ANV-126 Night Vision Device Test Set

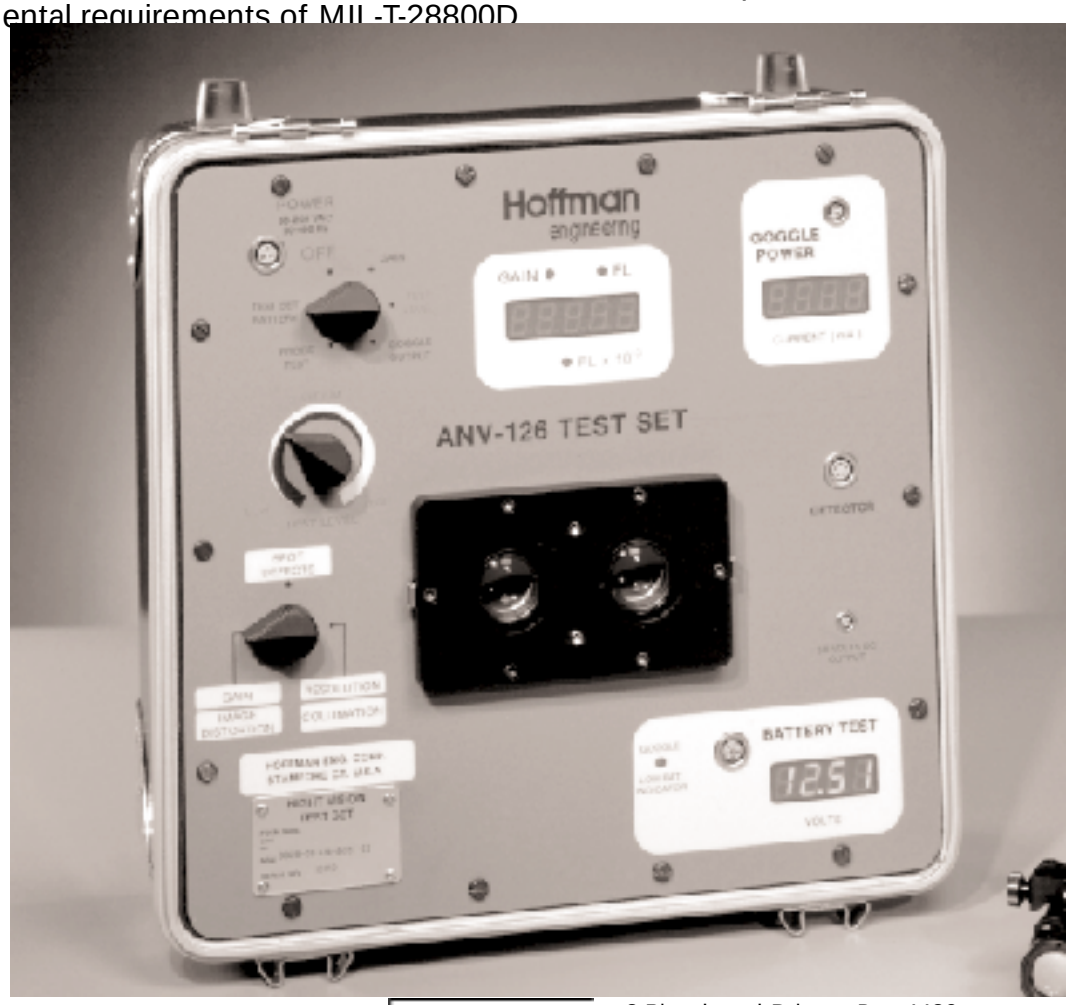
Hoffman's ANV-126 Night Vision Device Test Set is a portable instrument for evaluating the performance of most NVD types currently in service. The ANV-126 has earned worldwide acceptance as the standard for the test and evaluation of night vision devices.

The ANV-126 provides the capability to perform the full range of critical device tests. Resolution, Gain, Distortion, and Spot Defects can be evaluated under any nighttime light levels. Electrical parameters, including Device Current Draw, Battery Pack Voltage, and Low Battery Indicator can be accurately measured.

The system is designed to be usable at all service and repair levels. At the Operational level, it can be used to verify the device's basic functions prior to use. At the Maintenance and Depot levels, the ANV-126 can be used to troubleshoot, support repair activities and perform final tests on NVD's.

Unlike any other night vision test device in service, the ANV-126 quantifies the results so the operator can record valid data for tracking NVD performance.

The unit is calibrated to NIST Standards, and is qualified to the environmental requirements of MIL-T-28800D.



