

## VCS Video Capture System

Part No #18201 – 4 GB Flash Card

Part No #18204 – 16 GB Flash Card

### Basic Specifications

#### Inputs

- 2 x Camera inputs
- 2 x Microphone inputs

#### Output

- MPEG-2 video, 720x576, 24 kHz PCM audio

#### Communications

- 1 x CAN

#### Physical

- Connectors
  - 1 x micro USB
  - 2 x Autosport 5 pin yellow
  - 1 x Autosport 5 pin red
- Operating voltage 6 - 36 V
- 4 or 16 GB compact flash card

### Other Information

#### Compatibility

- MoTeC Data Loggers: SDL, ADL3 and ACL
- MoTeC 'hundred series' ECUs: M400, M600, M800 and M880

#### PC Requirements

- Windows XP or Vista
- USB port

#### Accessories

- All parts of the kit are available separately
- #99915 Replaceable lens cover
- #61122 VSM – Video Sync Module
- *i2 Pro* Data Analysis software\*

### User Manual and Software

Latest releases available from  
[www.motec.com/downloads](http://www.motec.com/downloads)



MoTeC's **VCS Video Capture System** is an integrated in-car camera system, designed for race cars and other harsh environments. The VCS is supplied as a kit (see next page) with either a 4 GB or 16 GB high performance flash card.

### Features

- Solid state digital recorder
- MPEG-2 video compression format at broadcast quality
- Configurable two camera PIP - Picture In Picture - system (second camera optional)
- Uses 12 V vehicle power - no recharging
- CAN interface for easy connection to MoTeC Data Loggers and ECUs
- Video can be linked to logged data using MoTeC's *i2 Pro* Data analysis software\*
- Footage can be automatically synchronised to the logged data using the VSM (optional)
- Programmable Auto Start/Stop Recording using any transmitted channel
- Gauges are recorded live on the video
- Fast USB2 download - no bent card pins
- Customisable screen layout

### Software

- Windows-based software designed for video setup and management
- Adjustable brightness, contrast, saturation, hue settings and microphone gain
- Simple to use DVD burning software

## On Screen Display

When using PIP (Picture-In-Picture), the second picture can be placed in any corner of the screen. There are three gauge sets selectable: Small, Medium or Large.

The on screen gauges can be positioned on the top or the bottom of the screen.



## Overlaid Data

The video may have the following data overlaid, depending on sensors installed:

- Throttle Position: displayed as a vertical green bar graph scaled between 0% and 100%
- Ground Speed: displayed as a gauge from 0 to 300 kph with overlaid numeric value
- RPM: displayed as a gauge from 0 to 9000 rpm with overlaid text value
- G force: displayed as a G circle from 0 to 2G with an indicator point and an overlaid text value for lateral and longitudinal G
- Brake Switch: displayed as a vertical red bar graph
- Gear: displayed numeric in the centre
- Lap number, Lap time, Last lap time: displayed numeric
- Steering: displayed as a steering wheel



## Kit Contents

### Recorder

- #18201C – VCS Pro Recorder, 4 GB card or
- #18204C – VCS Pro Recorder, 16 GB card

### Camera and Microphone

- #18202 – Camera
- #18203 – Microphone

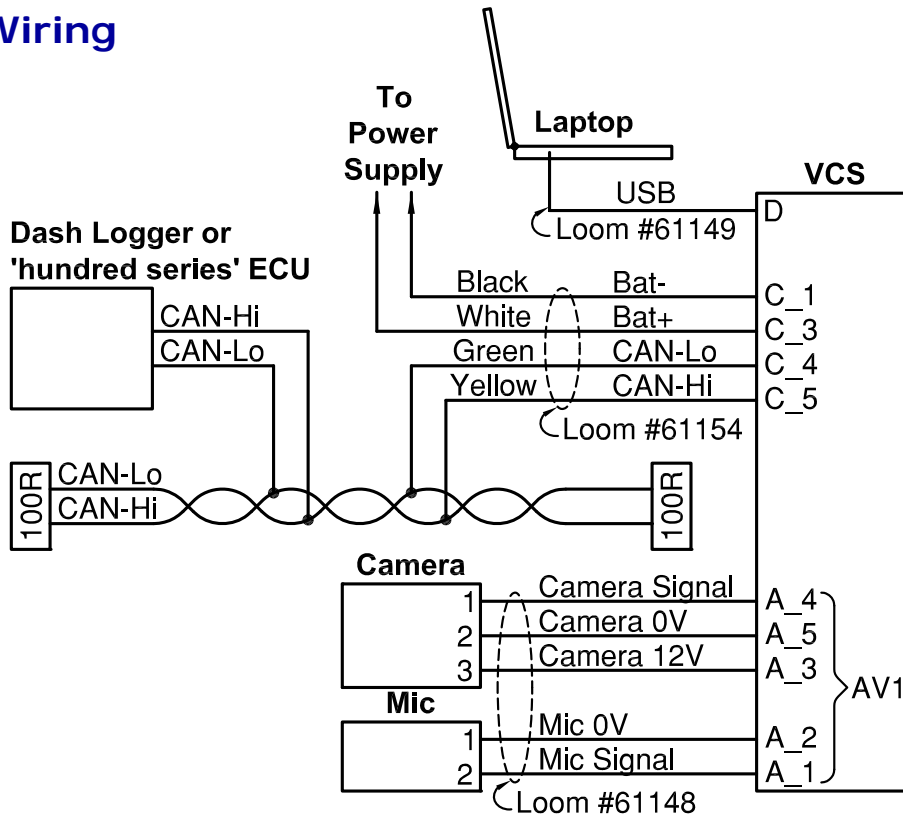
### Looms and Cable

- #61149 – Mini-USB B to USB A Male Cable
- #61148 – VCS Adapter Loom
- #61154 – VCS Power / CAN Loom

