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Introduction

Welcome joins KingRex usership

After the first integrated amplifier T20 visit the Hi-Fi field globally, KingRex never stop designing and creating “good” sounding products. Gladly, there are lots of audiophiles keep trying KingRex products, sharing their feedbacks, and providing their opinions to help KingRex knowing the “good products” are worth to be expected and it is able to survive in harsh tests.

KingRex is not very big company and it makes us have more elasticity to create more fitting personal demand Hi-Fi gears as desktop integrated ampli-T20U or our new product- HEADQUARTERS headphone amplifier.

It's a coincident for KingRex to create the home use headphone amplifier. From the early beginning, the headphone amplifier creation is all about the family member and closing friends' request for good sounding headphone amp. After the early stage product research and sample creation, we can't stop thinking to create one for our family and friends. So we trying to get it done and make it “great”. After the long time testing, tuning, and practicing, our entire offer is trying to create one good headphone amplifier to fit the demand of neutral and fidelity sound.

Before you start operating the HEADQUARTER (HQ-1), we hope you can spend some time to read this user manual carefully. This user manual has fully instruction for how to install, operate, and preserve the machines. It will help to extend the life circle of your HQ-1 and provide the best performance of your HQ-1.

Hope you will fully enjoy the music!!!

Sincerely yours,

All KingRex staffs

Performance & value

Move up the audio ladder. Connect to the headquarters.

Nothing can be more challenging than moving up the audio ladder in today's economic climate. At KingRex, we're committed to putting money to where our ears are. (And so are you). After spending countless months and sweat on developing and perfecting personal audio, we are proud to announce our inaugural headphone amp, the Headquarters HQ-1. This exciting new establishment will fulfill our goal in the following ways.

As the Headquarters that commands authority, the HQ-1 has adopted a two-chassis design with separate power supply for sonic integrity. And it's not the switch-mode power supply but audiophile grade linear power with rock solid 45W toroidal transformer (18V / 2.5A) completed with 25,100uF total capacity of reserve power and optimized regulatory circuit based on LMS 1585 constant voltage regulator.

As the Headquarters to co-ordinate and mobilize, the HQ-1 has an input/output impedance characteristic that's highly adaptable and will match nearly all headphones or earphones available in the market. Be it audiophile grade, closed or open air type, in-ear monitors or portable audio ear buds, the HQ-1 proves to be the perfect performance partner, yielding output power from 100mW at 300 ohm to 570mW at 30 ohm. Thanks to the sophisticated Class A MOSFET circuitry, THD + N drop to a bottom-low 0.005% while frequency response opens up wide at 20Hz to 80 kHz.

As the Headquarters to set high standard of performance, only top-notch audiophile grade components are qualified to work here: Toshiba A970/C2240 for first stage amplification; Hitachi MOSFET 2SK214 for output stage. Panasonic FM capacitors be chosen as main filter for transparent background and balanced soundstage. WIMA input capacitors for enhanced acoustic density. Vishay output capacitors for more neutral and delicate details. Gold-plated Neutrik 6.35mm headphone jack, gold-plated RCA terminals, Neutrik XLR socket (DC power transmission), Furukawa PCOCC internal wiring and ALPS potentiometer choose for sonic purity. What's the result? The naturally expansive, warm sound and vivid dynamics appears.

As the Headquarters to channel lines of communication, the HQ-1 in addition to headphone output is equipped with RCA line output and can be used as a high-quality preamp, selectable through a push button on the front panel.

As the Headquarters to bestow flagship image, the HQ-1 is furnished with two chassis designs: piano glass paint steel complemented with red anodized, hair-brushed aluminum front panel for trendsetting style, and sand-last paint steel with black anodized, hair-brushed aluminum front panel for the timeless classic look.

You've earned it. Welcome to the Headquarters!

Engineering passion & design idea

The slightest demand, the greatest satisfaction!

In headphone amplifier circuit design, some user might think more is better. In KingRex design more is not definitely better. The HEADQUARTER (HQ-1) is the first Class A headphone amplifier with pre-out design. The MOSFET as the heart of the HQ-1 makes the sound to be even warm and juicy. We think the vivid dynamic and transparent ton is also another main character of the HQ-1. Some part of these character might also need to thank for the separated HQ- PSU.

After T20 series audio amplifier appear to the public, KingRex already set the image for good power source provider and great audio equipment designer. The first unique design is the isolated linear power supply unit, it definitely improve the sonic performance by instant current surge providing ability and neater DC for providing clean background.

