HENS-D



# MEMS 220<sup>™</sup> USER MANUAL

totally awesome home network







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.

This product has been tested and complies with the specifications 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 according to 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 is found by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna
- Increase the separation between the equipment or devices
- · Connect the equipment to an outlet other than the receiver's
- Consult a dealer or an experienced radio/TV technician for assistance

Any changes or modifications not expressly approved by HEMS Technology, Inc. could void the user's authority to operate the equipment.

## WARNING:

THIS PRODUCT IS NOT DESIGNED FOR LIFE SUPPORT APPLIANCES. DO NOT USE IF THE APPLIANCE IS LABELED AS A MEDICAL DEVICE OR CRITICAL TO LIFE SUPPORT. Copyrighted 2008 HEMS Technology. All Rights Reserved.

#### **Limited Warranty Agreement**

No limited warranty is provided by HEMS Technology unless your HEMS Technology Product ("Product") was purchased from an authorized distributor or authorized reseller. No warranty service is provided unless the Product is returned to an authorized return center in the region (warranty regions are identified as Canada, U.S.A., Latin America, Europe, Middle East, Africa, Asia Pacific, India and Thailand) where the Product was first shipped by HEMS Technology, which may have regional specific warranty implications.

If your Product was purchased as a component integrated within a system by a system manufacturer, no limited warranty is provided by HEMS Technology. Please contact the place of purchase or the system manufacturer directly for warranty service. A Product that contains modules, modifications, or additions not explicitly approved and certified for insertion within or in conjunction with the Product is prohibited and violates any warranty agreement HEMS Technology provides for the Product.

The limited warranty covers a period of 190 days from purchase date by the end user. For a warranty to be valid, a purchase receipt must be included with the warranty claim. In the United States, some states do not allow limitations on how long implied warranties last, so the above limitation may not apply to you.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE FACE OF THE HEMS TECHNOLOGY LIMITED WARRANTY. HEMS TECHNOLOGY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, REGARDING THE PRODUCTS, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT. IN THE UNITED STATES, SOME STATES DO NOT ALLOW THE EXCLUSION OF THE IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU.

#### WARRANTY LIMITATIONS

HEMS Technology's limited warranty provides that, subject to the following limitations, each Product will be free from defects in material and workmanship and will conform to HEMS Technology's specification for the particular Product.

#### **RETURN MATERIAL AUTHORIZATION (RMA)**

No Product may be returned directly to HEMS Technology without first contacting HEMS Technology for a Return Material Authorization ("RMA") number. If it is determined that the Product may be defective, you will be given an RMA number and instructions for Product return. An unauthorized return, i.e. one for which an RMA number has not been issued, will be returned to you at your expense. Authorized returns are to be shipped prepaid and insured to the address on the RMA in an approved shipping container The original box and packaging materials should be kept for storing or shipping the Product.

#### **USE OF THE PRODUCT**

HEMS Technology will have no liability for any Product returned if HEMS Technology determines that:

The product was stolen from HEMS Technology, its authorized distributors, or its authorized representatives.

The asserted defect is not present, cannot reasonably be fixed because of damage occurring when the Product is in the possession of someone other than HEMS Technology, or is attributable to misuse, improper installation, alteration (including removing or obliterating labels and opening or removing external covers unless authorized to do so by HEMS Technology), accident or mishandling while in the possession of someone other than HEMS Technology.

The Product was not sold to you as new.

#### ADDITIONAL LIMITATIONS ON WARRANTY

HEMS Technology's warranty does not cover Products which have been received improperly packaged, altered, or physically damaged. Products will be inspected upon receipt for the following:

Improperly packaged

Non-qualified shipping container Alterations both external and/or internal Labels have been counterfeited, switched or tampered Label missing standard printing such as UL or capacity Missing barcode Damaged both external and/or internal Deep scratch or discoloration on the case Loose, damaged, or missing screws

#### **EXTENDED WARRANTY**

You can purchase an extended warranty on eligible HEMS Technology product(s) with less than a 1-year warranty. The maximum warranty period for these products, including any warranty extension, cannot be longer than 3 years from the date of purchase.

#### LIMITATION OF REMEDIES

YOUR EXCLUSIVE REMEDY FOR ANY DEFECTIVE PRODUCT IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT.

HEMS Technology may elect which remedy or combination of remedies to provide in its sole discretion. HEMS Technology shall have a reasonable time after determining that a defective Product exists to repair or replace a defective Product. HEMS Technology's replacement Product under its limited warranty will be manufactured from new and serviceable used parts. HEMS Technology's warranty applies to repaired or replaced Products for the balance of the applicable period of the original warranty or ninety days from the date of shipment of a repaired or replaced Product, whichever is longer.

