

VCS Video Capture System

Part No #18201 #18204 #18205 #18206

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
- Check with your dealer for compatibility with earlier models and other products.

PC Requirements

- Windows XP or Vista
- USB port

Accessories

- #68107 Replaceable lens cover
- #61158 High performance flash card 4 GB
- #61159 High performance flash card 16 GB

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
- When using MoTeC's **i2 Pro** or **i2 Standard** Data analysis software* to analyse logged data, this data can be automatically aligned or synchronised to the video from the VCS.
- Programmable Auto Start/Stop Recording using any transmitted channel
- Gauges can be recorded live on the video
- Fast USB 2.0 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: a vertical green bar graph scaled between 0% and 100%
- Ground Speed: a gauge from 0 to 300 kph with overlaid numeric value
- RPM: a gauge from 0 to 9000 rpm with overlaid text value
- G force: a G circle from 0 to 2G with an indicator point and an overlaid text value for lateral and longitudinal G
- Brake Switch: a vertical red bar graph
- Gear: a numeric in the centre
- Lap number, Lap time, Last lap time: displayed numeric
- Steering: displayed as a steering wheel



Kit Contents

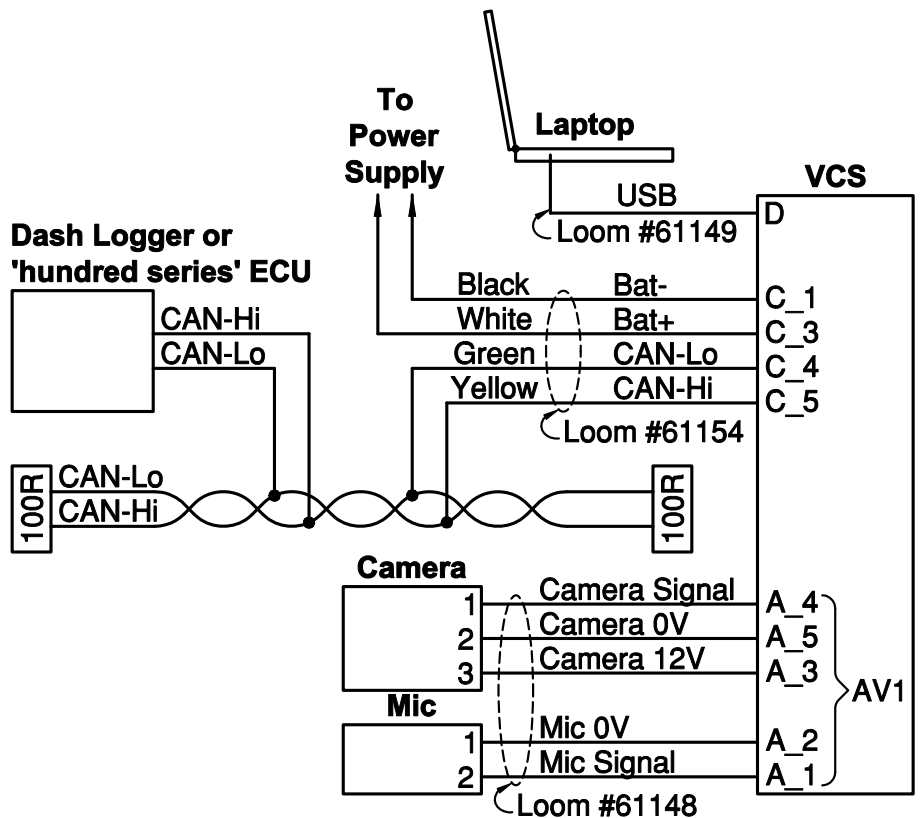
Kit Number	#18201	#18204	#18205	#18206
VCS Pro Recorder including memory card	#18201C 4 GB	#18204C 16 GB	#18201C 4 GB	#18204C 16 GB
#18202 Camera	1	1	2	2
#18203 Microphone	1	1	1	1
#61149 Mini-USB B to USB A Male cable	1	1	1	1
#61148 VCS Adapter Loom	1	1	2	2
#61154 VCS Power / CAN Loom	1	1	1	1
#65076 Roll Cage Mounting Bracket	1	1	1	1
#65077 VCS Mounting Plate	1	1	1	1

Wiring

The diagram shows how to use the included looms to wire the VCS to the camera, microphone, power supply, CAN bus and laptop.

