



Line Signal PRE-AMPLIFIER

PRE V630



USER'S MANUAL

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Cordial thanks for your decision in favour of a

VIOLECTRIC product !

VIOLECTRIC is a trademark and product line of Lake People electronic GmbH. Lake People electronic GmbH develops, manufactures and distributes products in the professional range, for broadcast, television, airports, exhibition halls, festival venues, theatres, large-scale installations, private studios and more. In the private sector as well, Lake People products become increasingly popular due to their outstanding quality.

The **VIOLECTRIC** trademark and product line is specially intended to supply the Hi-Fi and High-End market with its specific requirements.

Who develops **VIOLECTRIC equipment ?**

VIOLECTRIC devices are exclusively developed in Germany by the engineers of Lake People electronic GmbH. In doing so, the team of developers can draw on twenty years of experience and countless products for the pro-audio domain.

Among others, the first German-made 20-bit A/D and D/A converters were developed by Lake People in the early nineties of the past century.

Who manufactures **VIOLECTRIC equipment ?**

VIOLECTRIC devices are exclusively manufactured in Germany by Lake People electronic GmbH or contractors in the company's vicinity.

Lake People - and by association **VIOLECTRIC** - put high emphasis on domestic manufacturing. As well, all component suppliers are chosen in order to achieve the main part of added value inland.

How do **VIOLECTRIC** devices get to the customer ?

VIOLECTRIC devices can be obtained from respective specialist suppliers. If there is none such accessible regionally, the customer is supported by transregional distribution partners (google may help...) and, of course, by Lake People electronic GmbH themselves.

... and if it doesn't work like it should ?

VIOLECTRIC devices are covered by a 24-month warranty. In case of any malfunction during this period, they can be shipped to the manufacturer directly. Of course, the client will benefit from **VIOLECTRIC**'s and Lake People's full technical support even when warranty has expired. Any technical questions or need for advice is welcome.



is a subsidiary of



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General Safety Instructions

WARNING

For your protection, please read the following:

Water, Liquids, Moisture:

This appliance should not be used near water or other sources of liquids. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

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.

Grounding:


Care should be taken that this appliance is operated with proper grounding only.

Power Cord:

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.

This unit is equipped with a 3-pole mains cable with German 3-pin mains plug. In some countries this unit must be operated with a mains adaptor, supplied by the owner.

Please refer to the table below to connect a mains plug:

OVERVIEW: POWER CORD FUNCTION AND COLORS			
CONDUCTOR		COLOR	Alternativ
L	LIVE	BROWN	BLACK
N	NEUTRAL	BLUE	WHITE
E 	PROTECTIVE EARTH	GREEN+YELLOW	GREEN

U.K. Mains Plug Warning:

A moulded mains plug that has been cut off from the cord is unsafe. Discard the mains plug at a suitable disposal facility.

NEVER UNDER ANY CIRCUMSTANCES SHOULD YOU INSERT A DAMAGED OR CUT MAINS PLUG INTO A 13 AMP POWER SOCKET. Do not use the mains plug without the fuse cover in place. Replacement fuse covers can be obtained from your local retailer. Replacement fuses are 13 amps and **MUST** be ASTA approved to BS 1362.

Mains Fuse:

The mains fuse of this appliance is soldered in place and accessible from the inside only!!

A blown fuse may indicate an internal problem and should be replaced during qualified servicing or repair work !!

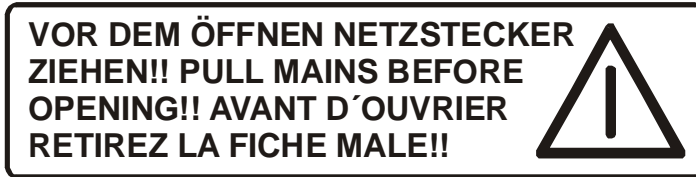
Switchable Power Supply:

Connect this unit to the power source indicated on the equipment rear panel only to ensure safe operation !!

This unit is provided with an internally settable mains supply for 115 / 230 V AC.

