Video Mode Explanation:

In addition to "Camera Stabilize Order" bytes 8-11 of the Set Video Mode Packet (0x1F), there is the notion of "Camera Display Order" bytes 14-17. Camera stabilize order controls which cameras are stabilized/tracked on and camera display order controls which cameras are displayed where in the various display modes (one-up, PIP, two-up, quad screen, etc.). These two orders are independent of one another.

Limitations on Camera Stabilize Order: Each camera must be only listed once: This means that a camera stabilize order of {0, 0, 1, 2} is not a valid stabilize order because camera 0 is listed twice. Also camera indices must be between 0 and 4 inclusive.

Limitations on Camera Display Order: Every camera that is displayed must be in the camera order list. Note that the camera order list is ignored after the index of number of inputs-1 (Byte 4 of packet 0x1F). For example if camera stabilize order is {0, 1, 2, 3} and number of inputs is 2 then a display order of {3, 0, 1, 2} is not valid because 3 is not between indices 0 and 1 of the camera stabilize order list, however if number of inputs is 4, then {3, 0, 1, 2} is valid because camera 3 is between 0, and 3.

In one up, the main screen corresponds to logical camera 0.
In two up, the left screen corresponds to logical camera 0, and the right screen corresponds to logical camera 1.
In pip mode, the main screen corresponds to logical camera 0 and the Pip window corresponds to logical camera 1.
In quad screen, the top left screen corresponds to logical camera 0, the top right screen corresponds to logical camera 1, the bottom left screen corresponds to logical camera 2, and the bottom right screen corresponds to logical camera 3.

Fusion corresponds to display order camera index of 8. Note that index 8 cannot be used in camera stabilize order, just camerea display order. (The system shouldn't stabilize and track on the fused imager.)

Examples:
Assume an EO camera is plugged into camera port 0.
Assume an IR camera is plugged into camera port 1.
Assume a digital camera input is plugged into camera port 4.

1) Stabilize and track off EO, but display IR. Number of inputs: 2, Display mode: one up , camera stabilize order {0, 1, x, x} camera display order {1, 0, x, x}
2) Fuse EO/IR, show PIP, with IR in main and fused in PIP. Number of inputs: 1, Display mode: pip, Camera Stabilize Order: {0, 1, x, x}, Camera Display Order: {1, 8, x, x}
3) Show IR twice in two up mode: Number of inputs: 1, Display: two up, camera stabilize order: {1, x, x, x}, camera display order: {1, 1, x, x}. To apply different false coloring modes to both, use byte 15 of the Set Display Parameters packet (0x12), first with byte 15 set to 0 (set the left IR image false color mode), then with byte 15 set to 1 (set the right IR image false color mode).

Note that before display order was introduced, camera display order was implicitly assumed to always be equal to camera stabilize order.