

MANUAL

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Wamp 280/380 Amplifier Heads – WP3–7 Preamp

- Congratulations on the purchase of your new WARWICK Wamp280/380 Head – WP3–7 preamplifier.
- Please read these instructions carefully before connecting up and using this unit.

● Once you have mastered the tips contained in this instruction book, you will soon be able to appreciate the qualities of your new Warwick amplifier. Please retain this manual in case you need to refer to it again in the future.

- Don't forget to send your **AMPLIFICATION PASSPORT** to the appropriate address!

SENSIBLE PRECAUTIONS

To ensure consistent and reliable performance from your Warwick amplifier, we recommend that you take the following precautions:

- **Never open the casing! You could get an electric shock. Leave any servicing to qualified professionals.**
- Avoid dust and excessive humidity, direct sunlight and high/low extremes of temperature.
- Do not subject this unit to excessive shocks.
- Always place this unit on a stable, level surface.
- Make sure that adequate ventilation is available. The unit should not be placed on soft surfaces (curtains, cushions etc). When building into a rack system, make sure that the ventilation slots are not covered.
- **Do not set up this equipment in the immediate vicinity of heaters, or electrical appliances which generate a lot of heat.**

- Internal components may only be replaced or cleaned by qualified service engineers.
- Make sure that no objects or liquids enter the unit through the ventilation slots.
- Have the unit examined by a qualified service engineer under the following circumstances:
 - If the mains cable or mains switch becomes damaged.
 - If objects or liquids are dropped inside the unit.
 - If the unit is used in conditions of excessive humidity.
 - If operation is intermittent or unusual.
 - If the unit has been dropped or its casing damaged.

PROTECTIVE CIRCUITS

The Warwick amplifier is fitted with a series of protective circuits, which guard against incorrect operation and provide effective protection for your amplifier.

Power-on delay

To protect the loudspeaker, the SPEAKER OUT is not activated until a few moments after this unit is first switched on.

Short-circuit protection

In the event of a short circuit, this facility prevents destruction of the output transistors by turning off the power supply to them immediately.

Direct current

This circuit continuously monitors the amplifier output to detect direct current, and protects the loudspeaker against overloading should an output transistor burn out.

High frequency oscillation

This safety circuit guards against damage which can be caused by frequencies over 20,000 Hz (feedback, etc) by turning off the power amplifier.

Thermal cut-out

This circuit protects the output transistors against damage from excessive temperatures, which can be caused by full-power usage in combination with either insufficient ventilation or direct sunlight.

Please note:

You can tell whether a fault has activated any of these protective circuits by looking at the **STANDBY LED**: it will **glow continuously**, even though you have not switched the unit to STANDBY mode.

PASSIVE input

Jack socket for connection to a bass guitar without an active equalisation circuit, or with a relatively low-power output signal.

ACTIVE input

Jack socket for connection to a bass guitar fitted with an active equalisation circuit, or with a high-power output signal.

GAIN control + 3 LED lights

Used to set the desired level of input signal:

- CLIP** LED on = signal level too high
- O.K.** LED on = signal level correct
- LOW** LED on = signal level too low.

LINEAR switch + LED

Switches the unit's equalisation section in or out: when pressed in, the signal is fed through the unit in a "linear" fashion, without going through the three-band equalisation, turbo switches or graphic equaliser.

The LED indicator appears **green** when the tone controls are not operational.

TURBO BASS switch + LED (no LED on 280 model)

Boosts the sub-bass frequency range between 20 and 40 Hz, in addition to any other tone settings.

The LED (when fitted) appears **red** when the Turbo Bass button is pressed in.

BASS control

Boosts or cuts the frequencies between 60 – 130 Hz: centred on 90 Hz.

MID LEVEL control

Boosts or cuts the volume of the frequency selected using the MID FREQ control.

MID FREQ control

Used to select a centre frequency between 175 and 2600 Hz which can then be cut or boosted using the MID LEVEL control.

TREBLE control

Boosts or cuts the frequencies centred between 2 – 8 kHz: centred on 4 kHz.