Service / Repair:

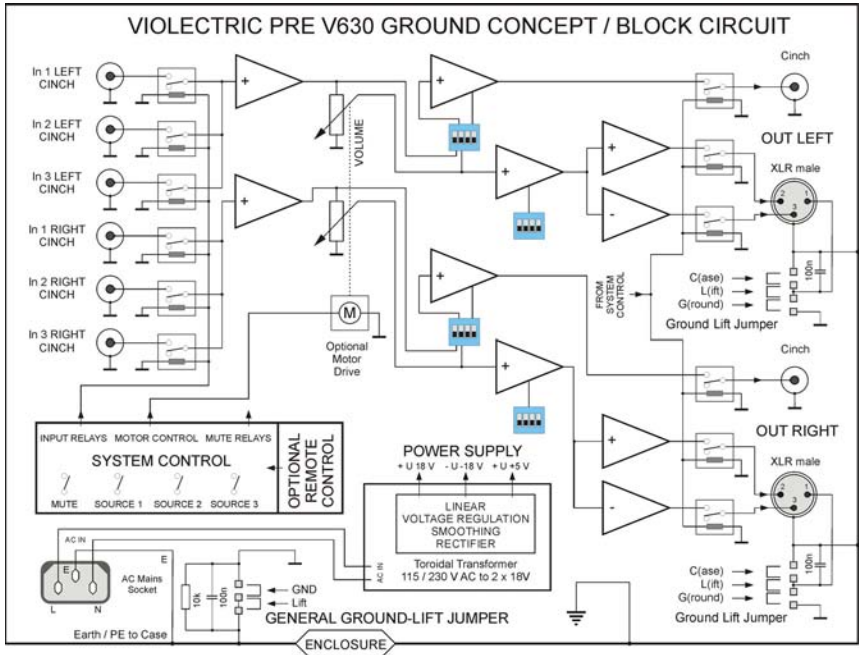
To reduce the risk of fire or electric shock, the user should not attempt to service the appliance beyond the measures described in the operating manual. All other servicing or repair should be referred to qualified personnel !!

**Electromagnetic Compatibility**

This unit conforms to the Product Specifications noted as **Declaration of Conformity** at the end of this manual. Operation is subject to the following conditions:

- this device may not cause harmful interferences
- this device must accept any interference received, including interference that may cause undesired operation
- this device must not be operated within significant electromagnetic field

The Earth / Grounding Concept



**General GROUND-LIFT Jumper (accessible from the inside.
Mind the SECURITY INSTRUCTIONS !!):**

Ex-works this jumper is set to the **LIFT** position.

The internal ground potential is "lifted" by means of this jumper.

As a result, the interconnection for DC voltages and lower frequencies (< 150 Hz) will be cut. Higher frequencies will be bled off to earth potential through the RC filter. The LIFT position is helpful in case of hum or jitter caused by different ground/earth potentials.

Of course full electrical protection is guaranteed as the case is always connected to ground/earth potential !

See page 18 "Technical Appendix" for details.

Unfortunately there is no general recommendation how to solve hum and jitter problems - or even minimize them. The best way to succeed is to check different options !! In case of balanced cables, it should always been verified if the shield of the cable is connected to the shell of the XLR connector. The shell is ALWAYS connected to earth potential when the connector is inserted !!

Concerning ANALOG inputs and outputs, the relationship between ground and earth may be modified. Electrical safety is always ensured, since the earth conductor is permanently connected to the enclosure !!

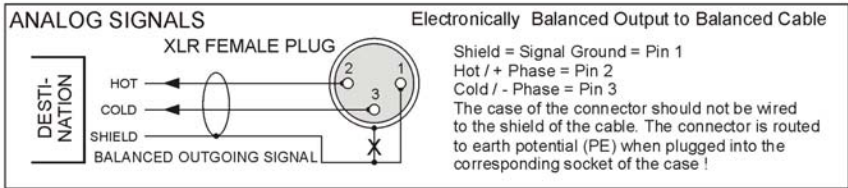
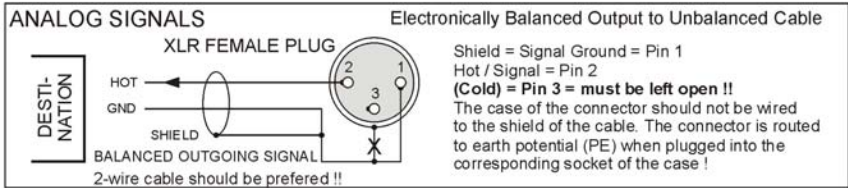
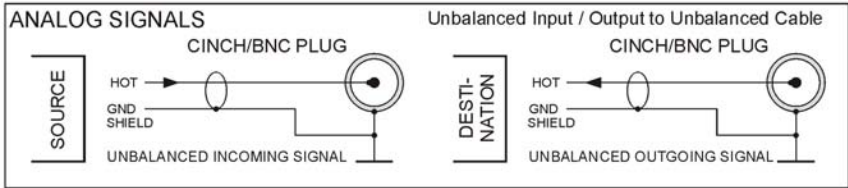
XLR GROUD-LIFT Jumper (accessible from the inside.

