

APPLICATION #1: INFRARED SYSTEM FOR A HOME THEATER

In this application we have a home theater system located in an entertainment center. All of the supporting electronics are hidden behind solid wood cabinet doors (see **Figure 1**). A large LCD TV is exposed and will be the location for the IR sensor.

Niles manufactures IR sensors in five different form factors that address different applications. Since we have an LCD TV, the MS220 IR MicroSensor® is the best choice for this application. This sensor will be applied to the frame of the TV with new and improved 3M adhesive backing. The sensor is connected to the Niles Main System Unit (MSU) with its attached 4-wire cable, which can be extended using CAT-5 cable. A Niles MicroFlasher®, plugged into the MSU, is placed on the IR sensor window of each source component you wish to control.

CRITICAL KNOWLEDGE

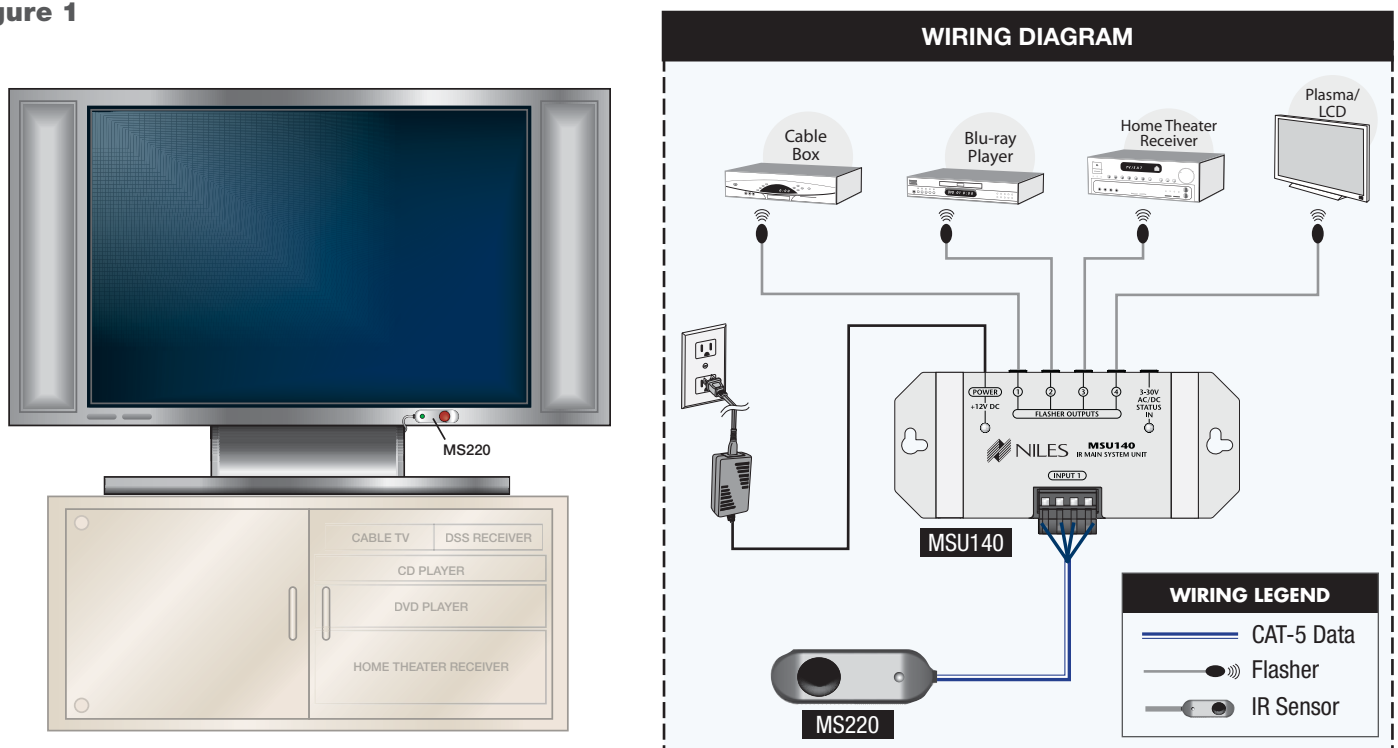
- A complete IR system consists of at least one IR sensor, one main system unit (MSU), and at least one flasher for each piece of electronics you want to control.
- The range of IR sensors is greatest when the user is no more than 30° off axis with the sensor.
- Always locate IR sensors so that direct sunlight cannot fall on the sensor throughout the day.

TIPS FROM THE PROS

- You can eliminate the use of flashers by connecting to the rear panel IR input on most surround receivers and some source electronics.
- Some IR sensor windows on cable and satellite boxes are susceptible to being overdriven. If you are experiencing problematic operation, simply locate the flasher to the side of the sensor window.
- To enable a feature called “Status Feedback,” simply connect a second power supply (FG01035) to the status input on the MSU and plug it into the switched AC outlet on the back of your surround receiver. The sensor will now indicate when the receiver is on.
- The adhesive backing of the MS220 MicroSensor has been scored and allows you to peel off a small portion of the adhesive cover thus allowing you to place and then move the MS220 to find the best operational placement before permanently affixing it to the TV.

APPLICATION #1: INFRARED SYSTEM FOR A HOME THEATER

Figure 1



APPLICATION #2: INFRARED SYSTEM FOR A HOME THEATER AND SECONDARY ROOM

This application allows the control of a system from two locations within a home. The primary area is a home theater with the source electronics hidden away. A second room is connected to the zone 2 output of the surround A/V receiver. All sources can be controlled from either area by simply pointing a remote at the IR Sensor.

Niles manufactures IR sensors in five different form factors. Since we have an LCD TV, the MS220 IR MicroSensor® is the best choice for the home theater, and a WS120 Wall Mount IR Sensor will be used in the secondary area (see **Figure 2**). The sensors are then connected to the MSU with CAT-5 cable. A MicroFlasher is placed on each source component, and a 3.5mm mono mini cable connects the MSU to the Zone 2 IR input on the receiver.

CRITICAL KNOWLEDGE

- A complete IR system consists of at least one IR sensor, one main system unit (MSU), and at least one flasher for each piece of electronics you want to control.
 - Cabling between IR sensors and the MSU can be extended up to 200 feet with CAT-5 cable.
 - The range of IR sensors is greatest when the user is no more than 30° off axis with the sensor.
 - Always locate IR sensors so that direct sunlight cannot fall on the sensor throughout the day.
 - When using two or more identical source products (e.g. two satellite receivers) to feed each room independently, an MSU440Z or PAR4 must be used.
- Visit www.nilesaudio.com for details.
- For Zone 2 control the IR commands must be different from Zone 1 commands.

TIPS FROM THE PROS

- You can eliminate the use of flashers by connecting to the rear panel IR input on most surround receivers and some source electronics. This is also the case for Zone 2 control on most receivers. Niles makes a 10-foot accessory cable to connect to the input of most source electronics (FG00933).
- Use the blocking covers provided with the Niles IR MicroFlasher when sources are located near each other or stacked.
- Some IR sensor windows on Cable and Satellite boxes are susceptible to being overdriven. If you are experiencing problematic operation, simply locate the flasher to the side of the sensor window.
- To enable a feature called "Status Feedback" simply connect a second power supply (FG01035) to the MSU and plug it into the switched AC outlet on the back of your surround receiver. The sensor will now indicate when the receiver is on.
- The WS120 IR sensor is a low voltage device and can be combined with other low voltage devices in a multi-gang outlet box.

APPLICATION #2: INFRARED SYSTEM FOR A HOME THEATER AND SECONDARY ROOM

Figure 2

