



1719 21st Street Santa Monica, CA 90404

Video Probe II Lens System Manual & Depth of Field Charts

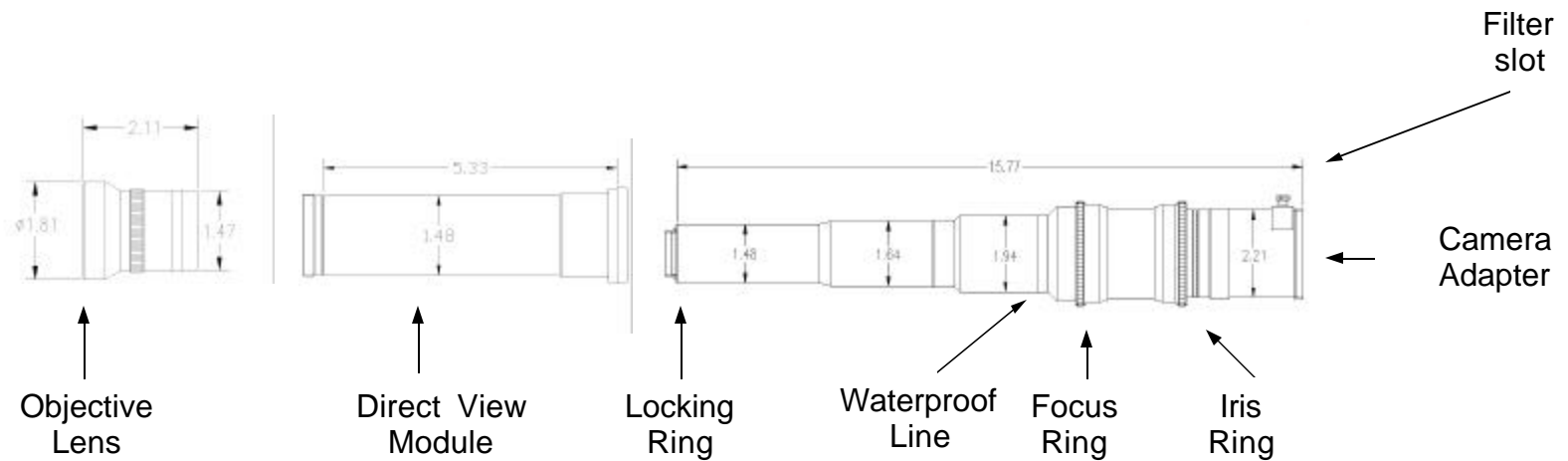


For additional technical support
Please Call InnoVision Optics at 310-453-4866

www.InnoVisionOptics.com



Video Probe II Dimensions



Video Probe II		Field of View	@ Minimum Focus	Coverage	T-Stop	
5mm	Horizontal	Inch	0.25	Inch	All Formats	@ T22
	Vertical	Inch				
7mm	Horizontal	11/16 Inch	0.5	Inch	All Formats	@ T22
	Vertical	1/2 Inch				
9.5mm	Horizontal	1 Inch	1.25	Inches	All Formats	@ T22
	Vertical	11/16 Inches				
12.5mm	Horizontal	1 1/8 Inches	2	Inches	All Formats	@ T22
	Vertical	0.875 Inches				
18mm	Horizontal	1.625 Inches	5	Inches	All Formats	@ T22
	Vertical	1 3/16 Inches				
24mm	Horizontal	Inches	11	Inches	All Formats	@ T22
	Vertical	Inches				

Magnification Ratio 1 :1

Video Probe II**LENS: 9.5 mm**

Circle of Confusion: 0.00083

T-Stop

Distance(in)	1	2	3	4	5	6	7	8	9	
2.8	Near	0.984	1.936	2.858	3.751	4.617	5.456	6.271	7.061	7.829
	Far	1.017	2.069	3.157	4.285	5.453	6.664	7.921	9.226	10.582
4	Near	0.977	1.909	2.801	3.653	4.470	5.252	6.003	6.723	7.416
	Far	1.024	2.100	3.230	4.420	5.673	6.996	8.395	9.875	11.445
5.6	Near	0.968	1.875	2.728	3.531	4.288	5.003	5.679	6.320	6.928
	Far	1.034	2.142	3.332	4.613	5.996	7.494	9.122	10.896	12.840
8	Near	0.955	1.827	2.626	3.362	4.041	4.670	5.254	5.798	6.306
	Far	1.050	2.210	3.498	4.937	6.556	8.389	10.483	12.898	15.712
11	Near	0.939	1.769	2.509	3.172	3.770	4.312	4.805	5.256	5.670
	Far	1.070	2.300	3.730	5.413	7.422	9.862	12.888	16.741	21.813

