Operation Description:

The F1DG102W is a 2 port switching device that switches Keyboard, mouse, and monitor outputs from one of two sources to a single synch. This enables a user to share the same Keyboard, Mouse and monitor between to computers. The F1DG102W main board draws its powered form the source computers USB ports. The power consumed from each port is 5V @ .5A.

The switching mechanism is evoked in one of two manners. One is by means of software running on either of the source computers. Communication by the software is done through the USB connection between the KVM main board and the source computers.

The second is by means of a RF remote. The RF remote is powered from a single 3.0V coin cell. The remote remains in a sleep state until it is awakened by detection of a mechanical button press. Upon detection of button press, a micro processor enables an ON/OFF keyed (OOK) modulated transmitter. The processor then sends the transmitter an Address and switch command in digital format at 1kbps rate. This digital signal is modulated by the transmitter and sent out as a 25ms burst of RF energy at 22uW, centered around 433.92MHZ. The transmitter is then disabled by the micro processor. The micro processor then flashes an LED indicating that an RF emission has taken place, after which the micro processor enters a sleep state and waits for another button press. The RF transmission is received at the KVM main board and demodulated. The KVM main board then performs a switch between the source computers.