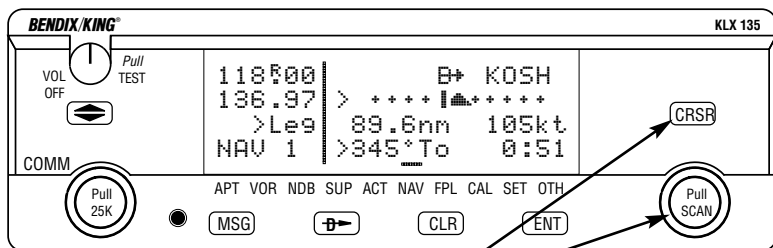


BENDIX/KING® GPS/COMM

These simplified operating instructions are only to familiarize you with the KLX 135A. For detailed operating instructions, please refer to the KLX 135A Pilot's Guide P/N 006-08789-0000.



GPS

The two concentric knobs and **CRSR** button on the right are used to control the GPS functions of the KLX 135A. The right inner knob can be pulled out, but for now it should be pushed in.

When the cursor is off, the right outer knob changes the page type (APT to VOR to NDB, etc.) and the right inner knob changes the page number (APT 1 to APT 2). When the cursor is on, the right outer knob moves the cursor and the right inner knob changes the data under the cursor.

To change a cyclic field:

1. Turn on the cursor (by pressing the **CRSR** button) and place it over a cyclic field, which is always preceded by a carat (>).
2. Press the **CLR** button to change the cyclic field. One example is the NAV 1 page, which can display a D-bar (Figure 1) or numerical course deviation (Figure 2).

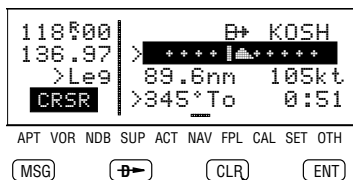


Figure 1

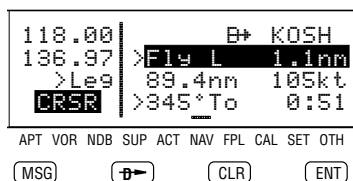







Figure 2







To display the Nearest Airport:

1. Press **MSG** then press **ENT** twice.
2. The waypoint page for the nearest airport will now be displayed on the screen. The right inner knob (in the "pulled out" position), may be used in the normal manner to scan the other nearest airports. With the right inner knob in the "in" position, you may view all four airport pages for a specific airport.

To go Direct To a waypoint:

1. Press the  button. The Direct To (DIR) page will be displayed with a waypoint field.
2. Enter desired waypoint using right concentric knobs.
3. Press  to view waypoint information. Press  again to confirm. This initiates the Direct To—your D-bar will be centered, and you're on your way!
4. Alternatively, display desired waypoint on APT, VOR, NDB or SUP page, or move the cursor over desired waypoint in the active flight plan, then press , then press  to confirm.

To create a Flight Plan:

1. Select the active Flight Plan (FPL 0) or one of the stored Flight Plans (FPL 1 through FPL 9) on the screen.
2. Delete existing waypoints from the Flight Plan as necessary by placing the cursor () over the identifier, pressing , and then pressing .
3. If you wish to insert a waypoint identifier between two other waypoints, place the cursor () over the waypoint you wish for the new waypoint to precede.
4. With the cursor on, enter the desired waypoint identifier and press .
5. The waypoint page for the selected identifier will be displayed. If this is the waypoint you intended to enter, press  again.
6. Repeat the waypoint entry process as needed for your Flight Plan.

To calculate the winds aloft:

1. Use the CAL 3 page to calculate the present pressure altitude.
2. Use the CAL 5 page to calculate the present true airspeed (TAS).
3. Turn to the CAL 6 page and enter the present aircraft heading. The headwind or tailwind component of the wind, and the wind vector (direction and speed) will be displayed on the last two lines of the CAL 6 page.

NAV 5 (Moving Map) Page Tips

To change the map scale factor:

1. Press the **CRSR** button. The cursor comes up over the map scale in the lower left corner of the map display.
2. Use the right inner knob to change between scale factors.
3. For terminal area operations select AUTO scale factor.

