



# UNI-PRE 5 KNOB

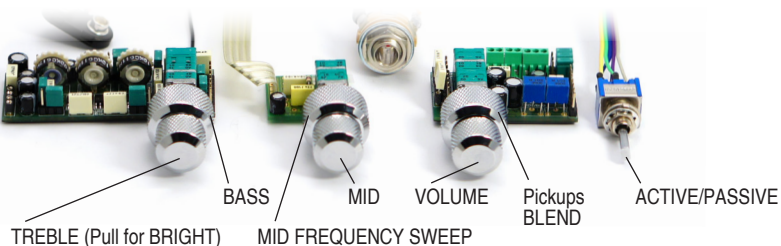
## Universal Active/Passive Bass Preamp System

The UNI-PRE is a new generation bass preamp system from East UK. It's a brand new modular design that sets new standards with unique features. Designed to fit virtually any bass with rear cavity electronics, the UNI-PRE is available in 3, 4 or 5 knob configurations as either 2 or 3 band EQ. Although it is designed as a complete system, the Volume/ Blend and EQ modules are also available individually for stand-alone use.

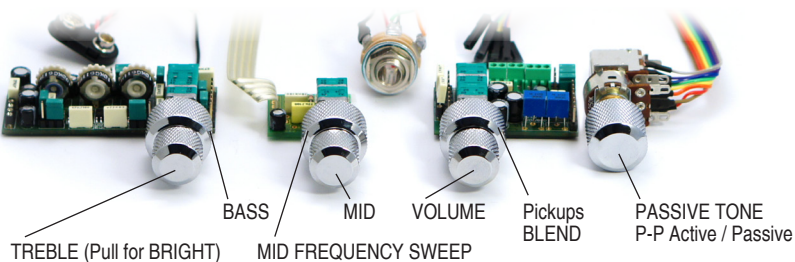
Its main components are the Volume/Blend and EQ modules. The Volume/Blend module has totally independent dual active and passive signal paths. In other words two volumes and two blends are controlled simultaneously with a conventional knob set, using custom pots. The EQ module allows internal voicing adjustment for the treble as well as the lower and upper bass frequencies for the bass control. This is to allow finely tuned focus on the most crucial parts of the bass spectrum.

Modular construction makes for easy installation, with simple plug connections between modules. External wiring, such as pickups and power, are simply connected using screw terminals.

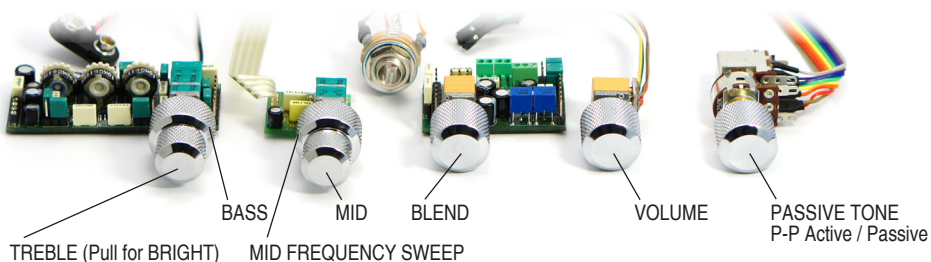
### • UNI-PRE 3 Knob



### • UNI-PRE 4 Knob



### • UNI-PRE 5 Knob



### Summary of features:

- Totally independent active and passive signal paths guarantee completely smooth blend when set to active.
- Custom designed pots allow optimal placement of all controls within active and passive signal paths.
- Class A FET input stages for great sound quality, with two gain trim preset adjusters, one for each pickup.
- Operational response of Bass Control can be set internally at both the lower and upper end of the bass spectrum.
- Treble Control with internally adjustable frequency voicing, plus Bright as a pull switch.
- Mid Control with Frequency Sweep.
- Overall response can be set as flat or with pre-shaper contour which adds some warmth and sheen.
- Modular concept allows for easy installation and replacement of parts, all with pluggable inter-connections.
- Screw terminals are used for all external connections such as pickups, power and grounding for easy installation.

