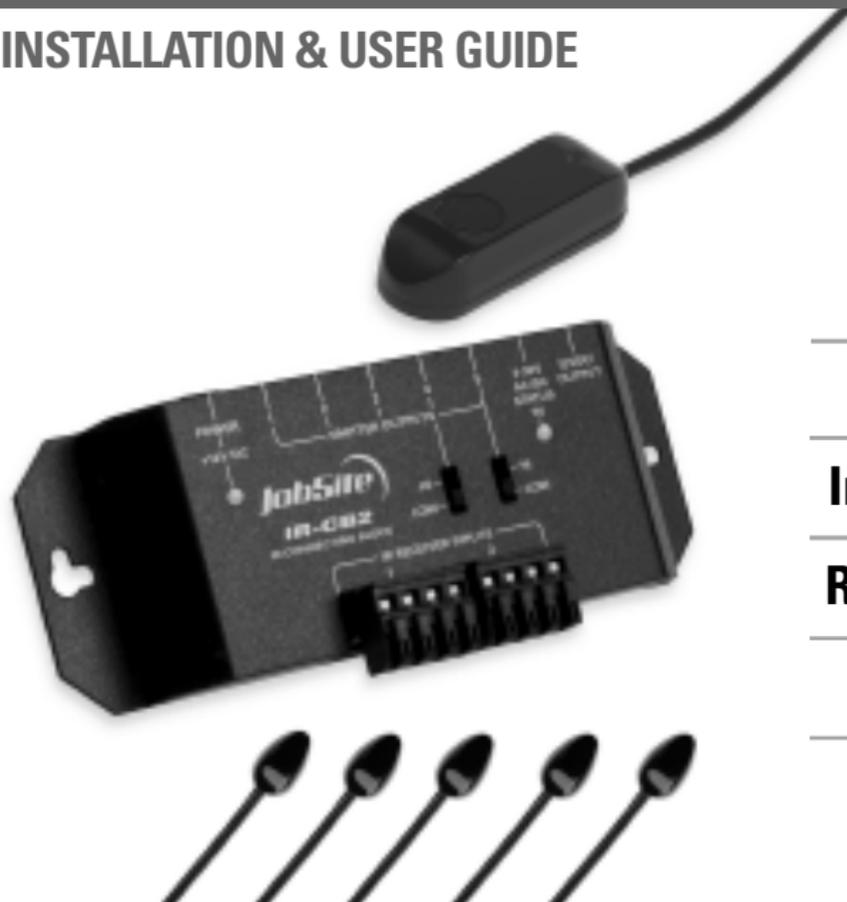


INSTALLATION & USER GUIDE



JobSite[®]
PURE CUSTOM[®]

**For Receiving and Routing
Infrared Commands from Any
Remote Control to Concealed
Audio/Video Equipment**

PLASMA PROOF IR REPEATER KIT

IR-KIT

IR-KIT

PLASMA PROOF IR REPEATER KIT

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FEATURES

IR-CB2

- Provides two IR Receiver inputs and five IR Emitter outputs
- Selectable high/low emitter outputs for use with IR-E1HO high output emitter or single and dual emitters
- LED power indicator
- 12V DC status input jack and LED indicator

Installation friendly design:

- Snap and Lock Connector secures wire in place without the use of a screwdriver
- 3.5mm emitter output jacks

- Wings allow for either vertical or horizontal mounting
- Includes in-line UL listed regulated power supply

IR-SMR Surface Mount IR Receiver

- Plasma-proof design
- Rejects interference from flat panel displays, CFL lighting or indirect sunlight
- Works with practically all remotes
- Extended receiving range
- Green talkback LED indicates when A/V system is on
- Blue talkback LED confirms reception of IR signals

Installation friendly design:

- 10' of connecting wire included
- Reliable adhesive backing

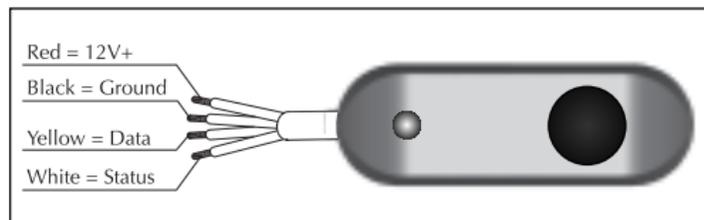
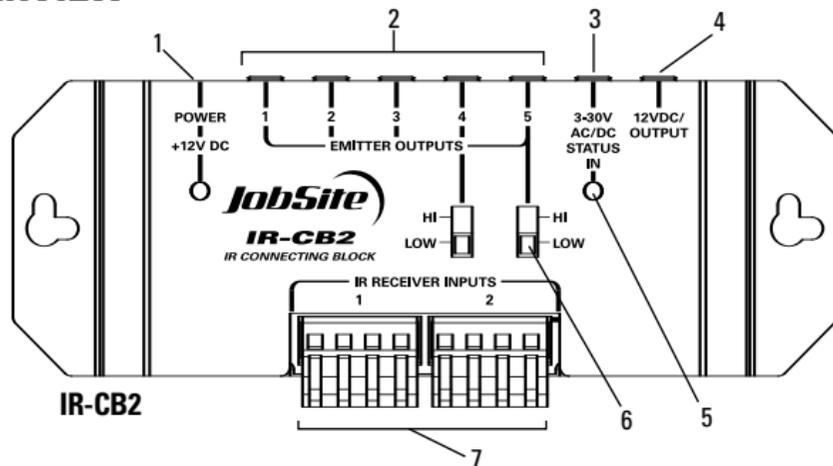
IR-E1 Infrared Emitter

- Infrared pass through housing
- Miniature size and shape

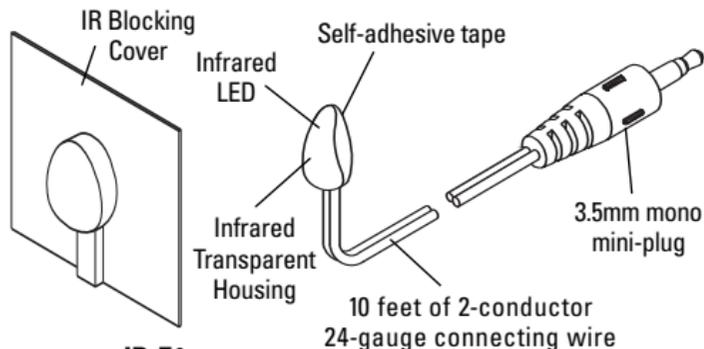
Installation friendly design:

- 10' of cable with 3.5mm plug
- Reliable adhesive backing
- Includes IR Blocking Cover

PRODUCT OVERVIEW



IR-SMR



IR-E1

1. 12V DC Jack – Provides 12Volt DC power to IR-CB2 via a regulated power supply.
2. IR Emitter Outputs – 3.5mm jacks provide output for either single or dual low-level flashers.
3. 3-30V AC/DC Status – 3.5mm jack provides system status to sensors/keypads via a 12V power supply attached to a switched outlet on the system receiver or a 12V trigger output.
4. 12V Output – When 12V DC is detected at the status jack (#3) the 12V output jack will output 12V/200mA DC. This is useful for triggering external devices and system automation.
5. Status/IR Confirmation LED – This LED performs two functions: (1) it provides a visible indication of system status via a green LED and (2) confirms the reception of IR data via a blinking blue LED.
6. Emitter Hi/Low switch – Setting these switches to the appropriate position allows you to connect either a high-output flooding emitter (IR-E1H0) or low-output emitter. There is one Hi/Low switch for emitter port four and one Hi/Low switch for emitter port five.
7. Sensor Inputs – Removable quick connect sensor plug for connection of IR sensors to the system.

PACKAGE CONTENTS

- IR-CB2 x 1
- Snap and Lock Connectors x 2
- In-line power supply x 1
- Self-adhesive rubber feet x 4
- IR-SMR Receiver x 1
- Adhesive-backed strip for mounting x 1
- IR-E1 Emitters x 5
- IR Blocking Covers x 5
- Extra emitter adhesive strips x 10

PREPARING FOR INSTALLATION

The IR Receiver cables, emitter cables and the 12V DC power supply cable must all reach the proposed location of the IR-CB2 Connecting Block. Mark the cables with wire labels, describing where the cables originate from, rather than where they will terminate. Locate a local un-switched AC outlet to be used to power the IR-CB2 power supply.

Tools Required

- 1/8" Slotted screwdriver
- Wire labels
- Wire stripper

INSTALLATION

1. Select an appropriate location for the IR-CB2.
2. Run all the necessary wiring to the IR-CB2. Label the wires for future reference.
3. Plug the supplied 12V DC power supply into the un-switched AC outlet.
4. Plug the 12V DC power supply connector into the IR-CB2 socket marked POWER.
5. After verifying that the AC outlet works, unplug the power supply connector.
6. Determine the mounting location for the IR-SMR.
7. Make sure the mounting surface is clean.
8. Remove the protective coating from the self-adhesive tape and attach the IR-SMR to the mounting surface.
9. Run the IR-SMR cable. Label the cable for future reference.

