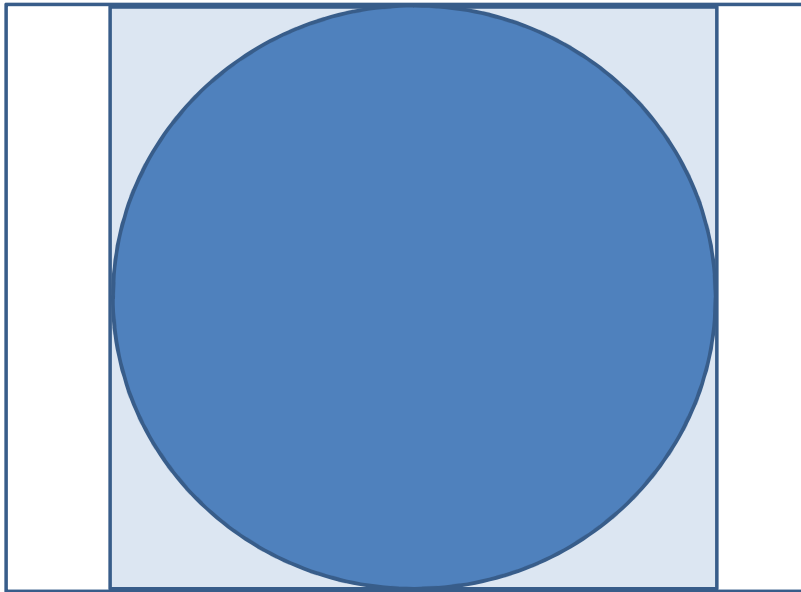


The Experimental Area must fit inside a circle, square, or 4:3 rectangle



HOW TO SELECT CINEPLEX CAMERA-LENS COMBINATIONS FOR CINEPLEX VERSION 3

1. For CinePlex Version 3, Plexon currently offers the AVT Stingray camera (Type 1/2 CCD) and two lenses - one varifocal and one zoom.

Not all camera-lens combinations will work for a particular experimental setup.

Use these steps together with the charts below to determine valid camera-lens combinations.

If more than one combination is valid, selection can be made based on price, quality, or other factors.

2. First, determine the size (in meters) of the customer's experimental setup. See the drawing above.

Imagine a circle, square or 4:3 rectangle drawn around the setup, completely enclosing it.

The Experiment Size in the charts below is the diameter of the circle, the side of the square, or the longer side of the enclosing rectangle.

3. Then, on each of the charts below,

Find the Experiment Size on the vertical scale.

Read across until you arrive at the green line.

If a particular size doesn't intersect the green line, go to the next chart.

Read down from the green line intersection to the horizontal scale.

That reading is the minimum Distance From Experiment at which that camera-lens combination can be placed.

Read across again at the Experiment Size until the blue line is intersected.

Read down to the horizontal scale. That reading is the maximum Distance From Experiment for the camera-lens combination.

If a particular size doesn't intersect the blue line, the maximum Distance for that camera-lens combination is more than 3 meters.

Record the minimum and maximum Distances From Experiment for the camera-lens combination, if found.

Go to the next chart until they have all been examined.

4. Determine the available distance range (in meters) for the customer's experimental setup.

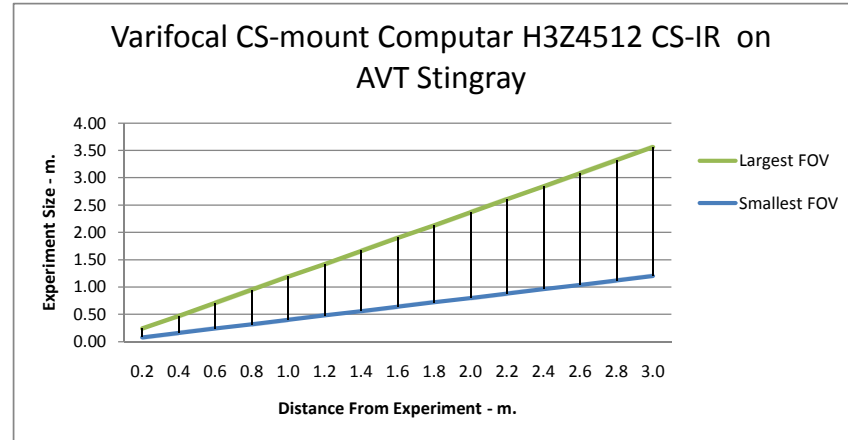
5. When there is overlap between the customer's available distances and a camera-lens range, that camera-lens combination can be used.

6. The best camera lens combinations are those where the Distance From Experiment are greatest. This is the minimum distortion.

Note that these are calculated numbers. Small variations in lens and camera manufacturing can result in as much as 10% variation.

STANDARD VARIFOCAL LENS

Meters to target	Largest FOV	Smallest FOV	Lens
0.2	0.24	0.08	Varifocal CS-mount Computar H3Z4512 CS-IR
0.4	0.47	0.16	Varifocal CS-mount Computar H3Z4512 CS-IR
0.6	0.71	0.24	Varifocal CS-mount Computar H3Z4512 CS-IR
0.8	0.95	0.32	Varifocal CS-mount Computar H3Z4512 CS-IR
1.0	1.19	0.40	Varifocal CS-mount Computar H3Z4512 CS-IR
1.2	1.42	0.48	Varifocal CS-mount Computar H3Z4512 CS-IR
1.4	1.66	0.56	Varifocal CS-mount Computar H3Z4512 CS-IR
1.6	1.90	0.64	Varifocal CS-mount Computar H3Z4512 CS-IR
1.8	2.13	0.72	Varifocal CS-mount Computar H3Z4512 CS-IR
2.0	2.37	0.80	Varifocal CS-mount Computar H3Z4512 CS-IR
2.2	2.61	0.88	Varifocal CS-mount Computar H3Z4512 CS-IR
2.4	2.84	0.96	Varifocal CS-mount Computar H3Z4512 CS-IR
2.6	3.08	1.04	Varifocal CS-mount Computar H3Z4512 CS-IR
2.8	3.32	1.12	Varifocal CS-mount Computar H3Z4512 CS-IR
3.0	3.56	1.20	Varifocal CS-mount Computar H3Z4512 CS-IR



ZOOM LENS

Meters to target	Largest FOV	Smallest FOV	Lens
0.2			Zoom C-mount Computar H6Z0812
0.4			Zoom C-mount Computar H6Z0812
0.6			Zoom C-mount Computar H6Z0812
0.8			Zoom C-mount Computar H6Z0812
1.0			Zoom C-mount Computar H6Z0812
1.2			Zoom C-mount Computar H6Z0812
1.4			Zoom C-mount Computar H6Z0812
1.6	0.96	0.17	Zoom C-mount Computar H6Z0812
1.8	1.08	0.19	Zoom C-mount Computar H6Z0812
2.0	1.20	0.21	Zoom C-mount Computar H6Z0812
2.2	1.32	0.23	Zoom C-mount Computar H6Z0812
2.4	1.44	0.26	Zoom C-mount Computar H6Z0812
2.6	1.57	0.28	Zoom C-mount Computar H6Z0812
2.8	1.69	0.30	Zoom C-mount Computar H6Z0812
3.0	1.81	0.32	Zoom C-mount Computar H6Z0812

