

KP-4000 Installation Manual

Network Keypad



 Universal Remote Control®

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Introduction

The KP-4000 is a Network Keypad with the ability to control audio video components, energy management devices, multizone matrixes, PCs and iPods and whole house URC Lighting. MAC addressing gives you the ability to use an unlimited amount of KP-4000's and allows the control of many identical components as needed throughout the house.

1. The KP-4000 communicates over IP with IP controlled components and the URC MRX-1 Network Base Station.

2. The MRX-1 receives commands from the Network then controls IR, RS-232 and Relay controlled components.



MRX-1 Network Base Station



Router



PoE Injector



IR Controlled Device

3. Self-adhesive "Flashers" affix to the Infrared sensors on the front panels of your client's components. The Flashers relay commands to components. The flashers plug in to the MRX-1 rear flasher line outputs via their 10 foot cables. The MRX-1 can also connect to components with rear panel IR Inputs via its adjustable IR Line Outputs.

Features and Benefits

2-Way IP and RS-232 Home Theater AVRS

Via the unique URC 2-Way database, installers can drag and drop 2-Way pre-programmed modules into any KP-4000 for multi-zone receivers with either IP or via the MRX-1, RS-232 control.

2-Way IP Control of Media on PCs and iPods

The high speed of the LAN enables the KP-4000 to display lists of artists, albums or songs and to display the cover art of the selected album on the Now Playing screen of the remote control from the PSX-2 Personal Server or from a PC.

User Configurable Internet RSS for News, Sports, Stocks and Weather

The well known URC modules for News, Sports, Weather and Stocks are all available updated to the KP-4000 screen and of course, are completely user set.

User set Scenes for URC Lighting via RFTX-1

Your client can fully control the lighting in their home without expensive black boxes and exotic wiring. A lighting system can be as simple as a single URC RF lamp dimmer on a lamp that they'd love to control without getting out of a chair. The KP-4000's optional RFTX-1 transmitter directly controls URC RF Dimmers and Switches. Your client can brighten, dim, and recall scenes, and they can store new scenes whenever they like, without a PC or a programmer. They simply manually adjust each dimmer to the new setting, then press and hold a scene button on their KP-4000 (just like storing radio stations in a car radio!).

Local Control via RFTX-1 & MRF Base Station

Via an optional RFTX-1 transmitter, low cost wireless control of a local stack of components can be done via a standard MSC-400, MRF-350 or MRF-260.

Parts Guide

The KP-4000 Network Keypad includes:

- 1 - KP-4000 Network Base Station
- 1 - Owner's Manual
- 4 - Screws for mounting to a wall box

Network Requirements and Power Options

The KP-4000 must be connected to the same Local Area Network as the MRX-1 to function correctly. Additionally, in order for your client to enjoy internet features such as RSS feeds, the Local Area Network must be connected to the Internet.

You have three options to power the KP-4000. The KP-4000 is a PoE (power over ethernet) device and can be powered as shown by either a PoE switch or a PoE injector (PoE injectors may be separately ordered from URC). This has the advantage that a single CAT 5 cable to the KP-4000 supplies all connections needed!

However, should you be installing a KP-4000 in a system where it is convenient to run an additional two conductor wire to the KP-4000 for power, you may power a KP-4000 from any 12V wall adapter with a 1 amp rating (12v wall adapters may be separately ordered from URC).

Option 1: PoE Switch



1. Connect the CAT 5 cable (RJ45) to the LAN connection on the rear of the KP-4000.
2. Plug the other end of the CAT 5 cable to the PoE switch (not included), which will power the KP-4000 and ensure that the PoE switch is properly configured and connected to the Router.

Option 2: PoE Injector



1. Connect the CAT 5 cable (RJ45) to the LAN connection on the rear of the KP-4000.
2. Plug the other end of the CAT 5 cable to the PoE Injector which will power the KP-4000.
3. Connect the PoE injector (not included) to the Router.

