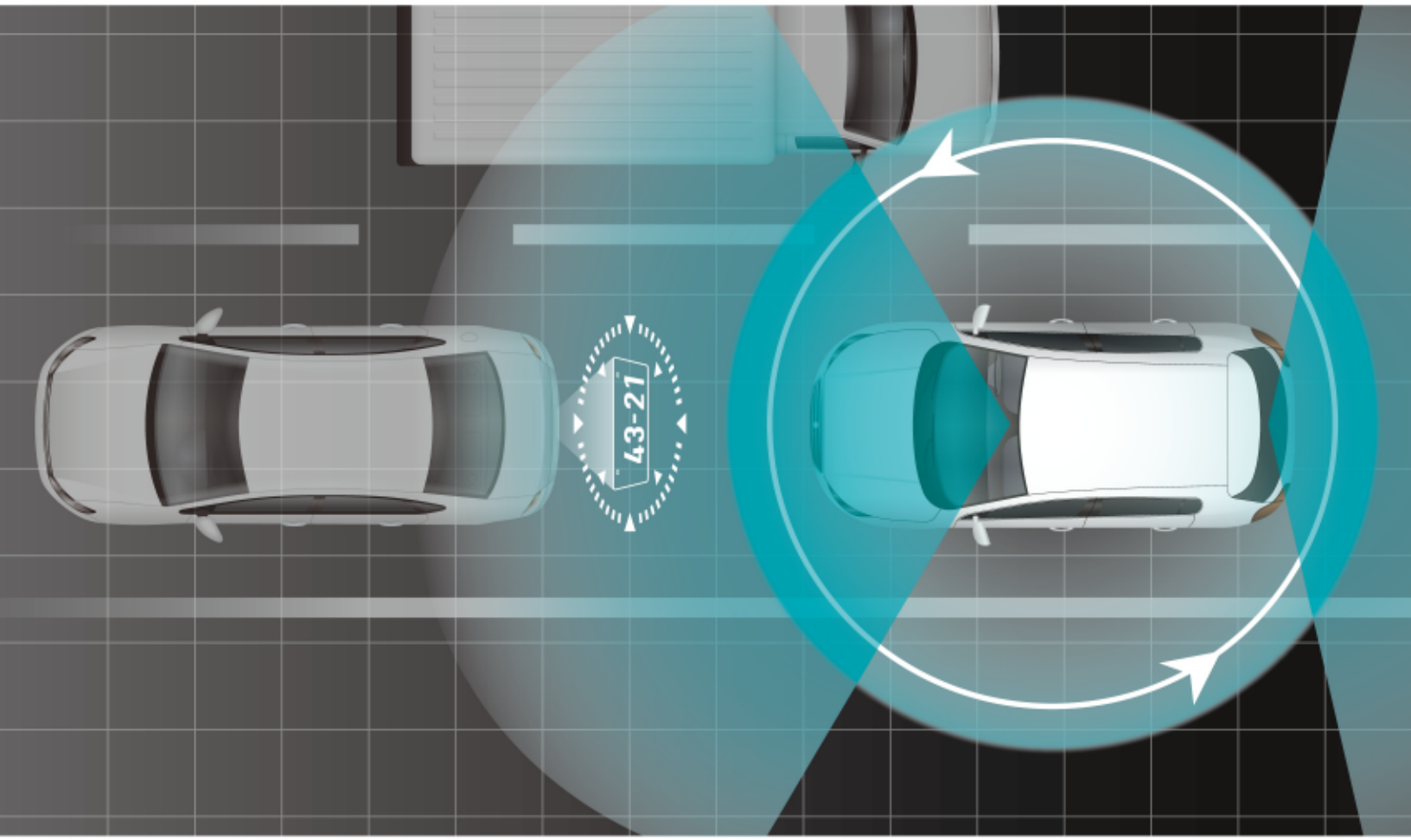
Carmate

RÄZO

d'Action360

360° Drive Recorders

High-resolution video recording for front and rear.
360° camera for monitoring inside and outside of your vehicle.



Front

Equipped with onsemi CMOS image sensor.
High quality image recording particularly specialized for license plate recognition.

Around 360°

Panoramic video recording

All-Around Drive Recorder with 3 cameras, for front, rear and 360°

DC4000RA d'Action 360D

Rear

with 360° lens.