Mind the SECURITY INSTRUCTIONS !!):

- G(ROUND):** Ex-works all jumpers are set to "G" (ground) position.
Pin 1 is connected to the internal ground reference.
High frequency interference is deflected to the case via a 100 nF capacitor.
- L(IFT):** The interconnection between Pin 1 and ground is open.
High frequency interference is deflected to the case via a 100 nF capacitor. This jumper position is specifically useful if the unit is equipped with transformers !!
- C(ASE):** Pin 1 is connected to the case, the 100 nF capacitor is bridged. This jumper position may be varied together with the **General GROUND-LIFT jumper**.

**Please note that with jumpers not in the ex-works position
EMC emission might occur,
for which the user is responsible only !**

Connection / Connectors for Analog Signals



GENERAL

The PRE V630 is a high-quality, two-channel preamplifier for line level signals. It offers 3 unbalanced stereo inputs, a high performance volume control and balanced as well as unbalanced stereo outputs.

The maximum output level can be adapted internally in many ways, additionally the unbalanced output can be set for pre- or post fader operation.

Due to the professional circuitry set-up of PRE V630, it offers extraordinarily low noise figures and extreme bandwidth and lowest crosstalk.

The input selection, mute and the motorized potentiometer can be operated via the optional remote control.

Features:

- Three unbalanced stereo inputs via gold plated cinch connectors
- Mute switchable
- Independent-channel design
- High-quality MKP capacitors in the signal path
- 0.1 and 1% metal film resistors throughout the unit
- High Quality OpAmps in the signal path
- ALPS RK27 High-Grade volume control
- unbalanced stereo output via gold plated Cinch connectors
- unbalanced output switchable to pre- or post fader operation
- balanced outputs via 2 x 3-pin XLR, from Neutrik, gold plated
- all output levels internally adjustable
- Hum free toroidal transformer
- Precise line-regulators Regler in the power supply
- Switchable Ground-Lift
- Rugged aluminium case with Nextel coating
- Solid, laser-engraved aluminium front panel

THE CASE

The PRE V630's case as well as the front/rear panels are made of solid aluminium. This choice of material ensures high mechanical stability and resistance.

EARTH AND GROUND

The PRE V630's case is grounded. Internal reference ground is bridged to protective earth by means of a jumper. The jumper is set to the 'LIFT' position (**see also: page 7 "Earth/Ground concept" and page 18 "Technical Appendix"**).

POWER SUPPLY

Mains power is provided via a three-pin IEC/CEE socket and mating "cold-appliance" mains cord with country dependend plug. The device is normally set to 230V mains, whereas the actual voltage may vary between 190 and 250 volts for flawless operation.

The US and Japan version comes with a US style mains cord and the unit is set to 115 V mains. Here the AC voltage may vary between 85 and 125 volt for flawless operation.

A toroidal transformer and analog line regulators are providing the internal operating voltages of +/-18 V approx.

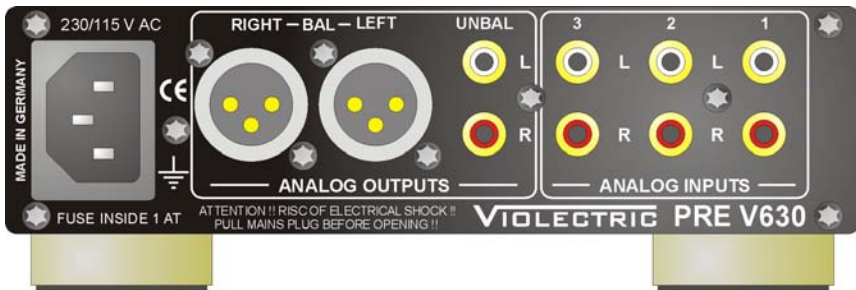
MAINS FUSE

The 0.25A time-lag fuse is soldered in place on the circuit board. In case, it must be replaced with a fuse of the same type only.

CAUTION !!

