Apollo CNX80 Quick Reference Guide

Comm Radio (COM)

Press **COM**

- Turn **Large** Knob to change MHz.

- Turn **Small** Knob to change kHz.

- Press **Menu/Enter** for Menu items.
  - Press **Signal** to view levels.
  - Press **Weather** to view frequencies.
    1. Turn **LARGE** knob to highlight.
    2. Press **<-SBY** or **<-A->**
  - Press **Audio** to view and edit levels.
  - Press **Save Chnl.**
    1. Turn **Large** and **Small** knobs to choose name & frequency.
    2. Press **Menu/Enter** to save.

- Press **SQ** to activate auto squelch.

- Press **MON** to monitor Standby frequency.

- Press **RCL** to recall (Recent) stored frequencies.
  - Turn the **Large** Knob to select frequencies.
  - Press **User** to view list of User created frequencies.
  - Press **Emrgncy** to insert the Emergency frequency into Standby.
  - Press **<-SBY** or **<-A->.**

- Press **<->** to toggle Active & Standby.

- Press **COM** again to return to previous view.

VOR/ILS Radio (VOR)

Press **VOR**

- Turn **Large** Knob to change MHz.

- Turn **Small** Knob to change kHz.

- Press **Menu/Enter** for Menu items.
  - Press **Test Log** to enter calibration info.
    1. Turn **Large** and **Small** knobs to modify calibration info.
    2. Press **Menu/Enter** to save.
  - Press **ID/TO/FR** to view the bearing TO/From the VOR or Ident.
  - Press **Audio** to view or edit levels.
  - Press **Save Chnl**
    1. Turn **Large** and **Small** knobs to choose name & frequency.
    2. Press **Menu/Enter** to save.

- Press **ID** to toggle Nav Audio - ID/Voice.

- Press **MON** to monitor Standby frequency.

- Press **RCL** to recall (Recent) stored frequencies.
  - Turn the **Large** Knob to select frequencies.
  - Press **User** to view list of User created frequencies.
  - Press **<-SBY** (Standby) or **<-A->** (Active).

- Press **<->** to toggle Active & Standby.

- Press **VOR** again to return to previous view.

Remote Transponder (XPDR)

Press **XPDR**

Change Ident
1. Turn **Large** Knob to highlight numbers.
2. Turn **Small** Knob to change numbers.
3. Automatically saved after selecting 4th number or press **Menu/Enter.**
or
1. Press **CRSR** knob in.
2. Press **0-7** numbers in order desired.

- Press **Menu/Enter** to view options.

- Press **Emrgncy** then **Menu/Enter** to insert 7700 Squawk code.

- Press **VFR** to insert 1200 Squawk code.

- Press **TrgrSpd** to select Trigger Speed to automatically activate transponder when in Auto Mode.
  1. Turn **Large** and **Small** knob to edit speed.
  2. Press **Menu/Enter** to save.

- Press **Auto** to toggle Auto Activate Mode (Active or Standby mode when passing the Trigger Speed.

- Press **IDNT** to activate Ident mode.

- Press **STBY** to place transponder in Standby.

- Press **ON** to enable Mode A operation (sends squawk code).

- Press **ALT** to enable Mode C operation (sends squawk code and altitude data).

- Press **XPDR** again to return to previous view.

Setting Up a New Flight Plan

1. Press **FN** and then the **FPL** smart key.

2. Press the **New** smart key.

3. Use the **Large** and **Small** knobs to select the Origin waypoint and then press **Menu/Enter.**

4. Use the **Large** and **Small** knobs to select the Destination waypoint and then press **Menu/Enter.**

5. Resolve any discontinuities. Highlight (green) the departure waypoint and insert a waypoint or airway. Continue until route is complete.

6. The flight plan is named and saved in the Library by the Origin and Destination waypoints.

7. Press the **Exec** smart key to execute the flight plan and make it the active flight plan. If another flight plan was active, press **Menu/Enter** to insert your new flight plan as the active flight plan.

Deleting a Waypoint or Airway in your Flight Plan

1. Turn the **Large** knob to highlight the waypoint or airway you want to delete.

2. Press the **CLR** key.

3. Press **SAVE** to return to the Library.

Editing a Library Flight Plan

Changing Origin, Destination, & Alternate Wpts

1. Press **FN** and then the **FPL** smart key.

2. Turn the **Large** knob to highlight the flight plan to edit.

3. Press the **Edit** key.

4. Turn the **Large** knob to highlight the flight plan name.

5. Press the **Origin** or **Dest** or **Alternate** Line Selection keys to alter these waypoints.

6. The flight plan is renamed and shown in the Library by the new Origin and Destination waypoints.

7. Press the **SAVE** smart key to save the flight plan.

Inserting a Waypoint or Airway in your Flight Plan

1. Highlight a waypoint with the **Large** knob.

2. Press the **->Wpt** key to insert another waypoint.

3. Use the **Large** and **Small** knobs to select a waypoint and then press **Menu/Enter.** The new waypoint will be inserted after the highlighted wpt or en route intersection.