A Dash Logger or ECU must be wired onto the same CAN bus.

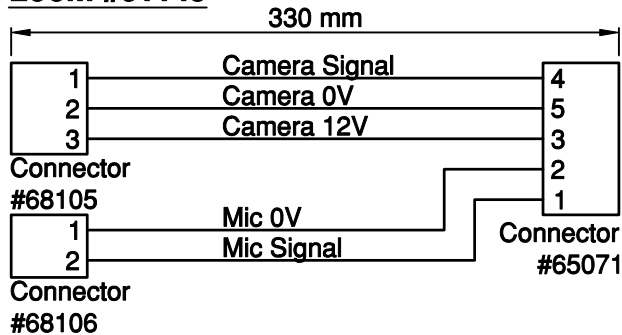
A second camera can be wired similarly to the B-connector



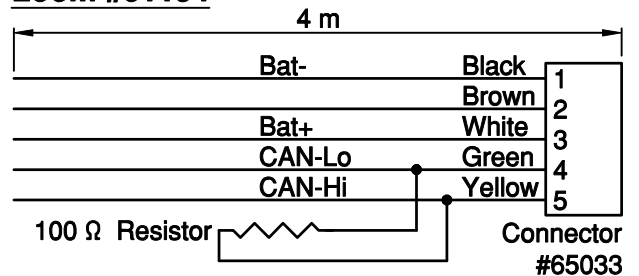
Looms

The following looms are included in the kit:

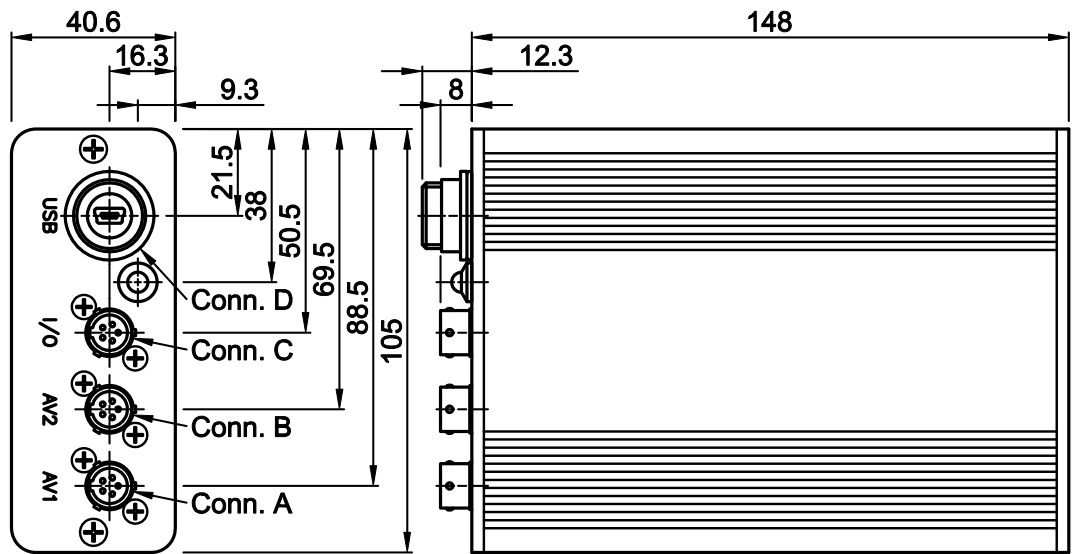
Loom #61148



Loom #61154



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 via two methods:

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