

Using a Micro Force to Drive the Servos of Fujinon and Canon ENG-style Lens with Sony F5/F55

When using a Micro Force to control the internal servos of ENG-style lenses with Sony F5/F55, it is possible that the MF will not power up and cause a lens error on the camera. This is due to the current-limiting circuitry inside the F5/F55. **The problem only occurs if the lens is being powered through the lens mount.** When the lens is powered from an external battery, however, all ENG lens-ready MF models control the lens as expected and do not cause any errors.

If you must power the lens from the mount on the F5/F55, there is a modification to the Micro Force video cable that will allow normal operation for most MF models. The modification consists of installing a 2 ohm series resistor on the +12V pin. **For DMF1/DMF2 cables, this is pin 1; for V+F/V+F2/V+F3 cables it is pin 6.** This resistor will limit the inrush current so the F5/F55 doesn't throw an "Abnormal Lens Communication" error. See the chart below for information about what Micro Forces work:

Micro Force	Lens powered from mount w/ unmodified MF cable	Lens powered from mount w/ modified MF cable	Lens powered from battery (any MF cable)
V+F	Does Not Work	Does Not Work	Fully Functional
V+F2	Does Not Work	Fully Functional*	Fully Functional
V+F3	Works Intermittently	Fully Functional	Fully Functional
DMF	Fully Functional*	Fully Functional*	Fully Functional
DMF2	Fully Functional*	Fully Functional*	Fully Functional

* - These configurations have been tested and sometimes caused a lens error momentarily, but then powered on and functioned normally after a couple seconds.

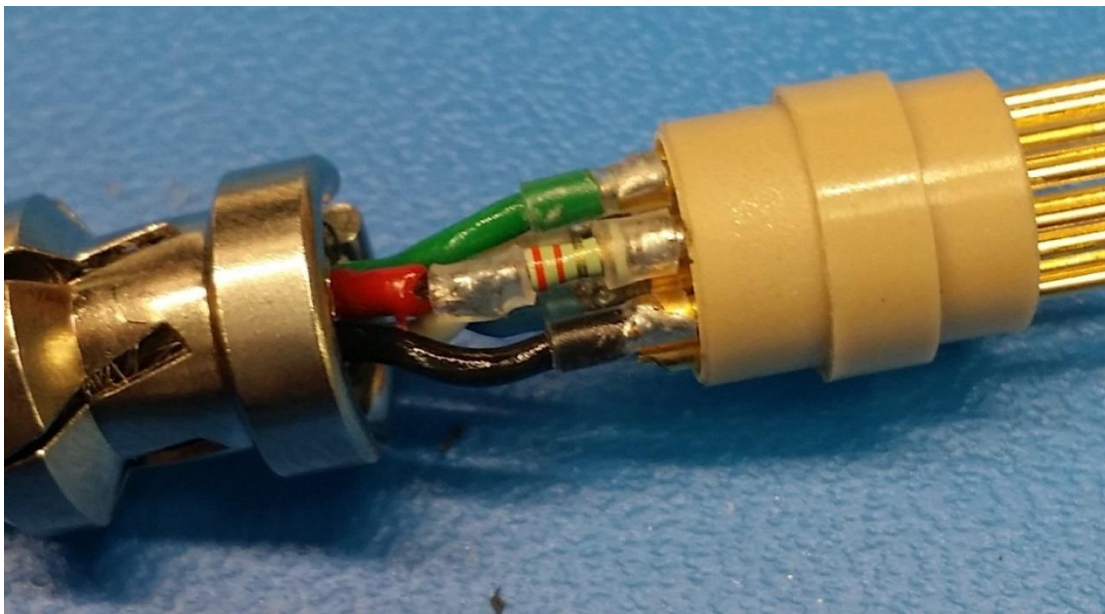


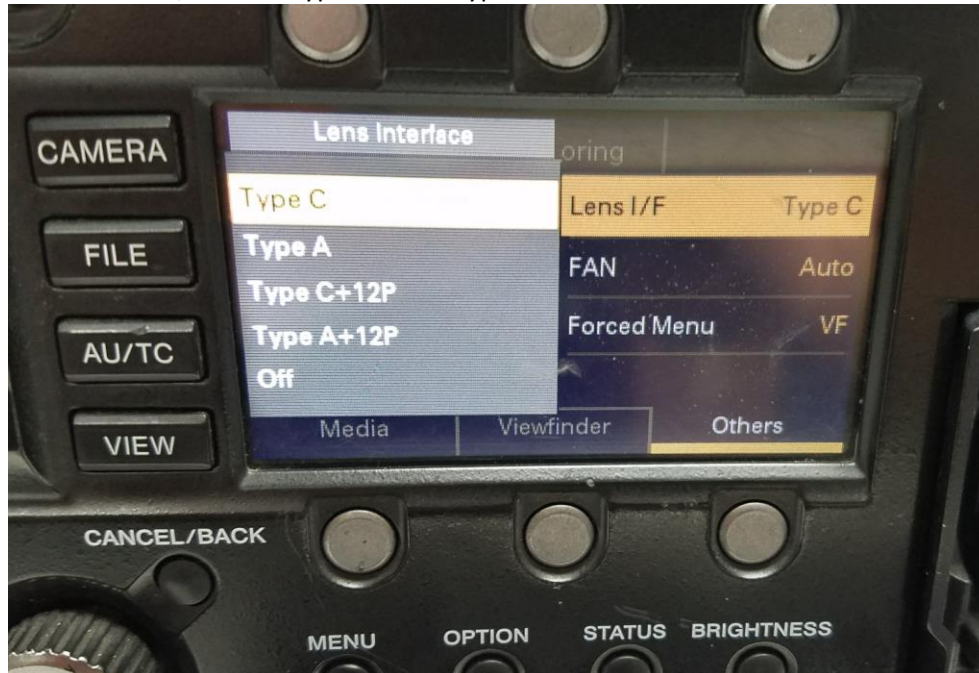
Figure 1 - 2Ω series resistor installed on +12V line

Figure 1 shows the 2Ω resistor installed in the MF cable. To perform the mod, simply desolder the +12V supply line (pin 1 for DMF, pin 6 for AMF) and add the 2Ω resistor in series with it. You may also send the cables in to us to receive the mod free of charge.

Video cables that have this modification and the protection transistor are denoted by a **green/yellow** striped band on the Hirose connector. Cables with just a green band have the protection transistor installed but still need this modification to function properly with the F5/F55 when the lens is powered through the mount.

Camera and Lens Setup for Proper Operation

- 1) Make sure the F5/F55 lens type is set to Type C:



- 2) The Manual/Servo mode selector switches must be set to "Servo" on the ENG lens. The picture below shows the setting on a Canon 17-120mm:



- 3) For Fujinon lenses, DIP switch #3 must also be set to "Off" and the lens must have firmware H or newer for optimum performance with a compatible Micro Force.