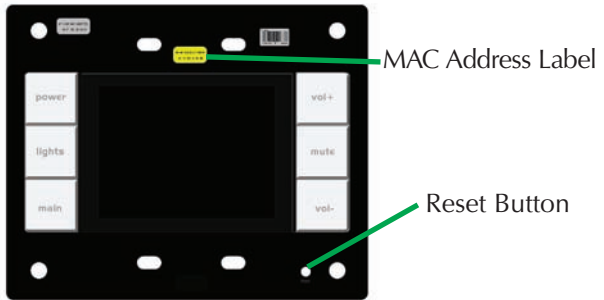
Option 3: No PoE: 12 Volt Power Supply



1. Splice a 12V 1Amp Power Adapter (not included) and connect to the rear Power input.
2. For network connections to IP devices, MRX-1 and the internet, connect a CAT 5 cable (RJ-45) to the LAN connection on the rear of the KP-4000 and plug the other end into the Router.

Installation Notes

MAC Address Labels/Reset Button

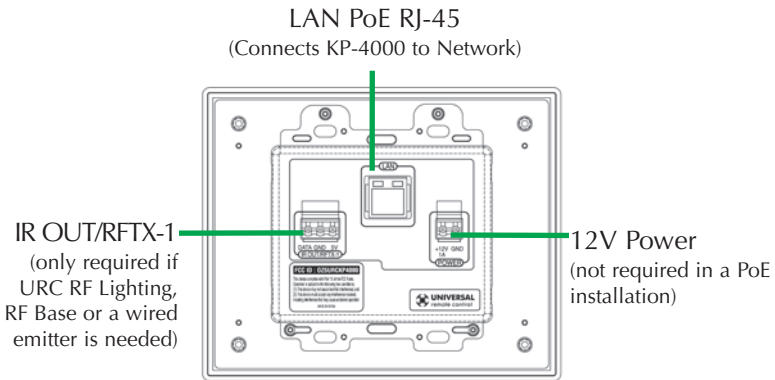


The KP-4000 has a magnetic cover, simply pull it away from the keypad's main body to remove.

Reset Button: Press this button to reset the keypad.

MAC address Labels: Tear off the 2nd label and stick it to your Job Documentation indicating which room the KP-4000 is installed. You'll need the MAC address when you program the KP-4000.

Connections



In most installations, you will power the KP-4000 via a single CAT 5 cable connected to the network. The KP-4000 is PoE, so you can power it from either a PoE power injector or any PoE switch.



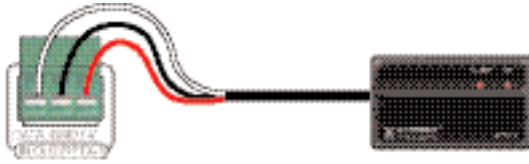
LAN PoE RJ-45: Plug an Ethernet RJ45 cable into a PoE switch or PoE injector (available via the URC Toolbox) to power the KP-4000 or directly connect to a LAN Router if a Power Adapter has been connected.

IR OUT/RFTX-1

This 3 Conductor removable connector can be used for either an RFTX-1 RF transmitter or for a URC IR emitter.

RFTX-1 Connections

In installations with URC RF lighting or a standard RF base station, you will need to add an RFTX-1 RF Transmitter to the KP-4000. Range can wildly vary, depending on the structure of the wall the KP-4000 is installed in. You can make the RF range much more predictable by installing the RFTX-1 with the MRX-1 in most homes and this is the recommended method! However in some installations, you may achieve satisfactory results from an RFTX-1 inside the wall cavity. To connect use the following terminations to the KP-4000:



- Data** – Connect the white wire which is connected to the Tip of the 3.5mm plug
- GND** – Connect the black wire which is connected to the bottom sleeve(base) of the 3.5mm plug
- 5V** – Connect the red wire which is connected to the ring of the 3.5mm plug

IR Emitter Connection

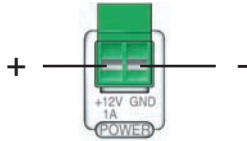
Should you need to drive an IR emitter directly from the KP-4000, you connect the emitter to Data and GND. A URC emitter is wired with a cable that has a silver and a copper conductor. If you have another brand of emitter, reverse polarity if the first attempt doesn't work. URC emitters can be successfully powered over long cable lengths if the wire gauge is at least 16 gauge.

