

# REST – STAR functional diagrams

## Errors

Legend

INPUTS (events)  
OUTPUTS(actions)

### POSSIBLE ERRORS detected by e-bidet

The following errors describe the problems that electronics inside e-bidet can detect. Only 1 error is possible at the same time. E1 has preference to E2, E2 to E3... and so on. There are blocking errors (system has to be powered off or restarted to work again) and no blocking errors (system works as usual).

Errors are shown by the e-bidet in two ways (only if error occurs while e-bidet is ON, not during SYSTEM OFF):

- Corner LED lights blinking: blinks the number of times of the error every 5 seconds for 1 minute. After minute, corner LED lights return to the light mode set.
- Beep sound: Long beep every 5 seconds in coordination with the LED light blinking, for only 15 seconds (3 times).

If there have been a Link-Test process, then the remote also shows the error code as it is explained on the table below.

In addition, the Technical Service can see the current status and also the last error through a key combination in remote control:

- Remote control keys "Temperature -" and "Position -" at the same time for 5 seconds => Remote control lights shows last error occurred for 5 seconds.
- Remote control keys "Temperature +" and "Position +" at the same time for 5 seconds => Remote control lights shows current status (error or OK) for 5 seconds.

In all blocking errors (except E2) is possible to perform a WATER TANK EMPTYING process. If blocking error occurs and error showing is over (beep and LED blinking finished), then if later there is a remote control key press or lateral panel key press, it should show again this last error LED blinking and 3 beeps.

ERRORS	BLOCKING ERROR? (If blocking, system has to be powered off or restarted)	SYSTEM ACTION (How to proceed when error occurs)	WAYS TO DISPLAY STATUS		
			ON CORNER LIGHTS (only when system is ON, not in SYSTEM OFF)	ON REMOTE CONTROL (show status for 5 seconds. Functions LEDs ON)	ON
No error, system OK	-	Normal functionality	LEDs ON for 5s, then long BEEP and LEDs OFF.	All LEDs completely ON.	
E1 - No water income. No water on tank or level sensor damaged. See annex table for clarifying when Error 1 has to be showed and when to refill the water tank.	YES	Stop all functions. If wash function active, nozzle to home position but no autoclean is performed.	Quick blink (x1) every 5 seconds for 1 minute.	1st LED of TEMPERATURE ON	
E2 - Water pump electrical overconsumption. If current consumption on water pump (measured by shunt resistor) is over 2A.	YES	Stop all functions. If wash function active, nozzle to home position and no autoclean.	Quick blink (x2), every 5 seconds for 1 minute.	1st and 2nd LEDs of TEMPERATURE ON	
NO ERROR 3 IN SW 3.xx	-	-	-	-	
E4 - Extreme overheat. Water tank temperature ( $T_1$ ) $\geq 47^\circ$ in static heating case. Water nozzle temperature ( $T_3$ ) $\geq 47^\circ$ in dynamic heating case.	NO	Stop all functions. Refresh water on tank until $T \leq 40^\circ$ C. After that, system is working as usual.	Quick blink (x4), every 5 seconds for 1 minute.	All 3 LEDs of TEMPERATURE ON 1st LED of PRESSURE ON	
E5 - Overheat. Water tank temperature ( $T_1$ ) $\geq 44^\circ$ in static heating case. Water nozzle temperature ( $T_3$ ) $\geq 44^\circ$ in dynamic heating case.	NO	Stop all functions. Refresh water on tank until $T \leq 40^\circ$ C. After that, system is working as usual.	Quick blink (x5), every 5 seconds for 1 minute.	All 3 LEDs of TEMPERATURE ON 1st and 2nd LEDs of PRESSURE ON	
E6 - Water is not heating up. Water temp on tank is not increasing during warming up (heater ON) when wash function is activated (or active).	NO	System is working as usual, every time wash function is activated and this condition happens, error is showed again.	Quick blink (x6), every 5 seconds for 1 minute.	All 3 LEDs of TEMPERATURE ON All 3 LEDs of PRESSURE ON	
E7 - Temperature sensor error. One of the 3 temperature sensors is not giving a proper signal.	YES	Stop all functions.	Quick blink (x7), every 5 seconds for 1 minute.	All 3 LEDs of TEMPERATURE ON All 3 LEDs of PRESSURE ON 1st LED of POSITION ON	
<b>CONDITION</b>					
Initialization Process	-	safety level sensor	WATER FILL	error 1 display	remark
user is NOT detected (stand-by)	-	-	0	X	20" fill water, if any level sensor still OFF $\rightarrow$ error1
user is detected (stand-by)	X	-	X	X	whatever level sensors status, do nothing
user detect off and wash function key is just pressed (trying to activate a wash function)	0	X	0	X	20" fill water, if any level sensor still OFF $\rightarrow$ error1 wash func. or pre-heat don't work till water tank filled error 1 directly
wash function ongoing	X	0	X	O	20" fill water, if any level sensor still OFF $\rightarrow$ error1 wash func. or pre-heat don't work till water tank filled stops everything and error 1
	O	X	X	O	stops everything and error 1
	X	0	O	O	10" fill water, if working level sensor still OFF $\rightarrow$ error1

**ERROR 1 ANNEX TABLE:**  
Clarification on when to show E1 and when to refill the water tank