T-Stop

Distance(in)	10	11	12	15	18	21	24	30	36	
2.8	Near	8.575	9.300	10.005	12.008	13.856	15.568	17.159	20.021	22.527
	Far	11.992	13.460	14.988	19.979	25.679	32.252	39.915	59.809	89.570
4	Near	8.082	8.723	9.340	11.062	12.612	14.015	15.291	17.523	19.413
	Far	13.112	14.886	16.779	23.292	31.425	41.866	55.762	104.166	247.251
5.6	Near	7.506	8.056	8.579	10.011	11.264	12.369	13.352	15.024	16.392
	Far	14.976	17.336	19.957	29.904	44.785	69.481	118.483	9372.092	INFINITY
8	Near	6.781	7.227	7.645	8.762	9.707	10.517	11.219	12.376	13.290
	Far	19.036	23.019	27.881	52.083	123.626	6560.465	INFINITY	INFINITY	INFINITY
11	Near	6.051	6.403	6.729	7.580	8.277	8.859	9.352	10.142	10.748
	Far	28.791	38.998	55.350	714.253	INFINITY	INFINITY	INFINITY	INFINITY	INFINITY

Video Probe II**LENS: 12.5 mm**

Circle of Confusion: 0.00083

T-Stop

Distance(in)	1	2	3	4	5	6	7	8	9	
2.8	Near	0.990	1.962	2.916	3.852	4.771	5.673	6.559	7.430	8.285
	Far	1.010	2.039	3.089	4.160	5.252	6.367	7.504	8.665	9.851
4	Near	0.986	1.947	2.881	3.792	4.679	5.544	6.387	7.209	8.012
	Far	1.014	2.056	3.129	4.232	5.368	6.538	7.743	8.985	10.267
5.6	Near	0.981	1.926	2.837	3.715	4.562	5.380	6.171	6.935	7.674
	Far	1.020	2.080	3.183	4.333	5.531	6.781	8.086	9.451	10.879
8	Near	0.973	1.896	2.772	3.605	4.397	5.152	5.873	6.561	7.219
	Far	1.028	2.116	3.269	4.493	5.794	7.181	8.662	10.248	11.948
11	Near	0.964	1.860	2.695	3.476	4.207	4.893	5.538	6.146	6.720
	Far	1.039	2.163	3.383	4.710	6.161	7.754	9.509	11.454	13.622

T-Stop

Distance(in)	10	11	12	15	18	21	24	30	36	
2.8	Near	9.124	9.950	10.761	13.113	15.349	17.478	19.507	23.294	26.757
	Far	11.061	12.298	13.562	17.522	21.758	26.300	31.181	42.127	55.000
4	Near	8.794	9.559	10.305	12.442	14.438	16.306	18.059	21.258	24.104
	Far	11.589	12.953	14.363	18.883	23.896	29.489	35.768	50.955	71.076
5.6	Near	8.390	9.083	9.754	11.647	13.378	14.968	16.432	19.039	21.290
	Far	12.375	13.944	15.590	21.064	27.500	35.177	44.494	70.713	116.468
8	Near	7.848	8.451	9.029	10.629	12.052	13.327	14.475	16.461	18.118
	Far	13.777	15.750	17.884	25.478	35.538	49.499	70.176	169.016	2769.635
11	Near	7.262	7.776	8.262	9.582	10.723	11.721	12.600	14.078	15.273
	Far	16.051	18.793	21.913	34.520	55.999	100.796	251.973	INFINITY	INFINITY

Video Probe II**LENS: 18 mm**

Circle of Confusion: 0.00083

T-Stop

Distance(in)	1	2	3	4	5	6	7	8	9	
2.8	Near	0.995	1.982	2.959	3.927	4.887	5.838	6.780	7.714	8.640
	Far	1.005	2.019	3.042	4.075	5.118	6.171	7.234	8.308	9.391
4	Near	0.993	1.974	2.942	3.897	4.840	5.771	6.690	7.598	8.495
	Far	1.007	2.027	3.061	4.109	5.171	6.248	7.340	8.447	9.569
5.6	Near	0.991	1.964	2.919	3.857	4.779	5.684	6.574	7.448	8.308
	Far	1.009	2.038	3.086	4.154	5.243	6.353	7.485	8.640	9.818
8	Near	0.987	1.948	2.886	3.799	4.690	5.559	6.407	7.235	8.043
	Far	1.013	2.054	3.124	4.223	5.354	6.517	7.714	8.946	10.216
11	Near	0.982	1.930	2.845	3.729	4.583	5.410	6.210	6.984	7.734
	Far	1.019	2.075	3.173	4.314	5.500	6.735	8.021	9.362	10.761

