1.7 OPERATION

FIGURE 1-1 AT 165 FRONT PANEL

1.7.1 FUNCTION SELECTOR SWITCH

The function selector is a four position rotary switch. The four positions are:

OFF- Turns off all power to the transponder.

SBY- Turns the transponder power supply on. When in **SBY**, the transponder will not reply to any interrogation. **SBY** is used at the request of the air traffic controller to selectivity clear his scope of traffic. When in this mode SBY will be shown on the Code display window.

ON- Places the transponder in Mode A, the aircraft identification mode. In addition to the aircraft's identification code, the transponder will also reply to altitude interrogations (Mode C) with discrete signals that do not contain altitude information. When in this mode ON will be shown on the Code display window.

ALT- The **ALT** position activates all the necessary circuitry (transponder to optional altitude digitizer and return) to respond to ATC (Air Traffic Control) altitude interrogations and aircraft identification interrogations with standard pressure altitude (29.92 inches Hg). The **ALT** position may be used in aircraft that are not equipped with the optional altitude digitizer, however, the only response will be discrete signals that do not contain altitude information. When in this mode ALT will be shown on the Code display window.

1.7.2 **CODE SELECTOR/DATA ENTRY SWITCH**

Pressing the Code Selector/Data Entry Switch once enables Transponder Code entry. The left most code digit will begin flashing. Turning the switch selects the code and pushing the switch again moves to the next digit from left to right. Once code selection has started, all four digits must be set before the code entry is completed. A total of 5 pushes completes the code entry process. If the switch is inadvertently pressed, it will stop the code entry process automatically in 10 seconds. The VFR code can subsequently be recalled automatically by pressing the VFR button. Code entry can not be started if the AT165 is in setup, Count Down Timer set, or Altitude Buffer set modes.

1.7.3 **IDENT**

Pressing the **IDENT** button will activate the SPIP (Special Position Identification Pulse) signal for approximately 20 seconds. This signal will "paint" an instantly identifiable image on the controller's scope. This signal must only be used upon request of a "Squawk IDENT" from the controller. Use at any other time could interfere with another aircraft sending a SPIP. The IDENT legend will appear in the Code window while the Ident signal is being sent.

1.7.4 **VFR**

Pressing the **VFR** button will cause the squawk code to either change from the user entered code to a VFR code or change back to the user entered code from the currently displayed VFR code. The last used squawk code is automatically recalled when the unit is cycled off and on.