

**SECTION 9****Supplement AVE8****Bendix / King KMD 150 Multifunction Display / GPS**

When the Bendix / King KMD 150 Multifunction Display / GPS is installed in the AQUILA AT01, this Supplement is applicable and must be inserted in the Supplements Section (Section 9) of the Pilot's Operating Handbook. Information in this supplement either adds to, supersedes, or deletes information of the basic AQUILA AT01 Pilot's Operating Handbook.

Approved by:



Date:

09. Juli 03

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## 1.0 General

The airplane is equipped with a Bendix / King KMD 150 Multifunction Display / GPS Navigator herein referred as the „Navigator“.

The KMD 150 is capable of providing VFR (IFR) enroute and terminal navigation with position accuracies better than 15 meters. In this installation only functions which are necessary for VFR-operation are discussed. The system utilizes the Global Positioning System (GPS) satellite network to derive the airplane`s position (latitude and longitude).



Figure 1  
KMD 150 Front Panel

## 2.0 Limitations

The airplane AQUILA AT01 is limited to operations under the definitions of VFR-day only. The airplane must have other approved navigation equipment, defined as minimum equipment installed and operating appropriate to the route of flight.

The KMD 150 Navigator is listed and installed as optional equipment the failure of which is uncritical in all operations of flight.

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### 3.0 Emergency Procedures

If GPS Navigator information is not available or is invalid, utilize remaining operational navigation equipment as required. (see also Section 2)

### 4.0 Normal Procedures

Normal operating procedures are outlined in the „KMD 150 Pilot`s Guide and Reference“ (Rev. 2 Oct/2002 or later appropriate revision). It is recommended because of the variety and complexity of the functions to have the original manual on board the airplane.

#### 4.1 Activate GPS

- |      |                         |          |
|------|-------------------------|----------|
| I.   | Battery Master Switch   | ON       |
| II   | Avionics Master Switch  | ON       |
| III. | Navigator /Power Switch | Push, ON |

#### 4.2 Deactivate GPS

- |    |                         |            |
|----|-------------------------|------------|
| 1. | Navigator /Power Switch | Pull , OFF |
|----|-------------------------|------------|

### 5.0 Performance

No change from basic handbook

### 6.0 Weight & Balance

No change from basic handbook

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## 7.0 Systems Description

NOTE

This supplement provides a general description of the Bendix King KMD 150, its basic operation and its integration in the instrument panel of the Aquila AT01 airplane. For a detailed description of the KMD 150 and full operation instructions refer to the „KMD 150 Pilot’s Guide“ (Revision 2, Oct 2002 or later appropriate revision).

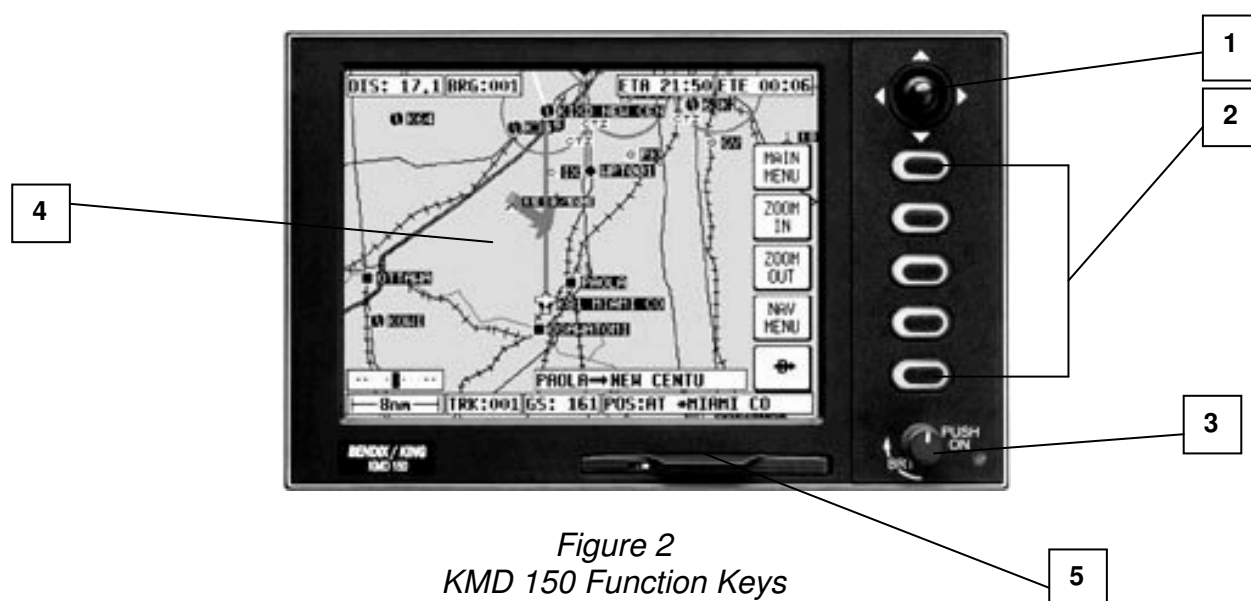


Figure 2  
KMD 150 Function Keys

- (1) Joy Stick
- (2) Function Keys
- (3) ON/OFF/Brightness Control
- (4) Full Color TFT Display
- (5) Data Base Card Slot

When powered ON by the ON/OFF-button the KMD 150 shows the basic screen on the TFT-display. The unit is operated via a joystick, a series of five soft keys and a push/pull/rotary ON/OFFbrightness control. The joystick allows movement of the pointer in MAP-mode and is used for all forms of data entry or selection. The appropriate key labels for a particular page are configured in software and are drawn alongside the appropriate rubber key. The rotary brightness control is used for adjusting the brightness of your screen.

The primary mode of the instrument is switched by pressing the MAP-key.

For getting familiar with the modes of the GPS-navigator refer to the KMD 150 Pilot’s Guide, Section „Getting Started“.

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The operating system of the Bendix King KMD 150 keeps to a minimum the number of key presses necessary to activate the various functions, especially those most frequently used in the air. The provision of a joystick makes it considerably simpler to operate the unit and allows you fast and efficient access to most functions.

The GPS Navigator consists of a GPS receiver, a navigation computer and a Jeppesen NavData database all contained in the KMD 150 control unit mounted in the center console of the instrument panel.

The KMD 150 is capable of providing VFR (IFR) enroute and terminal navigation with position accuracies better than 15 meters. In this installation only functions which are necessary for VFR-operation are discussed. The system utilizes the Global Positioning System (GPS) satellite network to derive the airplane`s position (latitude and longitude altitude).

The GPS-antenna is located behind the rear window in the center of the upper fuselage. All GPS and navigator controls are accessible through the KMD 150 front control panel located in the center console. The panel includes a joystick, function keys, a power switches, a multifunction TFT-color display and a card slot for the Jeppesen NavData card.

The GPS-Navigator is powered by 14 VDC through the 3 Amp GPS circuit breaker placed on the right side of the instrument panel.

The Jeppesen Navigation Database provides access to data on airports, approaches, and VOR`s and NDB`s frequencies.

North American and International databases are available. Database information is provided on a PCMCIA card that can be inserted into the card slot on the GPS unit.

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