

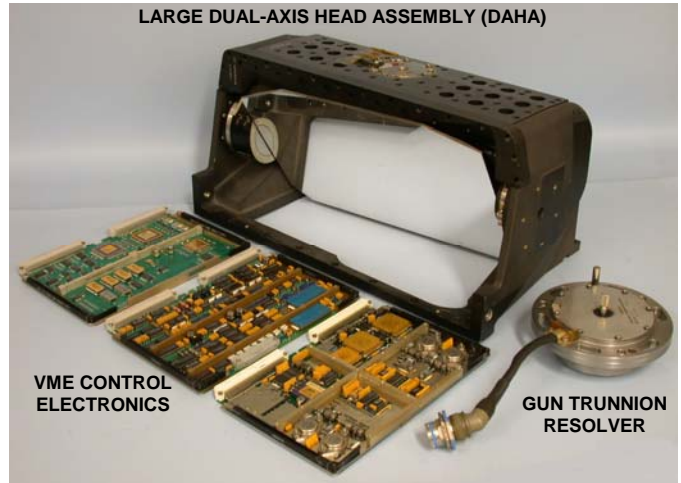


**DIGITAL DUAL-AXIS LINE-OF-SIGHT (LOS)
STABILIZATION SYSTEMS**

ABRAMS M1A2 SEP MAIN BATTLE TANK



LARGE DUAL-AXIS HEAD ASSEMBLY (DAHA)



**VME CONTROL
ELECTRONICS**

**GUN TRUNNION
RESOLVER**

Description

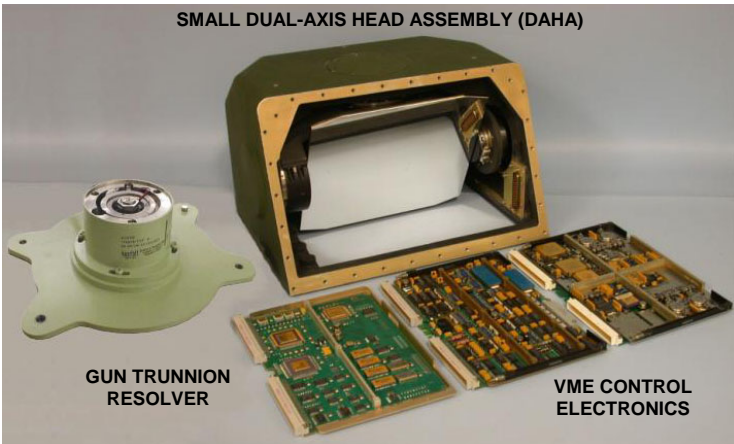
The Dual-Axis Head Assembly (DAHA), part of the Line-Of-Sight (LOS) Stabilization System, presently in full scale production, is a key element of the full solution Fire Control System (FCS) presently being used on Main Battle Tanks and other fighting vehicles. The LOS system developed by Kearfott Guidance & Navigation Corporation allows the gun to fire accurately while on the move, and at stationary or moving targets. Applications include any vehicle requiring stabilized guns and sights.

The dual-axis head mirror is operated with either analog electronics or digital VME control electronics. The system provides improved image acquisition, improved target tracking, and maintains the sight aim reticle at the sight's center of view.

The dual-axis systems are available in two sizes. The larger unit is designed for the M1A2 Abrams head assembly envelope. The smaller designed as a sealed unit, for the EFV envelope.

Inertial stabilized mode with rate tracking, as well as backup unstabilized mode are provided. Single-axis LOS stabilization systems are also available.