Equipped with Sony STARVIS™ CMOS image sensor.
Record clearly through tinted windows even at night.

All-Around Drive Recorder with 3 cameras, for front, rear and 360°

DC4000RA

Simultaneous recording of not only front and rear directions, but inside and outside of your vehicle

Around 360°

Rear

Front

Around 360°

360° camera records all around your vehicle

Seamless and 360° recording.
The 360° camera records both sides and interior of your vehicle.
Infrared LED for brighter nighttime recognition of vehicle interior *1

Rear

Rear camera records through tinted window

High-quality nighttime recording is ensured with STARVIS™ CMOS Image Sensor, and good for both OEM and aftermarket tinted windows.

Front

Front camera for clear recognition of license plates

The F/1.5 lens allows for bright nighttime recording. HDR *2 and WDR technologies to reduce white out and black out highlights. The front scene, including license plates are clearly recorded.

*1: Due both to the characteristics of infrared LED and the specifications of 360° camera, recorded image/movie of certain subjects may become more reddish.
*2: Due to the characteristics of HDR, recorded image/movie may become paler and whiter.

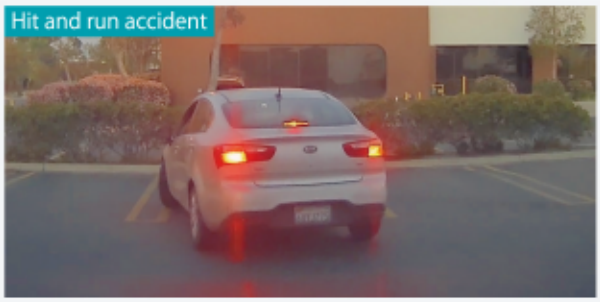
360° recording while unattended

When using Parking Option DC203A (sold separately), the camera automatically switches to Parking Mode as soon as the car engine is turned off. Let the camera monitor, detect and record incidents such as door dings and hit-and-runs even while your car is unattended.

* The sensitivity of impact detection may vary depending on the setting and your vehicle model. The camera does not record unless it detects an impact.

Event Recording in Parking Mode

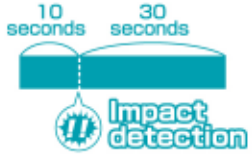
With the car engine turned off, G-Sensor activates and the camera starts recording as soon as it detects more impact than the setted G-Sensor sensitivity.



Up to 12 hours of recording on 3 cameras, and 48 hours on 360° camera alone

Before/After Recording

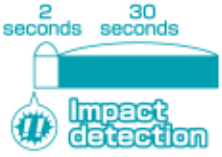
Up to 12 hours
All cameras



Simultaneous recording on 3 cameras allows for capturing what happens around your parked car, such as license plate numbers.

After Recording

Up to 48 hours
360° camera only



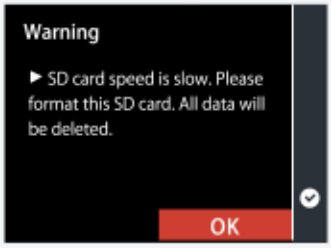
Ideal for a long-hour recording, such as at home.

Large 2.7-inch LCD display

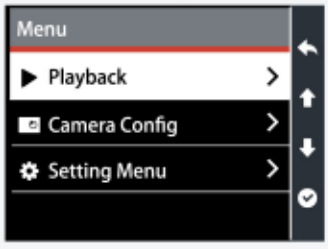
Easy and intuitive on-screen operation

Camera indicator

Error indicator



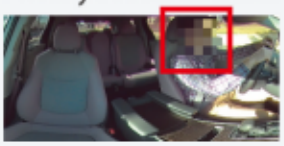
Menu setting



Software for PC

Use d'Action 360 software to play all recorded videos at the same time. Nighttime videos can be adjusted to be clearer using the brightness adjuster.