How is the difference between switching power and linear power!

All of the amplifiers need current while them working, or there won't be any good sonic performance as many detail will lost. So the power source is very important for the amplifiers. There will be three power sources most in common: switching power adaptor, linear power supply unit, and battery power supply unit.

The switching power adaptor should be most convenience and common power source the users could chose however it is not a good selection for music connoisseur who cares the sonic performance much more than the obtain convenience as it has the most noise and distortion by the high-frequency switching and harmonics in its design.

The linear power supply should be better choice for audiophiles. It has less noise and distortion than the switching power adaptor, however, during the AC to DC conversion and rectification process, there is still unavoidable following the unexpected noise and distortion. That's because the AC power should pass lots of electronic parts as transformer, diodes, voltage regulators, and components to be the lower current and neat DC.

The linear PSU will be a great design for the HEADQUARTER (HQ-1) as the pure power could affect the sonic performance a lot. Sometime people already spend a lot of money for a really Hi-End power supply unit. That's why we design one reserved PSU for it. All KingRex concern is for bring the fully enjoyment and happy listening while using HQ-1.

Contents in this box

Headquarters headphone amplifier *1

Headquarter liner power supply unit *1

AC power cord *1

Headquarter XLR female jack DC power cord*1

User manual *1

Warranty card*1

Fully package item*1 (one paper carton box + 1set black recycle foam)

Safety instructions

A. Important safety instructions!

Thank you for choose KINGREX HEADQUARTERS headphone amplifier . We sincerely hope you could keep the user manual for whole HEADQUARTERS headphone amplifier lifetime, it provides you with better protection for connected equipment.

Please read this user manual very carefully. It provides safety, installation, and operating instructions that will help you derive the overall performance and fully extend the life that the HEADQUARTERS has to offer.

Please save this manual! It includes important instructions for the safely use HEADQUARTERS and for obtaining factory service should the proper operation of the HEADQUARTERS come into question.

Please save or recycle the packaging materials! The HEADQUARTERS's shipping materials were designing with great care to provide protection from transportation related damage. These materials are invaluable if you ever have to return the HEADQUARTERS for service. Damage sustained during transit is not covered under the warranty.

B. Safety caution!

- To reduce the risk of electric shock, disconnect the HEADQUARTERS reserved power supply unit from the mains supply before installing the HEADQUARTERS headphone amplifier. Reconnect the power cord only after signaling interconnections have been made.

- The following precaution should be observed when working on the power supply unit:
 - Remove watches, rings or other metal objects.
 - Use tools with insulated handles.
 - !!! Caution: Risk of electric shock, do not remove cover. No user serviceable parts inside, Refer servicing to qualified service personnel.
 - !!! Warning: To reduce the risk of fire, replace only with the same type and rating of fuse.
 - !!! Warning: To reduce the risk of fire or electric shock, install in temperature and humidity controlled indoor area of conductive contaminants.

- Read the user manual and familiarize yourself with the functions before you attempt to use this equipment.
- To prevent fire or shock hazard, do not expose this appliance to rain or moisture.
- Do not dispose of in fire to prevent injury or burns. Also do not place the units near the heat sources such as radiator, heat registers, stoves, or other devices (including amplifiers) that produce heat.
- Do not disassemble the machine with power on. If you do, you may receive an electric shock.
- Do not let children (or grownups) push anything into holes or slots in the case-this could result in harmful electrical shock and could cause damage of the equipment.
- Do not set these units near the water near following area: bathtub, washbowl, kitchen sink, laundry tub, wet basement, or swimming pool.
- Do not place heavy objects on the power cord. If the cord is damaged, fire, or electrical shock may result. In particular, it is possible that one might accidentally place a heavy object on a carpet that covers the cord; definitely avoid these situations!
- Do not install the HEADQUARTERS headphone amplifier in a place where it might be exposed to oil, smoke or steam (for example, near a cooking table or humidifier). Otherwise, fire or electrical shock may result.
- Do not place the power cord near a heating device. Otherwise, the cord sheath may melt, resulting in fire or electrical shock.
- Obstruct the necessary all- around ventilation: especially DO NOT place the set close to curtains or on soft furnishing such as carpets. Overheating can cause unnecessary damage and shorten the lifespan of the equipment.
- No user serviceable parts inside. Refer servicing to qualified technician. Never remove the cover unless qualified to do so. This unit contains dangerous voltage.
- When you remove the power plug, be sure to hold the plug. Never pull on the cord. Otherwise, the power cord may become damaged, resulting in fire or electrical shock.
- Do not attempt to modify this equipment. Otherwise, fire or electrical shock may result. Warranty is void on modified devices.
- Do not damage, process, bend, twist, stretch or heat the power cord. If the cord is damaged, fire or electrical shock may result.