TURBO HIGH switch + LED (no LED on 280 models)

Boosts the upper treble frequency range around 8 – 20 kHz, in addition to any other tone settings.

The LED (when fitted) appears **red** when the Turbo High button is pressed in.

When **TURBO BASS** is selected, it increases the effectiveness of the BASS control!

Similarly, when **TURBO HIGH** is selected, it makes the TREBLE control more powerful.

DI PRE/POST EQ switch + LED (no LED on 280 models)

This determines whether the signal present at the DI output (used for connection to a mixing console) is PRE (i.e. linear) or POST (i.e. all tone settings and connected effects are operative).

The LED appears **yellow** when the equalisation is being fed to the DI Output.

GRAPH EQ switch + LED

Used to turn the graphic equaliser on and off.

The LED appears **yellow** when the EQ is operational – in other words, the settings on it are active as well as the 3-band EQ and the Turbo switch settings.

7 **GRAPH EQ** faders (280 model: 5 faders)

These are used to increase or decrease the amount of a particular frequency band which is present in the sound signal.

LEVEL fader

Used to set the effectiveness of the EQ fader settings as a whole (0 = inoperative; 10 = maximum).

MASTER control

Used to determinate the output level at the SPEAKER OUT (rear) and PHONES (front).

PHONES output (stereo)

Jack socket for connection to a pair of headphones.

STANDBY switch + LED

Used to turn the power amplifier, DI output und LINE out off (for intervals in playing, re-tuning an instrument or practising using headphones).

The **red** LED signifies that STANDBY mode is in operation.

POWER switch + LED

Used to turn the unit on and off.

ON = LED glows **green**.



If you ever are faced with a situation where no sound is coming out, read the **OPERATION** chapter carefully. In most instances you will discover the reason.

The **GRAPH EQ** switch takes precedence over the FOOTSWITCH setting. If the GRAPH EQ switch has been selected, you will not be able to turn the EQ off using the footswitch.

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OPERATION

- Ensure that you have a loudspeaker cabinet designed to accommodate bass frequencies connected to the **SPEAKER OUT** socket, and that it has a suitable power handling capacity (WP3–7; connect speaker to power amplifier's SPEAKER OUT).

 Check that the mains plug of the unit is plugged in.

- Set the **MASTER** control to the zero position.

- Use the **PASSIVE** socket to connect your bass if it does not have active tone controls; use the **ACTIVE** circuit if it does.

- Press the **LINEAR** button so that it stays in the "in" position (3-band equalisation section, Turbo and Graphic EQ switches are now switched off).

- Turn the unit on using the **POWER** switch: a green status LED will glow.

- Now turn the **STANDBY** switch off (the red LED will go out).

- Turn all the volume controls on your bass full on.

- Turn the **GAIN** control to a position where the **O.K.** LED illuminates all the time that you are playing. You have a optimum setting when the **CLIP** LED only flashes on briefly, if at all.

- Use the **MASTER** control to set the volume of the attached speaker cabinet to the desired level.

- Use the tone control(s) on your bass to create the desired sound.

EQUALISATION SECTION

With its three-band tone control section featuring parametric midrange, and its two extra switchable tone controls, this unit can produce a very wide variety effective sounds.

The additional facilities of graphic equaliser's faders make it easy to select precisely the sound you want.

All the parameters have been chosen to suit the characteristics of the human ear, and offer precise control over their entire ranges.

Tip: altering the tone settings can lead to a considerable difference in level. You may need to re-adjust the **GAIN** control to compensate for this.

Having two different, independent tone sections means that you can use the unit in a choice of modes, apart from the added variation provided by the tone settings on your instrument. The modes are:

1. **LINEAR=off/GRAPH EQ=off.** The sound you hear is only governed by the 3-band equalisation section.
2. **LINEAR=off/GRAPH EQ=on.** This allows you to combine the two tone control systems to create a single sound.
3. **LINEAR=on/GRAPH EQ=off.** The sound you hear is that of the instrument.

