



PG-ARES



Kenwood TM-D710GA Dual Bander Operation



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Objectives

- Overview of capabilities of the D710G
- Connections
- Initial Setup Options
- Basic Operations
- Using built in TNC
- WL2K Setup
- Power Saving Options
- Crossband Repeat





D710G overview

- High Power (50, 10 & 5 W)
- Dual Band (V&V, U&U)
- TX 144-148, 430-450 (A&B)
- RX A-118-524, B-136-524 & 800-1300
- GPS (Grid Square, Date & Time)
- TNC-APRS, Packet AX.25
- Echolink Ready
- Crossband Repeat
- RJ 45 Mic & Head/Radio



Connections

- Antenna (S0-239)
- Power (PP, Fuses)
- MIC (RJ-45)
- Control Head to Radio (RJ-45)
- Rear of Control Head (DIN->SERIAL or DIN->USB)
- Rear of Radio-PC & DATA
- Speaker(s) Option



Connections

- **Radio – REAR**
 - Antenna, DATA, PC, Speakers



Connections – Radio REAR

DATA (Ext TNC)

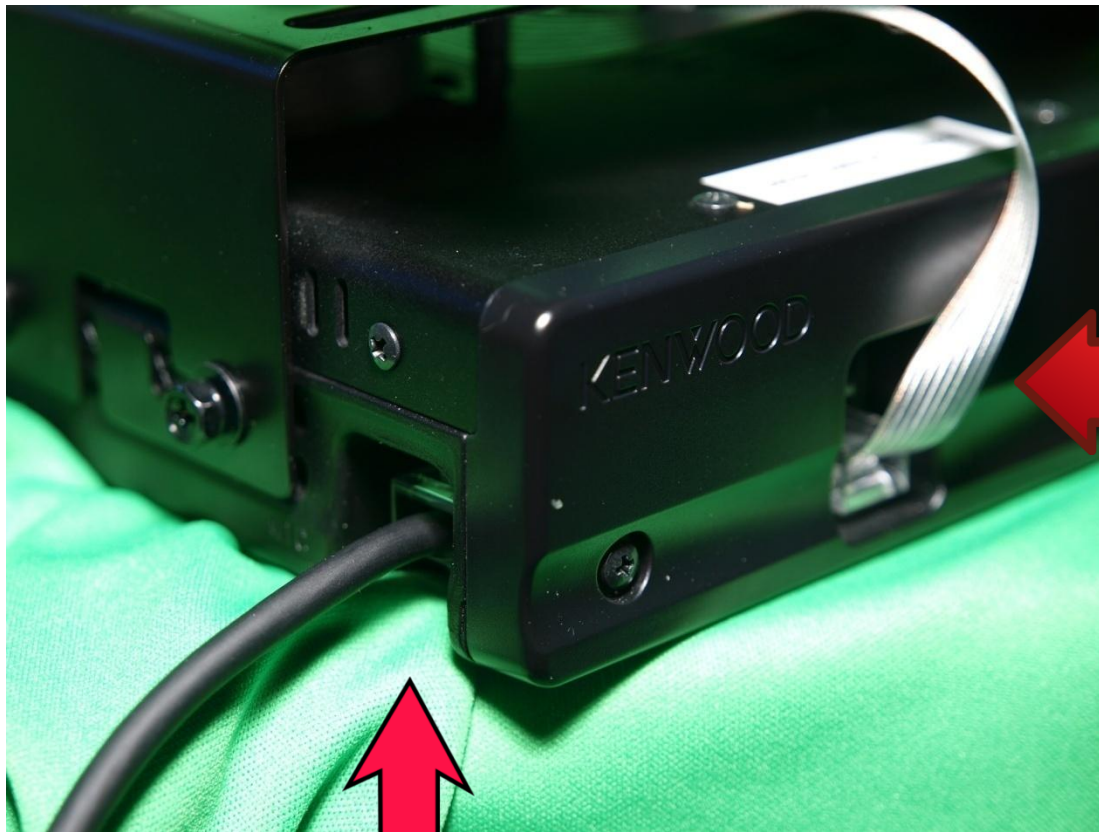


PC (Programming)