MIND THE SAFETY INSTRUCTIONS:

A blown fuse indicates an internal fault and should be replaced during qualified repair or servicing only !!



UNBALANCED INPUTS

For the use with unbalanced signals, gold plated cinch sockets are provided. They are labelled in the field "ANALOG INPUTS" as "L/R" and "1 / 2 / 3". Here, unbalanced sources with a level of up to +24 dBu may be connected. The input impedance is 50 kOhm.



THE POWER SWITCH

The unit is activated by means of the "POWER"- switch. Power-on status is indicated by the blue LED below the switch.

POWER-ON

During power-on the yellow LED from the last activated input is flashing and the outputs are muted.

The power-on procedure lasts for about 7 seconds



INPUT SELECTION

The activating of an input is internally made by means of relays. This process is controlled by the front mounted buttons labeled "SOURCE SELECT 1 / 2 / 3 ". The activated input is shown by the corresponding yellow LED, marked with "1 / 2 / 3".

As an option, the input selection can also be accomplished by the optional remote control.

THE MUTE BUTTON

The output signal is fully cut by means of the "MUTE" button. When engaged, the red "MUTE" LED will light up.

As an option, the mute can also be executed by the remote control.

VOLUME CONTROL

The "VOLUME" control sets the desired output volumes for left and right channel simultaneously.

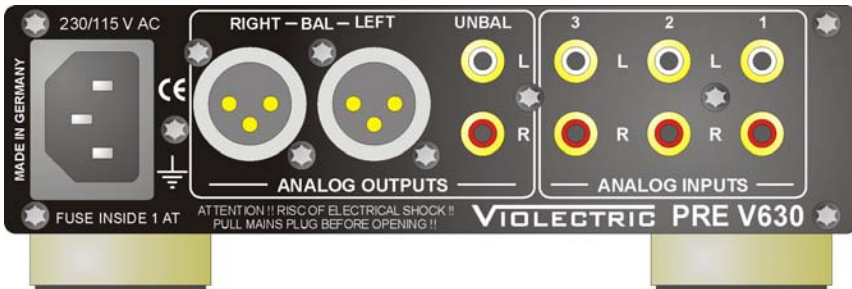
As an option, the volume may also be remote controlled.

In this case the volume potentiometer is driven by means of a back-gear motor.

Of course the volume may be controlled manually at any time – even when the motor is engaged.

THE SIGNAL ROUTING (see also page 7)

After the activation of an input by the dedicated relais, the signal is fed to a buffer amp to achieve a low impedance state. Next the signal is routed to the volume control which his again followed by a buffer amp. At last the signal reaches the output drivers which may be set to different output levels.



THE UNBALANCED OUTPUTS

are situated on the rear panel of PRE V630 in the field "ANALOG

OUTPUTS " and denoted as "UNBAL L/R". They are equipped with gold plated cinch sockets.

As a special feature the unbalanced outputs may be set "pre fader" or "post fader".

"Post Fader" means, that the volume control is affecting the signal level of the unbalanced outputs.

„PRE FADER“ means, that the buffered activated input signal is routed unaffected to the unbalanced outputs.








This setting may be useful when the unbalanced outputs are connected to an appliance with its own volume control like a headphone amplifier.

Settings Unbalanced left/right		
	pre fader 1 = On	
	post fader 2 = On	ex Works
	Gain 0 dB 3+4 = Off	ex Works
	Gain -6 dB 3 = On	
	Gain +6 dB 4 = On	

Ex works the unbalanced outputs are set to “Post Fader” state. The output level from the unbalanced outputs may be set to $-6 / 0 / +6$ dB by means of the dedicated dip switches. This ratios is relative to the input signal and fully open volume control. Ex works the gain of the unbalanced outputs is set to 0 dB.

See also page 7 (block diagram) and page 18 (technical Appendix)

THE BALANCED OUTPUTS

Verstärkungseinstellungen balanced left/right		
	-9 dB 1 = On	
	-6 dB 1+3 = On	
	-3 dB 3 = On	
	+/-0 dB All Off	ab Werk
	+3 dB 3 = On	
	+6 dB 2+4 = On	
	+9 dB 4 = On	

are situated on the rear panel of PRE V630 in the field "ANALOG OUTPUTS" and denoted as "RIGHT – BAL - LEFT". They are equipped with gold plated XLR sockets.