If you pre-select different settings for each of the tone control sections on the amplifier, you can then use a footswitch to "toggle" between two different sounds. For instance:

- Basic sound (3-band) – solo sound (Graphic EQ)
- Loud – quiet
- Basic sound – slap sound (more cutting)
- 4-string bass – 5-string bass
- Fretted bass – fretless bass, etc.

You will find some frequency diagrams on the back pages.

AC VOLTAGE terminal

Connection point for mains lead. Fitted with integral fuse holder (WP3-7: electronically protected).

SPEAKER OUT socket (not WP3-7)

1 x XLR/Switchcraft socket and one jack socket, used for connecting a loudspeaker enclosure.

LINE OUT socket (WP3-7: twin sockets)

Socket for connection to an external amplifier.

LINE IN socket (not WP3-7)

Socket from and to the internal power amplifier (or use with a drum computer, for instance).

TUNER socket

Socket for connecting a bass guitar tuner.

FOOTSWITCH socket

Socket for a remote footswitch. This can then be used to switch the graphic equaliser on and off (master control provided by the GRAPH EQ front panel switch).

EFF. SEND output

Jack socket (mono) for connection to the input of an effects unit.

LOW CUT switch (not 280)

Only allows frequencies over 200 Hz, where effects are most audible, out via the EFF. SEND socket.

GROUND LIFT switch

Electrically separates the earth lead from the unit's casing.

EFF. RETURN sockets and **LOW CUT** switch

The **LEFT/MONO** and **RIGHT** sockets are used to connect up a mono or stereo effects unit. If no second amplifier is connected to the LINE OUT socket, the stereo effects signal is summed together to make a mono signal inside the amplifier. In other words: if an additional external power amplifier and cabinet are connected, the left effects channel will stay with the amplifier, and the right channel will be fed to the LINE OUT socket. The unprocessed bass sound is retained at both sockets.

In addition, your Warwick WP3-7 and Wamp380 can be switched to operate in two different ways using the LOW CUT switch:

LOW CUT off = Insert mode

The effects unit is connected into the signal path. The intensity of the effect within the blended sound is controlled by the Mix or Balance control on the effects unit itself.

LOW CUT on (▶) = Parallel mode

The signal sent to the EFF. SEND is uncoupled and the incoming signal from the effects unit is then remixed with the unprocessed original signal.

DI OUT

An electronically balanced, controlled level signal for "direct injection" into a studio or sound reinforcement mixing console.

When using the WP3-7, the optimum sound can be obtained by connecting both DI sockets to the same mixer, then leaving the panorama controls on extreme left and right settings. The processed bass sound will then remain audible in the middle.

I M P O R T A N T

Controls

All units in the Warwick Amplification Series are designed using state-of-the-art knowledge of the physiology of the human ear. This means that all tone controls are finely tuned, and their operating centres have been determined according to what sounds best in practice, rather than purely according to theory.

In order to maximise the effectiveness of the individual equaliser parameters, the Master control has a very progressive action. Depending on the tone settings chosen, full volume will not be developed until positions 8 - 10.

Fuses

Only ever use fuses with an identical value to the original one. Fuses with higher values can destroy this equipment and will invalidate your guarantee.

