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## 1080p Camera for VBOX Video HD2

The 1080p camera (RLACS329) for VBOX Video HD2 features a LEMO connector and comes with a 3 m cable as standard.

VBOX Video HD2 units (VBVDHD2-V5/V6 only) need to be running firmware version 1.4.85.5 or higher to work with this camera.



## **Camera Specifications**

Image Sensor	1/3.2" 13 Mega Pixel CMOS
Recording Mode	1080p30
Aperture	F3.0
Synchronising System	Internal, rolling shutter
Video Output	Racelogic proprietary LVDS
Dynamic Range	69 dB
Gain Control	x1 to x7.75 Analogue, x1 to x7.98 Digital
Shutter Speed	1/30 ~ 1/33333 secs
White Balance	Automatic (AWB)
Field of View	119° HFOV, 68° VFOV, 135° DFOV
Operating Voltage	4.5 V DC
Operating Current	350 mA max
Operating Temperature	-30°C to 70°C
Camera Dimensions	24 (D) x 81 (L)
Camera Weight	135 g
IP Rating	IP65



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## **Camera Mounts and Brackets**

RLACS269	Camera Ring Clamp	
	This camera ring clamp comes with all HD2 packages. It connects to the VBOX Video HD2 suction mount, roll cage mount or mount extension.	
RLACS286	Roll Cage Camera Mount	
	This roll cage mount comes with track packages. It has a solid aluminium body, connected to a curved mounting plate that can be secured onto the roll bar using two jubilee clips large enough accommodate an FIA-spec bar; also in the kit is a strip of protective rubber to stop the roll bar from being scratched (not in picture).	
	See (*) in Windscreen mount.	
RLACS287	<ul> <li>Windscreen Suction Mount</li> <li>This suction mount comes with standard (non-track) HD2 and Video VBOX packages. It uses the same elbow joint as the roll cage mount, which can be removed and used with the RLACS267 roll cage bracket. This suction mount also comes with the OLED Displays. *</li> <li>* RLACS116 is required to mount the high-resolution Video VBOX cameras.</li> <li>* RLACS269 is required to mount HD2 cameras.</li> </ul>	
DBSUCSETX3	Mounting Cradle Suction Cups	
	A set of 3 suction cups for the RLACS287 Suction Camera Mount.	



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RLACS273	Camera Mount Extension	
	The camera mount extension bar extends the camera location by 10 cm. This is especially useful on vehicles with deep sun strips, giving you a much bigger view out through the windscreen - avoiding that "letterbox" look. It will fit on any mount with a standard 1/4" in UNC thread.	
	Picture shows the Camera Mount Extension pole screwed to the RLACS269 Camera Ring Clamp (top) and the RLACS286 Roll Cage Camera Mount (bottom).	
RLACS270	Heavy-Duty Camera Clamp	
	This is an optional accessory that screws onto either the RLACS286 roll cage mount or the RLACS287 suction camera mount and allows for secure mounting of an HD2 camera. It is of aluminium construction with a rubber liner to protect the camera. The clamp is tightened with two M3 hex-socket screws that require a 2.5 mm Allen key. It is exactly the right diameter so that you cannot crack the camera even if fully tightened.	
RLACS267	Roll Cage Bracket only	
	This is the bottom half of the RLACS286 – just the curved bracket, jubilee clips and a protective sheet.	
	A customer may want to buy this instead of a full mount as they can dismantle a suction mount unit (RLACS287) and use the elbow joint with the RLACS267.	

All these items can be purchased from the HD2 Accessories section of our online store.



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## Troubleshooting

Problem	Actions
White, pink, or purple flashes/ blue lines on video playback	Cause
	This is caused by electrical interference, primarily from ignition systems, however some spark plugs and Car to Pit radio systems also give off a lot of electrical noise. The HD2 power lead was found to pick up this interference and cause the white flashes/ blue lines seen in the video playback.
	Solution
	Current HD2 units are supplied with a new screened power supply (either cigar plug cable RLCAB010LE or unterminated cable RLCAB014LE) which eliminates this issue.
	In older power cables, we have also found that adding a ferrite choke eliminates this problem in almost all cases.
	Customers that experience this issue and have the older power cable variants (either cigar plug cable RLCAB010L or unterminated able RLCAB014L) should contact us at <a href="mailto:support@racelogic.co.uk">support@racelogic.co.uk</a> and we will provide either a new power cable or ferrite choke kit (RLACS242) free of charge.
Green screen	Cause
	This is caused by the main processor failing to lock onto the video input for the camera, most commonly if the camera is not correctly connected prior to boot up. When this is the Picture in Picture camera, it is disabled and only the main image is visible. When the main camera is affected, the image will simply show a green image as the main camera cannot be hidden (as in the above image).
	Solution
	We have a solution to this which is undergoing development at this time and will be released as soon as possible. In the meantime, users must ensure both cameras are properly connected prior to applying power to the VBOX.

For more troubleshooting guides, please refer to our **<u>RACELOGIC Support Centre</u>**.