#### NO CONSEQUENTIAL OR OTHER DAMAGES

NOTWITHSTANDING ANYTHING ELSE IN THIS POLICY OR OTHERWISE, HEMS TECHNOLOGY WILL NOT BE LIABLE WITH RESPECT TO THE PRODUCTS UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY (I) FOR ANY AMOUNT IN EXCESS OF THE PURCHASE PRICE FOR THE DEFECTIVE PRODUCT OR (II) FOR ANY GENERAL, CONSEQUENTIAL, PUNITIVE, INCIDENTAL OR SPECIAL DAMAGES. THESE INCLUDE LOSS OF RECORDED DATA, INTERRUPTION OF USE, THE COST OF RECOVERY OF LOST DATA, LOST PROFITS AND THE COST OF THE INSTALLATION OR REMOVAL OF ANY PRODUCTS, THE INSTALLATION OF REPLACEMENT PRODUCTS, AND ANY INSPECTION, TESTING, OR REDESIGN CAUSED BY ANY DEFECT OR BY THE REPAIR OR REPLACEMENT OF PRODUCTS ARISING FROM A DEFECT IN ANY PRODUCT. THIS SECTION DOES NOT LIMIT LIABILITY FOR BODILY INJURY OF A PERSON.

IN THE UNITED STATES, SOME STATES DO NOT ALLOW EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE LIMITATIONS ABOVE MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

#### INDEMNITY

You agree to fully defend and indemnify HEMS Technology from any and all claims, liabilities, and costs (including reasonable attorney's fees) related to (1) your use of the product or (2) your violation of the terms and conditions of this Agreement.

#### DISCLAIMER FOR CRITICAL APPLICATIONS

The Product is not intended or authorized for use in monitoring or controlling life support devices and products or for other products for which a failure of the Product could cause personal injury or death. If you or your customers use or permit the use of the Product for such unintended or unauthorized uses, you agree to fully indemnify HEMS Technology and its affiliates, and the officers, employees and distributors of each, from all liability related to such use, including attorneys' fees and costs arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if HEMS Technology shall be allegedly negligent with respect to the design or the manufacture of the product.

#### COMPLIANCE WITH LAWS

You must use the Product in accordance with all applicable laws, regulations and statutes. You agree that neither you nor your licensees (if any) intend to or will, directly or indirectly, export or transmit the Product to any country in violation of export restrictions.

#### CHOICE OF LAW; VENUE; LIMITATIONS

You agree that the statutes and laws of the United States and the State of Texas, USA, without regard to conflicts of laws principles, will apply to all matters relating to this Agreement or the Product, and you agree that any litigation will be subject to the exclusive jurisdiction of the state or federal courts in Tarrant County, Texas, USA. You agree that regardless of any statute or law to the contrary, any claim or cause of action arising out of or related to this Agreement or the Product must be filed within one (1) year after such claim or cause of action arose or be forever barred.

#### **PRODUCT LABELING**

You are not authorized to use any HEMS Technology trademarks, brand names, or logos unless specifically authorized by us.

#### ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between you and HEMS Technology regarding the subject matter of this Agreement, and supersedes all prior communications, negotiations, understandings, agreements or representations, either written or oral, if any. This Agreement may only be amended in written form, executed by you and HEMS Technology.

#### SEVERABILITY

If any provision of this Agreement is held for any reason to be invalid or unenforceable, then the remaining provisions of this Agreement will be unimpaired and, unless a modification or replacement of the invalid or unenforceable provision is further held to deprive you or HEMS Technology of a material benefit, in which case the Agreement will immediately terminate, the invalid or unenforceable provision will be replaced with a provision that is valid and enforceable and that comes closest to the intention underlying the invalid or unenforceable provision.

The waiver by HEMS Technology of any breach of any provision of this Agreement will not operate or be construed as a waiver of any other or a subsequent breach of the same or a different provision.