- Data** – Silver Conductor
- GND** – Copper Conductor



12V Power

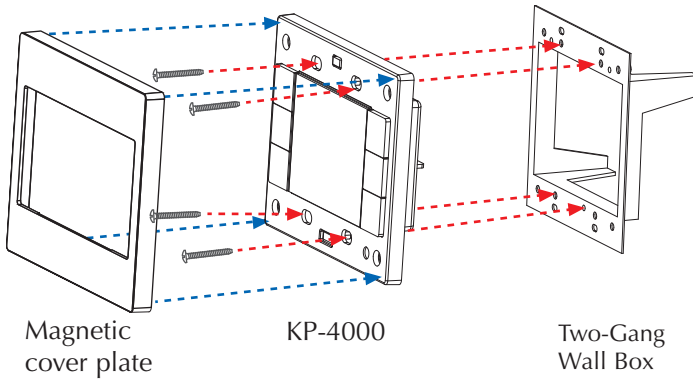
This 2 conductor removable connector can be used to power the KP-4000 with a wall adapter in an installation where PoE is not available. You must run an additional two conductor cable to the KP-4000 to utilize this feature. Connect a spliced power adapter 12Volt, 1AMP with the polarity (Positive & Negative) connected correctly.



12V 1A – Connect to the + conductor of a 12V, 1 Amp DC wall adapter.

GND – Connect to the – conductor of a 12V, 1 Amp DC wall adapter.

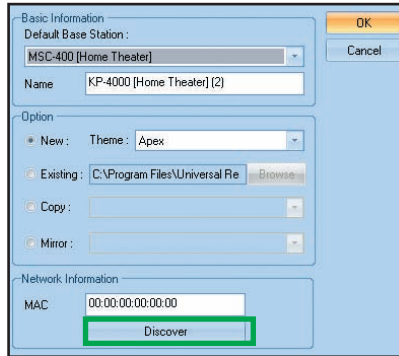
In-Wall Installation



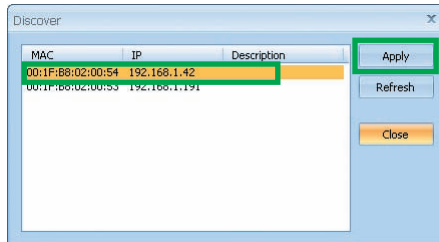
1. The KP-4000 installs in a standard two gang box. If in a retrofit installation, cut in and install a standard two gang p-ring or retro fit box (not included) into the wall.
2. Make connections for IR Out/RFTX-1, LAN, or Power Supply. For connections, refer to page 5.
3. Next, secure KP-4000 onto p-ring or retro fit box with the 4 included screws.
4. Finally attach the magnetic cover plate to the four screws secured into the KP-4000.

CCP MAC Address Discovery

1. Once the KP-4000 has been connected to the network, note the MAC address located on the KP-4000 under the magnetic cover plate.
2. Open the Complete Control Program editor.
3. Select the Program tab then press Configure Home.
4. Add a KP-4000 Network Keypad from the Remotes section and the properties window opens. *Note: Adding a MRX-1 base station to communicate with a KP-4000 is recommended.*
5. Within the Network Information field, press the Discover button to select the unique MAC address of your unit.



6. The Discover window opens to reveal KP-4000's connected to the network. Highlight the MAC address which matches the KP-4000's label. Then press Apply.



7. Begin programming your customer's file.

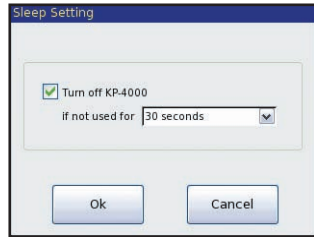
Displaying the Settings Screen

You can adjust the settings of the KP-4000 whenever you like by pressing and holding both the MAIN and MUTE buttons for five seconds. When you do, the screen will change to the SETTINGS screen. If you do not press any button on the SETTINGS screen within 1 minute, the KP-4000 will time out and automatically return to normal operation.