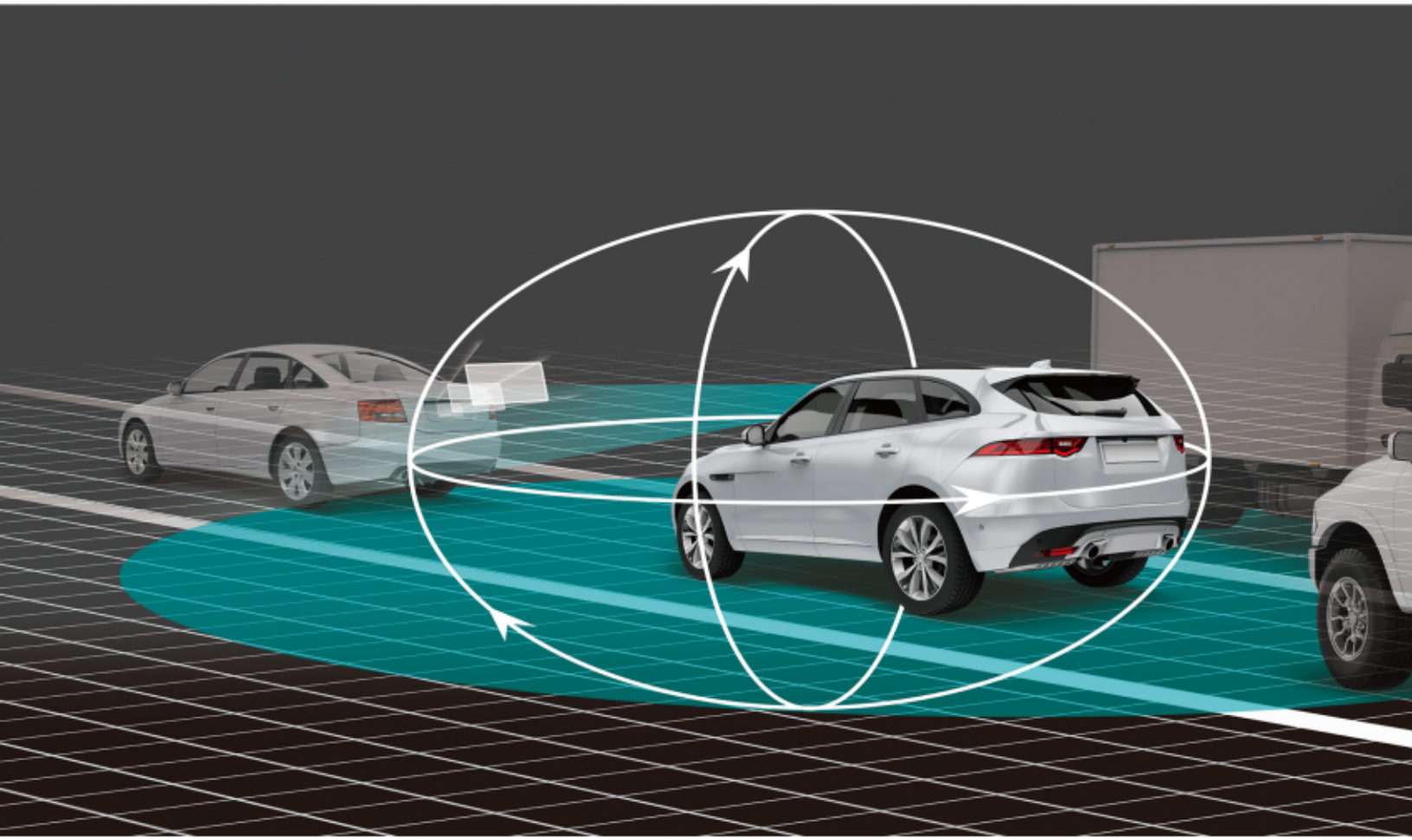
Privacy Protection Blur



Blur effects can be applied to recorded videos.

* Visit the website to check the minimum system requirements for d'Action 360 software