Speakers

Connections – Radio Side- Front



Mic



Control Head



Connections – Control Head



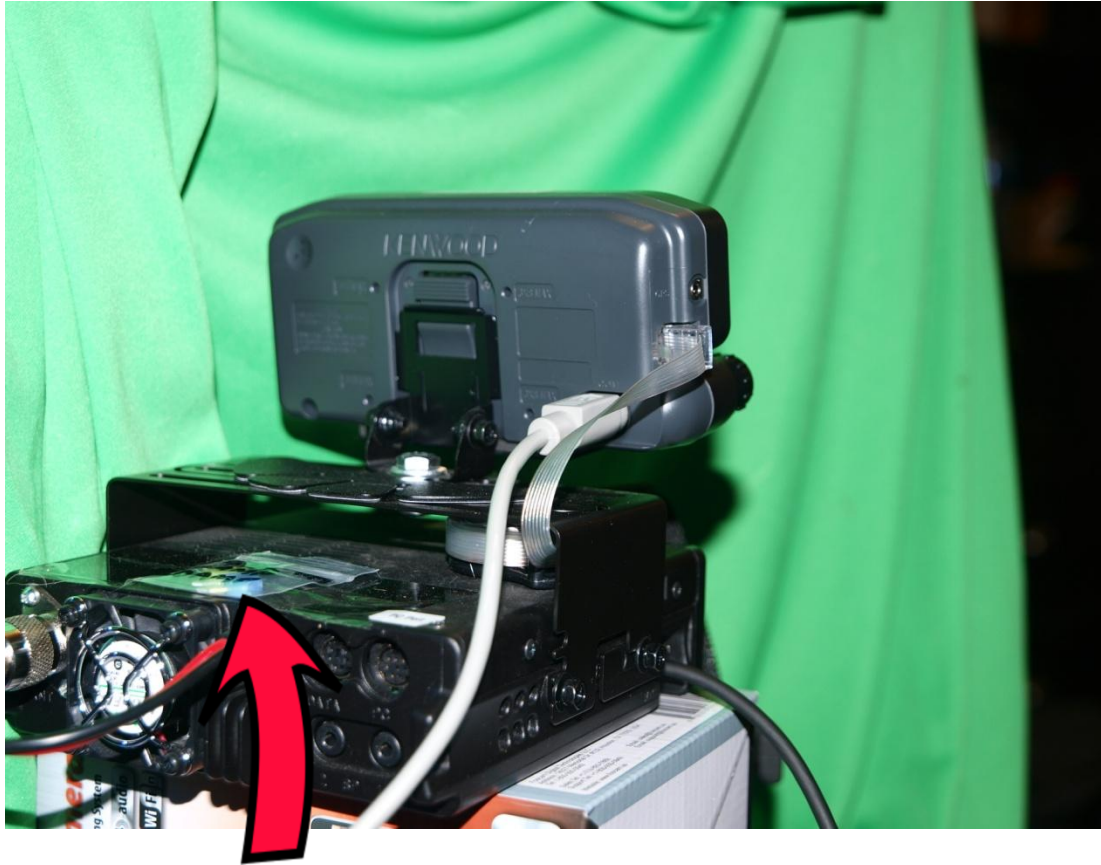
Ext GPS

To Radio (RJ-45)

