

Fault Phenomenon: The controller (wired controller) has power but the screen shows no display (black screen).

Sudden black screen can be caused by the following reasons:

1. The switching power supply is faulty.
2. The controller is faulty.
3. The mainboard is faulty.

Operational Steps:

Step 1: Measure the Controller Voltage

Action: After disconnecting the power, carefully remove the controller and inspect the wiring terminals on its back. Use a multimeter to check whether there is voltage (typically 12V DC) at the terminals supplying power to the controller.

Result Analysis and Action:

Scenario A: If no 12V voltage is detected

Diagnosis: The switching power supply providing power to the controller is damaged and is not delivering the required voltage.

Solution: The *switching power supply* needs to be replaced with a new one.

Scenario B: If normal 12V voltage is detected

Diagnosis: The power supply is normal, but the controller itself is damaged and cannot function.

Solution: The *controller* needs to be replaced with a new one.

Step 2: Observe Special Phenomena (If the first step doesn't resolve the issue or if special phenomena occur)

Phenomenon: If the controller's screen briefly lights up upon power-on and then turns off, or displays an error code.

Diagnosis: This usually indicates a fault with the mainboard (main control board). The mainboard may be unable to establish normal communication with the controller, preventing the controller from starting correctly.

Solution: The *mainboard* needs to be replaced with a new one.