360° camera
without a blind spot

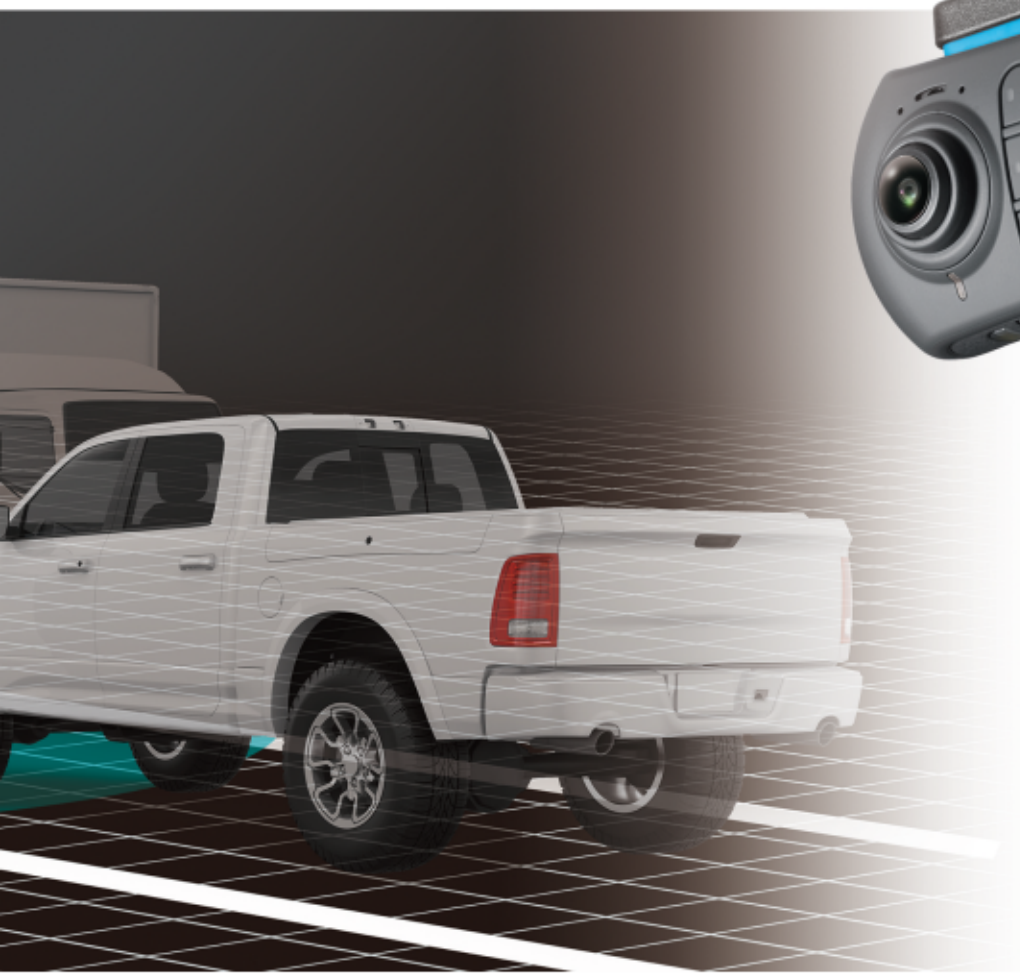


Record outside and inside of the car with dual 360° lenses.

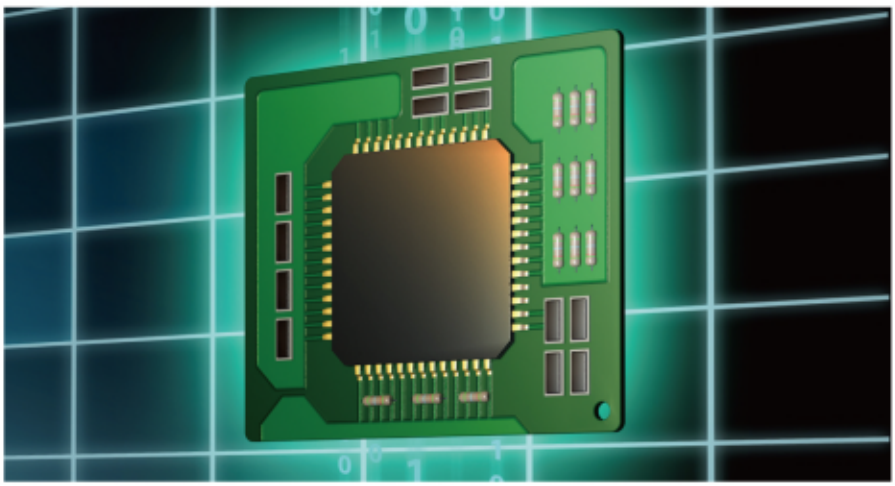
Records in all directions with

360° × 360° dashboard / action camera

DC5000A d'Action 360 S



360° × 360° model.



Backside illumination CMOS image sensor is equipped for highly sensitive, nighttime recording.