4. If the waypoint is on an airway (such as a VOR), Airways will be available to insert into your flight plan. Press the **->Arwy** key. Use the **Large** and **Small** knobs (or Smart keys) to select the Airway and exit points. Press **Menu/Enter**.

5. Press the **XPND** smart key to view all of the waypoints inserted automatically by inserting the airway.
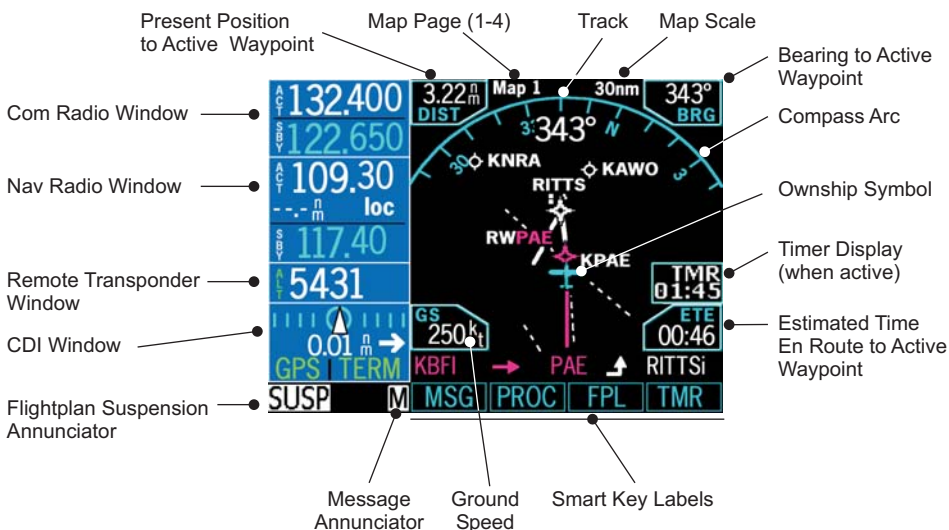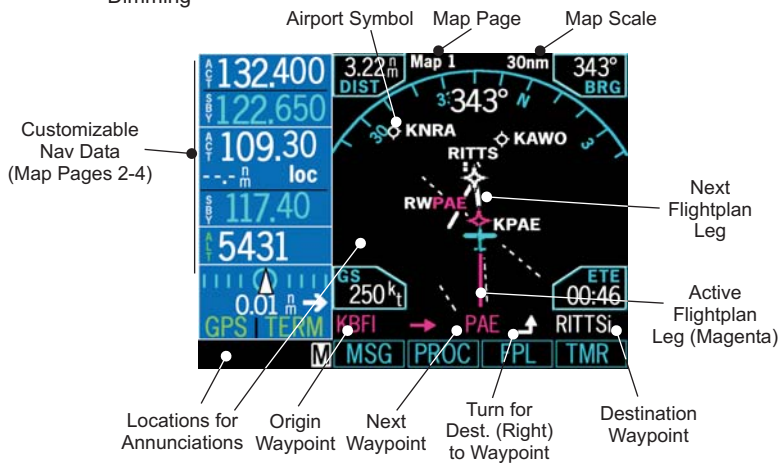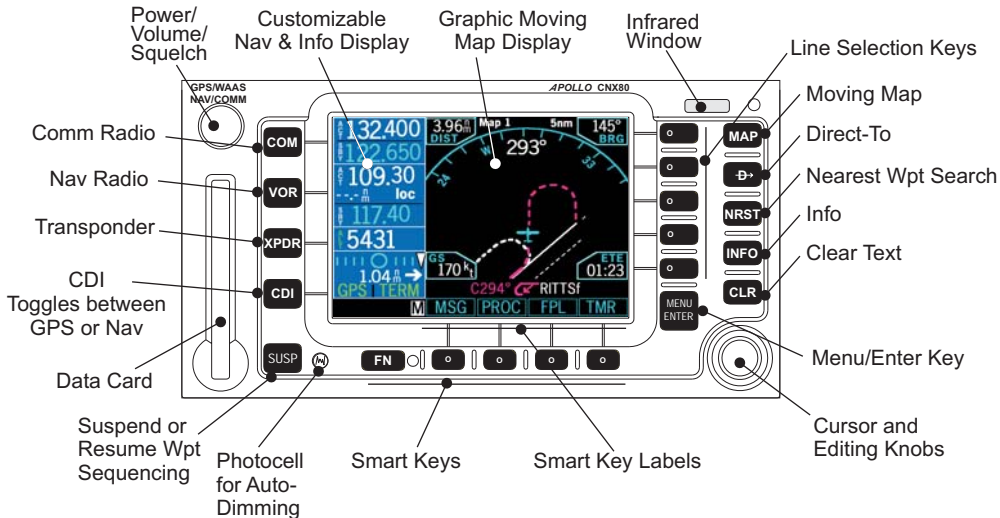
Activating a Flight Plan

