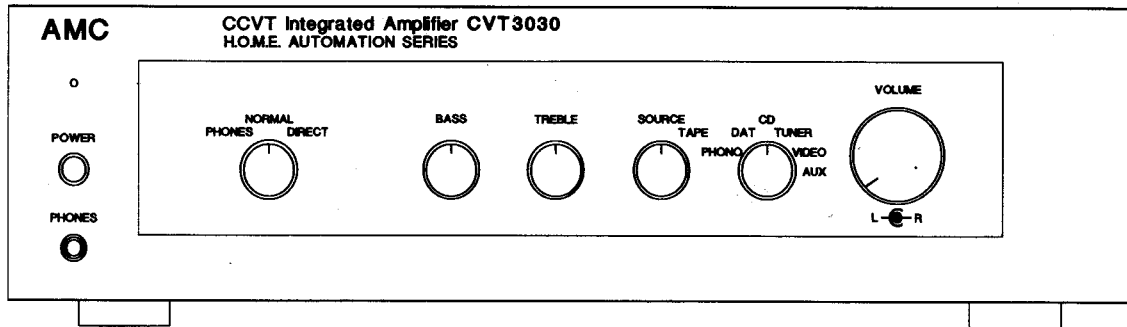


# AMC CVT3030

## VALVE AMPLIFIER



**INSTRUCTIONS FOR INSTALLATION AND OPERATION**



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



AFIN DEVIET UN CHOC ELECTRIQUE ET LES CONSEQUENCES GRAVES QUI POURRAIENT EN RESULTER, TENEZ PAS D'OUVRIR L'APPAREIL ET DE TOUCHER AUX COMPOSANTS INTERNES SANS LA PRESENCE D'UNE PERSONNE QUALIFIEE.



PARA REDUCIR EL RIESGO DE SACUDIDAS ELECTRICAS, NO DEBERA QUITARSE LA TAPA (NI PARTE POSTERIOR). CONSULTESE AL PERSONAL CAPACITADO PARA LAS REPARACIONES INTERNAS.

**WARNING:** TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

**ADVERTENCIA:** PARA EVITAR EL RIESGO DE INCENDIO O SACUDIDA ELECTRICA, NO DEBERA EXPONERSE ESTE APARATO A LA LLUVIA O HUMEDAD.

**CAUTION:** TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARISED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

**ATTENTION:** POUR PREVENIR LES CHOCES ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR. UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SILES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

**PRECAUCION:** PARA EVITAR SACUDIDAS ELECTRICAS, NO DEBERA UTILIZARSE ESTA CLAVIJA POLARIZADA CON UN CORDON DE PROLONGACION, RECEPTACULO U OTRO TIPO DE SALIDA A MENOS QUE SE HAYAN INSERTASO COMPLETAMENTE LAS LENGÜETAS PARA EVITAR SU EXPOSICION.

**NOTE:** Some AMC products are equipped with dual or multi-voltage transformers (which is indicated on the back panel). If you wish to change the voltage, please bring your unit to an authorised AMC service technician for internal conversion.

**ATTENTION:** Quelques pièces AMC sont munies de transformateurs à double ou à multi-voltage (indiqué au panneau arrière). Si vous voulez changer le voltage, veuillez apporter votre appareil au fournisseur de AMC pour le transformer.

**ZUR BEACHTUNG:** Einige AMC Geräte sind mit Umschaltern für unterschiedliche Netzspannungen ausgerüstet (Ein Vermerk auf der Rückseite weist darauf hin). Die Anpassung, wenn notwendig, muß von einem qualifizieren Techniker in einer AMC Servicestation vorgenommen werden.

**NOTA:** Ciertos componentes de AMC están dotados de transformadores de doble tensión o de varias tensiones (lo que se indica en el panel posterior). Si se desea cambiar la tensión, sírvanse llevar el aparato a un técnico autorizado por AMC para su conversión interna.

**NOTE to CATV systems installer:** This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

**NOTA PARA EL INSTALADOR DE ANTENAS DE TELEVISION COLECTIVAS:** La presente advertencia se provee para llamar la atención del instalador al Artículo 820-22 de NEC (Código Eléctrico Nacional) donde se facilitan las directrices para la pertinente puesta a tierra y que especifica en particular que el conductor a tierra del cable debe conectarse al sistema de conexión a tierra del edificio, lo más proximo posible al punto de entrada del cable.



The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure; that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

## INTRODUCTION

The AMC CVT 3030 has been designed to give superb sound quality and represents outstanding value for money.