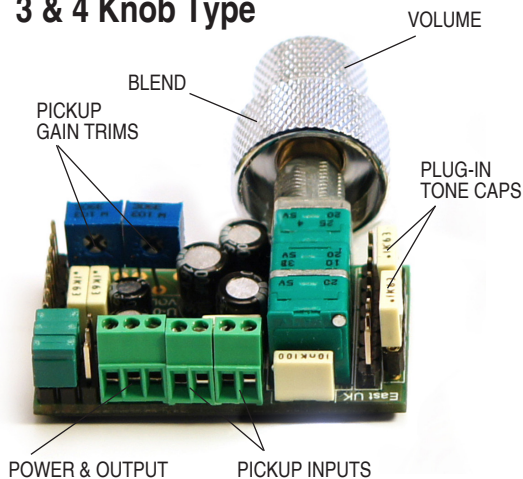


# UNI-PRE

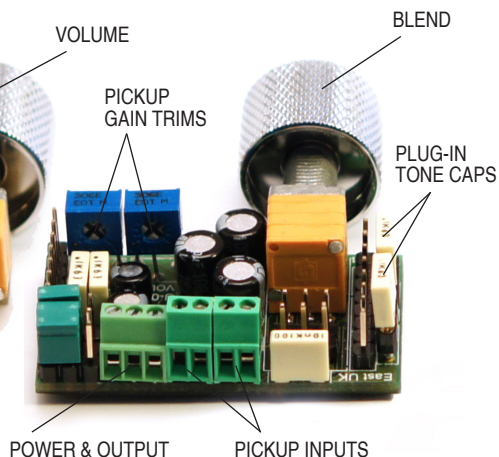
## Technical Details

### • VOLUME / BLEND CIRCUITS

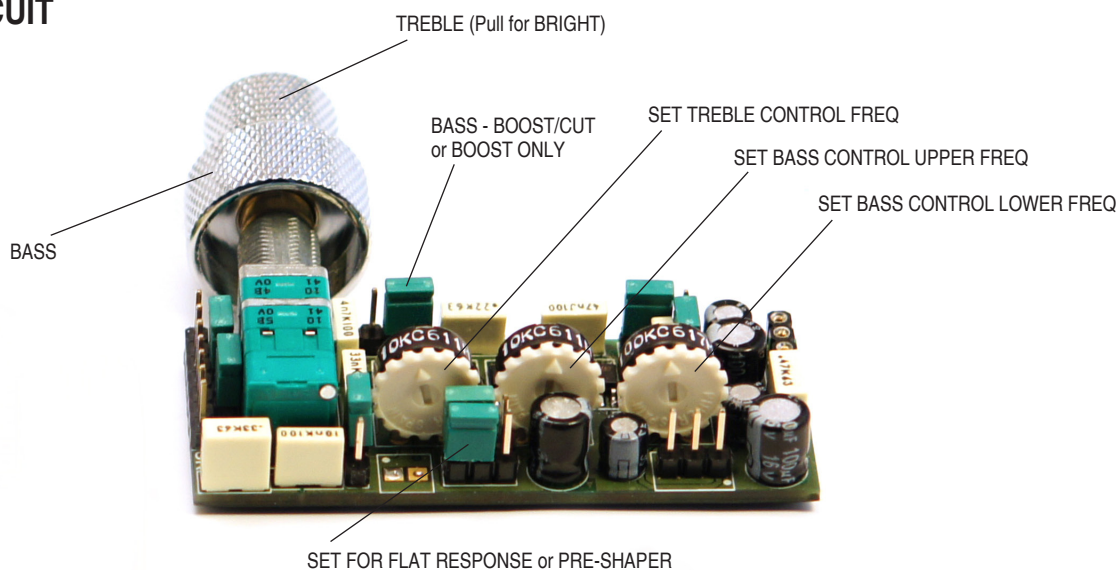
#### 3 & 4 Knob Type



#### 5 Knob Type



### • EQ CIRCUIT



### • BASIC RESPONSE, GAIN & EQ SPEC.

- **FLAT RESPONSE:** Neutral response setting.
- **PRE-SHAPE:** Gentle lift at the lower and higher frequencies, peaking +4dBs at 40Hz & 10kHz.
- **PICKUP GAIN:** Internal Trimmers 0-12dBs for each pickup in Active Mode.
- **BASS CONTROL:** +/- 18dBs Cut/Boost with internally adjustable 'bass window'.
- **BASS WINDOW:** Lower Frequency Filter 20-80Hz & Higher Frequency Filter 40-200Hz.
- **MID CONTROL:** +/- 14dBs Cut/Boost with Frequency Sweep 100Hz - 2.5kHz.
- **TREBLE CONTROL:** +/- 18dBs with internally Shelf Frequency 1kHz - 7.5kHz, Pull for Bright peaking at 10kHz.



