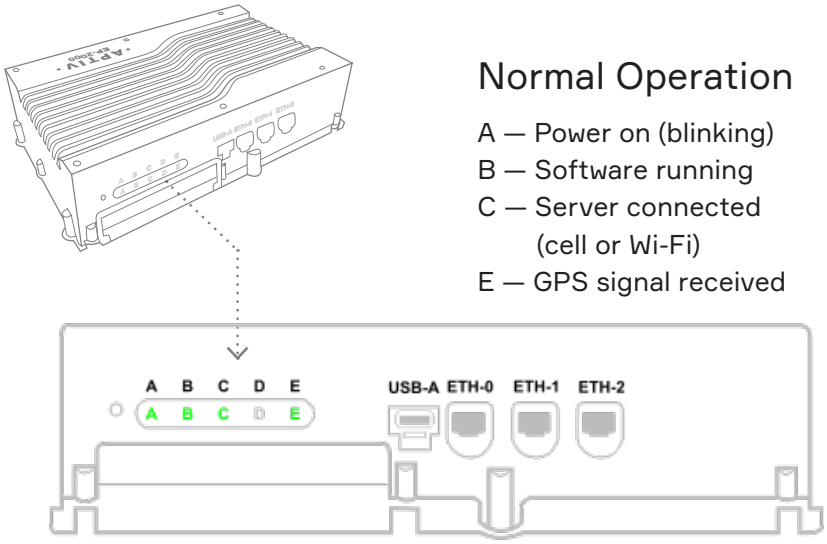
VDR LED DECODER

(EP-2000 Version)



Normal Operation

A — Power on (blinking)
B — Software running
C — Server connected (cell or Wi-Fi)
E — GPS signal received

This diagram shows how the LEDs appear when the VDR is operating normally. If your VDR looks different, see the tables below for an explanation.

A — Power Status

What You See		What It Means	What You Should Do
●	Solid green	VDR is running and connected to the cloud.	Nothing; the VDR is functioning normally.
✳	Blinking green	VDR is running but not connected to the cloud.	Nothing; the VDR is functioning normally.
●	Solid amber	System booting up in recovery mode / secondary partition.	Try to power cycle the device. If the status persists, contact your Aptiv representative.
●	Solid blue	OTA successful. Device will go solid green after 30 seconds.	Nothing; VDR will return to normal state after 30 seconds.
✳	Blinking blue	OTA in progress.	Nothing; wait for OTA to complete. Do not unplug device.
●	Solid red	System error. Device maintenance needed.	Contact your Aptiv representative.
✳	Blinking red	OTA failed.	Wait; status should return to green after 30 seconds. If all the LEDs are flashing red, see page 4.
●	Solid purple	Device overheating.	Remove from heat source/elevated temperatures. If the status persists, contact your Aptiv representative.
●	Off	The VDR is off.	Make sure the VDR is plugged in and double-check the connections.

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B — Data Acquisition Status (continued on next page)

What You See		What It Means	What You Should Do
	Solid green	Data acquisition (DAQ) software is running normally.	Nothing; the VDR is functioning normally.
	Green flashes every 1000 ms.	DAQ software is awake but waiting for a CAN connection.	Nothing; this is a normal part of the startup process. It should become solid green soon.
	Green flashes every 200 ms.	DAQ software is in standby mode.	Nothing; this is a normal part of the startup process. It should become solid green soon.
	Red flashes every 500 ms.	DAQ software is running a default config, or no config is available.	Contact your Aptiv representative to update the VDR config.
	Red flashes every 100 ms.	DAQ software exited abnormally or is not running, or the disk space is full.	Contact your Aptiv representative.
	Flashing red and green alternate.	The gateway has authenticated the device, but diagnostics are not running.	Nothing; this is usually a temporary state. (This state occurs only in certain vehicles equipped with a secure gateway.)
	Solid red	DAQ software is not available and/or not running.	Contact your Aptiv representative.
	Off	DAQ software is preparing for shutdown.	This usually signifies that the VDR is powering down, but if C is lit and B is not, contact your Aptiv representative.

Note: During the normal startup process, the B LED usually flashes green and then turns solid green.

C — Cell/Wi-Fi Status

What You See		What It Means	What You Should Do
	Solid green	The VDR is connected and communicating with the server.	Nothing
	Green flashes for 550 ms.	The VDR is connected to cell or Wi-Fi service but not communicating with the server.	Usually this is a temporary state that goes away after the VDR establishes a connection. If it persists, contact your Aptiv representative.
	Off	VDR is not connected to cell or Wi-Fi networks.	Move the vehicle to an area with better cell and/or Wi-Fi availability. If that doesn't help, try repositioning your antennas.

D — Disk Status

What You See		What It Means	What You Should Do
	Off	The VDR has plenty of disk space available (<60% full).	Nothing
	Green flashes for 50 ms.	A file is moving to the MicroSD card.	Nothing
	Green flashes for 250 ms.	A file is uploading to the server.	Nothing
	Solid amber (may flicker)	Config or firmware files are actively loading.	Nothing; do not unplug the VDR.
	Solid amber (no flicker)	The disk is starting to get full (60-80% full).	Nothing; do not unplug the VDR.
	Amber flashes every 350ms.	The disk is nearly full (80-90% full).	Contact your Aptiv representative.
	Solid red	The disk is dangerously full (≥90% full).	Contact your Aptiv representative.

Note: As the disk becomes increasingly full, the D LED will be solid amber, then flashing amber, then solid red. The disk % is indicated by whichever partition has the highest disk usage.

E — Critical Events and GPS Status

What You See		What It Means	What You Should Do
	Solid green	GPS is functioning normally.	Nothing
	Green flashes every 500 ms.	The GPS is functioning, but it is unable to get a position fix from the GPS satellites.	Make sure the GPS antenna has a view of the sky. If that doesn't help, move the vehicle to an area with a stronger GPS signal.
	Off	The GPS is not functioning.	Contact your Aptiv representative.
	Red flashes. The number of flashes will vary.	The VDR does not have a GPS fix, and the VDR has experienced critical events. The number of flashes corresponds to the number of critical files.	Contact your Aptiv representative.
	Alternating colors flash. The number of flashes will vary.	The VDR has a GPS fix, but it has experienced critical events. The number of flashes corresponds to the number of critical files.	Contact your Aptiv representative.
	Solid red	A firmware update is in progress.	Nothing; do not unplug the VDR.

F — SSD Activity (only for VDRs with an SSD installed)

What You See		What It Means	What You Should Do
	Green flashes	The SSD is actively reading and/or writing data.	Nothing

Combinations

What You See		What It Means	What You Should Do
	Solid red B and solid red D	DAQ software is not running, and the disk is full.	Contact your Aptiv representative.
	Amber lights flash sequentially in a chasing pattern.	The VDR software is actively updating.	Nothing; do not unplug the VDR.
	B, C, D, and E LEDs flash red. No repeating pattern.	Someone has pressed the manual trigger.	Nothing; this is what should happen when you press the manual trigger.
	All LEDs flash red in a repeating pattern. The number of flashes will vary.	The VDR is likely experiencing a hardware failure.	Count the number of flashes in the repeating pattern and contact your Aptiv representative.
	All LEDs flash white then turn off, followed by solid white A for one second.	The system is booting up.	Nothing; the VDR is functioning normally.