1. Press **FPL** to display the Flight Plan list.

2. Turn the **Large** knob to the desired active flight plan.

3. Press **Exec**.

Missed Approach

Press **SUSP** to deselect the Suspend state and allow flight plan sequencing. If the destination waypoint of your flight plan is in the database, follow the automatic guidance on the unit display.

Adding a Procedure to a Flight Plan

1. Press **FN** and then the **PROC** smart key.

2. Press the **Appch** (Approach), **Depart** (Departure), or **Arrival** key next to the Origin or Destination waypoint.

3. Use the **Large** and **Small** (or Smart keys) knobs to select the procedure. A representative map will be shown below the procedure name.

4. Press the **Menu/Enter** key.

5. Press the **XPND** smart key to view the full list of waypoints automatically entered. Resolve any discontinuities.

6. Press the **Exec** smart key to activate the flight plan with added procedures.

Power/
Volume/
Squelch

Customizable
Nav & Info Display

Graphic Moving
Map Display

Infrared
Window

Line Selection Keys

Moving Map

Comm Radio

Nav Radio

Transponder

CDI
Toggles between
GPS or Nav

Data Card

Direct-To

Nearest Wpt Search

Info

Clear Text

Menu/Enter Key

Cursor and
Editing Knobs

Suspend or
Resume Wpt
Sequencing

Photocell
for Auto-
Dimming

Smart Keys

Smart Key Labels

Display annotations (top unit): GPS/WAAS NAV/COMM — APOLLO CNX80 — COM — VOR — XPDR — CDI — SUSP — FN — MENU ENTER — 132.400 — 122.650 — 109.30 loc — 117.40 — 5431 — 1.04 — GPS TERM — MSG PROC FPL TMR — 3.96 Map 1 5nm — 293° — 145° BRG — GS 170k — ETE 01:23 — C294° RITTSf

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Airport Symbol

Map Page

Map Scale

Customizable
Nav Data
(Map Pages 2-4)

Next
Flightplan
Leg

Active
Flightplan
Leg (Magenta)

Locations for
Annunciations

Origin
Waypoint

Next
Waypoint

Turn for
Dest. (Right)
to Waypoint

Destination
Waypoint

Display annotations (middle unit): 132.400 — 122.650 — 109.30 loc — 117.40 — 5431 — 0.01 — GPS TERM — 3.22 DIST — Map 1 — 30nm — 343° BRG — 343° N — KNRA — KAWO — RITTS — RWPAE — KPAE — GS 250k — ETE 00:46 — KBFI — PAE — RITTSi — MSG PROC FPL TMR

Present Position
to Active Waypoint

Map Page (1-4)

Track

Map Scale

Bearing to Active
Waypoint

Com Radio Window

Nav Radio Window

Remote Transponder
Window

CDI Window

Flightplan Suspension
Annunciator

Compass Arc

Ownship Symbol

Timer Display
(when active)

Estimated Time
En Route to Active
Waypoint

Message
Annunciator

Ground
Speed

Smart Key Labels

Display annotations (bottom unit): 132.400 — 122.650 — 109.30 loc — 117.40 — 5431 — 0.01 — GPS TERM — 3.22 DIST — Map 1 — 30nm — 343° BRG — 343° N — KNRA — KAWO — RITTS — RWPAE — KPAE — TMR 01:45 — ETE 00:46 — GS 250k — KBFI — PAE — RITTSi — SUSP — MSG PROC FPL TMR

GARMIN

Moving Map (MAP)

Press **MAP**

1. Turn the **Large** knob to view the map pages. (1 to 4). The Nav Data area on the left side of the display can be customized in Map pages 2 - 4.

2. Turn the **Small** knob to change the map scale.

3. Press the **Menu/Enter** key to show the available line selection keys for Map mode. Press the line selection key next to the menu item for that choice.