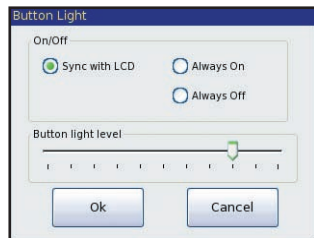
Adjusting Sleep Settings

Conserve energy by configuring the keypad to fall asleep after a specified amount of time. Select a time from the drop down list.



Button Light Settings

Conserve energy by opting to turn off the LED lighting behind the buttons.



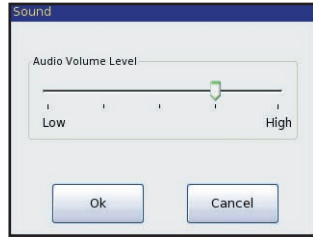
Setting Date and Time

Your KP-4000 may have been programmed to display the date or time on the touch screen. If you need to, you can adjust the time displayed by changing the settings on this screen. If you live in a part of the country that uses daylight savings time, check the box next to: "Automatically adjust clock for daylight saving".



Sound

Your KP-4000 may have been programmed to make sounds. This is optional, and some professional installers may prefer to keep it silent. However, you can adjust the volume to any level you like by touching and dragging the volume control here.



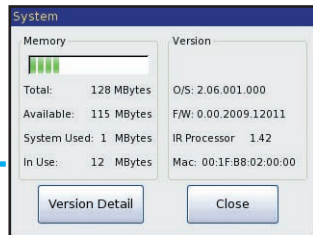
Adjusting Brightness

Simply touch and drag the brightness slider to the desired level.



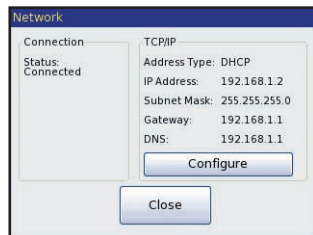
System

The System Information screen displays data about your KP-4000's operating system, memory etc.



Network

The Network screen displays network information about your KP-4000 and the network it is connect to.



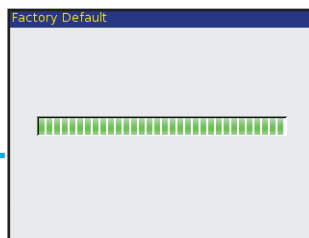
Factory Default

WARNING! Only use this button when instructed to by Technical

Support. It resets the memory of the KP-4000 to the factory condition. All your programming will be lost!

Exit

When you have finished adjusting Settings, simply tap the EXIT button to return to normal operation.



USA Limited Warranty Statement

1. LIMITED WARRANTY AND DISCLAIMERS

Universal Remote Control, Inc. ("URC") warrants that URC equipment purchased directly from URC or from an authorized URC dealer or distributor shall be free from defects in material and workmanship under normal usage for a period of one (1) year from the date of purchase of the product by the end-user, but no longer than thirty-six (36) months from the date of shipment of the URC equipment by URC to an authorized URC dealer or distributor, except that with respect to Total Control® whole-house products, the warranty extends for two (2) years from the date of purchase by the end-user, but no longer than forty-eight (48) months from the date of shipment of the URC equipment by URC to an authorized URC dealer or distributor.

This limited warranty is valid only in the United States of America.

URC equipment purchased from other than an authorized URC dealer or distributor is without warranty.

URC warrants that the software will substantially conform in any material respect to its functional specifications at the time of delivery. URC SHALL NOT BE LIABLE FOR OPERATIONAL, TECHNICAL OR EDITORIAL ERRORS AND/OR OMISSIONS MADE IN THE URC DOCUMENTATION. URC DOES NOT WARRANT THAT THE URC SOFTWARE IS BUG-FREE OR ERROR FREE OR THAT THERE ARE NO ERRORS/BUGS IN THE URC SOFTWARE.

URC warrants that at the time of purchase the URC equipment and the URC software complied with all applicable regulations and policies of the Federal Communications Commission ("FCC") regarding electromagnetic interference caused by electronic/computing devices and to the extent that the URC equipment and/or the URC software fails to so comply, URC shall, at its own expense, take all reasonable measures to promptly cause such to comply.