10. Locate the IR Connecting Block Snap and Lock Connectors and remove them if they are plugged in.

11. Use a small flathead screwdriver or your thumb to raise the locking tabs, exposing the holes on the connectors.

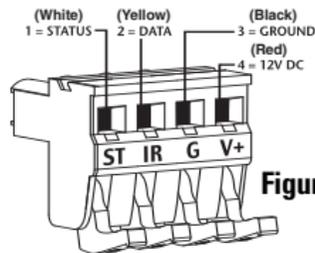
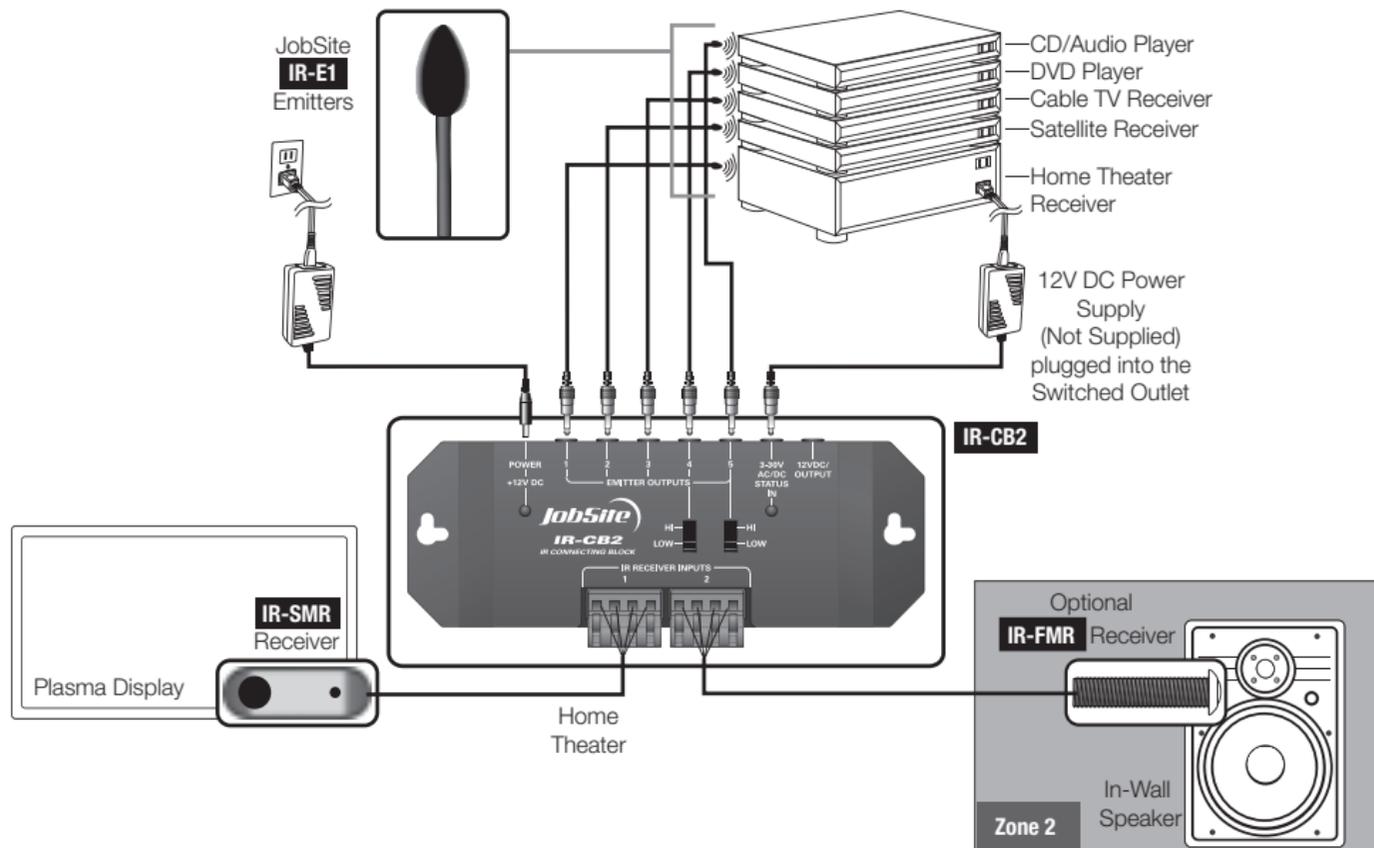


Figure 1

12. Insert each wire into the appropriate hole and snap down the locking tabs. **Figure 1**
13. Insert the smooth side of the connector plug into the smooth side of the IR Connecting Block socket.
14. Connect the IR-E1 Emitters to the emitter outputs.
15. Plug the 12V DC power supply connector into the IR-CB2 socket marked POWER.