EFFECT SEND/EFFECT RETURN

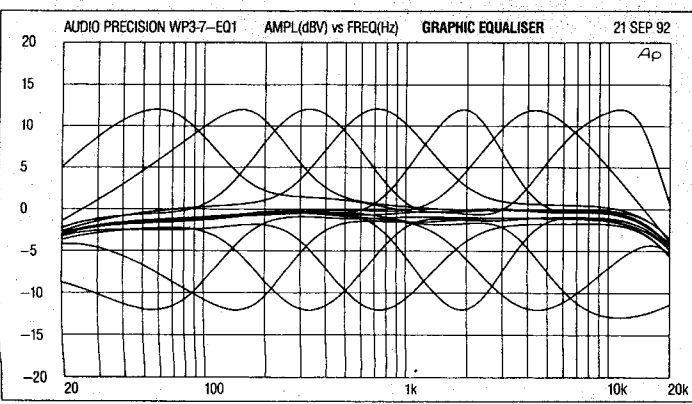
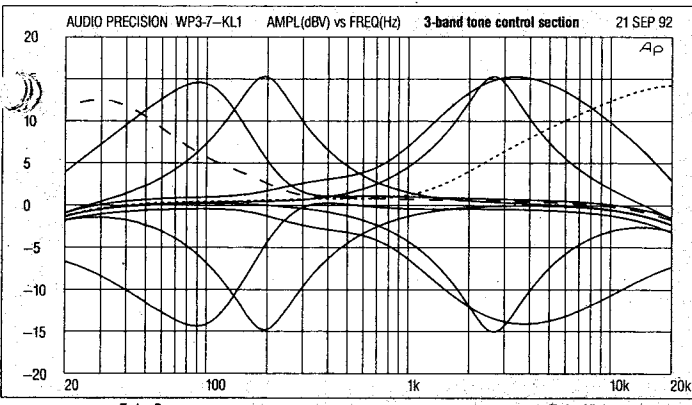
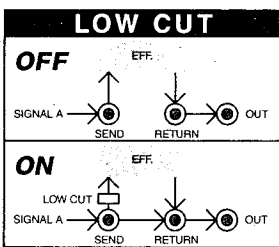
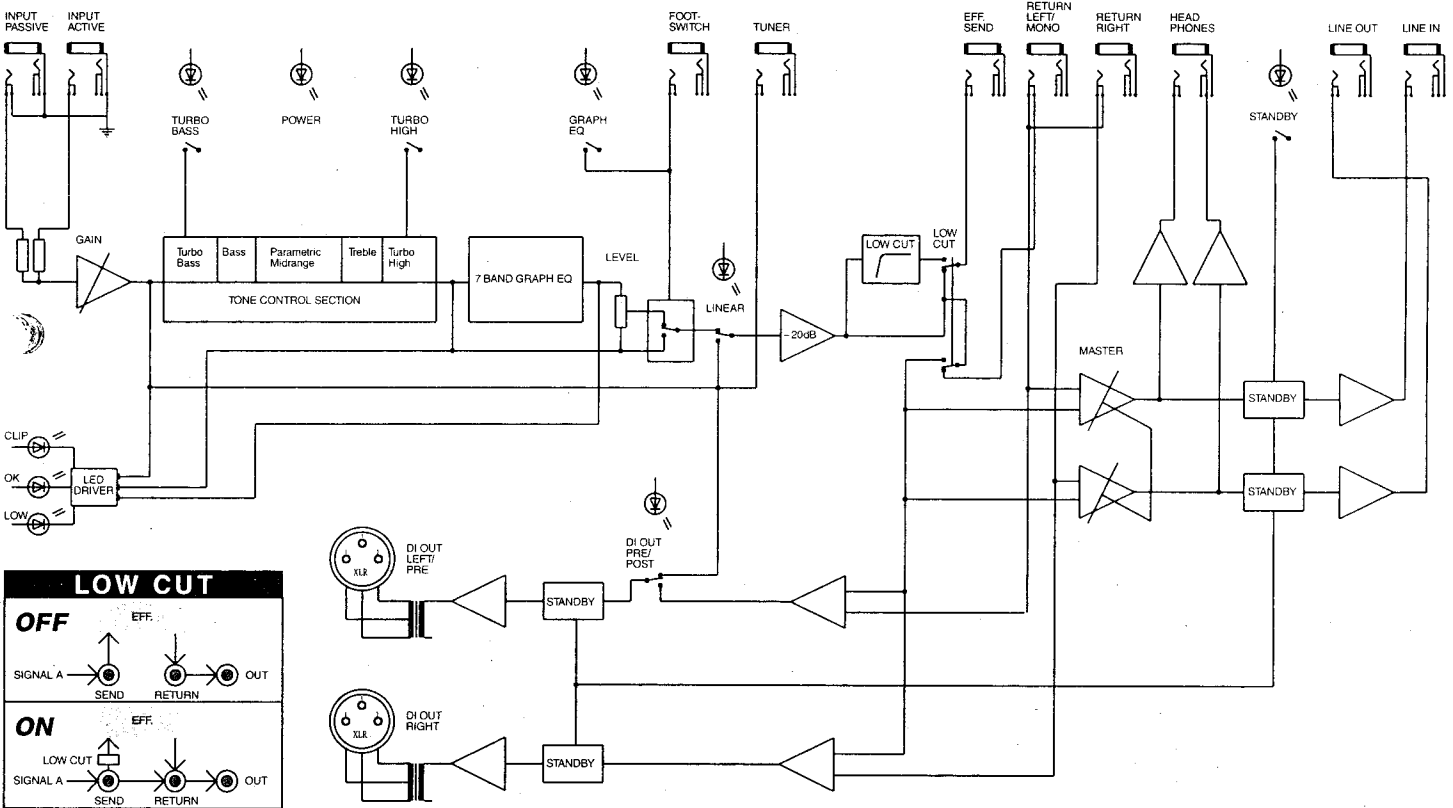
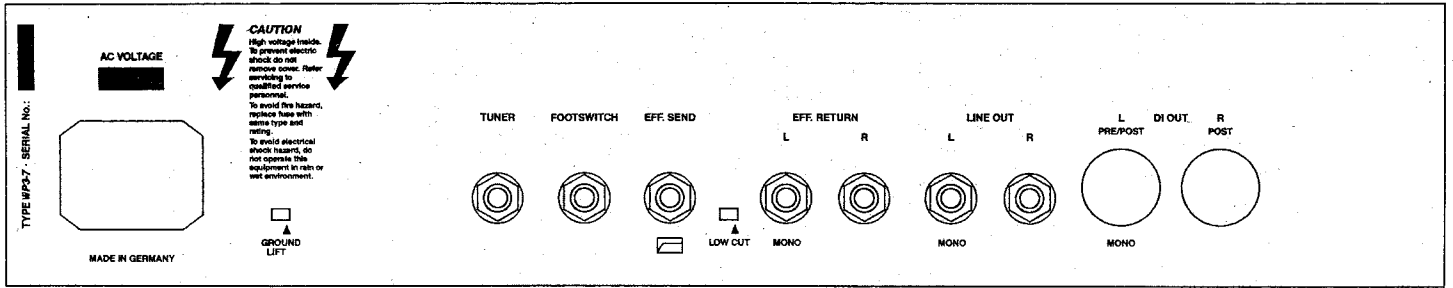
These sockets allow a separate line-level effects unit to be connected up, such as delay lines, reverb units, chorus, flanger etc. Consult the instruction manual of your effects unit for advice on getting the best results.

