## **AVM-MC1-B Media Controller Operational Description**

The AVM-MC1-B Media Controller is a microprocessor-based digital audio server with full home automation control features. The system uses a CD-RW drive to digitally record audio CD's onto a hard drive. It can then serve multiple independent audio streams over Ethernet and WiFi networks as well as from three stereo analog audio outputs and one digital audio (TOSLINK) output. It can accept audio inputs from three line level stereo analog inputs and one digital audio input (TOSLINK).

The user interacts with the Media Controller using a 2.4 GHZ (802.15.4) wireless remote control and video user interface. The video is output in one of four video formats including NTSC/PAL composite, S-video, Component (YPbPr), and VGA. The user also interacts with the Media Controller via front panel LCD graphics display, four buttons and a rotary encoder.

The Media Controller's home automation features include IR inputs and outputs, Relay's, Contact Sense inputs, Composite video sense inputs, and serial ports. TCP/IP Networked devices are controlled over 10/100baseT Ethernet and 802.11b/g WiFi. Other wireless devices are controlled using an integrated a 2.4 GHZ (802.15.4) radio.

The IR outputs are 3.5mm phone jacks intended to drive IR LED extension cables. The cable ends have a small housing containing and IR LED and fitted with and adhesive strip allowing them to be mounted over the IR input windows of equipment to be controlled by the Media Controller.

The relay outputs have Normally Open, Normally Closed and Common terminals available on terminal blocks and are intended to switch low voltage devices such as gas fireplaces, or sprinklers.

Contact inputs can allow switch closures or logic level signals to be sensed by the Media Controller. These inputs are intended to accept input from devices like motion sensors or door closure switches.

The serial ports can support RS232, RS422 and RS485 standards.

WiFi communications are implemented using a pre-approved FCC compliant USB WiFi adapter.