- When you are connecting other audio devices to the HEADQUARTERS headphone amplifier make sure that you first turn off the power to all devices to be connected. Refer to the user's guide for each device and use the specific cable for the connection.
- Set the volume levels of all devices including that of the HEADQUARTERS headphone amplifier) to minimum before connecting the HEADQUARTERS headphone amplifier to your actual set up and to the AC outlet. Otherwise, an extremely loud noise could damage your loudspeakers or even your hearing.
- If you plan not to use the HEADQUARTERS headphone amplifier for a long period of time (such as when you are on vacation), remove the power plug from the AC outlet. Otherwise, a fire could possibly result.
- If any abnormality occurs while using the HEADQUARTERS headphone amplifier, remove the plug from the AC outlet. In this case first shut off the power amplifier or turn down the volume controls and so on to avoid possibly damaging transients.
- If you notice any abnormality- such as smoke, smell, noise, etc. –remove the plug from the AC outlet. Confirm that the abnormality is no longer present, then consult your dealer for repair. If you continue using the HEADQUARTERS headphone amplifier under abnormal condition, fire or electrical shock might result.
- If a foreign object or water enters inside the equipment, remove the plug from the AC outlet and consult your dealer for repair. If you continue using the HEADQUARTERS headphone amplifier under this condition, fire or electrical shock may result.
- If the power cord is damaged(for example if it is cut or if the core wire is exposed), ask your dealer for a replacement. If you continue using the HEADQUARTERS headphone amplifier under this condition, fire or electrical shock might result.
- The HEADQUARTERS headphone amplifier offers superb sonic quality. To ensure the best possible results, you should use the best quality connecting cables that you can afford. Regular maintenance involves keeping all connections clean using a quality contact cleaner.

C. Important warning!

You must earth this machine. The PReference PSU is going through 3 wires power cord and wall ac socket. If you cut off the mould plug, get rid of it straight away. You cannot rewire the plug it into a socket

The wires in the mains lead have the following color code:

Green and Yellow: Earth

Blue: Neutral

Brown: Live

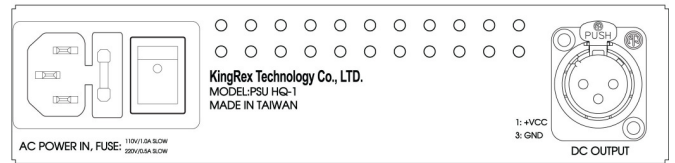
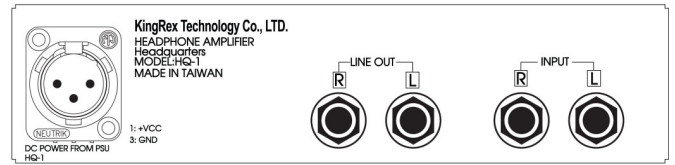
If the wires in the main lead do not match the colors marked in your plug, do the following:

- You must connect the green and yellow wire to the pin marked by the letter “ E ” or by the safety ‘Earth symbol’ or colored green and yellow or green.
- You must connect the blue wire to the pin which is marked with the letter “ N ” or colored black.
- You must connect the brown wire to the pin which is marked with the letter “ L ” or colored red.
- You must have a fuse in the plug, adaptor, or at the distribution board.
- The power supply cord should be rounted so that it is not likely to be walked on or pinched, especially near the plug, convenience receptacles, or where the cord exists from the unit.
- The power-supply cord of the unit should be unplugged from the wall outlet when it is to be unused for a long period of time.