4. Press the **More** key to advance to the next list of menu items. Press the **Menu/Enter** key again to make the list go away or just wait for a few seconds.

Menu Items	Description
Airports, VORs, NDBs, Intersections, User Wpts, Lo and Hi Airways	Solid reversed means ident, and symbol are displayed. A bold outline means only symbol is displayed. A thin outline means item not displayed.
Airspace	Solid reversed means airspace outline and sector lines are shown. A bold outline means airspace outline only displayed. A thin outline means airspaces are not displayed.
Flight Plan	Map pages 2-4. Toggles display of flight plan route line.
Declutter	Toggles display of labels and icons on/off at higher zoom levels.

Checklists

1. Press the **FN** key and then the **CHK** smart key.

2. Press **NEW**. Press the **CRSR** knob in and then use the **Large** and **Small** knobs to name the list and then press **Menu/Enter**.

3. Press **EDIT**.

4. Turn the **Large** knob to advance. Turn the **Small** knob to select items. You may also press the **CRSR** knob and create your own.

5. Press **Menu/Enter** when finished editing.

Customizing Nav Data

1. Press **Map**, then turn the **Large** knob to Map pages 2 - 4.

2. Press **Menu/Enter**, then press the **More** line selection key until the **Nav Data** key is shown.

3. Press **Nav Data** to toggle the display of the standard default or your customized Nav Data.

4. Press **Sel Data** (the **Nav Data** key must be highlighted).

5. You can know customize the Nav Data on the left side of display. Turn the **Large** knob to move to the item to edit. Turn the **Small** knob to change the item.

6. Press **Sel Data** or **Menu/Enter** to save your changes.

Panning (PAN)

1. Press **FN** and then the **PAN** smart key or press the **MAP** key and then press the **CRSR** button on the **Small** knob.

2. Your present position is in the center of the display. You can move the white crosshair with the **Large** and **Small knobs**. The Lat/Lon, range, and bearing from your present position to the crosshair is shown at the bottom of the display. A green line is drawn from your present position to the crosshair location.

3. Turn the **Large** knob to move the crosshair North/South.

4. Turn the **Small** knob to move the crosshair East/West.

5. Press the **Range** line selection key and then turn the **Small** knob to change the map scale. Press **Range** again to return to crosshair control.

6a. When the crosshair is near a waypoint, the waypoint will turn green. Press **INFO** to view information about that waypoint.
Or

6b. Press **D->** to fly Direct-To that waypoint.

Creating a User Waypoint in Pan Mode

1. Press the **MRK** line selection key.

2. Use the **Large** and **Small** knobs to enter information about the new User waypoint.

3. Press **Menu/Enter** to save the User waypoint.

Navigating a Holding Pattern

Holding Pattern is in the database

If the holding pattern is in the database for the destination waypoint of your flight plan, follow the automatic guidance on the unit display.

Holding Pattern Inserted While On Route

1. Press **DIRECT-TO** (**D->**).
2. Turn the **Large** knob to highlight the desired waypoint to perform the holding pattern.
3. Press the **Hold** key.
4. Use the **Large** and **Small** knobs to select Right or Left turn, Course, and hold leg time or length.
5. Press **Menu/Enter**.
6. When you reach the holding pattern, flight plan sequencing is suspended (SUSP will appear) automatically. Roll steering guidance is available.
7. Press **SUSP** to exit the hold pattern and to return to the flight plan, or press **D->** or **FlyLeg** to exit holding pattern.

Direct-To - Intercept Course From Wpt

The Course From operation allows you to navigate from a waypoint on a selected course. When the Course From operation is executed, the CDI will indicate FROM and the flightplan will go into suspend mode (SUSP); it will not automatically sequence the flightplan waypoints. The airplane will track outbound on the selected radial until instructed otherwise.

1. Press **Direct-To**. Select a new waypoint, if desired, with the **Large** and **Small** knobs.

2. Press **CrsFr**. (you may have to press **More** first)

3. Change the course bearing, if desired. Turn the **Large** knob to change the 10's value. Turn the **Small** knob to change the 1's value.

4. Press **Menu/Enter**.

Direct-To - Intercept Course To Wpt

Course To operation allows you to add an intercept course to the selected waypoint. Upon reaching the selected waypoint, the flightplan will sequence to the next waypoint in the flightplan normally.

1. Press **Direct-To**.

   a. Press **WPTS** and turn the **Large** knob to select a waypoint in your flight plan.

   or

   b. Press **DB** and select a new waypoint, if desired, with the **Large** and **Small** knobs.