The balanced outputs always offer 6 dB more level than the unbalanced outputs. The output level from the balanced outputs may be set to $-9/-6/-3/0/+3/+6/+9$ dB signal gain.

This ratios is relative to the input signal and fully open volume control. Ex works the gain of the balanced outputs is set to 0 dB.

See also page 7 (block diagram) and page 18 (technical Appendix)

Attention:

All other maybe possible dip-switch settings should be avoided !

DISMANTLING / JUMPER SETTINGS

In order to change any DIP switch or jumper settings inside the PRE V630, its case must be opened. For this purpose, a TORX screwdriver T10 or 3mm allen key is required, and you should - by all means -

PULL THE MAINS PLUG !!!

after which any setting procedures can be effected without risk.

Disassembly

1. remove the two upper screws on the front panel
2. loosen the two lower screws on the front panel by 2 to 3 turns
3. remove the two upper screws on the rear panel
4. lift off the lid to gain access to the switches/jumpers
5. reassemble the unit in reverse order.

DISPOSAL



Disposal of Old Electrical & Electronic Equipment
(Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment.

By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources.

For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

TECHNICAL DATA PRE V630

All measurements RMS unwt'd., 20 Hz - 20 kHz if not otherwise noted




Inputs:	3 x 2 Cinch, unbalanced
Max. input voltage:	+24 dBu
Input impedance:	50 kOhm
Gain (unbal. output):	-6 / 0 / +6 dB
Gain (bal. output):	-9 / -6 / -3 / 0 / +3 / +6 / +9 dB relativ -3 / 0 / +3 / +6 / +9 / +12 / +15 dB absolut
Volume control Ch. mismatch:	< +/- 0,2 dB
Frequency Range (-0,5 dB):	< 4 Hz ... 80 kHz
Signal-to-noise ratio (unwt'd):	-109 dB for 0dBu on the input
Signal-to-noise ratio (wt'd):	-112 dB for 0dBu on the input
Max. dynamic Range	135 dB

THD+N / 20 Hz – 20 kHz		bal. Out	unbal. Out
+6 dBu in 10 kOhm	1 kHz	-100 dB	-101 dB
	7 kHz	-100 dB	-101 dB
+15 dBu in 10 kOhm	1 kHz	-101 dB	-101 dB
	7 kHz	-100 dB	-94 dB

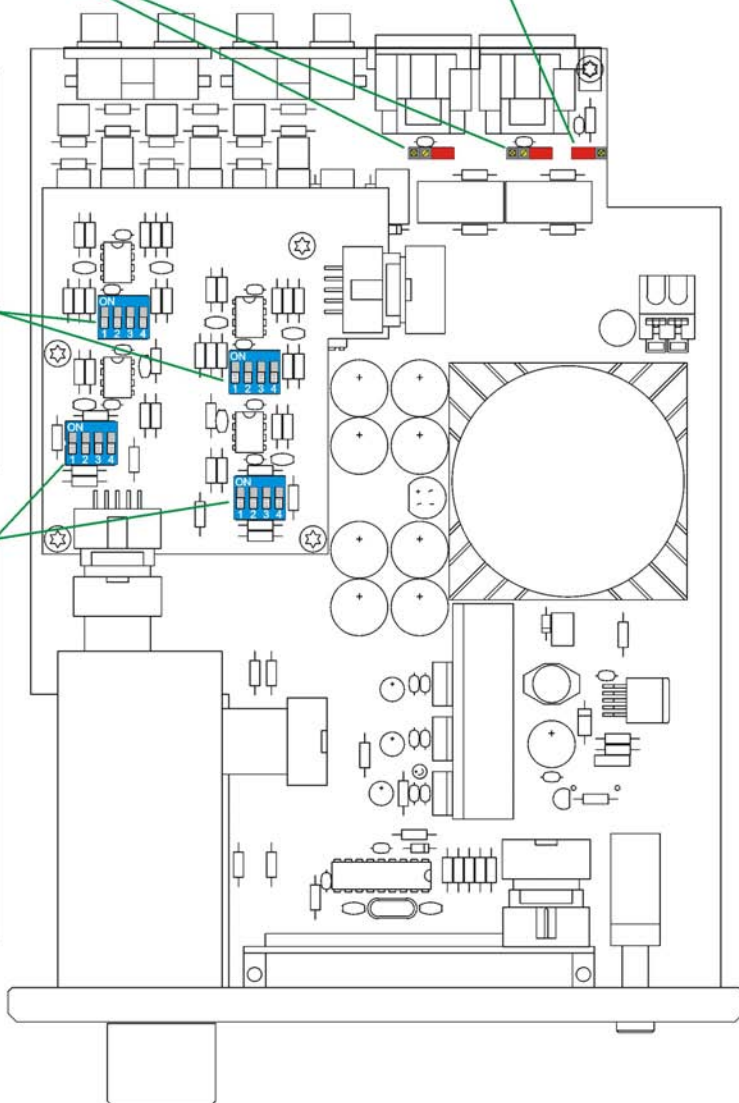
Crosstalk L < > R	1 kHz	-135 dB
	15 kHz	-114 dB
Crosstalk Input 1 < > 2 < > 3	1 kHz	-135 dB
	15 kHz	-130 dB

