Intermatic Radio Frequency Home Automation System

Z-WaveTM-enabled Universal Serial Bus Device

MODEL: HA22 DESCRIPTION: USB Z-WaveTM Stick

Preliminary Product Specifications - Revision 0.1, 1/17/2006

Written by:

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Z-Wave™ is a registered trademark of Zensys A/S.

0.0 Description:

Intermatic has developed a new line of lighting control products based on a mesh-networking protocol called Z-Wave[™] and an ASIC chip referred to as the ZW0102. Z-Wave[™] is a Wireless Control Technology developed by Zensys located in Copenhagen, Denmark. This wireless system operates in the 908.42MHz public band in the United States. For more information regarding Zensys and Z-Wave[™], please visit the Zensys website at http://www.zen-sys.com

The Intermatic Home Automation lighting control system consists of the following lighting control devices:

- HA01 Duplex Receptacle
- HA02 Grounded Plug-in Appliance Module
- HA03 Plug-in Dimmable Module
- HA04 Outdoor Appliance Module
- HA05 Screw-in Lamp Module
- HA06 In-Wall Dimmer Switch Module
- HA07 12 Channel Master Controller
- HA09 6 Channel Handy Remote Controller

Each model shares a common RF-front end transceiver design that allows simple and reliable 2-way communication between devices.

A Universal Serial Bus (USB) device would allow a connected personal computer to control and manage a Z-wave™ enabled home network containing a number of the above devices, with the use of software developed specifically for that network.

1.0 Agency Requirements

- 1.1 FCC Part 15 Intentional Radiator
- 1.2 Industry Canada (IC)
- 1.3 EMC IEC 1000 4.4 Electromagnetic Compatibility Electrical Fast Transient/Burst immunity test

2.0 Technical Specifications:

- 2.1 Operating Frequency: 908.42MHz
- 2.2 Operating temperature range: 0°C to 40°C. Storage temperature: -35°C to 70°C
- 2.3 Operating Range: 100 feet
- 2.4 Environmental: 10% to 95% Non-condensing relative humidity. Indoor use only.
- 2.5 Power supplied by USB port, 4.40V to 5.25V DC.
- 2.6 Electronic design of the RF module shall be based on the US Enhanced Small Form Factor Z-Wave Module, ZW0102. See attached BOM for components required.



- 2.7 Design shall utilize a USB to UART microcontroller with supporting components to interface the Z-wave module with a personal computer via USB input port.
- 2.8 Housing design shall be as small as possible and manufactured in gloss white ABS plastic subject to approval by Intermatic.
- 2.9 Unit shall have a power/communications indicator LED in Green.
- 2.10 Package shall include a USB v2.0 extension cord 6ft. in length.

END