

ROADRUNNER[®]

ELECTRONIC FLIGHT INSTRUMENT



CAPABILITY YOU NEED. PRICE YOU CAN AFFORD.

Astronautics

DISPLAYS & COCKPIT INTEGRATION



THE FASTEST WAY TO UPGRADE

The AFI4700 RoadRunner Electronic Flight Instrument (EFI) is a form-fit-function EFI replacement for Attitude Director Indicator (ADI) and Horizontal Situation Indicator (HSI) primary flight instruments.

The RoadRunner EFI offers enhanced safety, reduced operating costs, and minimized installation downtime, and is capable of displaying terrain awareness, traffic, weather, and synthetic vision.

ROADRUNNER



2-IN-1 REPLACEMENT FOR EXISTING ADI & HSI

The RoadRunner EFI provides pilots and operators with several benefits versus currently-installed electromechanical or CRT displays:

Repair Cost Mitigation. Eliminate expensive and unscheduled removals of legacy instruments that can ground aircraft for weeks and cost \$20,000 or more.

Long-term Value. 8,500-hour MTBF, two-year warranty, and ongoing support.

Minimal Downtime. Three-day or less installation with minimal or no change to aircraft wiring and no change to instrument panel with an adapter plate.

Intuitive Control. Familiar, easy-to-use controls with menus never more than two pages deep.

Decreased Workload. Approved for single-pilot IFR with dual EFI installation.

Increased Operational Capability. Enable RNAV capability with WAAS-enabled GPS for LPV, LPV+, and LNAV+V approaches.

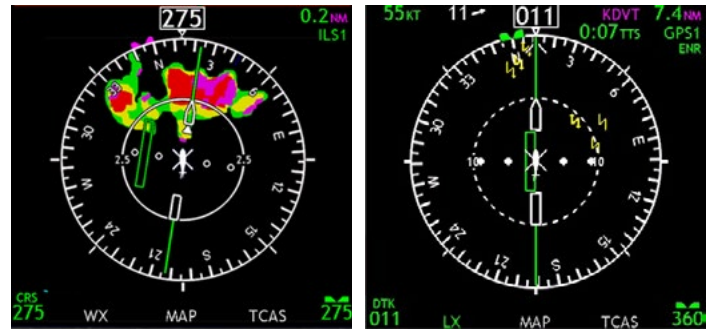
Certified. TSO approved and flying on A109, Bell 412, UH-60, and Casa 212 aircraft.

Growth Path. Field-loadable USB supports future software upgrades such as Synthetic Vision and HTAWS.

Improve Situational Awareness

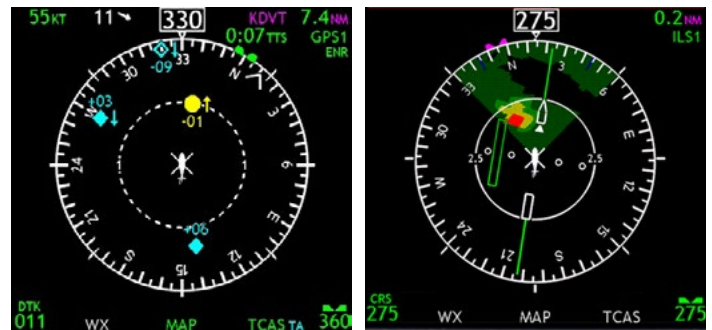
INTEGRATE ONBOARD SENSORS

Bring safety system information directly into your field of view and in a new modernized package, allowing you to integrate on-board systems, including Radar, Stormscope, Traffic, RadAlt, and TAWS overlays.



Weather Radar

Stormscope



Traffic

TAWS

ADD FUNCTIONALITY WITHOUT COMPLEXITY

Increase situational awareness by overlaying electronic map data (EMD) on the HSI, including active flight plan info such as flight legs, ground speed, wind speed/direction, decision height, track,

and waypoint information (when coupled to an FMS or GPS), without increasing pilot workload through the RoadRunner EFI's intuitive and easy-to-use pilot interface.



VOR Map



GPS Map



Course Deviation

without Increasing Pilot Workload.



LPV

Rising Runway

EXPAND LANDING CAPABILITY

With a WAAS-enabled GPS source, the RoadRunner EFI allows pilots to make localizer performance with vertical guidance (LPV) approaches, as well as approaches with advisory vertical guidance, known as LP+V and LNAV+V.

IMPROVE SITUATIONAL AWARENESS & PERFORMANCE OVER TIME

The RoadRunner EFI's **pilot-accessible USB port** gives operators a path to implement updates and new features as they become available.

New features can have many operational benefits, including the continued improvement of situational awareness through advanced features such as synthetic vision system (SVS) and internal TAWS. With the RoadRunner EFI, these field-loadable updates are implemented quickly, with little disruption to your ongoing operations.



Synthetic Vision



B212 & B412



A109



Astronautics

HH-60

PRODUCT DESCRIPTION



THE ROADRUNNER EFI consists of a hardware part number and a software flight application.

The large amount of legacy and modern interfaces provide for easy integration with existing systems as well as enablement and display of modern navigation systems and other digital inputs.

GENERAL SPECIFICATIONS

Dimensions	
Electronics Unit	5.0"H x 4.6"W x 6.9"D
Display Head	9.7"H x 5.2"W x 1.5"D
Weight	8.1lbs
Display	4" x 7" AMLCD 4.1" x 6.8" viewable area
Resolution	480 x 800
Luminance	>800 cd.m ²

I/O SPECIFICATIONS

ARINC 429 Inputs	8
ARINC 429 Outputs	4
3-wire Synchro/Resolver Inputs (XYZ)	6
Synchro/Resolver Reference (26VAC or 115VAC) Inputs	5
ARINC 568 DME Inputs	1
4-wire Resolver Outputs	1
Low-Range Analog Inputs	6
High-Range Analog Inputs	8
RS-422 (crosslink) Inputs	1
RS-422 (crosslink) Outputs	1
RS-232 Inputs	2
RS-232 Outputs	2

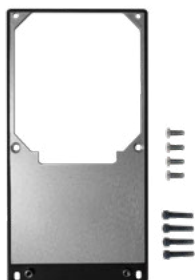
CERTIFICATION SPECIFICATIONS

FAA TSO	C209, C3e, C165a
Software	DO-178C Level A
Firmware	DO-254 Level A
Environmental	DO-160G
FAA System Safety	Part 25 & 29
A109 FAA STC Validation	SR04390CH EASA, ANAC, DGAC
B212/412 FAA STC	SR01048DE



THE INSTALLATION KIT contains parts needed for dealers to build an adapter harness. The Part Number Matrix will list various Installation Kit Part numbers with descriptions.

- ✓ Assuming a customer is updating an aircraft specified in the Part Number Matrix with Original Equipment Manufacturer installed displays, Kit descriptions with the Aircraft model will contain both the RoadRunner EFI connector and the aircraft side mating connectors.
- ✓ A Generic Installation Kit contains only the RoadRunner EFI connector. The dealer is responsible to source the aircraft side connectors.



THE INSTALLATION RING is an adapter plate designed to facilitate drop-in replacement of the existing aircraft instruments with the RoadRunner EFI.

The Installation Ring is aircraft model specific. The Installation ring hole pattern is meant to match the aircraft's existing instrument panel. The Installation ring is fastened to the panel with supplied fasteners. The RoadRunner EFI is then fastened to the Installation Ring with supplied fasteners.

The Installation Ring is not required if a new aircraft panel is being fabricated.



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