

Flicker Fusion System, Model 12021

The Flicker Fusion System provides the user with a variety of versatile controls to perform accurate and timely measurements of Critical Flicker Frequency (CFF). Digital circuitry is used to provide extremely accurate frequency generation from 1Hz to 100Hz in 0.1Hz steps. The menu-driven LCD display allows for exact and repeatable frequency settings, while the serial port computer interface provides a means for test result storage and computer control of the device. The user options include five modes of operation to cover virtually any test requirement: Ascending Auto Frequency, Descending Auto Frequency, Continuous, Discrete and Analog Control Mode. The software program also provides three automatic protocols: Automatic Method, Adaptive Method and Self-Control Method. The user also has control over the stimulus luminance, sweep rates and stimulus selection.



Includes:

- 1 - Control Unit
- 1 - Viewing Chamber
- 1 - 12VDC Wall Mount AC Adapter
- 1 - DB9 Female to Female Cable
- 1 - DB15 Male to Female Cable
- 1 - Single Hand-Held Push Button
- 1 - Dual Hand-Held Push Button
- 1 - 12021.EXE Software Program

The viewing chamber has two lights: one for the left eye and one for the right eye. The light compartments are completely separated, allowing for four stimulus combinations to occur: left eye only, right eye only, left and right simultaneously, or left and right alternately. The viewing chamber is constructed to control extraneous factors, which might distort CFF values. The white electroluminescent lamps produce even lumination over a 0.5" diameter viewing area. The stimuli are separated by 2.75" (center to center) with a stimulus to eye distance of 15" and a viewing angle of 1.9°. The inside of the viewing chamber is painted flat black to minimize reflection.

Functional Specifications:

Power Supply:	12VDC @ 0.5A, 2.1mm center positive DC plug
Fuse:	0.5A, 5 x 20mm fast blow
Frequency:	1 to 100Hz in 0.1Hz increments with an error of 0.05%
Slide Holder:	2" x 2" 35mm holder for optional Model 12100 Neutral Density Filters with 0.1% to 50% light transmission
Auto Mode Ramp Rates:	Options of 0.5, 1, 2, and 4Hz per second
Analog Input:	3.5mm Mono Phone Plug with voltage range from 0.1 to 10V for 1 to 100Hz flicker rate ABSOLUTE MAXIMUM INPUT = 14V
External Initiate:	SPST normally open hand-held switch with RCA input
External Response:	Dual SPST normally open hand-held switch with 3.5mm stereo plug
RS-232C Port Settings:	9600 baud, no parity, 8 data bits, 1 stop bit
Typical Luminance:	58Cd/m ²
Viewing Angle:	1.9°
Light/Dark Ratio:	1:1
Stimulus Color:	White
Viewing Chamber Mask:	Hypo-allergenic black silicone mask may be cleaned with an alcohol wipe
Control Size:	8.625"W x 6.5"L x 3.25"H Weight: 1.8lbs.
Viewing Chamber Size:	7"W x 19"L x 16"H Weight: 7.4lbs