Record with two 360° lenses
One camera records in all directions

DC5000A

Record the road ahead in higher definition
Dual-recording function

1 360° Recording

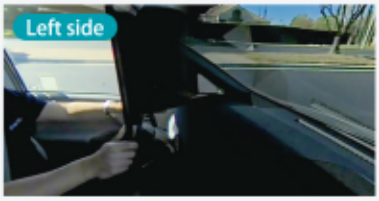
+

2 Dual-recording function

While the 4.1 megapixel, 360° recording function records what happens around your car, the 2 megapixel dual recording function records in front in high resolution. This simultaneous recording is ideal for clearly recording the road ahead, including license plates and scenic roads.

Get ready for road rages and sideswipes

Whole area, from front to rear, and inside and outside of your car is recorded.
With the added 360° camera, you can record potential aggressive drivers who tail too closely, sideswipe, or cut abruptly in front of you.
Record the car interior at the same time.



360° recording while unattended

Use Parking Option DC201A (sold separately) to keep the camera ready to monitor, detect and record incidents, even with the car engine turned off.
The 360° camera captures all scenes such as door dings and hit-and-runs in parking lots.

* The sensitivity of impact detection may vary depending on the setting and your vehicle model. The camera does not record unless it detects an impact.

Theft from car

Door ding

Automatic switching between 3 recording modes allows for long-hour monitoring

- Voltage monitor to prevent your car battery from draining
- Set times to start, stop or cancel recording when getting in and out of your car

* The camera stops operating or switches to different operational mode when it is outside its' operational temperature range, or below a set voltage.

Playback recorded videos on your smartphone or PC

Built-in wireless LAN enables you to play recorded videos wirelessly on your smartphone. Use the app to switch to a clearer and undistorted view. You can also play recorded videos using d'Action 360 PC software.

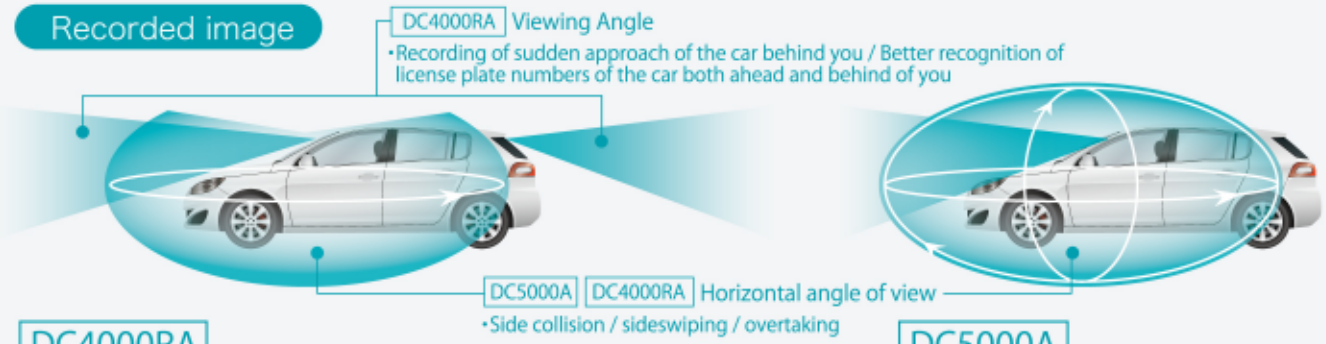
⚠ For d'Action 360 PC software and app, supported smartphone or PC are required.

* Visit the website to check the supported devices for d'Action 360 PC software and app.

6 views on smartphone app, plus front recording

Comparison between DC4000RA and DC5000A

Recorded image



DC4000RA

Front of your car is recorded on the main camera portion, equipped with the front camera and 360° camera. Rear direction of your car is recorded on the rear camera.

DC5000A

The main camera mounted on the front of your car, which is equipped with the front camera and 360° camera, records in all directions.

