

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



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

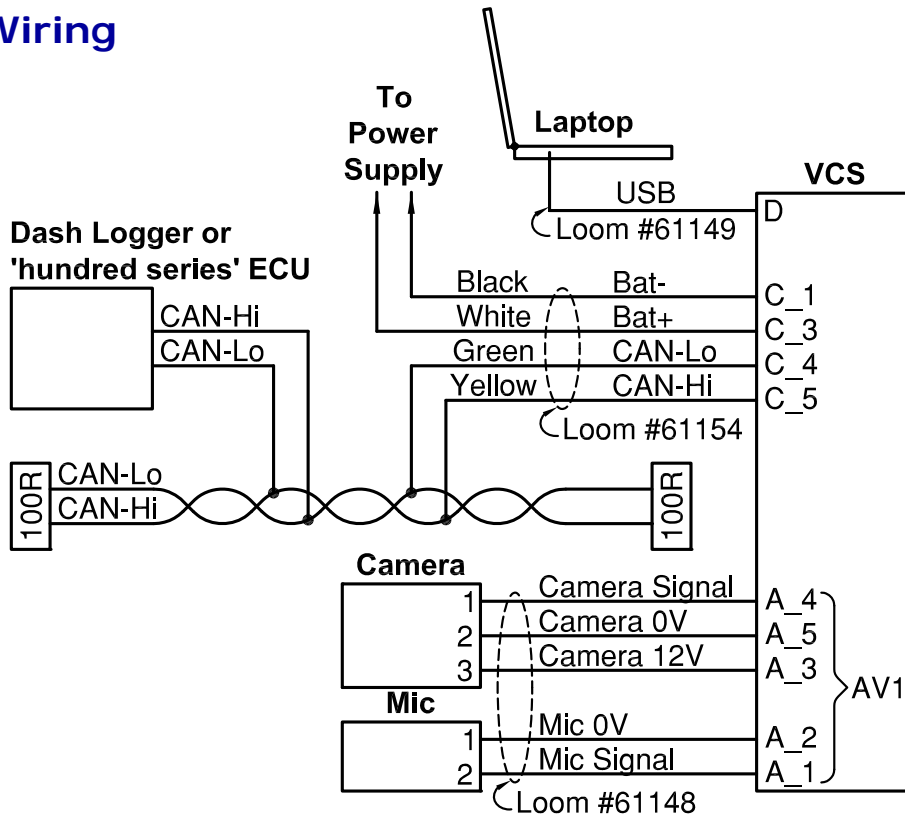
Looms and Cable

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

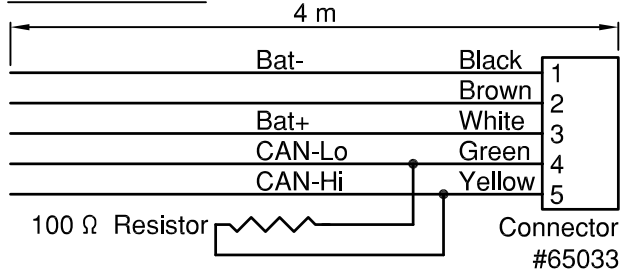
Mounts

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

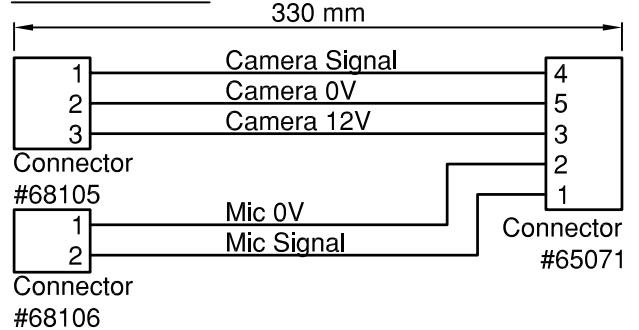
Wiring



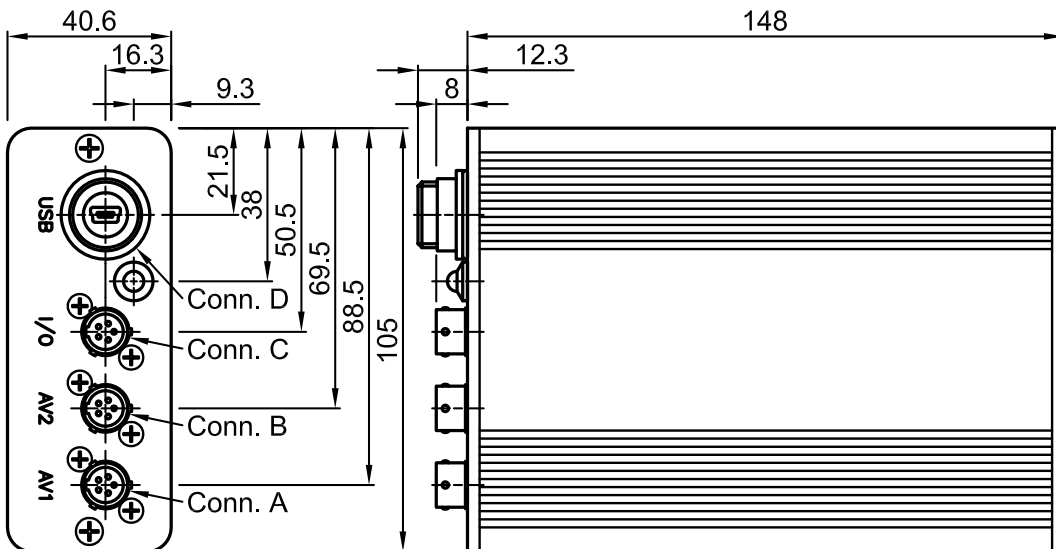
Loom #61154



Loom #61148



Dimensions



Connectors and Pinout

VCS Connectors

Connector A and B (AV1, AV2)

5 pin Autosport connector
Mating connector #65071 (yellow)

Pin	Name	Function
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)

Pin	Name	Function
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

Pin	Name	Function
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

Pin	Name	Function
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.