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Features

- ***Versatile*** - The system tests a wide variety of NVD's including: F4949, AN/AVS-6, -8 and -9, AN/PVS-7, AN/PVS-5, Cats Eyes, NITE-OP, AN/PVS-4, AN/TVS-5, LPNVG, PVS-15 and CN2-H. Custom adapters can be made to accommodate many new NVD configurations.
- ***Quantified Information*** - Test results are displayed on digital readouts. Pass/Fail judgments are based on accurate data which may be recorded to track NVD performance over time.
- ***Portable*** - Operates from an internal, sealed, rechargeable battery, or 90-260 VAC, 50-400 Hz, or DC. Designed to go everywhere NVD's go!
- ***Calibrated*** - The Test Set calibration is traceable to NIST Standards. An optional calibration package is available for field use, assuring the ANV-126 remains in service without interruption.
- ***Variable Light Levels*** - Continuously variable from Full Moonlight to Starlight conditions. NVD's can now be tested at all light levels experienced during night missions.
- ***System Self-Tests*** - Complete Self-Test functions are incorporated in the ANV-126 to verify accurate system performance any time the test set is used.
- ***Simple to Use*** - All tests can be performed quickly and accurately.

System Configurations

ANV-126 **NSN 5855-01-360-3597**	***NVD Test Set*** *Includes:* Test Set, Gain Probe Detector, 12 Volt Internal Battery, Military Enclosure per MIL-T-28800D, AC Power Cord, F4949, AN/AVS-6 (25mm), -8 and -9 Goggle Adapters and Manual.
ANV-126-001 **NSN 6625-01-374-9681**	***NVD Test Set with Diopter and Collimation Bridge*** *Includes:* Test Set, Gain Probe Detector, 12 Volt Internal Battery, Military Enclosure per MIL-T-28800D, AC Power Cord, F4949, AN/AVS-6, -8 and -9 Goggle Adapters, Diopter Scope, Collimation Bridge, and Manual.
ANV-126-006	***NVD Test Set: No Adapters*** *Includes:* Test Set, Gain Probe Detector, Military Enclosure per MIL-T-28800D, AC Power Cord, Collimation Bridge, Diopter Scope and Operators Manual.

Accessories and Options

GOGGLE-SIGHTS-SCOPES ADAPTERS

ANV-126-010	Cats Eye Goggle Adapter Set
ANV-126-012	AN/PVS-5A Goggle Adapter Set
ANV-126-013	AN/PVS-5B Goggle Adapter Set
ANV-126-014	AN/PVS-5C Goggle Adapter Set
ANV-126-015	AN/AVS-6 Goggle Adapter Set
ANV-126-016	AN/PVS-7A Goggle Adapter Set
ANV-126-017	AN/PVS-7B Goggle Adapter Set
ANV-126-022	"NITE-OPS" Goggle Adapter Set
ANV-126-024	AN/AVS-6-LIF ANVIS Goggle (with Laser Protection Filter) Adapter
ANV-126-028	F4949 and AN/AVS-6 (25mm) -8 and -9 Goggle Adapter Set
ANV-126-100	AN/PVS-4 Weapon Site
	AN/TVS-5 Large Weapon Site Adapter Set
ANV-126-194	SFIM CN2-H Adapter Set
	BM8043 (DSJ Helmet Mounted Goggle) Adapter Set

SYSTEM OPTIONS:

ANV-126-040	Diopter Scope (NSN 5855-01-360-3596)
ANV-126-047	Low Battery Circuit Tester
ANV-126-050	Collimation Bridge (NSN 5855-01-361-2362)

CALIBRATION AND SUPPORT OPTIONS

ANV-126-085	Calibration and Maintenance Kit (NSN 6625-01-394-7760)

Hoffman Engineering now offers on-site equipment calibration and NVD maintenance. Please contact us for further information on this service.

Tests and Applications

- ***Resolution*** - Goggle Resolution can be tested under all nighttime skylight levels.
- ***Spot Defects*** - Defects can be located in the proper quality zones. Reference spots are displayed in the NVD's field of view to gauge defect sizes.
- ***Gain*** - NVD "Gain" is quantified and can be documented at specific input levels. Tubes can be changed to match Gain performance.
- ***Distortion*** - Gross scene distortion is evaluated using a precision grid pattern under controlled light levels. Localized distortion is checked by sweeping the test pattern across the image field.
- ***Automatic Brightness Control (ABC)*** - The light level where NVD ABC activates can be quantified, and tubes can be changed to match high brightness performance.
- ***Goggle Current Draw*** - The current drawn by the NVD is displayed. Goggles can be evaluated for electrical shorting, circuit problems and tube degradation.
- ***Power Pack Operation*** - Voltage under load, Low Battery AN/AVS-6 and AN/AVS-9 Indicator operation and Simulated Aircraft power circuits are checked on the AN/AVS-6 and AN/AVS-9 power packs.
- ***NVD Test Set Self-Tests*** - Complete self-testing features are designed into the Test Set to confirm system accuracy between calibrations prior to each test.
- ***Collimation and Diopter Scope*** - Binocular alignment of the NVD is performed with the Collimation Bridge. Eye Piece diopter range can be verified with the calibrated, full range Diopter Scope. (Optional)
- ***Boresight*** - Boresight and alignment modules are available for NVD's with complex optical paths. (Optional)

