



PROBLEM SOLVED

The problem encountered by many Z series users having no power to the camera when attaching a third party dummy battery or other external power adapter to the battery slot of their cameras and getting an on screen warning "*Shutter disabled—Recharge Battery*" is in firmware which detects a battery with less than operating voltage or a discharged battery activating a protection circuit via firmware which prevents inadvertent damage to the processor and other circuits should the camera shut down part way through taking photos or recording video.

There is however a simple but somewhat annoying work around for the warning and failure of third party dummy batteries to power the Z series cameras. The workaround requires the dummy battery is pre-powered by an external power supply not less than the minimum wattage required by the Z series camera in use (for the Z6 this calculates out to being close to 25 watts continuous) ensuring the power source to the dummy on "before" installing the battery adapter in the camera.

I've tried unorthodox ways of overcoming the problem, concluding that without power applied to the adapter when inserted into the cameras, the Z series automatically detects a discharged battery and will not power up beyond its safety limit even if it detects nominal power at the connection. This happens when dummy battery adapters installed are later connected to their power sources, which triggers an in camera alert to a battery incompatible with the internal power requirements.

Though my workaround overcomes the problem, including after market adapters, if you can use the Nikon original, which will report the same warning if not installed correctly with power applied.

I'm not one to support after market suppliers with expensive equipment and electrical safety, but I calculated a nominal operating voltage and current needed to power the Z Series which works out to 8.4 Vdc at 2.5 Amps - 3 Amps being better giving the Nikon EH-5c or d AC adapters output 9 Vdc at 4 Amps (4500 mA) to the genuine Ep-5b dummy battery.

By keeping the voltage at a nominal required by your camera, it not only extends the adapted power supply life by won't push the chassis to its limits. The camera itself reaches maximum power consumption two times during normal operation the first is when you first turn your camera on and the second in recording video internally to XQD or CFexpress cards as the camera is at near peak power requirement to complete its function tests and maximise recording.

by James Cooper