T-Stop

Distance(in)	10	11	12	15	18	21	24	30	36	
2.8	Near	9.558	10.467	11.369	14.026	16.616	19.140	21.601	26.343	30.859
	Far	10.485	11.590	12.706	16.119	19.636	23.260	26.999	34.836	43.196
4	Near	9.380	10.254	11.118	13.647	16.086	18.440	20.714	25.035	29.079
	Far	10.708	11.863	13.034	16.651	20.431	24.385	28.526	37.422	47.244
5.6	Near	9.153	9.984	10.800	13.171	15.430	17.583	19.638	23.480	27.003
	Far	11.020	12.247	13.499	17.418	21.598	26.066	30.853	41.532	53.988
8	Near	8.832	9.603	10.357	12.517	14.540	16.436	18.219	21.480	24.390
	Far	11.524	12.872	14.263	18.711	23.622	29.072	35.156	49.723	68.700
11	Near	8.462	9.167	9.851	11.786	13.562	15.198	16.709	19.412	21.759
	Far	12.222	13.750	15.348	20.624	26.755	33.968	42.577	65.992	104.190

Video Probe II**LENS: 24 mm**

Circle of Confusion: 0.00083

T-Stop

Distance(in)	1	2	3	4	5	6	7	8	9	
2.8	Near	0.997	1.990	2.977	3.959	4.936	5.908	6.875	7.837	8.794
	Far	1.003	2.010	3.024	4.042	5.066	6.095	7.130	8.170	9.216
4	Near	0.996	1.985	2.967	3.941	4.909	5.869	6.822	7.769	8.709
	Far	1.004	2.015	3.034	4.060	5.095	6.137	7.187	8.245	9.312
5.6	Near	0.995	1.979	2.954	3.918	4.873	5.818	6.754	7.680	8.597
	Far	1.005	2.021	3.048	4.085	5.134	6.193	7.265	8.348	9.442
8	Near	0.993	1.971	2.935	3.884	4.821	5.744	6.654	7.551	8.435
	Far	1.007	2.030	3.068	4.123	5.193	6.280	7.384	8.506	9.646
11	Near	0.990	1.960	2.911	3.843	4.757	5.653	6.532	7.395	8.241
	Far	1.010	2.042	3.095	4.171	5.269	6.392	7.540	8.713	9.912

T-Stop

Distance(in)	10	11	12	15	18	21	24	30	36	
2.8	Near	9.746	10.694	11.637	14.436	17.194	19.912	22.589	27.827	32.916
	Far	10.267	11.324	12.387	15.609	18.885	22.214	25.599	32.541	39.722
4	Near	9.641	10.568	11.487	14.208	16.871	19.479	22.034	26.989	31.750
	Far	10.386	11.469	12.560	15.886	19.291	22.779	26.352	33.767	41.564
5.6	Near	9.505	10.404	11.294	13.913	16.458	18.930	21.334	25.947	30.318
	Far	10.549	11.668	12.800	16.271	19.861	23.578	27.427	35.553	44.303
8	Near	9.308	10.168	11.017	13.495	15.875	18.163	20.365	24.527	28.397
	Far	10.803	11.980	13.176	16.884	20.782	24.887	29.215	38.616	49.163
11	Near	9.072	9.888	10.688	13.005	15.202	17.287	19.270	22.957	26.313
	Far	11.139	12.394	13.679	17.718	22.061	26.743	31.806	43.277	56.975

Prism Attachment Instructions

There is no light loss when using the Prism Attachment; therefore no Stop compensation is required.

The Probe II is **Not Waterproof** when used with the Prism Attachment

35mm Probe II The Prism Attachment will cover the following focal lengths when used on the Probe II: 16, 20, 32 & 40

The Prism Attachment will not cover the 9mm & 12mm Lenses.

Note: Some older couplers will be engraved "Coupler A" and "Coupler B". Use the correct coupler with the Objective lenses shown below:

Coupler	35mm Probe II
A	16mm, 20mm, 40mm
B	32mm

Installation Steps:

1. Unscrew protective housing from objective lens