To change what information is displayed on the map:

1. Press the **CRSR** button, select **Menu?** and press the **ENT** button to bring up a pop-up menu.(Figure 3)

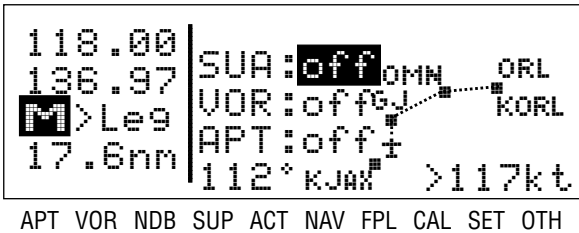



Figure 3

- Line 1: Display 5 nearest special use airspaces (SUAs), on or off
 - Line 2: Display 9 nearest VORs; on or off
 - Line 3: Display 9 nearest airports; on or off
 - Line 4: Map orientation; $N\hat{\uparrow}$ =North up, $DTK\hat{\uparrow}$ =Desired track up, $TK\hat{\uparrow}$ = Actual track up (when groundspeed > 2 kts)
2. Use the right outer knob to select the desired item, and the right inner knob to change the setting.

To change the navigation info displayed in the lower right corner:

1. Press the **CRSR** button.
2. Use the right outer knob to move the cursor to the cyclic field in the lower right corner.
3. Press **CLR** to change between the choices, which are:
 - Groundspeed,
 - Estimated Time En route (ETE) to the active waypoint (figure 6),
 - Crosstrack correction, or
 - Magnetic Desired Track (DTK).

COMM

The two concentric knobs and  (transfer) button on the left are used to control the COMM functions of the KLX 135A.

A small “R” appears over the decimal point of the active frequency when the squelch is broken and the radio is receiving (Figure4). When the transmitter is keyed a small “T” appears in this same spot.

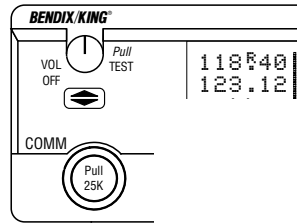


Figure 4

To tune a COMM frequency:


1. Use the left outer knob to select the desired number of megahertz between 118 and 136.
2. Make sure the left inner knob is pushed in, and use it to complete the desired frequency. In this case, the left inner knob changes the frequency in increments of 0.05 MHz (50 kHz).

To tune a 25 kHz frequency:




1. Pull the left inner knob out.
2. Use the left knobs to tune the frequency. Notice that the KLX 135A only displays two digits after the decimal point, so the last digit is implied. For example, if the frequency is 123.125 MHz, the KLX 135A displays 123.12.
3. When you're ready to go back to 50 kHz tuning, push the left inner knob back in. This will allow you to select frequencies with fewer turns of the knob.

To use the standby frequency entry (flip-flop) mode:

Note: This is the default frequency entry mode.

1. Use the left knobs to tune the standby COMM frequency.
2. To exchange (flip-flop) the active and standby frequencies, press the  button.

To use the active frequency entry mode:

1. Press and hold the  button for approximately 2 seconds. The standby frequency will disappear and the active frequency will be the same as before you pressed the  button (Figure 5).
2. You can now use the left knobs to tune the active COMM frequency.
3. To change back to standby frequency entry mode, press the  button momentarily.

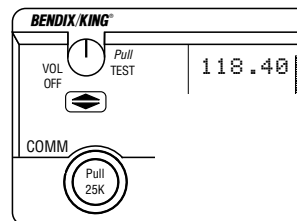


Figure 5

How to QuickTune™ a COMM frequency from the data base:

1. Locate the page for the facility you desire to communicate with (APT, FSS or CTR). The APT 4 page displays the frequency type (TWR = Tower Freq, GRND = Ground Control, etc.) and frequency (Figure 6).

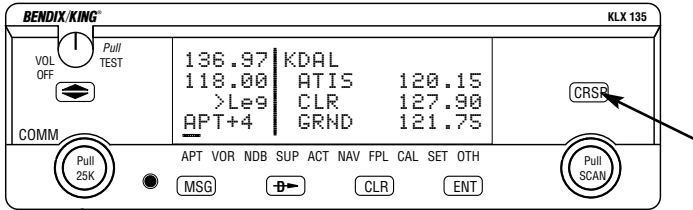


Figure 6

2. Press the **CRSR** button to turn the cursor on and use the right outer knob to scan through all the airport's frequencies (Figure 7). There may be more frequencies than can be displayed at one time.