Calibration Options

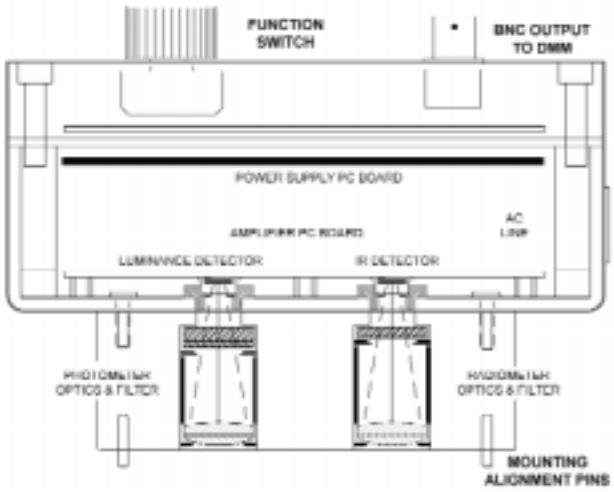
ANV-126-085

NSN: 6625-01-394-7760

The monitored input levels of the ANV-126 are critical to its ability to test accurately and should be verified annually. Hoffman offers several options to maintain this calibration.

The ANV-126-085 Calibration Kit is designed for use at PMEL or DEPOT facilities to eliminate the need for contractor recalibration, thus allowing the user to maintain readiness requirements. The Calibration Kit comes complete with all the necessary tools and instructions to properly recalibrate the ANV-126. The ANV-126-085 can also be used to re-calibrate the ANV-20/20 as well as the ANV-1026.

Hoffman Engineering Corp. calibrates and supports all of the equipment we manufacture. Our laboratory is staffed and equipped to provide timely and accurate calibrations. Additionally, Hoffman offers on-site recalibration and NVD testing services. Please inquire about the availability of this service in your area.



Accuracies

Light Source:	• +/- 3 % at 1.0 x 10-3 fL +/- 5 % at 1.0 x 10-4 fL
Gain Probe Luminance:	• +/- 3 %
Gain:	• +/- 8 % at 1x10-4 fL

Specifications

Light Source Range:	• Continuously variable from 5.0 x 10-6 to 1.5 x 10-3 fL equivalent luminance
Light Sources:	• Internal light sources are monitored by calibrated silicon photodiode detectors • I.R. LED (810 nm peak) for goggle Test Levels • Visible LED (560 nm peak) for Gain Probe Self-Test
Gain Probe:	• 15 degree, circular field of view • 15 mm Eye Relief • Mechanically adaptable to most NVD eyepieces
Digital Readouts:	• Easy to read, green, LED displays • 4-Digit display of Gain, Test Levels and NVD Output • 3-Digit display of Goggle Current • 3-Digit display of Goggle Battery Voltage
Test Set Focal Length:	• Set to infinity
Resolution Target:	• Utilizes elements of 1951 Air Force Bar Target • Resolution Ranges: 4.00 to 57.0 line pairs per mm .107 to 1.53 line pairs per mR
Spot Defect Test:	• Evaluates Quality Zones 1 & 2 • Reference gauge for .003, .006, .009, .012 & .015 inch defects displayed directly in the NVD's field of view
Power For Goggle:	• Regulated 2.70 VDC supplied to goggles • Test Set simultaneously monitors and displays NVD current with 0.1 mA resolution
Goggle Battery Test:	• 60 mA resistive load applied to battery under test at 3.0 volts • 0.01 volt resolution
Diopter Scope:	• Graduated -6 to +2 diopter scale
Collimation Bridge:	• Contains two beam combining prisms in rugged bridge for evaluation of goggle optical alignment • Allows left-to-right, right-to-left checking
Test Set Power:	• Operates on internal battery or AC line voltage
Test Set Battery:	• Rechargeable, fully sealed, lead acid battery • 20 hour operational cycle • 4-8 hour recharge cycle
AC Line Operation:	• 90 - 260 VAC, 50-400 Hz
Dimensions:	• Case: 16 x 15 x 16 inches • Operational (less lid): 16 x 9 x 16 inches
Weight:	• 49 Pounds • 42 Pounds (less battery)

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