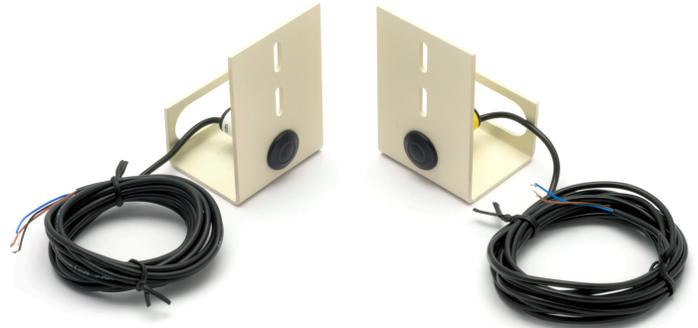


See the HAL Installation Manual for all IR2 instructions and warranty information.

The HAL Installation and Design Manuals, data sheets with specifications, Halogen software and help files, graphics and CAD files, and system applications are available at [rane.com/hal](http://rane.com/hal).



### General Description

The Rane IR2R and IR2S are collectively known as an IR2. They work in pairs as an accessory to Rane HAL products. The IR2S sends infrared, the IR2R receives it. They work as a pair to provide an automatic way to sense the position of a movable wall or door. Mounting brackets and screws are included.

A single CAT 5e cable for each door connects the IR2 to a dedicated IR Remotes port on the rear of the HAL2 or DR4. For a wiring diagram, see the next page.

When mounted on opposite sides of the door, and wired correctly, green indicators on the IR2R and IR2S are always lit. Only when the door is open and the IR2R is receiving infrared from the sender does the IR2R's amber indicator light. Depending on the IR2 mounting height and your eyeglass prescription, these indicators can usually be viewed from the floor. Note that the HAL need not have a configuration loaded in it for the above functionality to be observed. A powered HAL2 or DR4 is sufficient.

For an IR2 remote to control audio, the IR2 requires a connection to a HAL2, or to a DR4 connected to any HAL. In either case, the HAL must be loaded with a suitable configura-

tion. When doors or movable partitions are opened or closed the IR2 automatically detects this, and the audio system reconfigures itself appropriately and automatically.

Distinguishing the IR2R from the IR2S: Both the send and receive parts have brown and blue wires, but the receiver also has a black wire.

The HAL does not check the IR2 wiring for errors. The IR2R's green indicator flashes when the output is short-circuited. The amber indicator flashes when the signal is marginal, as for a dirty sensor, or if it's too far away. The IR2 will operate up to 1.5 meters (5 feet) apart.

### Features

- Integrates with the Rane HAL System.
- CAT 5e cable wiring to the HAL2 or DR4.
- All steel mounting brackets included.
- Green power indicators and amber alignment indicator aid wiring.
- Sink and source 100 mA per IR2R output.