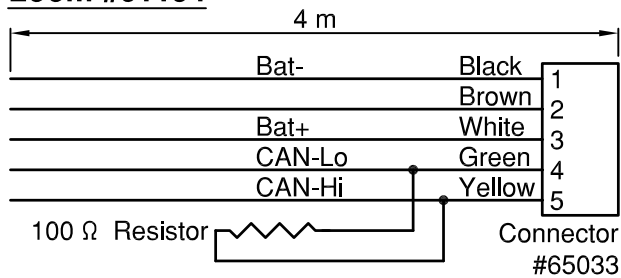
### Mounts

- #65076 – Roll Cage Mounting Bracket
- #65077 – VCS Mounting Plate

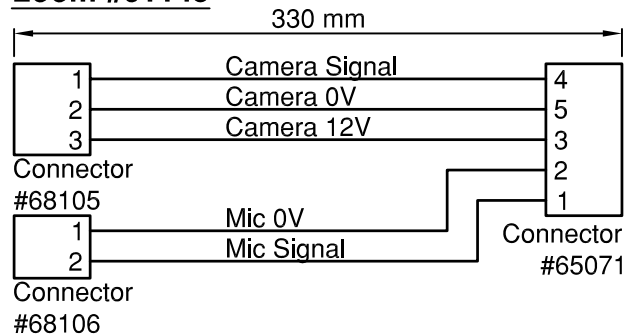
## Wiring



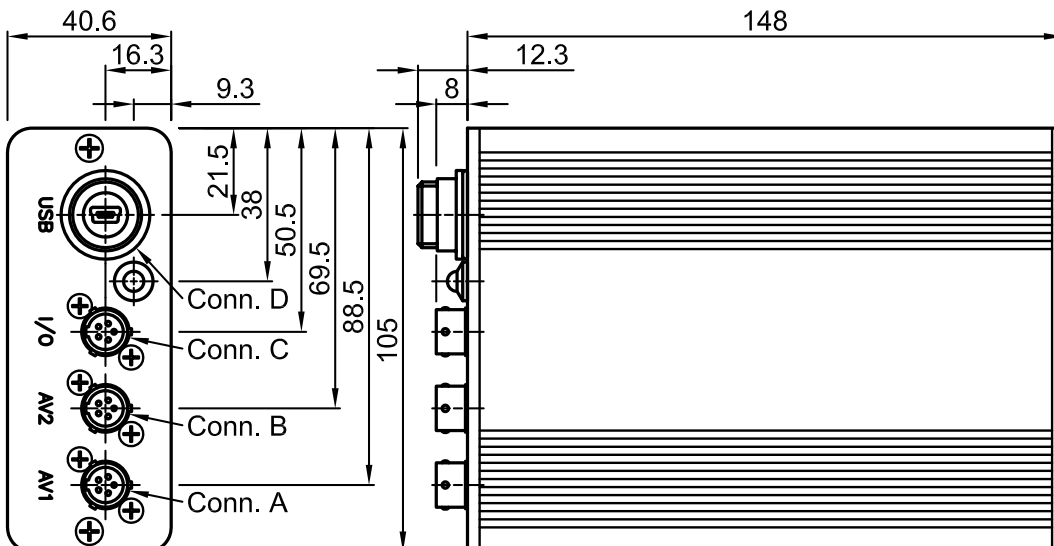
### Loom #61154



### Loom #61148



## Dimensions



## Connectors and Pinout

### VCS Connectors

#### **Connector A and B (AV1, AV2)**

5 pin Autosport connector  
Mating connector #65071 (yellow)

| <b>Pin</b> | <b>Name</b> | <b>Function</b>   |
|------------|-------------|-------------------|
| 1          | Mic In      | Microphone In     |
| 2          | Mic 0V      | Microphone 0 Volt |
| 3          | Cam 12V     | Camera 12 Volt    |
| 4          | Cam In      | Camera In         |
| 5          | Cam 0V      | Camera 0 Volt     |

#### **Connector C (Power/Comms)**

5 pin Autosport connector  
Mating connector #65033 (red)

| <b>Pin</b> | <b>Name</b> | <b>Function</b>  |
|------------|-------------|------------------|
| 1          | Bat-        | Battery Negative |
| 2          |             | N/C              |
| 3          | Bat+        | Battery Positive |
| 4          | CAN LO      | CAN Low          |
| 5          | CAN HI      | CAN High         |

#### **Connector D**

Mini-USB connector

### Camera Connector

4 pin Binder Connector  
Mating connector #68105

| <b>Pin</b> | <b>Name</b> | <b>Function</b> |
|------------|-------------|-----------------|
| 1          | Cam Out     | Camera Out      |
| 2          | Cam 0V      | Camera 0 Volt   |
| 3          | Cam 12V     | Camera 12 Volt  |
| 4          |             | N/C             |

### Microphone Connector

3 pin Binder Connector  
Mating connector #68106

| <b>Pin</b> | <b>Name</b> | <b>Function</b>   |
|------------|-------------|-------------------|
| 1          | Mic 0V      | Microphone 0 Volt |
| 2          | Mic Out     | Microphone Out    |
| 3          |             | N/C               |

\* **i2 Pro** software is available in two ways:

- Via the Pro Analysis upgrade on the ECU or Dash Logger - refer to the Device documentation for more information.
- via the **i2 Pro** Feature Licence - refer to the online help in **i2 Pro** software.