The CVT 3030 is a hybrid mosfet valve design, capable of giving superb sound reproduction. The components are all of the highest quality, but there are a few simple hints to follow in order to get the best from your new amplifier.

- 1) Do not stand any object or other component on the top. Whilst the 3030 is one of the coolest running Class A valve amps available, uninterrupted air flow is most important.
- 2) There are two silent fans in the base under each pair of EL34 valves. Again, the air space under the amp must not be restricted in any way. Never stand the unit on a carpeted surface or anything soft, or on another component which generates heat.
- 3) The amplifier will sound best when it is 'warmed up', this can take 15-20 minutes avoid operating the PHONES/NORMAL/DIRECT switch during this period.
- 4) The valves should last a very long time but can be changed easily. However, as there is always some voltage present inside, even when the unit is turned off, we recommend that this is carried out by your AMC dealer, it is only a five minute job for an engineer.
- 5) We recommend you retain the original carton and packaging so that it can be repacked correctly if it ever becomes necessary to transport the unit or return for service.
- 6) After switching off, always let the amplifier cool down before turning on again.

## INSTALLATION

Your AMC amplifier is supplied set to work on your local mains supply voltage. Check that your local mains supply voltage agrees with the voltage setting indicated on the back panel of the amplifier. If not, please contact your dealer or national distributor for details on how to proceed further.

The cores of the mains lead are coloured in accordance with the following code:

Blue            – Neutral  
Brown           – Live

Note: Export units for certain markets have moulded mains plugs fitted as standard .

As the colours in the mains lead may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked by the letter N, or coloured black or blue. The wire which is coloured brown must be connected to the terminal which is marked by the letter L, or coloured red or brown.

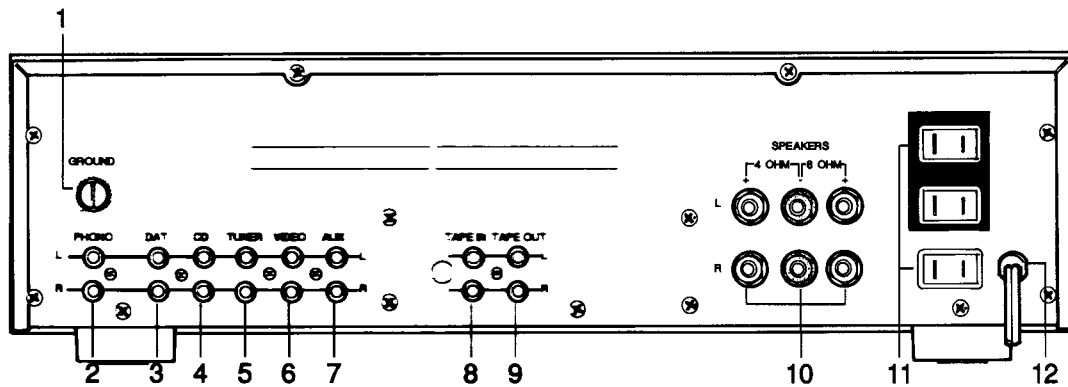
## FUSES

If the mains plug is fused, fit a 3amp fuse.

Your AMC amplifier contains fuses which are designed to protect the amplifier and prevent the occurrence of a dangerous fault condition. These should only be inspected and replaced by a competent engineer using the correct replacement types.