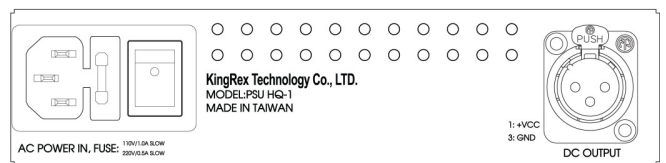
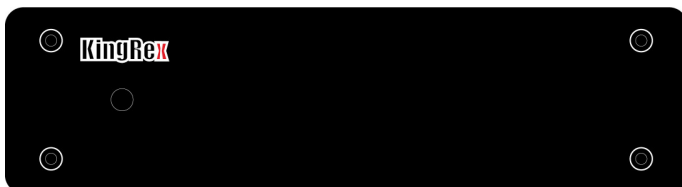
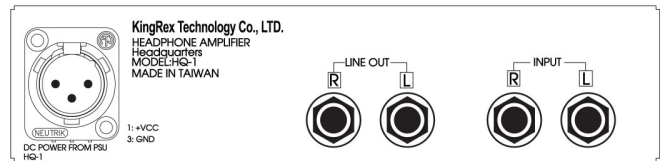
Operation environment presentation

Front panel details & rear panel details

HQ-1 in red panel color



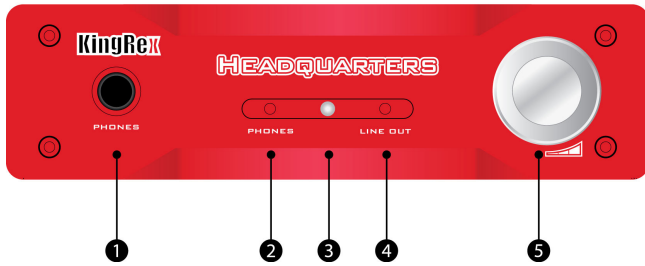
HQ-1 in Black panel color



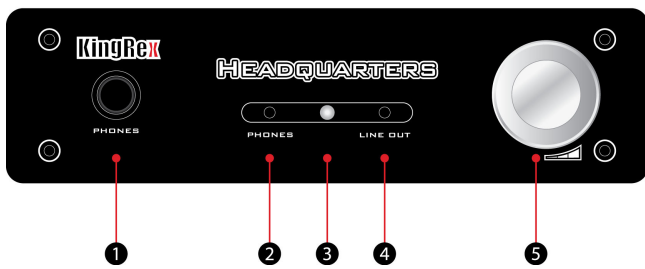
Connecting the cables and machine setting