View differences of 360° camera

DC4000RA Horizontal 360° / Vertical 190°

DC5000A Horizontal 360° / Vertical 360°

View differences of rear image

DC4000RA The separate rear camera records the rear of the car

DC5000A The main camera mounted on the front records as far back as the rear direction of the car

Recording ranges

Type	Recording range				Recognizability of license plate numbers	
	Front of car	Rear of car	Sides of car	Inside of car	Front of car	Rear of car
DC4000RA: 2 cameras on front and rear, plus 360° camera	Yes	Yes	Yes	Yes	Yes	Yes
DC5000A: 360°×360°	Yes	Limited part of the view	Yes	Yes	Yes	No
General front camera only	Yes	No	No	No	Yes	No
General 2-camera on front and rear	Yes	Yes	No	No	Yes	Yes
General 360° camera plus rear camera	Yes	Yes	Yes	Yes	No	Yes

■Comparison

DC4000RA

Camera	
Front camera	
Image sensor	Full-color CMOS sensor 1/2.7
Number of recorded pixels	Approximately 2 megapixels FHD 1920×1080
	Approximately 0.9 megapixels HD 1280×720
Viewing angle	Horizontal 96° Vertical 50° Diagonal 119°
Max. aperture (F)	1.5
Max. frame rate	Drive Mode: 27.5 fps Parking Mode: 5.2 fps
Auto adjustment	HDR and WDR
360 camera	
Image sensor	Full-color CMOS sensor 1/2.7
Number of recorded pixels	Approximately 3.6 megapixels FHD 1920×1920
Viewing angle	Horizontal 360° Vertical 190°
Max. aperture (F)	2.2
Max. frame rate	Drive Mode: 19 fps Parking Mode: 5.2 fps
Auto adjustment	WDR
Rear camera	
Image sensor	Full-color CMOS sensor 1/2.8
Number of recorded pixels	Approximately 2 megapixels FHD 1920×1080
Viewing angle	Horizontal 131° Vertical 75° Diagonal 155°
Max. aperture (F)	1.8
Max. frame rate	Drive Mode: 27.5 fps Parking Mode: 5.2 fps
Auto adjustment	HDR

Recording Specifications	
Recording modes	Drive Mode: Normal Recording, Event Recording, Manual Recording Parking Mode (requires an optional add-on that is sold separately): Impact Recording
Recording time unit per file of Normal Recording	30 seconds
File format	MOV(H.264)
Audio recording	Yes
Hardware specifications	
GPS	Yes
G-Sensor	Yes
Power supply voltage	DC12V/24V
Maximum electrical power consumption (DC12V)	440mA
Operating temperature range	Drive Mode: -10℃ to +50℃ (14°F to 122°F)
	Parking Mode: -10℃ to +65℃ (14°F to 149°F)
LCD	2.7 inch full-color TFT
Wireless LAN	No
Smartphone linkage	No
Video playback media	Main camera screen
	d'Action software for PC (Windows)
	Playback media such as Windows media player
Included micro SD card	Yes, 32GB microSD card (DC3A)
Size	
Product dimensions with mount attached	Main camera: H92mm×W122mm×D47mm (H3.6inch×W4.8inch×D1.8inch)
	Rear camera: H59mm×W59mm×D38mm (H2.3inch×W2.3inch×D1.5inch)
Weight with mount attached	Main camera: 206 grams (7.3 oz) Rear camera: 62 grams (2.2 oz)
Other Functions	
Noise reduction	Yes
Voise notification for SD card status	Yes
Supercapacitor	Yes
LED light traffic compatible	Yes
Recording media	Included microSD card, 32GB (Item No. DC3A) or dedicated microSD cards, 32GB (Item No. DC3A), 64GB (Item No. DC4A), or 128GB (Item No. DC5A)

DC5000A

Camera	
Image sensor	CMOS 1/2.3
Resolution	360°×360° View + Front recording: Approx. 4.1 megapixels + approx. 2.0 megapixels 360°×360° View recording only: Approx. 4.1 megapixels or approx. 7.3 megapixels
Viewing angle	Horizontal 360°/Vertical 360°
Max. aperture (F)	2.0
Frame rate	Drive Mode: 27.5 fps (*Automatically adjusted in high temperatures.)
	Parking Mode: 3.75 / 5.2 fps
	Drive Action Mode / Action Mode: 29.97 fps
Auto adjustment	WDR

