



nVisor MH60 Detailed Datasheet Rev A

19 Feb, 2018 23:30

Product Specifications

Optical

FOV, Vertical	34.4 °
FOV, Horizontal	43.6 °
Shape Of View (SOV) Type 1	Full Rectangular (Type 1)
Overlap	100
Pupil Size	9, Non-Real mm
Eye Relief	23 mm
Geometric Distortion	+15% Maximum (Pincushion)
Accommodation (Fixed Or User Adjustable Range)	0 diopter
Convergence Angle	0 °
Dipvergence (Vertical Misalignment)	4 MAX MOA
Brightness (MAX)	30 fL
Brightness Levels	10, 14, 18, 22, 26, & 30 fL
Chromaticity (X)	.313
Chromaticity (Y)	.329
Contrast (Min.)	100:1
Image Defect Criteria	See document 102458
Spatial Resolution	2.1 arcmn/pxl

Microdisplay

Display Technology	Color Sequential, LCOS (Reflective)
Resolution	SXGA 1280 x 1024
Pixel Format	13.62 micron square pixels (field sequential R G B)
Color Depth	24-BIT (8 bits per R,G,B)

Video

Video Input Format	SXGA 1280 x 1024 @ 60 Hz
Video Interface	Digital over DVI-D: Left and Right channels or Analog over VGA: Left and Right channels
VCU Interface	Mates with NVIS external Video Control Unit through umbilical independent Left & Right LVDS cables with safety power lock for Stereo / Mono operation.
Monitor Out	Digital over DVI (1X) Analog over VGA (1X)
Latency	<16.7 ms
Video Image Quality	No visible artifacts, noise or abnormalities

Controls

On/Off Control	Power (Push Button)
Brightness Control	Brightness buttons cycle through pre-set levels
Display Configuration Control	4DD SxProg over RS232; Rocker switch toggles between Left and Right channels
Interpupillary Distance (IPD) Range	53 to 72 (Independent left and right) mm
Eye Relief Adjustment Range	±14 mm
Vertical Adjustment Range For Head Fitting	±14 mm

Indicators

Power On/Off Indicator	1x Green LED on power button 1x Green LED on back panel
Sync (video Signal) Indicator	Sync indication via LCD panel for both Left and Right channels

Power

Power Consumption (TYP)	20 W
Power Supply	AVCU-S ROHS(103424): INPUT: 100-240 VAC 1.5 A 50-60 Hz. OUTPUT: +12 V DC 5.5 A AVCU-S W/ BATTERY ROHS(103426): INPUT: 100-240 VAC 1.4 A 50-60 Hz. OUTPUT: +24 V DC 2.5 A
Power Source	100-240 VAC, 50-60 Hz, 0.4 A (IEC Type C13 Cord)
Power Input	AVCU-S ROHS(103424): +12V DC, 5.5A WITH EXTERNAL AC ADAPTER 2.5 mm POWER JACK AVCU-S W/ BATTERY ROHS(103426): +24 VDC, 2.5A WITH EXTERNAL AC ADAPTER 2.1 mm POWER JACK

Physical

Size (envelope)	4.4 L x 7.9 W x 6.2 H max in
Mass	955 g
Color	Black and Pale Blue
Cable Exit	Rear sides of display module.
Cable Length	4.7 m
Cable Minimum Bend Radius	1 in
Cable Makeup	2x LVDS cables in braided nylon sleeve
Trackers Supported	IC3, IC2+, Ascension, and Polhemus.
Tracker Mounting	External; Two mounting holes on left and right rear of housing.
Logo, Labels, Markings	One part number label and one serial number label located on the exterior of the unit.

Environment

Operating Temperature Range	0 to 30 °C
Operating Humidity Range	90% Relative Humidity, Non-condensing, 240 hours

Storage Temperature Range

-20 to 60 °C

Storage Humidity Range

90% Relative Humidity, Non-condensing, 240 hours

Compliance

RoHS Compliance

RoHS Compliant

Drawings