Please note: Compressors are not suitable for use in LOW CUT mode. When using compressors with the Wamp380 and WP3-7, connect any compressor between the LINE OUT and LINE IN sockets.

If using floor-standing effects units, only place these inbetween the instrument and the amplifier!

You will find an illustration of the unit's rear panel, a circuit diagram and technical data on the back pages of this manual.

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|---------------------|---|
| WP3-7 Preamp | |
| Inputs | active 20mV, passive 50mV |
| Preamp | Transistor active controlled |
| Protections | direct current (DC), short circuit, thermal cut-out, high frequency oscillation, power-on delay |
| Equaliser | 7-band graphic, EQ ± 14 dB with master fader, EQ switch |
| Headphones | 3-band tone control section ± 14 dB with parametric midrange controls |
| Direct out | Turbo lo Turbo hi switches |
| Effects loop | 200 ohms, stereo |
| Line | 0dB 600 ohms, XLR bal. with pre post EQ switch and ground lift |
| Output | 0dB send full range |
| Voltage | + low cut 200Hz 600 ohms return 10Kohms, L/mono + R |
| Weight | Line in 10Kohms |
| Dimensions | Tuner OUT 10 kohms |
| Accessories | A + B 600 ohms |
| | 110/120 Vac USA-Japan, 230/240 Vac Europe-Australia |
| | 5 Kg |
| | 19 1/2 RU/2 HE |
| | 483 W x 88 H x 300 D mm |
| | Footswitch |