

FI+Z Controls for 3D Rigs

2/17/10



Hand Unit 3



Motor Driver 2



Digital Motor DM2

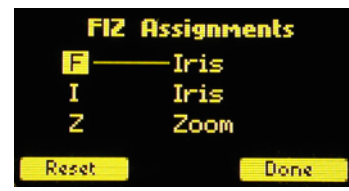
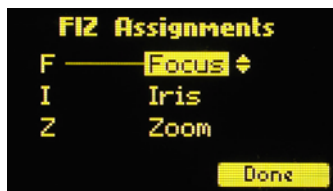
The FI+Z system provides complete stereo lens and rig control for 3D.

I. Stereo Lens Control

The FI+Z system -Hand Unit 3, Motor Driver 2 and one to three digital motors - controls the focus, iris and zoom of a single lens. The system can be configured for stereo lens control in either of two ways: with a single motor driver unit to drive only the focus rings of a lens pair, or with two motor drivers to drive the focus, iris, and zoom rings of the two lenses.

A. Single Lens-Function Control

The Hand Unit 3 can operate in a special "Custom" mode where a control function can be assigned to multiple motor channels. In the example shown below, the iris slider of the Hand Unit is assigned to both the focus and iris motor channels of the Motor Driver unit. Operating in this mode, a single Hand Unit and Motor Driver unit will control the focus of two lenses.



B. Full three function lens control.

In situations where all three functions need to be controlled by a single Hand Unit 3, the required system consists of:

- a. 1 x Hand Unit 3
- b. 2 x MDR units
- c. 6 x Digital Motors.

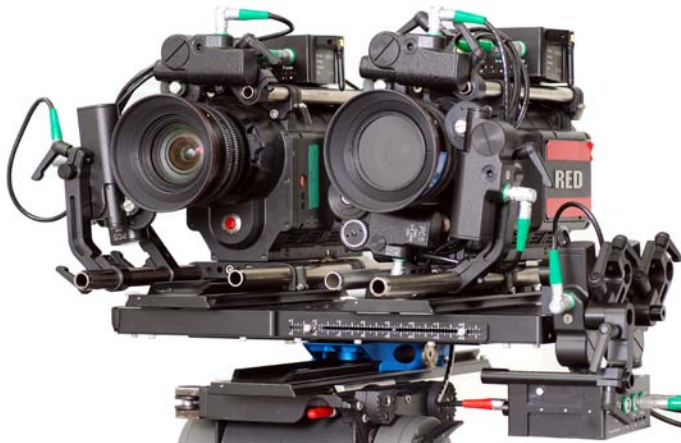
In this situation, one of the MDR2 units must have the program “3D Slave” loaded. This program can be loaded from a PC to the MDR2 using the Serial Cable which came with the MDR2. The current version of this software is: **MDR1-4.11 Simplex**.

II. 3D Rig Control

The FI+Z Hand Unit 3 and MDR2 can be used to control both the inter-ocular and convergence axes of a 3D rig. The axes can be either operated independently or interlocked so that the cameras automatically converge at a distance set by the HU3 focus knob. 3D software for the Hand Unit 3 allows it to control either beamsplitter or parallel rigs with motorized drives using either a single or dual screw. The current version of the 3D Rig Software for the HU3 is **Hand_3D_V1_00**.

The two “families” of 3D rigs are:

- Parallel
- Beamsplitter



Parallel Rig



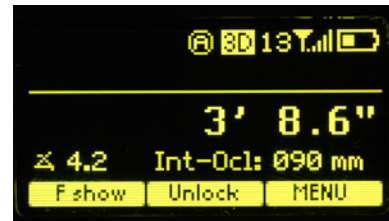
Beamsplitter Rig

The Hand Unit 3 stores calibration data for up to 5 different rigs making rig set-up quick and simple.

Once calibrated, the convergence distance can be set using a standard focus ring.

The Hand Unit display shows:

- convergence angle
- interocular distance
- convergence distance



3D mode display

Convergence distance