Input setting & Output setting

Red panel



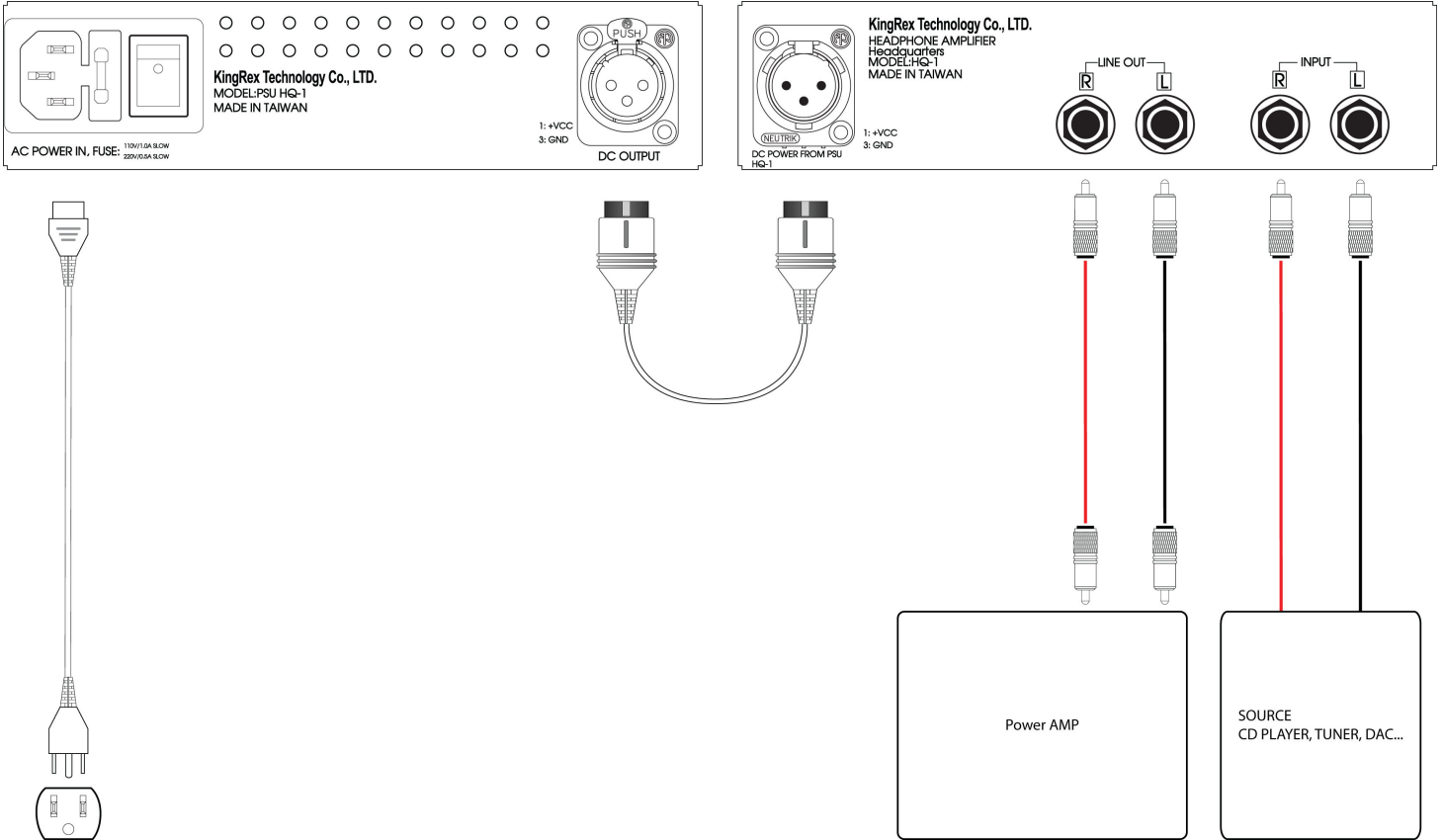
Black panel



1. 6.35MM PHONE JACK
2. PHONE OUT LED INSTRUCTION LIGHT
3. OUTPUT SELECTING SWITCHING BUTTON
4. PRE-OUT LED INSTRUCTION LIGHT
5. VOLUMN KNOB

Connecting the cables and machine setting

Input setting & output setting



How to operate

1. Please do not pill up the HQ-1 & HQ-1 PSU as it might be interrupted by very little noise . Please place the HQ-1 & HQ-1 PSU in horizontal position for getting the best performance.
2. Please make sure all power connection being tight before you start use it.
 - ◆ Please noted the Neutrik XLR plug connection is for signal pass, please do not connect the HQ-1 PSU with any other machines to avoid the unknown damages.
3. Please minimize the volume by VR before you replace another headphone.
4. In the early two minutes of turning up the power of HQ-1, the internal capacitors and input stage would be reached the balance. In this status, switching the output selector will cause the sudden pulse output. It might hurt your headphone or your power amplifier. KingRex would suggest you to do the switch 3 minutes after power on.
5. All KingRex parts and accessories are all in good quality and performance. However, we knew there still lots of users seeking the great. Change the accessories as signal cable or power cord might have significant efficiency. The HQ-1 & HQ-1 PSU connected power cord is specially made for reserved purpose. The ordinary Audio XLR cable should be not suit the HQ-1 & HQ-1 PSU. For avoid the unknown damages, please contact with KingRex or dealers before you replacing the XLR cable.
6. To maintain the consistence of the HQ-1 pre-out & phone out, KingRex sets the output level equally. The input level might be over for most of the integrated amplifier. We would suggest you use HQ-1 with your power amplifier.

● Specification of HEADQRATERS (HQ-1)

ITEM HQ-1 headphone amplifier with outboard Power supply unit

SPECIFICATION

Input Impedence: 15k Ohm Ω

Output

Impedence: 1.8 Ohm

Gain : 18.5dB

Frequency

Response: 20Hz(-0.7dB) ~ 80KHz(+0.1dB)

Output power (@1% THD+N)

100mW at 300ohm

170mw at 150 ohm

360mW at 60ohm

570m W at 30 ohm

THD + N : 0.005% at 2Vrms Output

Dynamic Range: 110dB

Channel

Separation : >92dB at 1Khz

>76dB at 10Khz

Signal to Noise

Ratio: 115dB

Audio connectors: Neutrik Headphone jack (6.35mm) with gold plated contacts

RCA connectors with gold plated contacts

Power

consumption: <10W with outboard low noise power supply

HQ-1 PSU technical specification

type: liner power

transformer : 45W toroidal type (18V / 2.5A)

voltage regulatory Total 8pcs Hi-Fi grade Nippon Chemicon Electrolytic capacitor in total

circuit: capacity 25100uF.

5 x 2,200 uF at AC input stage.

3 x 4,700uF at DC output stage.