THIS LIMITED WARRANTY DOES NOT COVER TECHNICAL ASSISTANCE FOR HARDWARE OR SOFTWARE USAGE EXCEPT AS EXPRESSLY PROVIDED FOR HEREIN.

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WITHOUT IN ANY WAY LIMITING THE GENERALITY OF THE OTHER PROVISIONS HEREIN, THIS LIMITED WARRANTY DOES NOT COVER: (I) DAMAGE FROM MISUSE, NEGLIGENCE OR ACTS OF NATURE, (II) MODIFICATIONS, (III) INTEGRATION WITH THIRD PARTY CONTENT, OR (IV) BEYOND THE WARRANTY PERIOD AND/ OR FAILURE TO FOLLOW URC WARRANTY CLAIM PROCEDURE.

The warranty limitations and warranty disclaimers may not apply to end user in whole or in part, where such are restricted or excluded by applicable law, and such shall apply to the maximum extent permitted by applicable law.

In the event of any warranty claim, URC will, at its sole option, repair the URC equipment using new or comparable rebuilt parts, or exchange the URC equipment for new or rebuilt equipment. **In the event of a defect, these are the end user's exclusive remedies.**

All the URC equipment returned for service, exchange or repair require an RGA number. To obtain an RGA number, you must complete a Return Request Form which you may obtain by calling (914) 835-4484 or contacting URC at returnrequest@universalremote.com. To obtain warranty service, end user must deliver the URC equipment, freight prepaid, in its original packaging or packaging affording adequate protection to URC at 420 Columbus Avenue, Valhalla, NY 10595. It is end user's responsibility to backup any macro programming, artwork, software or other materials that may have been programmed into the unit. It is likely that such data, software, or other materials will be lost during service and URC will not be responsible for any such damage or loss. A dated purchase receipt, bill of sale, installation contract or other verifiable proof of purchase is required. For the URC equipment support and other important information, please visit URC's website available at www.universalremote.com or call the Customer Service Center at (914) 835-4484.

This limited warranty only covers the URC equipment issues caused by defects in material or workmanship during ordinary consumer use. It does not cover product issues caused by any other reason, including but not limited to product issues due to commercial use, acts of God, third-party installation, misuse, limitations of technology, or modification of or to any part of the URC equipment. This limited warranty does not cover the URC equipment sold as used, as is, refurbished, so called "B stock" or consumables (such as batteries). This limited warranty is invalid if the factory applied serial number has been altered or removed from the URC equipment. **This limited warranty specifically excludes the URC equipment sold by unauthorized resellers.**

With the exception of URC's IR-only, broad-based consumer remotes, none of URC's PC programmable remotes or any of our Total Control® whole-house equipment are authorized for online internet sales. Buying URC's PC programmable remotes or any of

our Total Control® whole-house equipment online means buying equipment that does not have URC's limited warranty. Such equipment is not eligible for URC tech support or software support, either.

2. URC'S LIMITATIONS OF LIABILITY

IN NO EVENT SHALL URC BE LIABLE FOR INDIRECT, SPECIAL, INCIDENTAL, EXEMPLARY, PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY KIND OR LOSS OF PROFITS OR BUSINESS OPPORTUNITY, EVEN IF URC IS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

IN NO EVENT SHALL URC BE LIABLE FOR LOSS OF OR DAMAGE TO DATA, COMPUTER SYSTEMS OR COMPUTER PROGRAMS.

URC'S LIABILITY, IF ANY, FOR DIRECT DAMAGES OF ANY FORM SHALL BE LIMITED TO ACTUAL DAMAGES, NOT IN EXCESS OF AMOUNTS PAID BY END USER FOR THE URC EQUIPMENT.

IN NO EVENT SHALL URC BE LIABLE FOR ANY EVENTS BEYOND ITS CONTROL, INCLUDING ANY INSTANCE OF FORCE MAJEURE.

IN NO EVENT SHALL URC BE LIABLE FOR THE ACTS OR OMISSIONS OF END USER OR ANY THIRD PARTY.