# REAR PANEL CONNECTIONS/FRONT PANEL CONTROLS

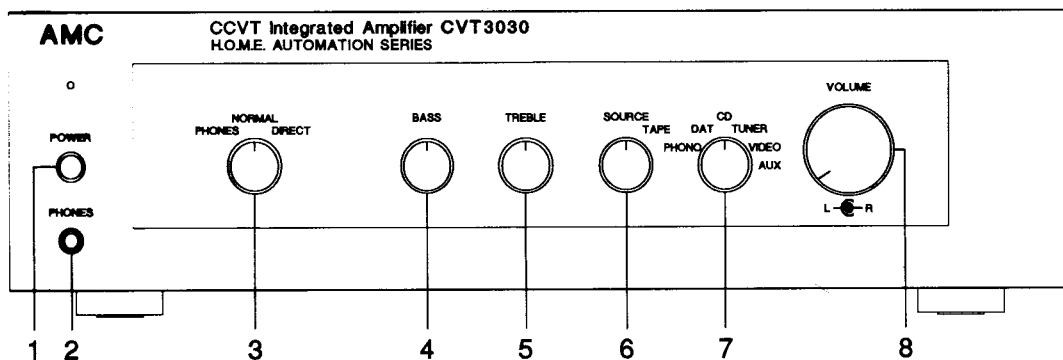
## REAR PANEL



1. PHONO GROUND TERMINAL
2. PHONO MM INPUT
3. DAT INPUT
4. CD INPUT
5. TUNER INPUT
6. VIDEO INPUT

7. AUXILIARY INPUT
8. TAPE INPUT
9. TAPE OUTPUT
10. LOUDSPEAKER TERMINALS
11. AC CONVENIENCE OUTLETS
12. AC LINE CORD

## FRONT PANEL



1. POWER SWITCH
2. PHONES
3. PHONES/NORMAL/DIRECT SWITCH
4. BASS CONTROL

5. TREBLE CONTROL
6. TAPE MONITOR SWITCH
7. INPUT SELECTION SWITCH
8. VOLUME CONTROL

# REAR PANEL CONNECTIONS

## A/C OUTLET

The A/C convenience outlet is fitted so that other components can be powered when your amplifier is switched on. You must fit an European Standard two pin plug, available from most specialist dealers.

**UNDER NO CIRCUMSTANCES SHOULD THE CASE OF THE AMPLIFIER BE OPENED BY ANYONE OTHER THAN A QUALIFIED ENGINEER, AS DANGEROUS VOLTAGES ARE PRESENT INSIDE. ANY UNAUTHORISED REPAIR MAY INVALIDATE YOUR WARRANTY.**

## INPUTS

All audio inputs and tape outputs are via gold plated RCA type phone connectors. All the phono sockets on your AMC amplifier are marked 'L' for left and 'R' for right channels, with the left channels nearer the top of the cabinet. Your connection leads will have a white or black plug for left, and a red plug for right.

## DISC INPUT

The input is suitable for moving magnet cartridges only. The plugs on your turntable lead should be connected to the disc input sockets on the rear panel of your amplifier.

To minimise hum, the turntable lead should be kept away from the mains wiring, and any separate turntable lead should be attached firmly to the earth terminal on the rear of the amplifier.

## CD INPUT

The CD input is suitable for use with any CD player. Connect your CD player to the amplifier using the phono sockets marked CD.

## VIDEO

The video input is suitable for most VCR's with an audio output. Connect your VCR using the phono socket marked 'Video'.

## DAT

The DAT input is suitable for use with any DAT player. Connect your DAT player using the phono socket marked DAT.

## TUNER INPUT

The tuner input is suitable for use with most AM/FM tuners. Connect your tuner to the amplifier using the phono sockets marked 'Tuner'.

## AUXILIARY INPUT

The auxiliary input is suitable for use with any extra source precessing a line level output (perhaps a second tuner or CD player, or an additional tape or video recorder wired for replay only).

## TAPE INPUT

This input is suitable for use with most cassette, reel to reel or video recorders.

Connect the 'record' leads of your tape recorder to the phono sockets marked 'Tape out' on the rear of your amplifier using phono/phono leads.

Connect the 'playback' leads of your tape recorder to the phono sockets marked 'Tape in' on the rear of your amplifier using phono/phono leads.

If your tape machine possesses DIN outputs, then DIN/phono leads, or a DIN/phono adaptor can be used. If you experience level matching problems when using DIN connectors, please consult your tape machine manufacturer.

## LOUDSPEAKER CONNECTIONS

The loudspeaker output terminals will accept 4mm (banana) plugs, pin connectors, spade connectors or bare wires.

The amplifier has speaker outputs that will match 4-8 Ohm speakers. Confirm the impedance of your speakers then connect as follows:

For 8 Ohm Speakers, connect the negative (black) speaker wire to the 'common' negative binding post.

Then connect the positive (red) cable to the 8 Ohm red binding post.

Repeat for the right speaker.

For 4 Ohm speakers, the negative (black) connections are the same as the 8 Ohm, but the positive or red connection must be to the 4 Ohm binding post. Your AMC amplifier is capable of generating high peak currents, so all connections must be checked to avoid inadvertent short circuits, and to ensure a good clean contact.

**UNDER NO CIRCUMSTANCES SHOULD BE OUTPUTS THE SHORTED TOGETHER.**

## FRONT PANEL CONTROLS

### POWER SWITCH

The amplifier is turned on by depressing the power switch. The small indicator above the switch will glow green. Before switching on, always set the volume control to minimum to avoid damage to your loudspeakers.

