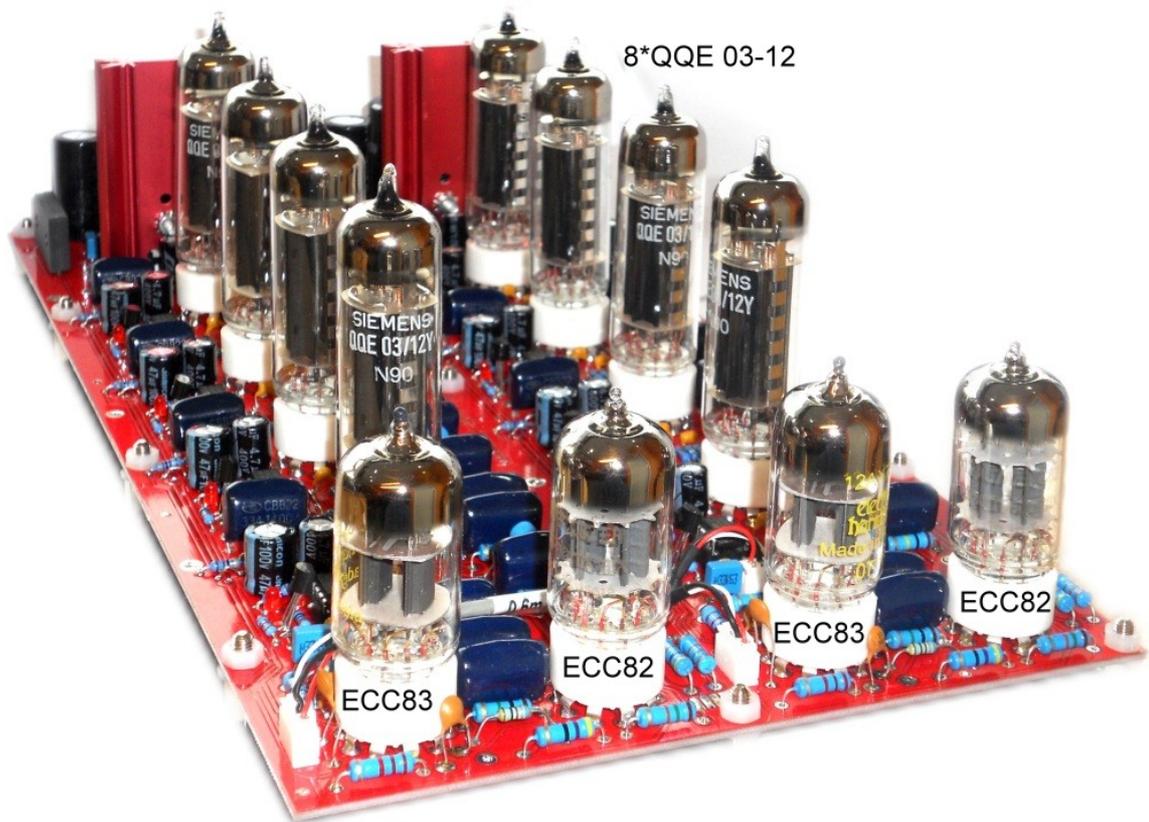
If a power valve in the ASSISTENT30 falls in performance to the point where it needs to be changed, the appropriate ABR circuit will indicate this by lighting LEDs next to the valve that needs replacing.

Exchange the faulty valve for a suitable replacement from the list above. You need only exchange the faulty valve as the ABR automatically adjusts the interrelationship between the valves to give optimum sound.

AudioValve will supply individual replacement valves (or complete sets of valves) through its distributors at an extremely competitive price.

Once you have changed the faulty power valve the LEDs should go out. If this or any other of the LEDs remains lit, turn the amp off at the POWER switch and contact your AudioValve dealer. Under normal operating conditions none of the LEDs are lit. A LED on each power valve light up, and when the amplifier is being driven to very high output levels it is normal for the LEDs that monitor the valve circuits to simultaneously light dimly.

TUBE PLACING



technical facts

- Push-Pull 2 * >30W Sound, Stereo Tube Integrated Amplifier
- Pure Class A operation - high precision full automatic bias adjustment
- NOS SIEMENS germany military high grade power tubes 8 pcs. QQE 03-12
- input tubes: 2*12AU7 (ECC82), 2*12AX7 (ECC83)
- Most of super Hi Fi fans also know this 's from AudioValve. the highest grade of amp.
- 100% HAND MADE IN GERMANY, 100% NEW IN BOX
- main voltage: 110 V - 240VAC
- Frequency: 20Hz-60KHz +/-3 dB
- Signal/Noise Ratio: 90dB
- ALPS volume control pot
- Distortion: less than 1% at full power
- Input Jack: 5 pairs cinch, switchable
- REC - out
- burn in time: 50-100 hours
- Input Consumption: 150W
- Size Dimension:220 mm wide x 360 deeph x 230 mm high
- Weight: 15kg

CE – Conformity

Declaration Of Conformity

Manufacturer: AudioValve,
Germany, 34123 KASSEL, Umbachsweg 70,
info@audiovalve.info

Product Name: ASSISTENT 30

Product Type: Audio Amplifier

Complies with Standards:

LVD: 92/31/EEC, 93/68/EEC, & 73/23/EWG

Safety: EN60065

EMC: EN55013, EN55020, EN55022, EN55103, EN61000-3-2,
& EN61000-3-3

The official Declaration of Conformity for this product is kept on file at:
AudioValve, 34123 Kassel, Umbachsweg 70, Tel. 05617013360



W A R R A N T Y

AUDIOVALVE warrants its components for a two - year period on all electronics and a 90-day period on the tubes from the purchase date.

In the event of a failure of your amplifier , AUDIOVALVE will repair or readjust this unit or , should the occasion arise , will replace it provided that all conditions stipulated in this warranty are met.

In order to initiate service of any kind it is necessary to obtain distributor or dealer authorization prior to shipping the unit for service.

Any of the following conditions shall void the warranty:

- Operation not in accordance with this manual.
- Abuse , accidental damage or unauthorized modifications , as determined by AUDIOVALVE or its agents exclusively.
- Removal , defacing or falsifying of the serial numbers.
- Shipping without the original complete factory crates.

WARRANTY REGISTRATION

Please fill out and return this warranty form to the distributor within 15 days of the purchase date with this form here, or make it online on our website.

- MODEL : _____
- SERIAL NUMBER : _____
- PURCHASE DATE : _____
- AUTHORIZED AUDIOVALVE DEALER:

- PURCHASER`S NAME : _____
- STREET ADDRESS : _____
- CITY : _____
- ZIP / POSTAL CODE : _____

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