### Specifications

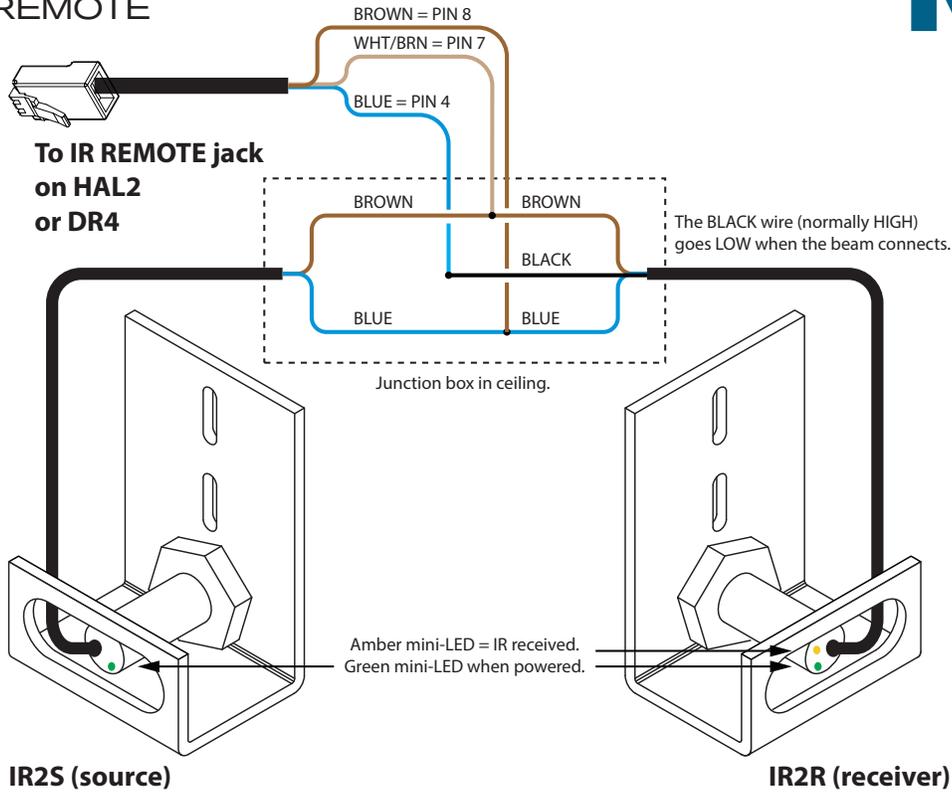
| Parameter                         | Specification                 | Limit | Units | Conditions/Comments  |
|-----------------------------------|-------------------------------|-------|-------|--|
| Infrared Range                    | 1.5 meters / 5 feet           | max   |       |  |
| Power Supply Requirement          |                               |       |       |  |
| .....Supply Voltage               | 10                            | min   | VDC   | Protected against reverse polarity.  |
|                                   | 30                            | max   | VDC   |  |
| .....Supply Current               | 30                            | max   | mA    | IR2 combined.  |
| IR2R Load Current                 | 100                           | max   | mA    | Protected against short-circuit.   |
| Ambient Temperature               | 70                            | typ   | °C    |  |
| Cable Length: Unit to Junction    | 2.0 meters / 6.5 feet         | typ   |       | Cables attached (see wiring diagram).  |
| Cable Length: Junction to IR Port | 305 meters / 1,000 feet       | max   |       | CAT 5e or similar cable with RJ45 (8P8C) at IR Port (3 wires of 26 AWG or better). |
| Environmental                     | IP66                          |       |       |  |
| Unit: Conformity                  | CE, FCC                       |       |       |  |
| .....Construction                 | Steel bracket and ABS housing |       |       |  |
| .....Size                         | 2.65"H x 1.75"W x 1.5"D       |       |       | (6.8 cm x 4.5 cm x 3.8 cm)   |
| .....Weight                       | 3 oz                          |       |       | (.09 kg)   |

# IR2

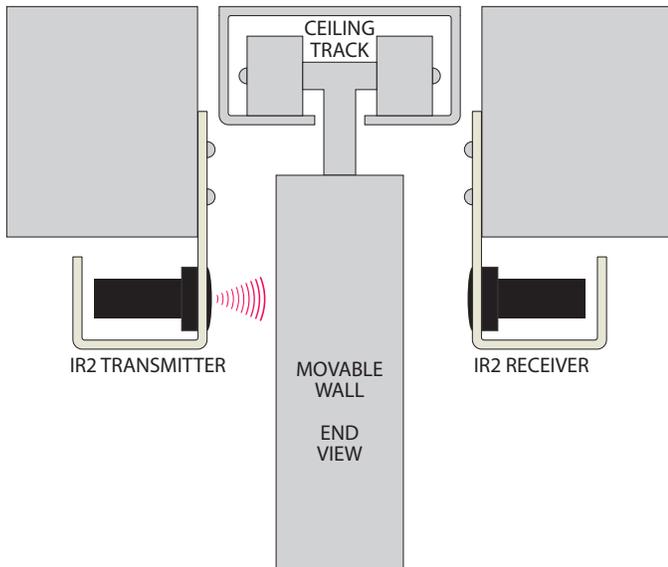
## INFRARED REMOTE



### Wiring



### Mounting



### FCC Statement

**NOTE:** This equipment has been tested and found to comply with the limits 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 in accordance with 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 can be determined 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 and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**CAUTION:** Changes or modifications not expressly approved by Rane Corporation could void the user's authority to operate the equipment.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

### Warning

This product may contain chemicals known to the State of California to cause cancer, or birth defects or other reproductive harm.

### Warning

#### Not To Be Used For Personnel Protection

Never use these products as sensing devices for personal protection. Doing so could lead to serious injury or death. These sensors do *not* include the self-checking redundant circuitry necessary to allow their use in personnel safety applications. A sensor failure or malfunction can cause either an energised or de-energised sensor output condition.