2. Press **CrsTo** (you may have to press **More** first).

3. Change the course bearing, if desired. Use the **Large** and **Small** knobs to change the course value.

4. Press **Menu/Enter**.

Direct-To - OBS

When the OBS mode is active, use the CDI/HSI control to set an intercept course to any waypoint as you would with a radial for a VOR.

1. Press **Direct-To**. Select a new waypoint, if desired, with the **Large** and **Small** knobs, otherwise the destination waypoint is used.

2. Press **OBS**. Now use the external CDI/HSI resolver to control the selected course.

Direct-To - FlyLeg

With the FlyLeg Menu selection you can activate a particular leg of your flight plan. If you have picked an invalid leg a message will appear to warn you.

1. Press **Direct-To**. Press the **WPTS** smart key if necessary.

2. Select the desired leg of your flight plan with the **Large** knob.

3. Press the **FlyLeg** key to activate the selected leg.

Navigating a Pilot Nav Leg

1. Some routes may require manual navigation by the pilot between waypoints. These points will be noted in the Flight Plan page as "Pilot Nav."

2. Active guidance is not provided to the pilot. Follow procedural directions.

3. Once the Pilot Nav Leg is completed, press the **SUSP** key to sequence to the next leg in your flight plan.

Messages (MSG)

1. Press **FN** and then the **MSG** smart key.

2. Turn the **Large** knob or press the **New** or **Old** smart keys to switch between Old or New messages.

3. Turn the **Small** knob to view the available messages.

User Waypoints (USER)

Creating a User Waypoint in User Mode
1. Press **FN** and then the **User** smart key.

2. Use the **Large** and **Small** knobs to enter information about the new User waypoint.

3. Press **Menu/Enter** to save the User waypoint.

Searching for a User Waypoint in User Mode
1. Press **FN** and then the **User** smart key.

2. Press the **Search** key.

3. Press the **CRSR** button on the **Small** knob to highlight the User waypoint name and then turn the **Small** knob to search through the list of User waypoints.

Editing a User Waypoint in User Mode
1. Press **FN** and then the **User** smart key.

2. Press the **Edit** key.

3. Use the **Large** and **Small** knobs to enter information about the new User waypoint.

4. Press **Menu/Enter** to save the User waypoint.

Deleting a User Waypoint in User Mode
1. Press **FN** and then the **User** smart key.

2. Search for the User waypoint you want to delete as described above.

4. Press **CLR** to delete the displayed User waypoint.

Direct-To A Waypoint Not In Your Flight Plan

1. Press **DIRECT-TO (D->)**.

2. Press the **DB** smart key.

2. Use **Large** & **Small** knobs to select waypoint ident or name.

4. Press **Dest** and **Menu/Enter**. Now, fly direct to the selected waypoint.

5. To set an approach, press **PROC** then **Appch**.

6. Use the **Large** and **Small** knobs to select the approach and press **Menu/Enter**. Now press **EXEC** and **Menu/Enter**.

Direct-To A Waypoint In Your Flight Plan

1. Press **DIRECT-TO**.

2. Press the **WPTS** smart key.

2. Use **Large** knobs to select the waypoint in the flight plan.

4. Press **Direct**. The CNX80 will navigate direct to the selected waypoint.

System Mode

Press the **FN** key and then the **SYS** smart key to reach the System Mode.

Press the **GPS**, **VERS**, or **CNFG** smart keys.

GPS
GPS/WAAS status, GPS Time, satellites available with overhead view, and signal strength of available satellites are shown.

VERS (Software Versions)
Unit serial number and software versions are shown. This information should be noted before calling Customer Service.

CNFG (User Configuration)
The User Configuration function allows you to set values for your particular aircraft.

1. Turn the **Large** knob to highlight the value.

2. Press the **CRSR** knob in and then turn the **Small** knob to change the value.

3. Press the **Menu/Enter** key to save the value.

Nearest Waypoint Search (NRST)

1. Press **NRST.**

2. Press the Line Selection key on the right side of the display to select waypoint type.

3. Turn the **Large** knob to view nearby waypoints.

4. Use next steps below to:

Find Nearest Frequency
1. Frequency is listed with waypoint info.

2. Press **<SBY** to insert displayed waypoint frequency into Standby frequency position or **<-A->** to insert into the Active position.

Fly Direct to Nearest Waypoint
1. Highlight (green) desired waypoint with the **Large** knob.

2. Press **D->** then press the **Direct** line selection key or press **Dest** to make the waypoint your new destination.

Find Info on Nearest Waypoint
1. Highlight (green) desired waypoint with the **Large** knob.

2. Press **INFO,** then press the desired line selection keys for more info.

3. Press **INFO** again to return to the previous view.