

Omega Systems – Quick Reference Application Guide

Light Source	UV Transillumination	White Light Transillumination	Epi-Illumination	Chemiluminescence	Bioluminescence
Sample Type	Transparent stained samples excited by 300nm UV light	Transparent stained samples visible with excitation	Non-transparent, opaque samples requiring reflected, not transmitted, light	Samples that emit light from a chemical reaction	Samples that emit light from a biochemical reaction
Typical Applications	Ethidium Bromide DNA Gels SYBR Green DNA Gels SYPRO Ruby Protein Gels SYPRO Red Protein Gels	Coomassie Blue Protein Gels Silver Stain Protein Gels Colony Plates Autoradiographic Film	Qdot Labeled Membranes Fluorescent Western Blots GFP Expressed Samples ELISA Plate Assays	Westerns Blots Northern & Southern Blots Macroarray Membranes Spotted Microplate Assays	Luciferase Labeled Plants Luciferin Labeled Animals
Omega System	10gD, 12iC, 14vR, 16vS	10gD, 12iC, 14vR, 16vS	10gD, 12iC, 14vR, 16vS	12iC, 14vR, 16vS	16vS
System Parameters	Transilluminator "ON" Proper Filter selected (see table on back)	Transilluminator "OFF" White Light Pad sitting on top of the transilluminator and plugged into the power cord "Open" Filter selected	Transilluminator "OFF" Sample on top in the middle of the Transilluminator, but no larger than 4" x 5" Proper Filter and Epi-Light selected (see table on back)	Transilluminator "OFF" Sample on top in the middle of the Transilluminator, but no larger than 4" x 5" "Open" Filter selected, no Epi-Light and Iris fully open	Transilluminator "OFF" Sample on top in the middle of the Transilluminator, but no larger than 4" x 5" "Open" Filter selected, no Epi-Light and Iris fully open
Preview Exposure	100ms	100ms	100ms	100ms	100ms
Exposure Time	100ms to 500ms	50ms to 250ms	100ms to 5s	15s to 20m	30s to 60m
Binning Exposure	1 x 1	1 x 1	1 x 1 or 2 x 2	1 x 1 or 2 x 2	2 x 2 or 4 x 4
Image Visualization	Enhance-Display Range	Enhance-Display Range	Enhance-Display Range	Enhance-Display Range	Enhance-Display Range