SMALL DUAL-AXIS HEAD ASSEMBLY (DAHA)



**GUN TRUNNION
RESOLVER**

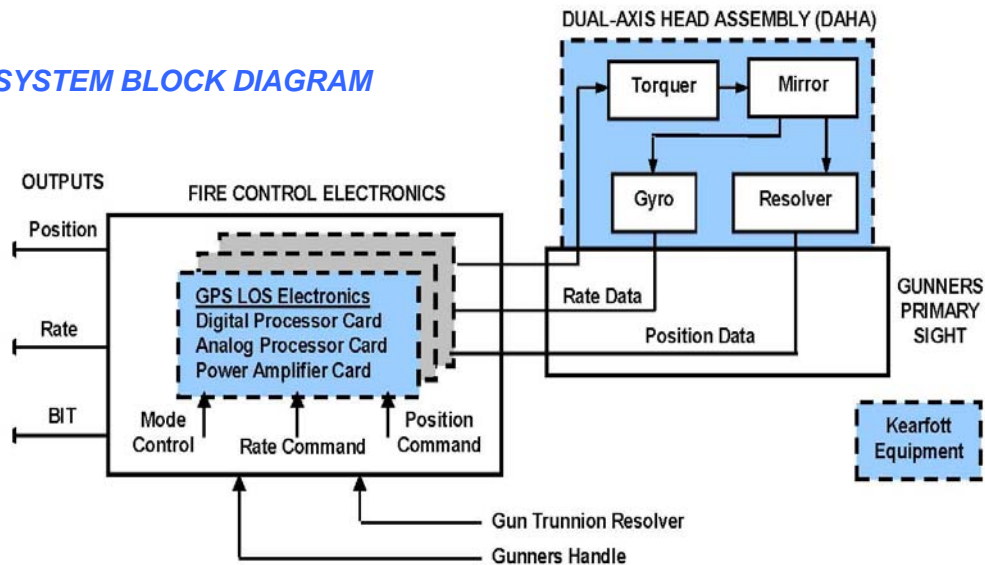
**VME CONTROL
ELECTRONICS**

EXPEDITIONARY FIGHTING VEHICLE (EFV)



LOS PERFORMANCE		PHYSICAL CHARACTERISTICS
LOS Excursion: Elevation: Large: +22° to -16° Small: +32.5°, -34.5° Azimuth: Large: +5° to -9° Small: +5° to -5°	Stabilization accuracy: Without Friction Compensation: <100μ radians With Friction Compensation: <50μ radians	Head Dimensions: Large DAHA: 8.8"H x 11.5"D x 18"W Small DAHA: 8.7"H x 11"D x 14.4"W Mirror size: Large: 9.4" x 13.3" Small: 9.5" x 8" Power: 24 V dc, 150 W (max.) Weight: Head Assembly: Large: 57 lbs Small: 53 lbs Digital VME Electronics: <4.5 lbs
Tracking Rate: Elevation: Large: 750 mils/s Small: 1100 mils/s Azimuth: Large: 450 mils/s Small: 1100 mils/s	Synchronization: <100μ radians Boresight retention: <100μ radians	

DAHA SYSTEM BLOCK DIAGRAM

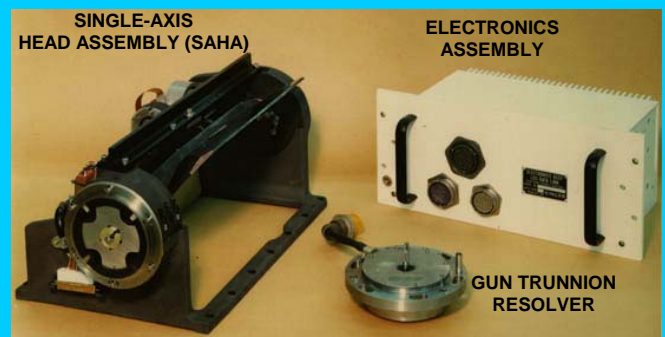


ANALOG LOS STABILIZATION SYSTEMS

DUAL-AXIS LOS STABILIZATION



SINGLE-AXIS LOS STABILIZATION



For information on this Line-of-Sight, Fire Control Systems, Navigators, Ruggedized Displays and CDU's, Rate Gyro Packages or any other product applications, please contact our Business Development Group at:
 Telephone: (973) 785-6555 or Fax: (973) 785-5905
 Visit our website: www.kearfott.com