THE LIMITATIONS OF LIABILITY MAY NOT APPLY TO END USER IN WHOLE OR IN PART, WHERE SUCH ARE RESTRICTED LIMITED OR EXCLUDED BY APPLICABLE LAW AND SUCH SHALL APPLY TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW.

URC SHALL NOT BE HELD RESPONSIBLE FOR THE STATEMENTS MADE BY OTHERS.

SOME STATES OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO END USER. THIS LIMITED WARRANTY GIVES END USER SPECIFIC LEGAL RIGHTS AND END USER MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE OR JURISDICTION TO JURISDICTION.

Frequently Asked Questions

I am unable to control my URC Lighting Dimmer/Switch with the KP-4000. Now what?

Make sure the RF switch on the RFTX-1 is set to the correct frequency for the URC Dimmer or Switch. URC Lighting Models MRFA is 418MHz and MRFB is 433MHz.

How do I update the firmware?

Periodically there will be firmware updates for the KP-4000. Make sure it is connected to the Network then open CCP and click on the

Live Update button located within the Communications tab.

How do I reset a KP-4000?

Remove the front cover of the KP-4000. Use a pen or pointy device to depress the button and reset the unit.

How do I erase a KP-4000?

Press and hold Main + Mute for 3 seconds then select the Factory Default button.

Specifications

Microprocessor: 190MHz RISC

Memory: 128MB Flash

Devices: Supports up to 255 Devices

Pages: Supports up to 255 Pages on each Device

Macro Capability: Up to 255 steps

Network: One 10/100 Ethernet port (PoE)

LCD : 3.5 inch (320x240)

Weight: 9.84 oz

Size: 5.75" x 4.7" x 1.8"

Power : Standard PoE Injector, PoE Switch or 12V DC 1A Adapter
(All purchased separately)

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one more of the following measures:

- ◆ Reorient or relocate the receiving antenna.
- ◆ Increase the separation between the equipment and receiver.
- ◆ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ◆ Consult the dealer or an experienced radio/TV technician for help.

Warning!

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Note : The manufacturer is not responsible for any Radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

FCC Caution

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the authority to operate equipment.

The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Federal Communication Commission (FCC) Radiation Exposure Statement

This remote device is approved as a hand-held and hand-operated only portable (relative to hand) device which is normally operated at 20 cm from a person's body.

Regulatory Information to the user

■ CE conformity Notice

Products with “CE” marking comply EMC Directive 2004/108/EC issued by the commission of the European Community.


1) EMC Directive

- Emission : EN 55022
- Immunity : EN 55024
- Power : EN-61000-3-2, 3

■ Declaration of Conformity

“Hereby, Universal Remote Control Inc. declares that this KP-4000 is in compliance with the Essential requirements and other relevant provisions of EMC Directive 2004/108/EC.”



Certification	CE
Type No.(Model No.)	KP-4000
Batch/Serial No.	-
Power Rating	12.0V  , 1.0A

Declaration of Conformity

Company Name : Universal Remote Control Inc.
 Company Address : 500Mamaroneck Avenue, Harrison, NY 10528, U.S.A
 Contact Info rmation : www.universalsremote.com
 Phone: (914)835-4484 Fax: (914)835-4532
 Brand Name : UNIVERSAL remote control
 Product Name : Network Key pad
 Model Name : KP-4000

This product herewith complies with the requirements of EMC Directive (2004/108/EC) issued bythe Commission of the European Community

Compliance with these directives implies conformity to the following European Community

■ EMC Directive

- EN 55022
- EN 55024
- EN 61000-3-2
- EN 61000-3-3

List of test reports and/or certificate verified compliance with the standards above

■ EMC Directive

- Report No.
- Testi ng Labora tory : Gumi College EMC Center

Date of issue : _____ December 22, 2010 _____

Name and signature of authorized person : _____ James Novak _____
 Senior Product Manager
 Universal Remote Control Inc.



 **Universal Remote Control®**

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Phone: (914) 835-4484 Fax: (914) 835-4532

www.universalremote.com