# UNI-PRE

## Unique Dual Active & Passive Paths Scheme

- **VOLUME / BLEND FEATURES**

The UNI-PRE has a unique dual path Volume/Blend system where the active and passive paths are completely independent in order to optimise the control of each mode.

Many systems have a passive volume and blend which feeds an active circuit. Although this can often be satisfactory, it does rely on the pickups and pots being a good match, but not always the case. Even so, many players are keen to retain passive for the unique differences in terms of sound compared to an active signal.

But in some cases, a blend pot may perform more like a three way switch. One method to make sure the blend is always smooth is to make it active, as it is with a number of units we already produce, such as our J-Retro and others. Systems which rely only on an active blend, either do not have a passive mode or have no way to blend the pickups in the passive mode.

So our solution in the UNI-PRE is to include separate active and passive paths, but controlled from the same knobs. Since our system needs to work with many different pickups, we have included a complete passive volume and blend with a totally separate active blend and volume too, but without increasing the number of knobs.

This approach guarantees a totally smooth blend in active. Since the pickups, each with its own input buffer/amplifier, are isolated from each other, it will work with non-matched pickups too. This active path, with the addition of Gain Trim Adjusters - one per pickup, allows pickups of different types with differing outputs, to be level matched.

This dual active/passive signal path is achieved with the use of our specially designed custom pots.



# UNI-PRE EQ

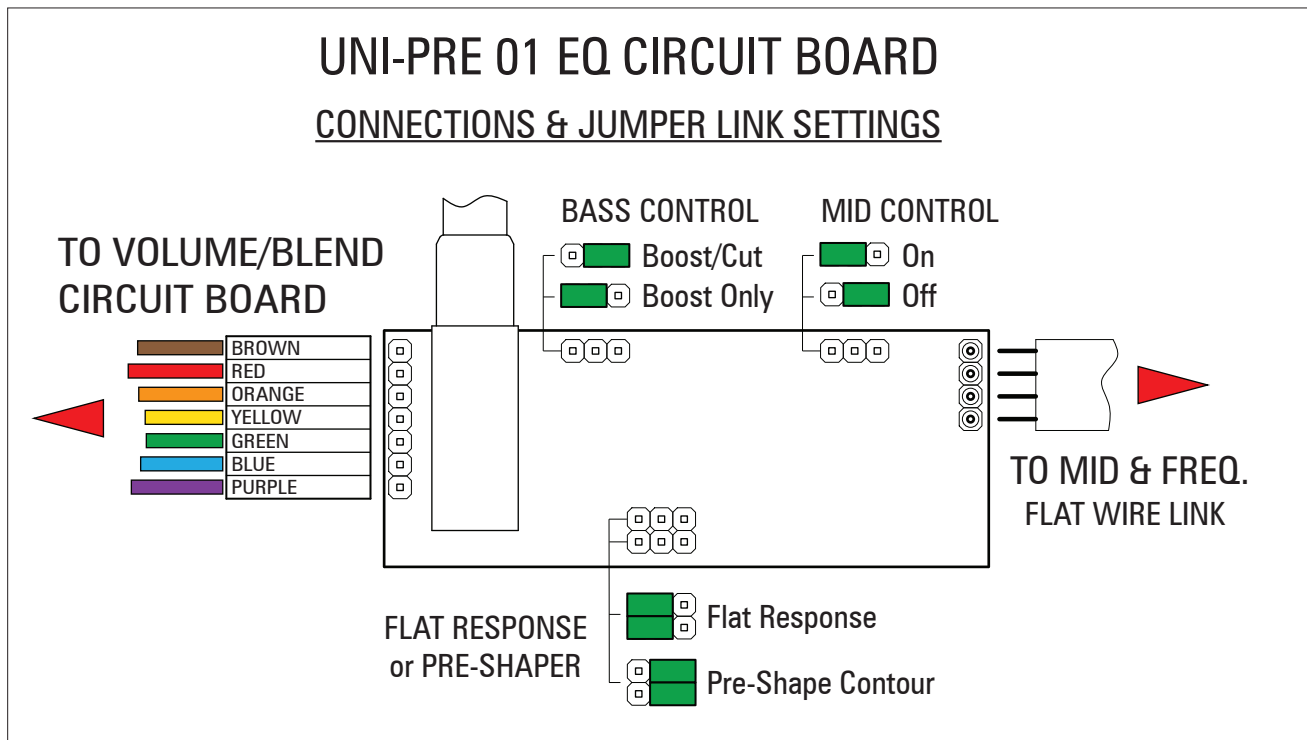
This Section Applies the 3, 4 & 5 Knob Types

