Cat 5 Camera Module

Installation Notes

Important Safety Precautions

READ ALL INSTRUCTIONS CAREFULLY AND COMPLETELY BEFORE INSTALLING THE CAT 5 CAMERA MODULE.

- **Do not** attempt to service, move or change any component of this system unless you are qualified to do so.
- This system must be installed by an authorized installer and must conform to all local building and electrical codes.
- **Do not** apply power to the Cat 5 Camera Module until all components have been installed and all wiring has been properly terminated.
- **Do not** attempt to terminate, change or un-install any wiring without first turning off power at the Cat 5 Camera Module which is located in the enclosure. Unplug the power transformer that is powering the Cat 5 Camera Module from the power outlet before proceeding with wiring terminations or changes.
- Install each component of this system **away** from heat sources such as heating ducts/registers, stoves or any other heat source.
- **Do not** expose any component that was designed for indoor use to moisture. Doing so can create electrical hazards or render the component unusable. Exposure to moisture will also void the warranty on the system (not applicable for weatherproof outdoor rated cameras).

1. Pre-Wiring the Cat 5 LCD Display(s)

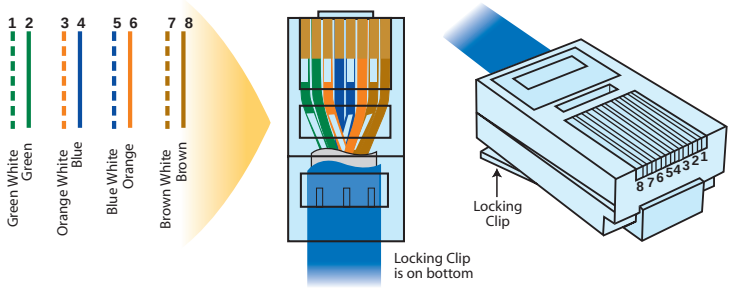
- Each Cat 5 Camera requires a single Cat 5 cable run from the camera location to the Cat 5 Camera Module which is typically installed in the structured wiring enclosure.
- Each Cat 5 Camera Module can support up to four Cat 5 Cameras.

2. Terminate wiring & finalize connections

All wiring should be terminated to the T568A wiring standard as shown in the diagram below.

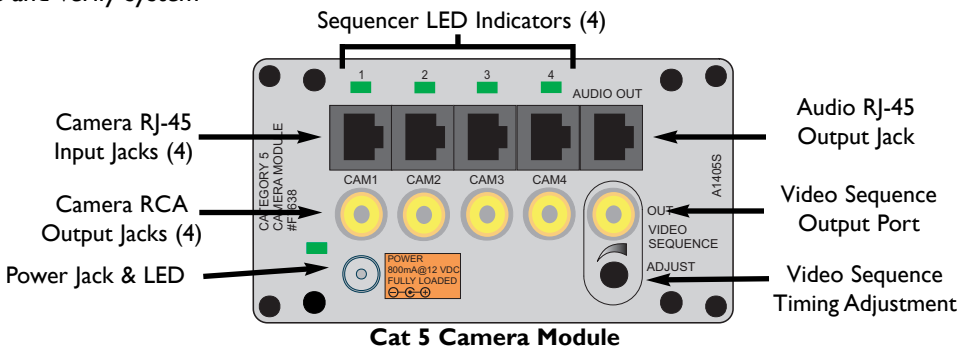
- Terminate all Cat 5 cable ends with RJ-45 plugs using the T568A wiring standard.
- Connect the RJ-45 plug at the camera locations with the Cat 5 Cameras according to the instructions that are included with your cameras.
- Insert the RJ-45 plugs at the Cat 5 Camera Module into the RJ-45 jacks located on the Cat 5 Camera Module labeled "CAM1" through "CAM4".
- Connect RCA cables from the desired RCA output ports on the Cat 5 Camera Module to a modulator, video server or other video device based on the application.
- Apply power to the Cat 5 Camera Module and verify system functionality.

RJ-45 Using TIA 568A Wiring Standard



Using the on-board sequencer

- The "Video Sequence Out" RCA port allows sequencing of up to four camera images. This port can be used as the only output from the camera module, or it can be used in conjunction with using the individual camera RCA output jacks to provide various camera viewing configurations.



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- The speed that the sequencer changes from one camera to another can be adjusted using the Video Sequence Timing Adjustment knob. This knob can be adjusted to set a range from 2 to 40 seconds and this setting determines how long each camera will be shown before switching to the next camera.