**Note:** Your AMC amplifier will play music almost immediately after being switched on. However, in common with other audiophile products, the internal circuits take some time to stabilise fully, and the best possible sound quality may not be obtained until the amplifier has had some time (possibly an hour or two) to warm up.

### INPUT SELECTION

The rotary input selector switch selects which input signal (Phono, CD, Tuner or Aux) is fed to the power amplifier. The selected signal is also fed to the 'Tape out' sockets for recording.

### TAPE MONITOR SWITCH

The Tape Monitor switch is generally left in the 'Source' position so that the programme selected by the input switch is routed to the loudspeakers/headphones. If the Tape Monitor switch is turned to the 'Tape' position, the signal from the tape recorder is routed to the loudspeakers/headphones.

If your tape machine is a three head type suitable for A/B monitoring, then turning the Tape Monitor switch to the 'Tape' position will allow full off-tape monitoring of the recorded signal to be carried out via the loudspeakers/headphones.

### VOLUME CONTROL

The Volume Control is of a split type and allows you to adjust the levels of the left and right channels for both loudspeakers independently. Normally, the two halves of the control knob rotate together as they are locked together by a friction clutch inside the volume control itself. However, by holding the rear part of the control firmly with the first finger and thumb of one hand, it is possible to alter the relative position of the two parts of the knob, and thus compensate for

level differences caused by the nature of the input signal or due to room acoustics.

### **TONE CONTROLS**

The tone controls on your AMC amplifier use low colouration high overload margin (higher than 50V RMS.) circuitry to ensure the minimum degradation of the music signal. They are designed to gradually modify the tonal emphasis of the music and to compensate for such problems as difficult room acoustics.

If required, the tone controls can be completely by-passed with a resultant increase in sound quality. To do this, simply turn the Direct/Phones switch to the 'Direct' position.

With the Direct/Phones switch in the 'Normal' position, the tone controls will cut their respective frequencies when turned anti-clockwise and boost them when turned clockwise. The flattest response is found when the controls are in the '12 o'clock' position. (DETENTED POSITION)

### **PHONES**

The headphone socket will accept any headphones fitted with a standard quarter inch (6.35mm) stereo jack plug. For private listening via headphones, the Direct/Phones switch should be set to 'Phones', thus cutting the output to your loudspeakers. In this position the tone controls remain active. The mute feature is also useful for situations where the output from your loudspeakers needs to be cut momentarily (eg for a phone call etc).

### **TAPE RECORDING**

All sources, Disc, CD, Tuner and Aux can be recorded via the tape connections. To record an input, select the required source and set your recorder to the record mode.

To record from one tape recorder to another, the playback recorder should be plugged into the Aux socket, and the recording machine into the Tape socket. The input selector switch should be set to 'Aux'. A recording can now be made in the normal way.

### **PLAYBACK**

Set the Tape Monitor switch to the 'Tape' position and your recorder to the playback mode.

### **CHECK LIST**

Should you have any difficulty in operating your amplifier, switch off and check the following before suspecting that a fault has developed:

#### **No power and LED not illuminated**

1. Check that all mains supplies, connections and fuses are good and that the power is switched on.

#### **Power on and LED illuminated but no output**

1. Check that the amplifier is connected to the desired input and that the correct input on the amplifier is selected.
2. Check that the loudspeakers are connected correctly to the power amplifier.
3. Check that the Direct/Phones switch is not set to 'Phones'.
4. Check that the Tape Monitor switch is not set to 'Tape'.

#### **Power on and LED illuminated but output from one speaker only**

1. Check that the left and right channels of the selected source are connected correctly and that the input wiring is not faulty. If in doubt, contact your dealer.
2. Check that one section of the volume control is not set to minimum.

#### **Loud hum heard through loudspeakers when disc is selected**

1. Check that the ground lead from the turntable (if fitted) is connected firmly to the ground terminal on the rear of the amplifier.
2. Check that the amplifier is correctly earthed via the mains lead.
3. Check that other transformers in the vicinity are not radiating into your amplifier.