## EQ CIRCUIT BOARD

The UNI-PRE EQ has a number of unique features and the factory default settings are as follows:

- **Flat Response / Pre-Shaper** - set to **Flat Response**.
- Bass Control: **Boost & Cut / Boost Only** - set to **Boost & Cut**.
- Bass Control: Lower Window Frequency - **20Hz**.
- Bass Control: Higher Window Frequency - **60Hz**.
- Mid Control: **On / Off** - set to **On**.
- Treble Control: Shelf Frequency - **4kHz**.

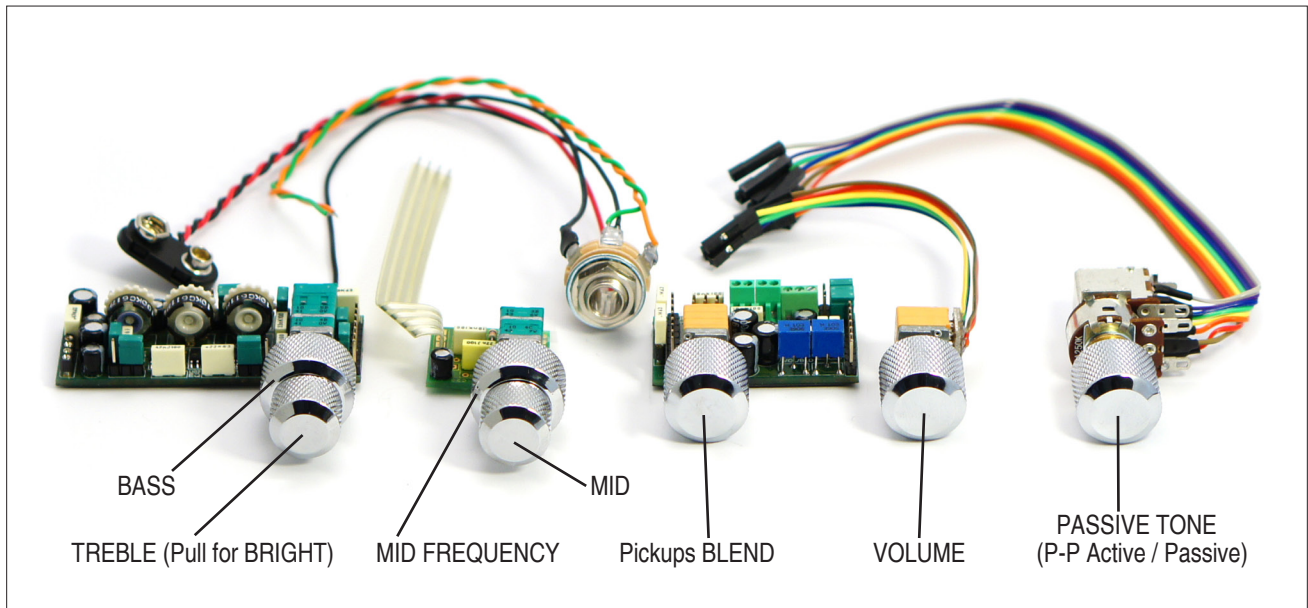
## UNI-PRE 01 EQ CIRCUIT BOARD CONNECTIONS & JUMPER LINK SETTINGS





# UNI-PRE

## 5 Knob Controls & Function



NOTE: With regard to knob rotation:

CW = Turning a knob up towards maximum or clockwise

ACW = Backing a knob off, turning it anti-clockwise or counter-clockwise

- **VOLUME KNOB**

Sets the output level for both active and passive paths.

- **BLEND KNOB**

Sets both the active and passive blend mix for the pickups: ACW for bridge pickup alone and CW for the neck pickup alone. A click midway gives an equal mix of both pickups if they are balanced. Internal Gain Trims, 0-12dBs, allow the pickup levels to be adjusted and/or matched.