Using the audio output jack

- When using the camera microphone (*not included with cameras*) with any cameras that are connected to the Cat 5 Camera module, audio signals can be output by using the Cat 5 to RCA cable (*not included*). The RJ-45 end of this custom cable plugs into the Audio RJ-45 Output Jack and the other end of the cable provides four RCA jacks labeled from 1 through 4.
- The audio RCA jacks can be connected to a modulator so that the camera's video and audio will be available on a modulated channel.
- See the diagram titled "Example 3" on the other side of the instruction sheet for more information.

Cat 5 Camera Solution Overview

The Cat 5 Camera Solution consists of a Cat 5 Camera Module, RJ-45 terminated cameras, and peripheral devices such as modulators and quad processors.

The Cat 5 Camera module can support up to 4 cameras through the use of an onboard tunable sequencer, and is compatible with single and multi-channel modulators. The camera module also provides power to the camera over the Cat 5, further reducing the number of installed cables.

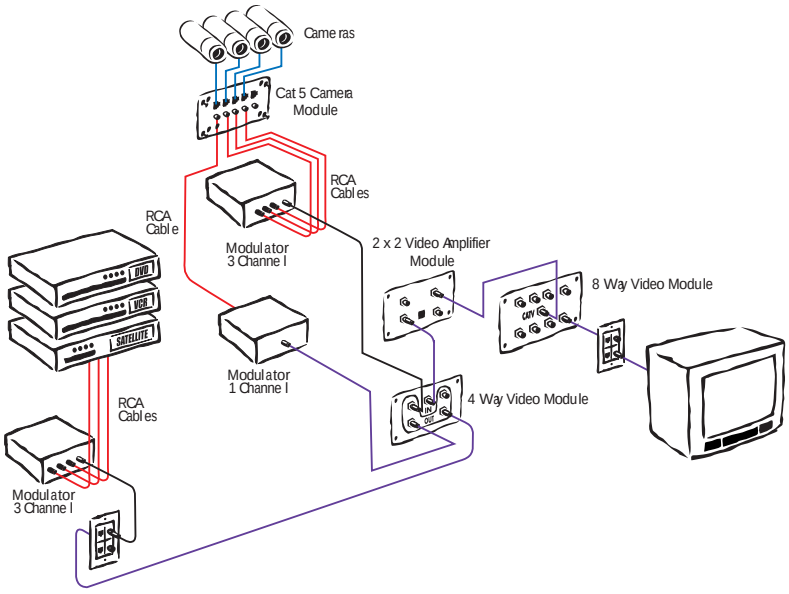
There are currently four cameras supported by the Cat 5 Camera System. The color bullet, black and white bullet and the black and white IR camera are all weatherproof and can be mounted outside. In addition, these cameras support audio with the addition of the camera microphone options and audio cable (purchased separately). There is also a hidden black and white mini camera that mounts inside of a single gang box and is hidden behind a decorator faceplate with smoked glass. The hidden camera does not support audio.

Application Examples

PLEASE NOTE: *Components such as power supplies are not shown in the diagrams but may or may not be included with the products shown below. Please consult the current catalog for more information on required parts and components.*

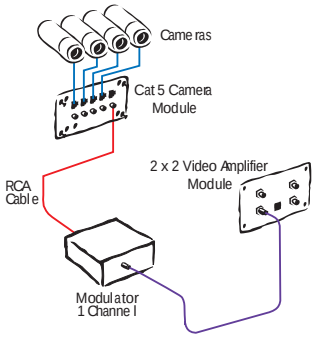
Example 1: Modulating Multiple Cameras

This drawing shows 4 cameras modulated each on their own channel. It also shows how to modulate additional devices, such as DVDs and VCRs, along with the Cat 5 Cameras. Cable TV or off air antenna could be added in this application by plugging the main cable feed into the 2 x 2 Video Amplifier Module using the port labeled "CATV/ANT". These broadcast signals would be combined with the modulated channels (modulated channels must be set to "open" channels which are not used by the CATV or off-air provider).



Example 2: Sequencing Cameras

This drawing shows 4 cameras sequenced on a single channel. This is accomplished by using the built in tunable sequencer output on the Cat 5 Camera module. The sequencer can be tuned to switch between cameras at intervals between 2 and 40 seconds (approximately).



Example 3: Sequencing & Modulating plus Audio

This drawing shows 4 cameras sequenced on a single channel, but in addition, one camera is modulated individually with audio on a second channel (ex: the front door). The Cat 5 to RCA cable is required to supply audio to the modulator.