See installation diagram (page 6).

INSTALLATION DIAGRAM



Power Status

You can send a Power Status signal to IR-SMR receiver by connecting a 12V DC power supply from the switched AC power outlet of the preamp/receiver to the status input jack of your IR-CB2. Any 12V DC power supply with a minimum of 100mA current capacity can be used.

Hi/Low Emitter Output Switches

Emitter Output positions 4 and 5 have Hi/Low output options. Set these switches to the appropriate position depending on what JobSite Emitter you intend to use. When you are using an IR-E1 or IR-E2 Emitter, set the switch in the LOW position. If you are using a JobSite IR-E1HO Emitter, set the switch in the HI position.

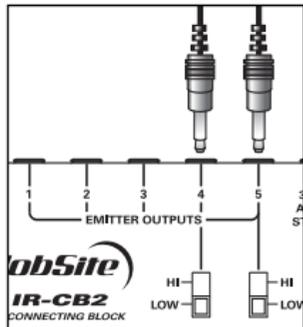


Figure 2

Note: Using an IR-E1 or IR-E2 Emitter with the Emitter Output Switch set to the HI position, can damage the emitter.

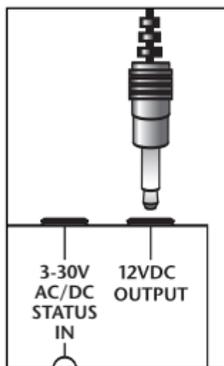


Figure 3

12-Volt Trigger Output

The JobSite IR-CB2 provides a 12V DC output that can be triggered one of two ways:

1. The presence of status voltage on the 12V DC status input jack.
2. Discrete infrared On and Off commands.

This output can be used to trigger any device that requires 12V DC to be activated.

Note: Status voltage takes priority over IR command.

OPERATION

Test your IR Repeater system by following three principal guidelines:

1. All components can be operated: Test all of your remote controls for all of your equipment.
2. Operation is consistent: A good test is to repeatedly step from Pause to Play with your VCR, CD, DVD, or Tape player remote control. Operation should be identical to standing in front of the component with the remote control pointed directly at the receiver window.
3. Maximum range between the remote control and the JobSite IR Receiver is similar to the maximum range between the remote control and the A/V component's IR Receiver: Typically a remote control with two batteries will have a 15 to 20 foot range and a remote with four batteries will have a 20 to 30 foot range.

Additional IR Receivers

The IR-Kit includes one surface mount receiver. The included IR-CB2 Connecting Block will accommodate a second IR Receiver. JobSite makes a variety of receivers for virtually any application. See your JobSite dealer for more information.

TROUBLESHOOTING

Bad Connections or Wiring

If the connections or wiring are wrong, loose, shorted or open, the system will not operate properly. The symptoms could include: Power LED flickers or is off, IR Test LED is continuously flickering or on without any remote control use, intermittent operation or no operation.

Solution: Systematically troubleshoot the wiring by:

1. Testing your power supply connections.
2. Testing your receiver connections.
3. Testing your emitter connections.
4. Testing your cable for shorts and opens.

IR Saturation

Sometimes the emitter output can saturate the IR receiving window of a component. When this occurs, the IR command will not be executed. This can occur on an intermittent basis when there is a Plasma TV in the system.

Solution:

1. Remove the IR Blocking Cover if you are using one.
2. Turn on the Plasma TV, because this may be contributing to the problem.
3. Relocate the IR Emitter approximately 1/2" away from the IR Receiving window.
4. Some experimentation will be required to determine the best location for emitter.

Note: Do not use an IR Blocking Cover if a component is sensitive to IR saturation.

Optical or Electromagnetic Interference

Direct sunlight, reflections, neon signs and other sources of infrared light or television sets, light dimming controls and other sources of electromagnetic fields can induce noise and interference into your IR repeater system. Symptoms can include: flashback LEDs continuously flickering or on without any remote control use, poor range, intermittent operation or no operation.