- **BASS & TREBLE STACK KNOB**

- **BASS**

Bass Boost/Cut or Boost only - set according to Jumper Link on circuit board. Controls the level of low end content according to the 'Bass Window' settings on the on the circuit board, described later. A centre click is included.

- **TREBLE (Pull for BRIGHT)**

Boost/Cut knob, controls the higher frequency spectrum according to the setting of the internal Treble Shelf Frequency adjustment. Pull for Bright, adds 'high end sizzle' sheen. A neutral setting is provided with a centre click.

- **MID & FREQUENCY STACK KNOB**

- **MID**

Controls the level of Mid Boost/Cut at frequencies according to the setting of the Mid Frequency knob. A neutral setting is provided with a centre click.



# UNI-PRE

## 5 Knob, Controls, Function & Installation

- **PASSIVE TONE**

- **TONE ROLL-OFF**

Set CW for no effect. Adjust ACW in order to mellow the treble and fully backed off for the 'darkest' sound.

- **PUSH-PULL Switch**

Pull for the Passive Signal path which consists of the Volume, Blend and Passive Tone. Push in for the full Active Signal path.

- **POWER**

The power is switched on automatically when a **MONO JACK** is plugged into the Output Jack Socket.

- **INSTALLATION**

- **GENERAL**

The UNI-PRE is normally shipped with all modules and wiring connected apart from the Mid Control. Once the Mid Control is plugged in, and a signal source is present at the inputs, a battery has been connected, the jack is feeding a rig, there should be sound.

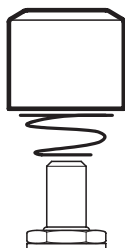
- **RECOMMENDATION**

Our recommendation is that the preamp is given a brief check straight out of the box. In other words, prior to installation, where modules may need to be disconnected and reconnected or a different jack wired in, connect a pickup to the inputs via the screw terminals, snap on a battery, and connect a jack lead to a rig to check for sound. Confirming the system is functional gives confidence and if there are any issues during installation, since the preamp worked out of the box, it will be easier to diagnose any possible ensuing issues.

- **LAYOUT & CONTROLS**

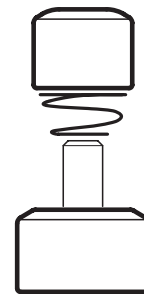
It is important to decide upon a suitable layout in terms of the control positions and that all modules and parts will fit comfortably in the control cavity, make sure there is enough depth. If the UNI-PRE is replacing another system it is important to make sure the holes are a suitable diameter for the pot threads - 7mm for single knobs and 9mm for dual knobs, plus clearance. Our 7mm pots are supplied with rubber spacer rings, in case they will be fitted in larger holes.

### Fit Spring Under Each Single & Upper Knob



A fine spring is provided for each single & upper knob, in order to maintain electrical contact with the knob.

Fit on pot shaft with the larger coil upwards, then fit and tighten the knob, making sure it turns freely.



