**INSTALLATION** 

IR-100, IR-E1 & DV9-500

IR System Connecting Block, Flasher & Power Supply

## Room Placement and Mounting

A clean, uncluttered installation requires infrared control system components, other than repeaters, to be installed out of sight.

The IR-100 connecting block(s) should be installed behind the equipment to be controlled. IR-E1 flashers attach, peel and stick, over each controlled component's infrared sensor window and the IR-E1's easy to hide wire leads are routed back to the IR-100's flasher jacks.

Power is supplied by the standard DV9-500 or the premium SPS-1212 power supply . The power supply is installed near and plugged into the IR-100 or near and plugged into an IR-J8 structured wiring junction box.

An IR-J8 structured wiring junction box simplifies improves reliability, and aids installation, in troubleshooting of multiple IR repeater control systems. It provides pluggable labeled connectors for up to eight repeaters and a optional power supply connection than can be used when the IR-100 is not a good choice.

## Wiring Recommendations

Infrared control signals are similar to digital communications signals. A low capacitance communications cable (< 20 pF/ft.) is a good choice for this application. Unshielded cable will work in all but the noisiest environments, very rarely is a shielded cable required.

Most installers use standard CAT5 computer network cable. Prewired homes come with CAT5 runs installed to most rooms. CAT5 is an excellent choice for IR control system wiring.

CAT5 has four twisted pairs, use one twisted pair for each of the three connections (V+, GND, and SIG) if possible. This method allows repeater runs to 1,000 feet and adds reliability to the connections. Single wire connections can be made if required, this method allows repeater runs in excess of 500 feet.

Never install low voltage devices, such as infrared repeaters, inside electrical boxes containing 115-Vac wiring. Run infrared control system wiring at least 1 foot away from 115-Vac lines, telephone lines, and speaker wires, this can reduce noise interference. Most low voltage devices can be installed close together with no adverse effects.

Multiple IR repeaters can be installed using either home run wiring or daisy chain wiring. Home run wiring is generally preferred because it is more reliable, easier to troubleshoot, and easier to modify during system upgrades.





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(Max. 15)

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