Outputs:	2 x XLR male, 3-pin, balanced 2 x Cinch, unbalanced
Max. output level:	+23 dBu unbal. / +29 dBu bal.
Output impedance:	< 2 Ohm unbal. / < 1.6 Ohm bal.
Supply voltage:	115 / 230 V AC max. 10 VA
Case, Front, Back:	Aluminium
Dimensions:	170 x 49 x 226 mm (W x H x D) 6.7 x 1.9 x 8.8 inch (W x H x D)

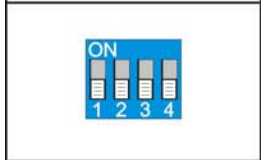
JUMPER SETTINGS PRE V630

XLR-GROUNDLIFT JUMPER (see Page 7/8)		
 GROUND POSITION (Ex Works)	 LIFT POSITION	 CHASSIS POSITION

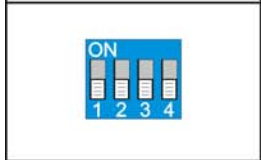
GROUNDLIFT JUMPER (see Page 7/8)	
 LIFT POSITION (Ex Works)	 GROUND POSITION



Settings for the balanced outputs. See also Page 15.



Settings for the unbalanced outputs. See also Page 14.



EU CONFORMITY STATEMENT:

We herewith declare that the following unit

Name: **VIOLECTRIC PRE V630**

Serial No. : -all -

is in conformity with the following EC directives:

2006/95 EG	Low voltage directive
2004/108 EG	Electromagnetic compatibility
EN 60065	Security directives for audio-,
JIS C 6065	video- und similar electronic devices

For verification of conformity with regard to electromagnetic compatibility the following harmonized standards are applied:

EN 50081-1 : 1992	Generic emission standard
EN 50082-1 : 1992	Generic immunity standard

Product family standard for audio, video, audio-visual entertainment apparatus:

EN 55013 : 2001	EN 61000-3-2 : 2000
EN 55020 : 2002	EN 61000-3-3 : 1995

This declaration is given under responsibility of:



LAKE PEOPLE *electronic GmbH*
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Fon +49 (0) 7531 73678
Fax +49 (0) 7531 74998

A handwritten signature in blue ink that reads 'Fried Reim'.

Konstanz 18.08.2013 Fried Reim CEO

WARRENTY

Since 1986 we are constructing and manufacturing sophisticated electronics for ambitious customers.

Since the early beginnings we are trying hard by accompanying measures, the use of 1st choice components and multiple quality checks during production to avoid faults at large.

We are quiet effective in that and this is - amongst others - why we enjoy such a good reputation.

Despite all accurateness faults may occure which may derogate the proper operation of your product.

In this case your unit is protected by a **5-years Warranty !**

Needless to say that we will care for your product even after the expiration of the warranty. If it is necessary please dispatch your item to:

Lake People electronic GmbH
Turmstrasse 7a
D-78467 Konstanz

Fon +49 (0) 7531 73678
Fax +49 (0) 7531 74998
E-Mail info@lake-people.de

Your warranty claim begins with the date of purchase, which should be denoted on your proof of purchase.

Do not forget to include the receipt of sales or a copy of the receipt.

Please also include a short description of the fault(s).

For the reshipment we need you correct address !!

Care for a safe packaging. Best is to use the original packaging.

Please keep in mind that we cannot accept collect freight.

We will grant a quick repair and quick return of the unit.

In case of a warranty repair we will reship free of charge.

Please denote here the serial number and the date of purchase:

Serial Number

Date of Purchase