#### DISCLAIMER OF WARRANTY FOR WEB USE AND DOWLOADS:

HEMS TECHNOLOGY DOES NOT WARRANT OR MAKE ANY REPRESENTATIONS REGARDING THE AVAILABILITY, USE, TIMELINESS, SECURITY, VALIDITY, ACCURACY, OR RELIABILITY OF, OR THE RESULTS OF THE USE OF, OR OTHERWISE RESPECTING, THE CONTENT OF THE SITE OR ANY OTHER WEB SITES LINKED TO OR FROM THE SITE. ANY MATERIAL DOWNLOADED OR OTHERWISE OBTAINED THROUGH THE USE OF THE SITE IS DONE AT YOUR OWN DISCRETION AND RISK AND YOU ARE SOLELY RESPONSIBLE FOR ANY DAMAGE TO YOUR COMPUTER SYSTEM OR LOSS OF DATA THAT RESULTS FROM THE DOWNLOAD OF ANY SUCH MATERIAL, OR USE OF THIS SITE. THE CONTENT OF THE SITE IS PROVIDED "AS IS" AND ON AN "AS AVAILABLE" BASIS, WITHOUT WARRANTIES OF ANY KIND EITHER EXPRESS OR IMPLIED. TO THE FULLEST EXTENT POSSIBLE PURSUANT TO APPLICABLE LAW, HEMS TECHNOLOGY DISCLAIMS ALL WARRANTIES. EXPRESS OR IMPLIED. INCLUDING. BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OR OTHER VIOLATION OF RIGHTS. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSIONS OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY. NO ADVICE OR INFORMATION. WHETHER ORAL OR WRITTEN, OBTAINED BY YOU FROM HEMS TECHNOLOGY WILL BE DEEMED TO ALTER THIS DISCLAIMER OF WARRANTY, OR TO CREATE ANY WARRANTY.

### WARNING:

1. The HEMS 220<sup>™</sup> plug-in Power Monitor is designed for 120VAC at 15 AMPs maximum. Any appliance that exceeds that amount of amperage should not be plugged into our device. Check the power rating on the back of your appliance before plugging into the HEMS 220<sup>™</sup>. To determine amperage, divide the power in watts by 120.

2. Do not attempt to disassemble –no user replaceable parts within this product. Disassembling voids the product warranty and may subject you to electrical hazards such as fire when plugged into an AC Receptacle.

3. Do not plug into AC Receptacle with wet hands or if product is wet. Doing so may result in fire or electrical shock.

## Welcome to the world of HOME energy conservation

With the purchase of the HEMS 220<sup>™</sup> and the HEMS-TXR<sup>™</sup> USB stick you will be able to monitor and control the time your appliances are either ON or OFF and the amount of energy each appliance uses.

## **Getting Started**

The HEMS-DR<sup>™</sup> home energy conservation system consists of multiple HEMS 220 wall plug-in power monitors, the HEMS-TXR<sup>™</sup> USB Stick which acts as the node controller radio, and the CD ROM which contains the software for your PC. The HEMS-DR<sup>™</sup> program runs in Windows XP<sup>™</sup> within an IBM Compatible computer. It requires a USB 2.0 or higher to work properly.

- **Step 1:** Install software using the program CD ROM The PC will reboot.
- **Step 2:** Plug the USB radio stick into a USB slot in the PC. Windows XP will recognize the USB device.
- Step 3: Click on the HEMS-DR™ ICON on the desktop
- **Step 4:** Record the HEMS 220<sup>™</sup> serial number and which appliance is connected to that particular HEMS plug-in.

## WARNING:

## TO AVOID ELECRICAL SHOCK, MAKE SURE THE APPLIANCE IS TURNED OFF BEFORE PLUGGING INTO THE HEMS 220™.

**Step 5:** Refer to the HEMS-DR<sup>™</sup> Software Manual for the procedure needed to configure the network and the appliances.

## INSTALLING THE HEMS 220™



Plug the HEMS 220™ into the AC Wall Outlet first.

## WARNING:

DO NOT PLUG THE APPLIANCE INTO THE HEMS 220™ DEVICE UNTIL THE HEMS 220 DEVICE IS PLUGGED INTO THE WALL OUTLET FIRST. Step 2:



Plug in the appliance male AC plug into the HEMS 220™ receptacle.

HEMS Technology 3013 Saint Bartholomew Drive Mansfield, Texas 76063-7517

#### www.hemstech.com

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### SUPPORT: support@hemstech.com

#### CONGRATULATIONS. YOU HAVE SUCCESSFULLY COMPLETED INSTALLING THE HEMS 220 DEVICE.

## OPERATING THE HEMS 220™

The HEMS 220 unit is controlled and monitored through the software residing in the personal computer (PC). Please refer to the HEMS-DR<sup>™</sup> Software Manual for this information.

## TROUBLESHOOTING THE HEMS 220™

If the HEMS 220<sup>™</sup> doesn't seem to be operational, unplug the unit from the AC socket and re-insert. If that doesn't fix the problem, check the HEMS-DR<sup>™</sup> Software Manual for tips on troubleshooting the unit.