# SPECIFICATIONS

Power output into 8/4 ohms ..... 30W  
With both channels driven

Rated T.H.D. 45Hz-20KHz ..... 1.0%

1KHz clipping power into 8/4 ohms ..... 36W

## Input sensitivity for 1W/30W into 8 ohms:

High level inputs ..... 34mV/180mV

Phono input ..... 0.5mV/2.7mV

## Input impedance:

High level inputs ..... 20K ohms/100pF

Phono input ..... 47K ohms/100pF

## Frequency response:

Tone bypass 20Hz-20KHz ..... +/- 0.5dB

Normal 20Hz-20KHz ..... +/- 1.0dB

High level inputs -3dB ..... 10Hz/80KHz

## Signal to noise ratio (ref. 1W/8 ohms):

High level inputs "A" WTD. .... 80dB

Phono input "A" WTD. .... 79dB

Separation 20Hz-20KHz ..... > 50dB

## Tone control range:

Bass at 50Hz ..... +/- 8dB

Treble at 10KHz ..... +/- 7dB

Overall feedback ..... 14dB

Dimensions (WxHxD) ..... 430x112x288mm

Net weight ..... 14Kg

Shipping weight ..... 15Kg

# SAFETY INSTRUCTION

## 1. READ INSTRUCTIONS

All the safety and operating instructions should be read before the appliance is operated.

## 2. RETAIN INSTRUCTIONS

The safety and operating instructions should be retained for future reference.

## 3. HEED WARNINGS

All warnings on the appliance 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 appliance should not be used near water—for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

## 6. CARTS AND STANDS

The appliance should be used only with a cart or stand that is recommended by the manufacturer.

### 6A.

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



## 7. WALL OR CEILING MOUNTING

This equipment is not designed for use mounted on a wall or a ceiling.

## 8. VENTILATION

The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or placed in a built-in installation, such as bookcase or cabinet that may impede the flow of air through the ventilation openings.

## 9. HEAT

The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

## 10. POWER SOURCES

The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

## 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 cords at plugs, convenience receptacles, and the point where they exit from the appliance.

## 12. CLEANING

The appliance should be cleaned only as recommended by the manufacturer.

## 13. NON USE PERIODS

The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

## 14. OBJECT AND LIQUID ENTRY

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

## 15. SERVICING

The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

## 16. DAMAGE REQUIRING SERVICE

The appliance should be serviced by qualified service personnel when:

- The power-supply cord or the plug has been damaged; or
- Objects have fallen, or liquid has been spilled into the appliance; or
- The appliance has been exposed to rain; or
- The appliance does not appear to operate normally or exhibits a marked change in performance; or
- The appliance has been dropped, or the enclosure damaged.

## 17. POWER LINES

### (APPLIES TO TUNER AND RECEIVERS ONLY)

An outdoor antenna should be located away from power lines.

## 18. OUTDOOR ANTENNA GROUNDING

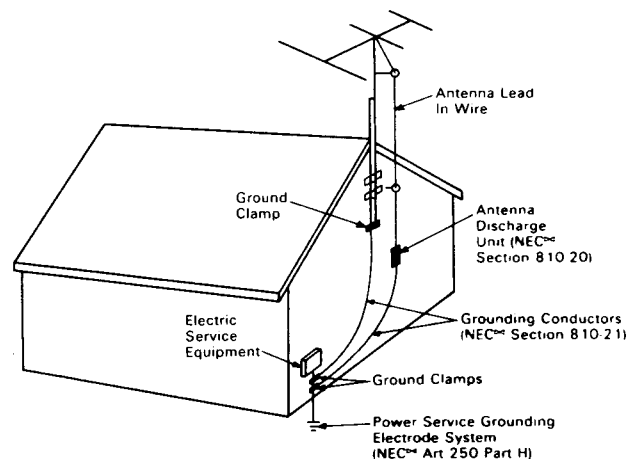
### (APPLIES TO TUNER AND RECEIVERS ONLY)

If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges.

Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure.

- Use No. 10 AWG (5.3 mm<sup>2</sup>) copper, No. 8 AWG (8.4mm<sup>2</sup>) aluminum, No. 17 AWG (1.0mm<sup>2</sup>) copper-clad steel or bronze wire, or larger, as a ground wire.
- Secure antenna lead-in and ground wires to house with stand-off insulators spaced from 4–6 feet (1.22–1.83 m) apart.
- Mount antenna discharge unit as close as possible to where lead-in enters house.
- Use jumper wire not smaller than No. 6 AWG (13.3 mm<sup>2</sup>) copper, or the equivalent, when a separate antenna-grounding electrode is used. See NEC Section 810-21(j).

Antenna Grounding According to the National Electrical Code



<sup>®</sup>National Electrical Code  
Available from Library, book  
stores, or National Fire Protection  
Association (Batterymarch Park,  
Quincy, MA 02269).

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