Co-Pilot Frequently Asked Questions

671 Chris Ordner Fri, Apr 14, 2017 Co-Pilot 3531

Q1. When the Co-Pilot version is upgraded (the Co-Pilot is reprogrammed), are the events that are stored on the Co-Pilot lost?

A1. No. The event space is NOT erased when a Co-Pilot is reprogrammed (firmware updated). Event spaces are erased ONLY when a new template is downloaded from TechTOOLS.

Q2. How does event numbering work on the Co-Pilot?

A2. When a template is downloaded from TechTOOLS, all events are erased and the event counter is reset. There are only four different event names and they are used in a circular fashion. The event names are **EventData_0 , EventData_1, EventData_2,** and **EventData_3**.

The Co-Pilot can only store 3 events at a time. Let us say that a user triggers 5 different events after downloading a template.. Since the Co-Pilot can only store the last 3 events, the events available for upload would be numbered as follows:

- EventData_2 EventData_3 EventData_0
    - EventData_0 would be the most recently triggered event.
- After the first event was triggered, the Co-Pilot would have the following events: EventData_0
- After the second event was triggered the Co-Pilot would have the following events: EventData_0, EventData_1
- After the third event was triggered the Co-Pilot would have the following events: EventData_0, EventData_1, EventData_2
- But, after the fourth event was triggered the Co-Pilot would have the following events, and EventData_0 would be overwritten: EventData_1, EventData_2, EventData_3
- When the fifth event is triggered, again, the events available for upload would be numbered as follows: EventData_2, EventData_3, EventData_0

Q3. What is the meaning of the lights on the Co-Pilot and it's trigger?

A3. Let's start with the trigger. The **green** LED on the trigger can be interpreted as follows:

G RE EN LED	**MEANING**
Off	Not recording
On	Recording
Flashing	Triggered: LED will go solid when the time after trigger interval expires (default is 10 seconds).

G RE EN LED	RED LED	MEANING
Off	Off	No power, or device is asleep or inoperative (broken)—see Q4 below
On	On	Conducting Power-On Self-Test, testing memory: Co-Pilot should enter this state whenever it is powered up. This state lasts for about 200 milliseconds. If the trigger LED is also on, then the device is in "bootstrap mode" (see Q4 below).

The two LEDs on the Co-Pilot itself **combined with** the trigger LED can be interpreted as follows:

On	Off	If the Trigger LED is **on,** the device is recording on a vehicle.
Off	ON	RAM failure; device is broken
Flashing	Off	If the trigger LED is **off**, the unit has established communications with an MDS or MDS2 client. If the trigger LED is **on**, the Co-Pilot is communicating with a vehicle and has at least one event stored on it already. If the trigger LED is **flashing**, the device is triggered and recording the seconds after trigger time for the event.
Off	Flashing	Attempting RS232 Communications connection to an MDS or MDS2 client

On	Flashing	Attempting to establish communication with a vehicle

Q4. If the Co-Pilot fails during a firmware update is the device recoverable?

A4. If programming a Co-Pilot fails (power is lost or some other event occurs), the Co-Pilot may appear to be completely inoperative. At this point, you should try to program the Co-Pilot from **bootstrap mode**.

- To get a Co-Pilot in bootstrap mode, first hold down the trigger button and then power up the Co-Pilot (screw on the power connector).
- When in bootstrap mode, both the LEDs will be on and solid (not flashing).
- You should then program the Co-Pilot firmware using the normal procedure.

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