AC acceptance : 110V +/- 10% ; 220V +/- 10% by area requiriement

Dimension : 183 x 145 x 55 mm

Two outfit design : Black panel / Red panel

● Feature of HEADQUARTERS (HQ-1)

- ✧ KingRex new – HEADQUARTERS (HQ-1) is in Class A MOSFET design is general-purpose desktop headphone amplifier.
- ✧ HQ-1 has one input and two outputs which is selectable by front panel push button- one is line-output and another is phone-output.
- ✧ Gold-plated NEUTRIK 6.35mm headphone jack and gold-plated RCA terminals for provide great contact.
- ✧ The interior circuitry consists by first stage transistor –Toshiba A970/C2240 for first stage amplification and output stage by Hitachi MOSFET 2SK214.
- ✧ Featuring Hi Fi grade Panasonic FM capacitor as main filter brings the transparent background and balanced soundstage ; input capacitor choose WIMA increase acoustic density; output capacitor choose Vishay for more neutral and delicate details. All material choose for neutral, balance, details, rich musicality, and vivid tuning.
- ✧ Original ALPS potentiometer for provide the best signal for sonic purity.
- ✧ Input/ output signal path setting use FURUKAWA PCOCC which brings more expansive and warm sound.
- ✧ Discreet external linear power design- highly current supplied toroidal transformer, LMS1585 constant voltage regulator, total 8pcs Hi-Fi grade Nippon Chemi-Con Electrolytic capacitor in total capacity 25100uF(5 x 2,200 uF at AC input stage; 3 x 4,700uF at DC output stage) through NEUTRIK XLR socket all design stream out fully power to fit active dynamic demands.
- ✧ Two style chassis design : Chassis design by piano glass paint steel 180 x 138 x 45mm with aluminum red anodized panel in hair polishing or Sandy blast paint steel 180 x 138 x 45mm with aluminum black anodized panel in hair polishing.

Maintenance

For cleaning the cabinet, use a dry cloth and wipe dust away. If needed, moisturize the cloth with a small amount of window cleaning dissolvent. Do not use excessive amounts of solvents, and do not let any of solvent spill into amplifier. The front panel is made of aluminum, it can be cleaned by using normal mild solvents and clean paper tissue or cloth. Do not use any other the scratch the mirror display at the front.

Burn in

All new electronic equipment must be burned in to achieve optimum performance. Please allow the new pre-amplifier and reserved power supply unit to burn in by playing music with the loudspeakers connected for 200 hours before critical listening is performed.

Service

The simplicity of the KingRex PReference preamplifier and reserved PSU are very few parts can be breaking down.

Should you ever require service, you can either contact your dealer or national distributor, who can solve any problems locally.

You are also very welcome to contact KingRex Technology Co., LTD directly if you need any information or help.

Our contact information is listed on the last page of this user guide.

Our best wishes ~

We at KingRex only use the best " raw materials" trimmed and rafted to perfection by the best engineers and sound enthusiasts for all audiophiles.

The guidance lines in this manual will assure you of an exquisite sound experience hope it will provide clear instruction to operate our products.

We hope you years of proud ownership and happy listening. We feel confident that you will cherish this amplifier for both its amazingly clear reproduction as well as for its splendid craftsmanship, elegant appearance, and convenient size.

Hope you won't mind to share with us if there is any problem or questions. Please do not hesitate to contact with us. We look forward to hearing from you~

KingRex Warranty

Limited Warranty

Kingrex technology warrants this product to be free from defects under normal uses for a period of one (1) year from the date of purchase (based on a proof-of-purchase receipt or invoice). This warranty includes exchange for new product within the first one (1) month and followed by repair service until this warranty expires on one (1) year from the purchase. Customer who requests warranty service is responsible for shipping costs mailing from the customer, and the returning shipping cost is covered by this warranty. KingRex Technology also offers repair service (charges of labor and/or parts) when warranty expires.

Exclusions from Warranty – This Warranty does not apply to:

1. Conditions resulting from misused, abused, disassembled, unauthorized modification by the purchasers (negligence) or anyone else outside of our control.
2. Conditions resulting from improperly maintained or placed in an unsuitable physical or operating environment.
3. Conditions resulting from a natural disaster such as a lighting strike, flood, earthquake, etc.
4. The device identification labels (i.e. serial numbers) have been removed/ altered or have deteriorated beyond recognition.

Conditions :

Serial Number :

Store of Purchase:

Date of Purchase:

Customer Name:

Mailing Address:

E-mail:

Phone Number: