

CAMERA SYSTEMS - MULTI-SUBJECT VIDEO MONITORING

Multi-Subject Video Monitoring Systems are available with Four or Eight Cameras

Camera System 4 (CAMSYS4) and Camera System 8 (CAMSYS8) include everything needed to record 4-8 channels of video data for integration with existing MP160 or MP150 System and AcqKnowledge software.*

The Camera Systems record multiple subjects or camera angles and AcqKnowledge media functionality synchronizes the video to any physiological data being recorded with the MP160 or MP150 Research System. The cameras work well in low-light conditions, making them very well-suited for long-term recordings, sleep studies, animal studies, and more.

View the video capture window and physiology in AcqKnowledge in real-time during recording—and scroll through the linked data in either the AcqKnowledge graph file or video playback viewer for review and analysis. Scrolling through one file will automatically advance the linked file to the same location.

During recording, the video capture window is capable of displaying all camera views at once in a stacked display. The included multiplexer allows the user to toggle between cameras, or cycle through all views. This allows the researcher to focus on a particular camera view during recording when necessary, and then easily revert back to the stacked camera view.

*Camera Systems work with AcqKnowledge Version 4.1 or above,
Windows Operating System only.

CAMSYS4 Four Camera System



CAMSYS8 Eight Camera System



CAMSYSUPG System Upgrade



NEW CAMSYS Video Monitoring Packages from BIOPAC interface to the MP160 Research System with AcqKnowledge!

Upgrade a CAMSYS4 four camera system to a CAMSYS8 eight camera system.

Components

Cameras	4	8	4
Tripods	4	8	4
Gooseneck Adapter	4	8	4
Camera Power Splitter	1 to 4 splitter	1 to 8 splitter	1 to 8 splitter
General Power Splitter	1 to 2 splitter	1 to 2 splitter	—
8 Channel Multiplexer	included	included	—
A/D Converter	included	included	—

For a video demo/tutorial of Camera System setup and operation, click [here](#).

VIDEO MONITORING APPLICATIONS

Exercise Physiology

Examine ventilation, oxygen uptake, carbon dioxide production, biopotentials, temp., and biomechanical signals simultaneously. Record wirelessly with BioNomadix.

Psychophysiology

Record BP, ECG, EDA, EMG, EEG, EOG, RSP, etc. Interface to stimulus presentation programs and use automated analysis routines to easily score and analyze data.

Remote Monitoring

BioNomadix modules provide high quality, full-bandwidth data for a variety of signals—ECG, EEG, EGG, EMG, EOG, PPG, RSP, SKT, Accelerometry, Cardiac Output and Gyro.

Sleep Studies

Long term recordings with up to 16 channels of data. Record EEG, EOG, EMG, respiration, temp., sound, limb position and more. Filter out EEG frequencies to score sleep stages.

Virtual Reality

Synchronize events from a virtual world with physiological data from an MP160/150 system. Use feedback loops for greater control and automation—change the VR world in real time.

For tips on synchronizing video data, see [Application Note 270](#)

CAMERA SYSTEM UPGRADE - CAMSYSUPG

The CAMSYSUPG package comes with four additional cameras, tripod stands, gooseneck adapters, and required cables to upgrade a CAMSYS4 package to the equivalent of a CAMSYS8 package.



CAMSYSUPG Package

CAMSYSUPG Upgrade from 4 to 8 Camera System Contains:

- 4 x Cameras (see additional camera specs below)
- 4 Tripod stands (1-2 meter range)
- 4 x 19" black gooseneck adapters for tripod stands
- Power Splitter (1 female to 8 male 5.5 mm x 2.1 mm)

ADDITIONAL CAMERA SPECIFICATIONS

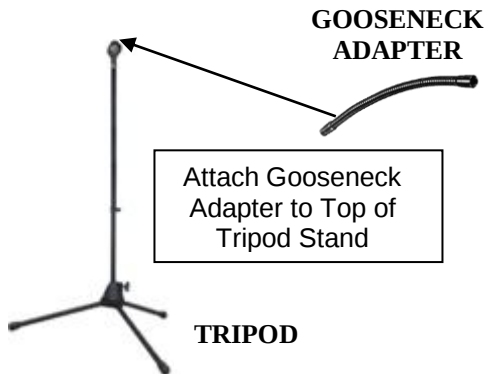
1/4" Color CMOS Image Sensor
Cable Length: 60'
420 TV Lines, Horizontal
6 mm Lens
Signal: NTSC
Night Vision Min. Light: 0 Lux (IR On)
IR Irradiation Distance: up to 30'
Operation Temperature: -5° F ~ 120° F
Power: 12 V DC
Power Supply: 12 V 1500 mA 4 Port

ADDITIONAL MULTIPLEXER SPECIFICATIONS

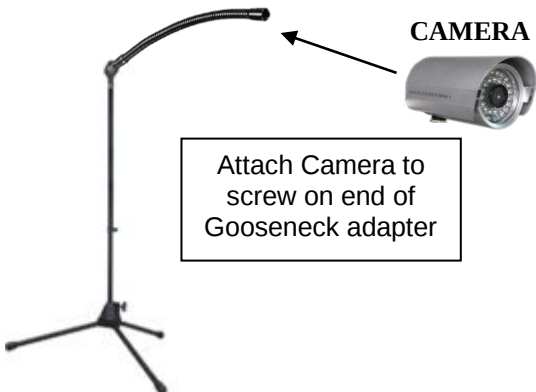
Supported Resolution NTSC: 720 (H) x 480 (V)
8 channel video signal input, 1 Vp-p, 75 Ohms
Video Output
Power Consumption 5 W (400 mA)
Operation Temperature -10 to 60
Operational Humidity within 85% RH
Power Supply: DC 12 V
Dimension 210 mm (L) x 130 mm (W) x 40 mm (H)

1. Tripod Assembly (for each tripod)

A. Attach Gooseneck to Tripod

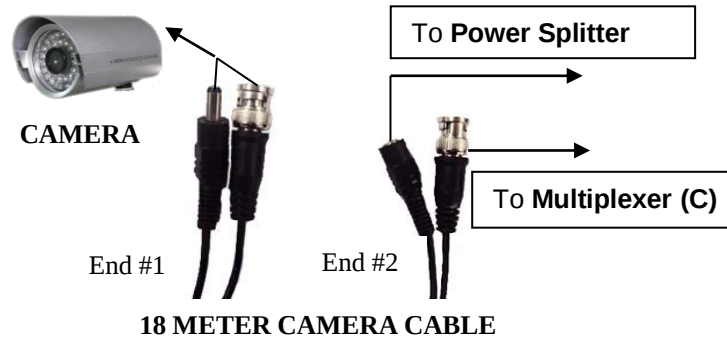


B. Attach Camera to Gooseneck

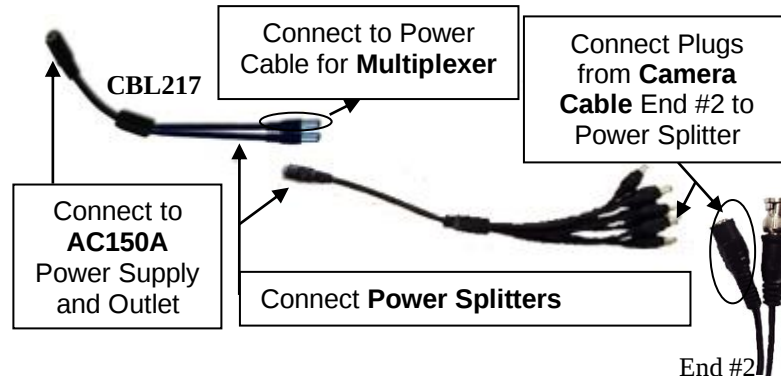


2. Cable Connections (for each camera)

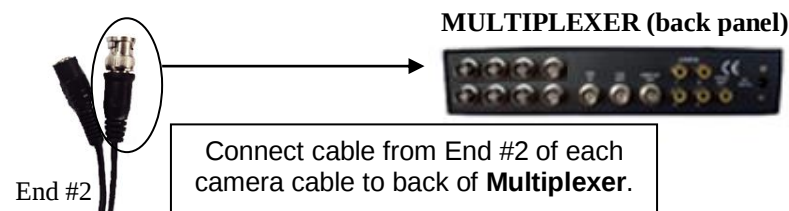
A. Connect End #1 of 18 m Cable to Camera



B. Connect Camera and Multiplexer to Power Splitters

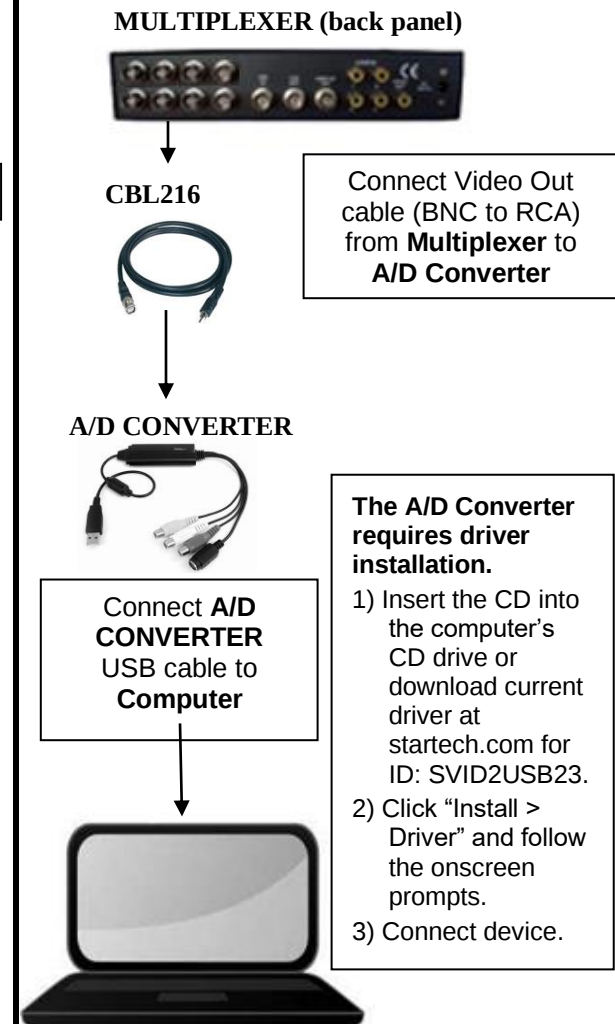


C. Connect End #2 of 18 m Cable to Multiplexer



3. Computer Connections

A. Connect Multiplexer to Computer



Once Camera System connections are completed, select cameras from the **Media Menu in AcqKnowledge. Next, synchronize the cameras with the **MP160/MP150 System** using **OUT103** LED light. For more information on synchronization, see Application Note 270 available on BIOPAC online **Support**