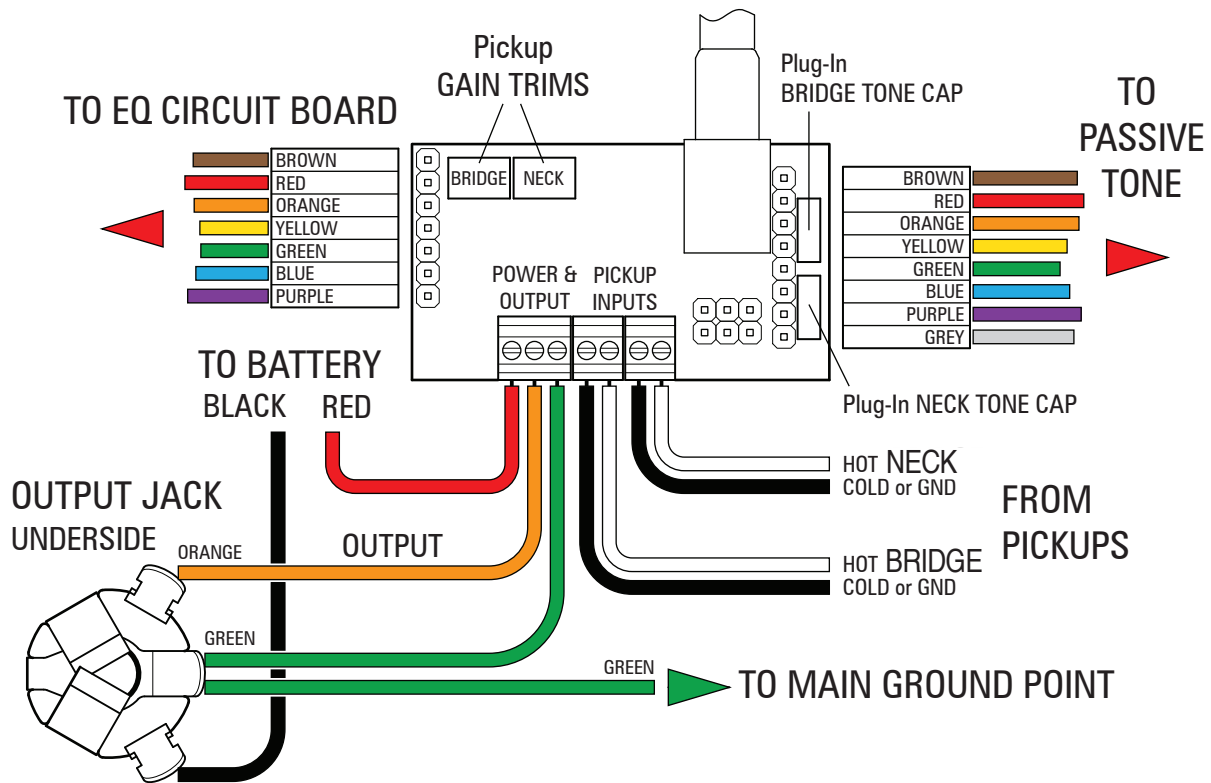


# UNI-PRE

## 5 Knob Installation

### UNI-PRE 01 5 KNOB BLEND CIRCUIT BOARD

#### CONNECTIONS & SETTINGS



#### **GROUNDING IN GENERAL - *IMPORTANT!***

- \* All pots shafts need to be substantially electrically grounded.
- \* This is best achieved using adhesive backed copper foil on the internal face the pots are mounted to.
- \* Conductive paint is fine for screening purposes, but DO NOT RELY ON IT to ground the UNI-PRE pots.
- \* Afix an appropriate peice of adhesive copper foil all over the area the pots will be mounted against.
- \* Solder the GREEN wire from the Jack Ground tag to the copper foil as a 'star' screening point.
- \* Solder any other ground wires, such as the bridge, pickup cavity screens, close to the star point.

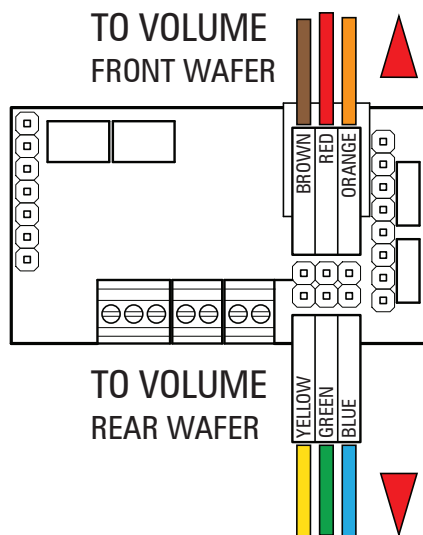


# UNI-PRE

## 5 Knob Installation Cont.

### UNI-PRE 01 5 KNOB VOLUME CONTROL

#### CONNECTIONS TO BLEND CIRCUIT BOARD



#### • **VOLUME CONTROL**

The UNI-PRE Volume Control for the 5 Knob version has 2 sets of 3 plug-in wire connectors to the Pan circuit board. The connection details are illustrated in the following diagram.

#### **GUARANTEE**

- Your East product is guaranteed to be free from defects in materials and workmanship for a period of one year from the date of original purchase.
- If during the guarantee period your product becomes faulty due to defective materials or workmanship, then the unit will be repaired or replaced without charge for parts or labour at the discretion of EastUK, according to the conditions below.

#### **CONDITIONS**

- The original sales invoice or receipt indicating the date of purchase and sales outlet is presented together with the faulty unit.
- The unit was installed competently consistent with the instructions supplied.

#### **WHAT IS NOT COVERED**

- Damage due to accident or improper handling, installation or operation.
- Defects caused by the instrument or system to which the unit has been installed.
- Damage resulting from repair of the unit carried out by non-authorized service personnel.
- The costs of transport or shipping costs relating directly or indirectly to the guarantee of this product.