Recording Specifications	
Recording modes	Continuous, Impact, Manual, Still image capture, Parked Continuous*, Parked Impact* (*required options)
Recording time unit per file of Normal Recording	30 seconds
File format	Video: MOV (Video: MPEG4-AVC/H.264, Audio: PCM stereo) Still image: JPEG
Audio recording	Yes
Hardware specifications	
GPS	Yes
Built-in triaxial G-Sensor	Yes
Power supply voltage	DC12V/24V
Maximum electrical power consumption (DC12V)	440mA
Operating temperature range	Drive Mode, Action Mode: -10℃ to +40℃ (14°F to 104°F)
	Parking Mode: -10℃ to +60℃ (14°F to 140°F)
LCD	No
Wireless LAN	Yes
Smartphone linkage	Yes
Playback support	d'Action app for smartphone (iOS/Android)
	d'Action software for PC (Windows)
	Playback media such as Windows media player
Included micro SD card	Yes, 32GB microSD card (DC3A)
Size	
Product dimensions with mount attached	H99mm×W131mm×D68mm (H3.9inch×W5.1inch×D2.7inch)
Weight with mount attached	235 grams (8.3 oz)
Other Functions	
Noise reduction	Yes
Voise notification for SD card status	Yes
Supercapacitor	Yes
LED light traffic compatible	Yes
Recording media	Included microSD card, 32GB (Item No. DC3A) or dedicated microSD cards, 32GB (Item No. DC3A), 64GB (Item No. DC4A), or 128GB (Item No. DC5A)

Optional add-ons

Camera \ Use	Parking Option	Battery Option	Recording media
DC4000RA 	**DC203A** 12V/24V  Wiring unit with a voltage monitor for DC4000RA Parking Option.		**d'Action genuine microSD card**  Genuine microSD cards for d'Action 360 dash cams DC3A : 32GB DC4A : 64GB DC5A : 128GB ※Ensure to use these genuine microSD cards. Using other cards may cause loss of recorded data and recording failure.
DC5000A 	**DC201A** 12V/24V  Wiring unit with a voltage monitor for DC5000A Parking Option.	**DC101A**  Includes a battery pack and a lens cover for DC5000A. The battery pack allows for an approximately 65-minute continuous recording.	

Approximate recording time

*The following recording times and number of images are provided for guidance only, and are not absolutely guaranteed values. These will vary depending on the condition of use, subject, and ambient environment.

DC4000RA Recording mode	Resolution of Front camera	NORMAL REC priority			EVENT REC priority (Initial values)			PARKING REC priority		
		32GB (Included DC3A)	64GB	128GB	32GB (Included DC3A)	64GB	128GB	32GB (Included DC3A)	64GB	128GB
NORMAL folder (Partition for Normal recording)	FHD	88 min	177 min	354 min	76 min	153 min	306 min	76 min	153 min	306 min
	HD	103 min	206 min	411 min	89 min	178 min	356 min	89 min	178 min	356 min
EVENT folder (Partition for Event recording)	FHD	10 min	22 min	44 min	21 min	42 min	86 min	10 min	22 min	44 min
	HD	12 min	25 min	52 min	24 min	50 min	100 min	12 min	25 min	52 min
PARKING folder (Partition for Parking recording)	FHD	10 min	20 min	39 min	10 min	20 min	41 min	21 min	43 min	85 min
	HD	11 min	23 min	45 min	12 min	24 min	47 min	25 min	49 min	99 min

DC5000A Recording mode	Recording type	Partition type: Driving Priority (Default setting)			Partition type: Action Priority		
		32GB	64GB	128GB	32GB	64GB	128GB
Continuous Recording + Parked Continuous Recording	360° x 360°+ Front	34 mins	70 mins	141 mins	12 mins	26 mins	53 mins
Impact Recording	360° x 360°+ Front	11 times	22 times	46 times	11 times	22 times	46 times
Parked Impact Recording (Continuous Recording mode)	360° x 360°+ Front	6 times	13 times	27 times	6 times	13 times	27 times
Parked Impact Recording (Impact / Energy Saving modes)	360° x 360° only (approx. 7.3 MP)	27 times	55 times	112 times	27 times	55 times	112 times
Manual Recording	360° x 360°+ Front	7 mins	15 mins	31 mins	28 mins	58 mins	118 mins
	360° x 360° only (approx. 4.1 MP)	11 mins	24 mins	49 mins	44 mins	90 mins	182 mins
	360° x 360° only (approx. 7.3 MP)	6 mins	12 mins	26 mins	23 mins	48 mins	97 mins
Still Image Capture	360° x 360° only	35 images	72 images	147 images	54 images	109 images	221 images

- Information in this catalog is as of March, 2022.
- The actual products may appear differently from images in this catalog due to color modifications and to printing process.
- Product specifications and appearance in this catalog are subject to change without notice for improvement.

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