Solution: To eliminate EMI try the following methods

1. Move the receiver or the receiver cable away from the EMI source or move the source of the EMI away from the receiver or the cable.
2. Connect the receiver's GND terminal to true earth ground (if this isn't feasible use the main system unit's GND terminal).

Optical Feedback Loop

If you have an IR Receiver in the same room as a emitter, and you have some low-level noise or interference, an optical feedback loop can occur which will interfere with proper operation. Symptoms can include: poor range, intermittent operation or no operation.

Solution: Replace IR-E1HO Emitters

You can eliminate optical feedback by replacing any IR-E1HO "flooding Emitters" with IR-E1 or IR-E2 Emitters and covering all emitters with the supplied IR Blocking Covers.

SPECIFICATIONS

IR-CB2

IR system:

Works with practically all brands of IR remote controls

Connections:

2 receiver inputs, 5 emitter outputs

Wiring requirements:

Category 5 or better

Home runs required from each IR receiver

Mounting:

Wall or flat surface: use drywall screws

Dimensions:

5-11/16" wide x 1-1/4" high x 2" deep

Power requirements:

110V to 12V DC power supply (included)

Warranty: 2 year limited

IR-SMR

IR system:

Works with practically all brands of IR remote controls

IR receiving (varies by brand of remote control):

18'-30' range

From 20', 30 degrees off-axis

Wiring requirements:

Category 5 or better, home runs required

Mounting:

Self-adhesive, surface mount

Dimensions:

2" long x 1/2" wide x 1/4" high

Warranty: 2 year limited

SPECIFICATIONS (CONTINUED)

IR-E1

IR system:

Works with practically all brands of IR remote controls

IR transmitting:

4' (line of sight)

Emitters mount directly to the IR window of a component

Wiring requirements:

10' of 2-conductor 24-gauge wire with a 3.5mm plug is supplied

Use 18-gauge for distances up to 20' and 16-gauge for up to 200'

Mounting:

Self-adhesive, surface mount

Dimensions:

5/16" wide x 3/16" high x 1/2" deep

IR Blocking Cover Dimensions

2" wide x 2" high x 1/4" deep

Warranty: 2 year limited

LIMITED WARRANTY

JobSite Systems ("JOBSITE"), a Niles Audio Corporation company, warrants its passive products (those not requiring AC or battery power) to the original purchaser to be free of manufacturing defects in material and workmanship for a period of ten years from date of purchase.

JOBSITE warrants its passive loudspeaker products (those not requiring AC or battery power) to the original purchaser to be free of manufacturing defects in material and workmanship for a period of five years from date of purchase.

JOBSITE warrants its indoor/outdoor loudspeaker products to the original purchaser to be free of manufacturing defects in material and workmanship for a period of two years from date of purchase.

JOBSITE warrants its all weather rock loudspeaker products to the original purchaser to be free of manufacturing defects in material and workmanship for a period of five years from date of purchase.

JOBSITE warrants its active products (those requiring AC or battery power) to the original purchaser to be free of manufacturing defects in material and workmanship for a period of two years from date of purchase.

This Warranty is subject to the following additional conditions and limitations. The Warranty is void and inapplicable if JOBSITE deems that the product has been used or handled other than in accordance with the instructions provided by the manufacturer, including, but not limited to, damage caused by accident, mishandling, improper installation, abuse, negligence, or normal wear and tear, or any defect caused by repair to the product other than by JOBSITE or an authorized JOBSITE wholesale distributor.

To obtain warranty service, you must write to JOBSITE: Include your name, address, telephone number, model number and serial number of your unit, and a brief description of the problem.

A factory Return Authorization Number will be sent to you. **DO NOT RETURN ANY UNIT WITHOUT FIRST RECEIVING WRITTEN AUTHORIZATION AND SHIPPING INSTRUCTIONS FROM JOBSITE.**

If the above conditions are met, the purchaser's sole remedy shall be to return the product to JOBSITE, in which case JOBSITE will repair or replace, at its sole option, the defective product without charge for parts or labor. JOBSITE will return the unit repaired or replaced under warranty by shipping it by its usual shipping method from the factory (only) at its expense within the United States of America. THERE ARE NO OTHER WARRANTIES, INCLUDING, WITHOUT LIMITATION, EITHER EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE PRODUCT.

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For the name of the nearest authorized JOBSITE wholesale distributor, contact:

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