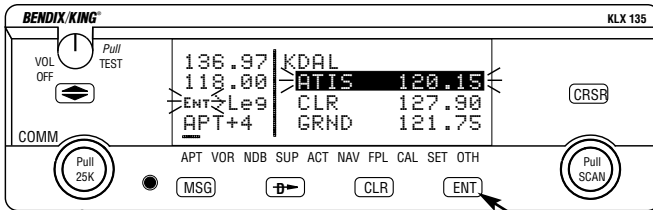


Figure 7

3. When you have the cursor over the desired frequency, press **ENT** and that frequency will become the standby frequency in the COMM transceiver (Figure 8).

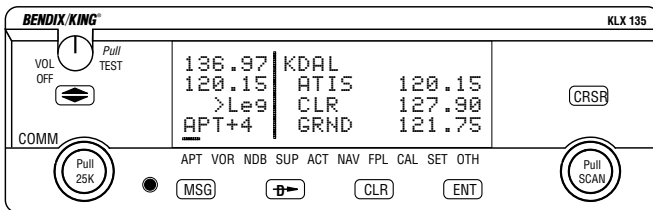


Figure 8

To adjust the volume by overriding the automatic squelch:

1. Pull out on the small knob in the upper left corner of the KLX 135A (Figure 9). This will either allow you to receive a distant, weak signal or give you a noise reference by which to adjust the volume.

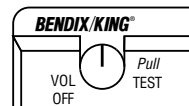


Figure 9

2. Push the volume knob back in for normal squelch operation.

Finding your way around:

There are ten types of pages that may be displayed on the right side of the screen. Each has multiple page numbers:

Airport (APT) Pages

- 1 Airport identifier, elevation, name, city, state/province/country, use type (if military or private-use)
- 2 Latitude/longitude, bearing/radial and distance relative to present position
- 3 Runway numbers, length, surface, lighting
- 4 Airport communication frequencies
- 5 Airport remarks

VOR Pages

- 1 VOR identifier, frequency, name, latitude/longitude
- 2 Magnetic station declination, bearing/radial, distance relative to present position

NDB Pages

- 1 NDB identifier, frequency, name, latitude/longitude
- 2 Bearing/radial and distance relative to present position

Supplemental (SUP) Pages

- 0 Used to choose method of user-defined waypoint creation
- 1 Latitude/Longitude, bearing/radial and distance relative to present position
- 2 Reference waypoint (default is nearby VOR), radial and distance from reference
- 3 User-defined waypoint remarks

Active Waypoint (ACT) Pages

Waypoint pages for the active waypoint and the waypoints in FPL 0

Navigation (NAV) Pages

- 1 Active waypoint/leg, CDI/crosstrack distance, ground speed, bearing, time to active waypoint
- 2 Present position (latitude/longitude or radial/distance)
- 3 Present time, departure time, ETA at destination, elapsed flight time

- 4 Desired track, actual track, bearing to active waypoint
- 5 Moving map

Flight Plan (FPL) Pages

- 0 Active flight plan
- 1-9 Stored (numbered) flight plans

Calculator (CAL) Pages

- 1 Trip calculations for distance, bearing, and ETE
- 2 Trip calculations for fuel requirements
- 3 Pressure altitude
- 4 Density altitude
- 5 True airspeed (TAS)
- 6 Winds aloft

Setup (SET) Pages

- 1 Position initialization for GPS receiver
- 2 Date, time, and time zone initialization
- 3 Data base update
- 4 Turn anticipation enable/disable
- 5 Default first waypoint character
- 6 Nearest airport criteria
- 7 SUA alert enable/disable
- 8 Baro set, indicated altitude, baro set units

Other (OTH) Pages

- 1 GPS receiver state, estimated position error
- 2 GPS satellite signal status
- 3 List of user-defined waypoints
- 4 List of airports and user-defined waypoints with stored remarks
- 5 Software versions

AlliedSignal Inc.
Electronic & Avionics Systems
One Technology Center
23500 West 105th Street
Olathe, KS 66061
Telephone (913) 782-0400

©1995, 1996 AlliedSignal Inc.

7/96 006-08790-0000 Printed in USA

