

## 1. INTRODUCTION

The On-Q/Legrand 4 Port Camera Module (P/N CM1011) allows a homeowner to monitor up to four different areas of the home (e.g. Front door, Baby's room, Patio, etc.) via On-Q cameras. The Camera Module acts as the interface between the On-Q Cameras and an On-Q Video Distribution Network, which distributes the camera feeds to chosen locations for viewing.

**NOTE: The camera module is shipped with a Single-Bay Module Mounting Bracket (P/N 364890-01). Distribution network and viewing hardware such as On-Q LCD Panel Displays (P/N HA5000-xx) are sold separately.**

**NOTE: Camera feeds consist of video, and optionally, audio if the homeowner chooses to purchase the microphone kit for any of the On-Q cameras.**

The homeowner can customize a distribution network to suit their needs, viewing their camera feeds:

- individually or sequenced, directly on LCD Panel Displays
- on one or more TV sets, via modulation hardware
- remotely over the internet, using the On-Q IP Video Server

## 2. DESCRIPTION

### A. FEATURES

The On-Q/Legrand 4 Port Camera Module features:

- One-wire camera installation — power, video and audio share one Cat 5 cable to each camera
- Ability to view up to four individual sets of camera video/audio feeds (audio optional)
- Ability to view up to four camera feeds sequentially on a TV set -- on the same channel, each on a different channel, or a combination of both depending upon modulation hardware purchased separately.
- Ability to output a combined video feed of up to all four cameras via an on-board Video Sequencer with adjustable sequence times ranging from 1/2 to 10 seconds

### B. BASIC OPERATION

Refer to **Figure 2**

- The Module requires 800mA @ 12VDC and receives its power at the **Power Jack & LED** via a power supply (P/N PW7725 – available separately). The LED illuminates green when power is applied.
- Cameras supplying video (and optionally, audio) are connected to the **Camera RJ-45 Input Jacks** with Cat 5e cable.
- The video signal from each camera is output on it's corresponding **Video RCA Output Jack**. The audio signal from any camera equipped with a microphone unit (not included) is output on it's corresponding **Audio RCA Output Jack**. The signal(s) from each set of Output Jacks can be sent to a Modulator, directly to the On-Q LCD Display Module for viewing on the LCD Panel Display, or to the On-Q IP Video Server.
- The **Video Sequence Output Port** combines the video signals from all attached cameras into one video output signal which is output via an RCA jumper cable. For example, if there are four cameras attached to the module and the Video Sequence Output Port signal is fed to a Modulator and then to a video distribution system, when the homeowner tunes their TV to the channel determined by the Modulator, they will see the feeds from all four cameras appear, one at a time in sequence. This port can be used as the only output from the camera module, or it can be used in conjunction with the individual camera RCA output jacks to provide various camera viewing configurations.
- The speed that the sequencer changes from one camera to another can be adjusted using the Video Sequence Timing Adjustment knob. Use this knob to adjust the sequence time from 1/2 second (minimum) to 10 seconds (maximum) -- the length of time each camera's image will be shown before switching to the next camera.

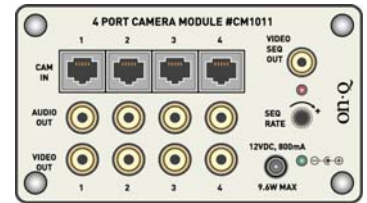


Figure 1

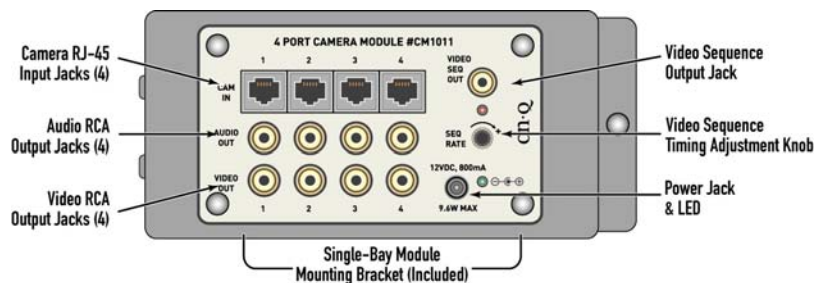


Figure 2

### 3. INSTALLATION

#### A. WIRING

1. Each Cat 5 Camera requires a single Cat 5 cable run from the camera location to the 4 Port Camera Module which is typically installed in a structured wiring enclosure.
2. Terminate the Cat 5e line from each camera using the T568A wiring standard shown in Figure 3.

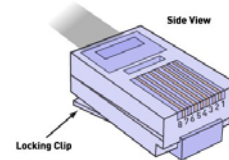
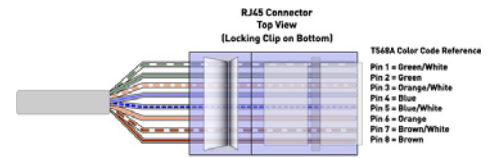


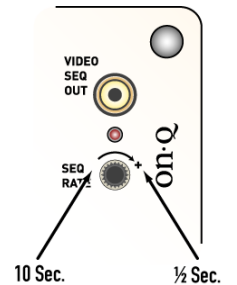
Figure 3

#### B. FINALIZE CONNECTIONS

1. Connect the RJ-45 plug at the camera locations to the Cat 5 Cameras according to their included instructions.
2. At the enclosure, insert the RJ-45 plugs from the cameras into RJ-45 jacks 1 through 4 located to the right of the "CAM IN" label on the 4 Port Camera Module.
3. The 4 Port Camera Module directs the video signal to its corresponding Video RCA Output Jack. If the camera is fitted with the optional microphone, the module directs the audio signal to its corresponding Audio RCA Output Jack (directly above its video output jack).
4. If both video and audio are to be monitored at an LCD Panel Display, connect the Audio / Video RCA Output jacks on the camera module to their corresponding Audio / Video RCA Input jacks on the LCD Display Module.
5. The signal(s) from each set of output jacks can also be sent to a Modulator for viewing camera feeds on a television, or to the On-Q IP Video Server for viewing over the internet or home network.
6. The video feeds from each camera can also be sequenced and delivered via the Video Sequence RCA Jack on the camera module. (See **Step C** below.)
7. Apply power to the 4 Port Camera Module and verify system functionality.

#### C. ADJUST SEQUENCE RATE (OPTIONAL)

1. If you are using the combined feed from the Video Sequence Output Port, adjust the rate at which each camera displays its feed (see **Figure 4**) before switching to the next by rotating the Video Sequence Timing Adjustment knob. When the knob is rotated fully clockwise, the camera feeds will switch approximately every half-second; when it is rotated fully counter-clockwise, the feeds will switch approximately every ten seconds.



Time each camera feed displays before switching to the next feed.

Figure 4

### 4. APPLICATION EXAMPLES

#### A. SEQUENCING CAMERAS

**NOTE:** Audio signals are not sequenced

**Figure 5** shows video feeds from two cameras sequenced on a single output.

This is accomplished by using the built-in tunable sequencer on the 4 Port Camera Module. In this example, the video feeds from both cameras are combined and sent via the sequencer output to the LCD Display Module, then to the LCD Panel Display.

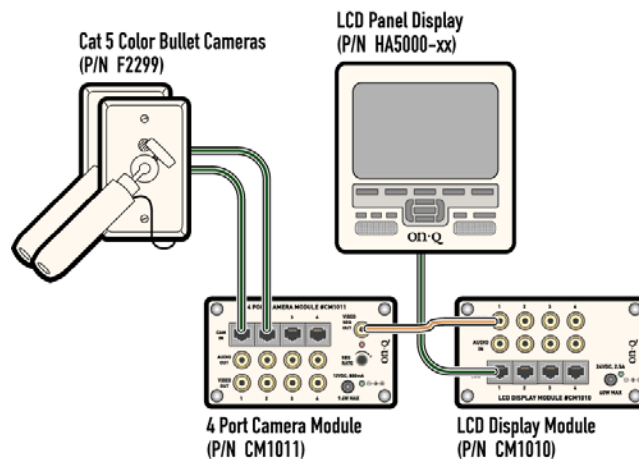


Figure 5

### B. MONITORING CAMERAS

**Figure 6** shows a two-camera system (both configured with the optional audio component).

- Both camera feeds can be monitored from the same LCD Panel Display using the camera selection buttons on the panel display.
- Feeds (video/audio) are sent from each camera, via a single Cat 5 cable, to the first two RJ-45 input jacks on the 4 Port Camera Module. From there, audio and video from both feeds are separated and made available at their corresponding RCA Output jacks.
- These jacks are jumpered to corresponding RCA **Input** jacks on the LCD Display Module, which converts and combines the signals to the format required for viewing on an LCD Panel Display.
- Each combined signal is delivered to its corresponding display via a single Cat 5 cable.

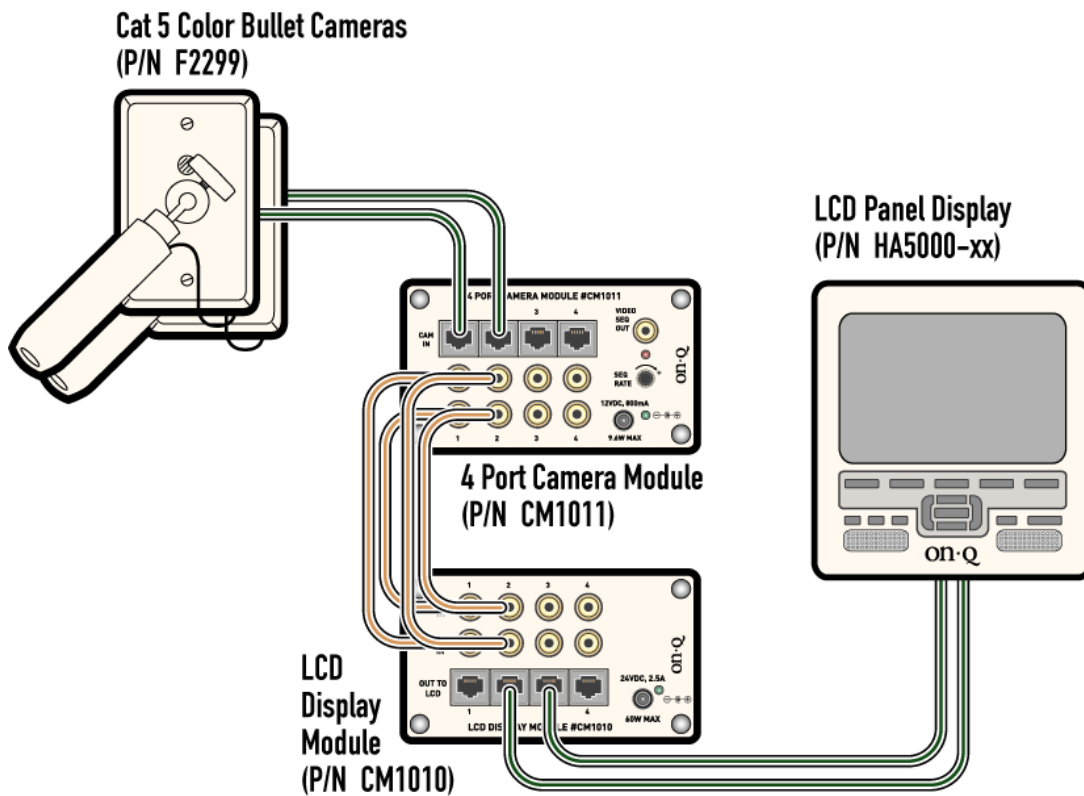


Figure 6