COM - TNC



Connections – Ready for AX.25



**NOTE: Spare Fuses (ATM) 15A & 20A
taped to top of radio**



Go Box Mounted TM-D710GA



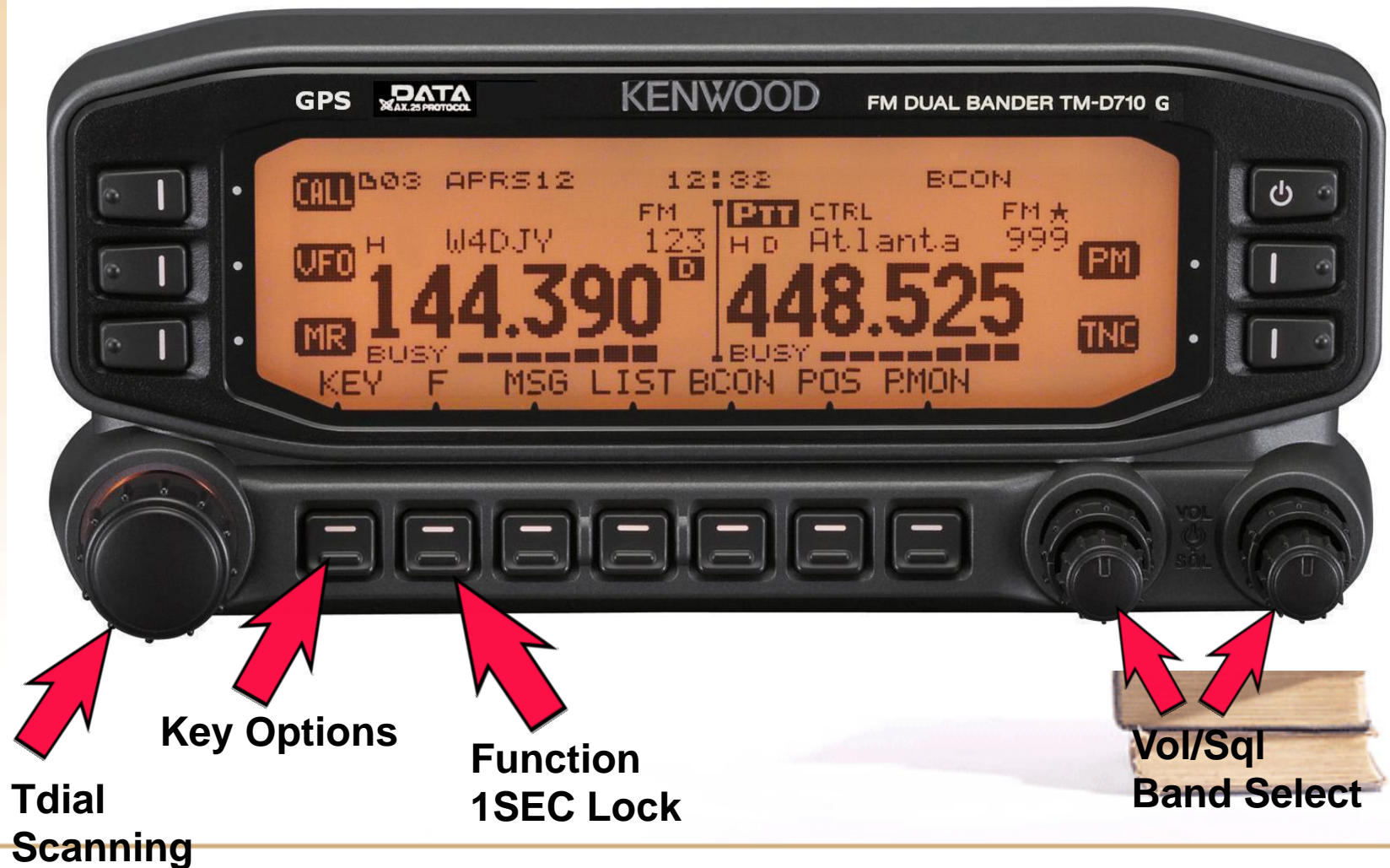
Go Box Mounted TM-D710GA



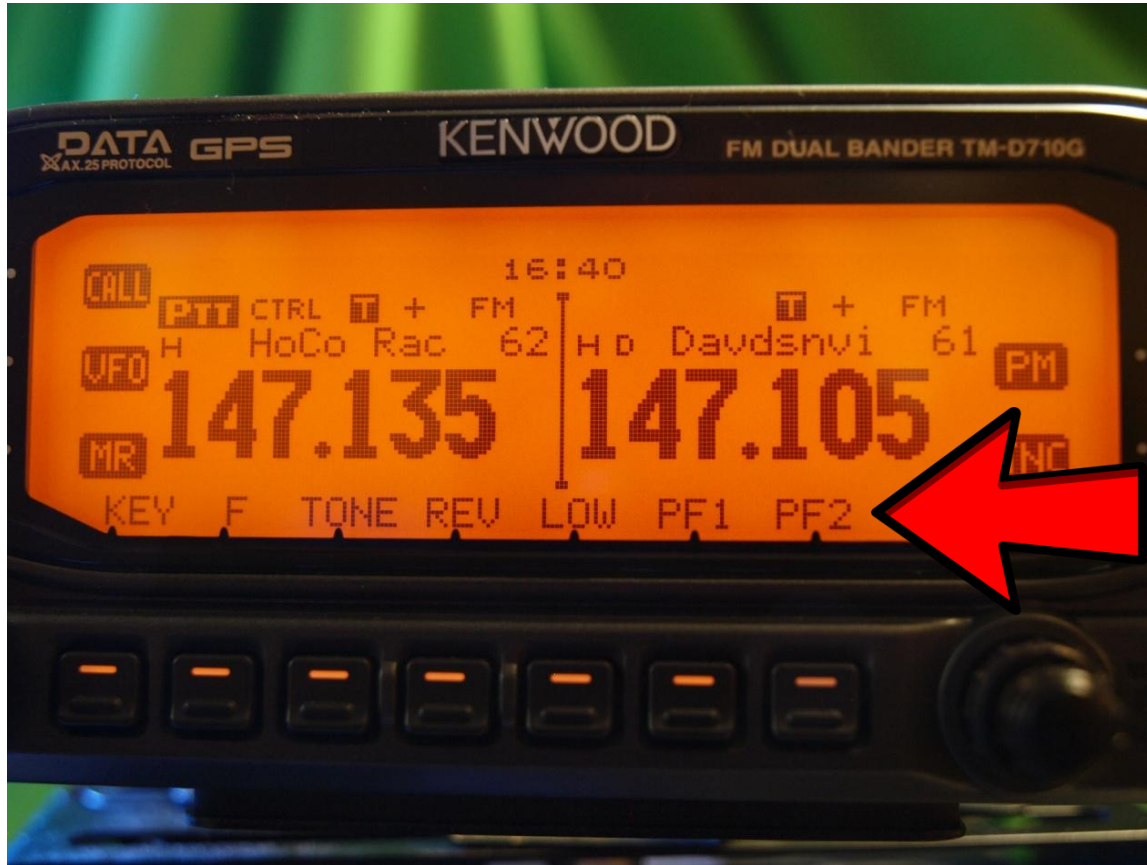
TNC Cable

PC Cable

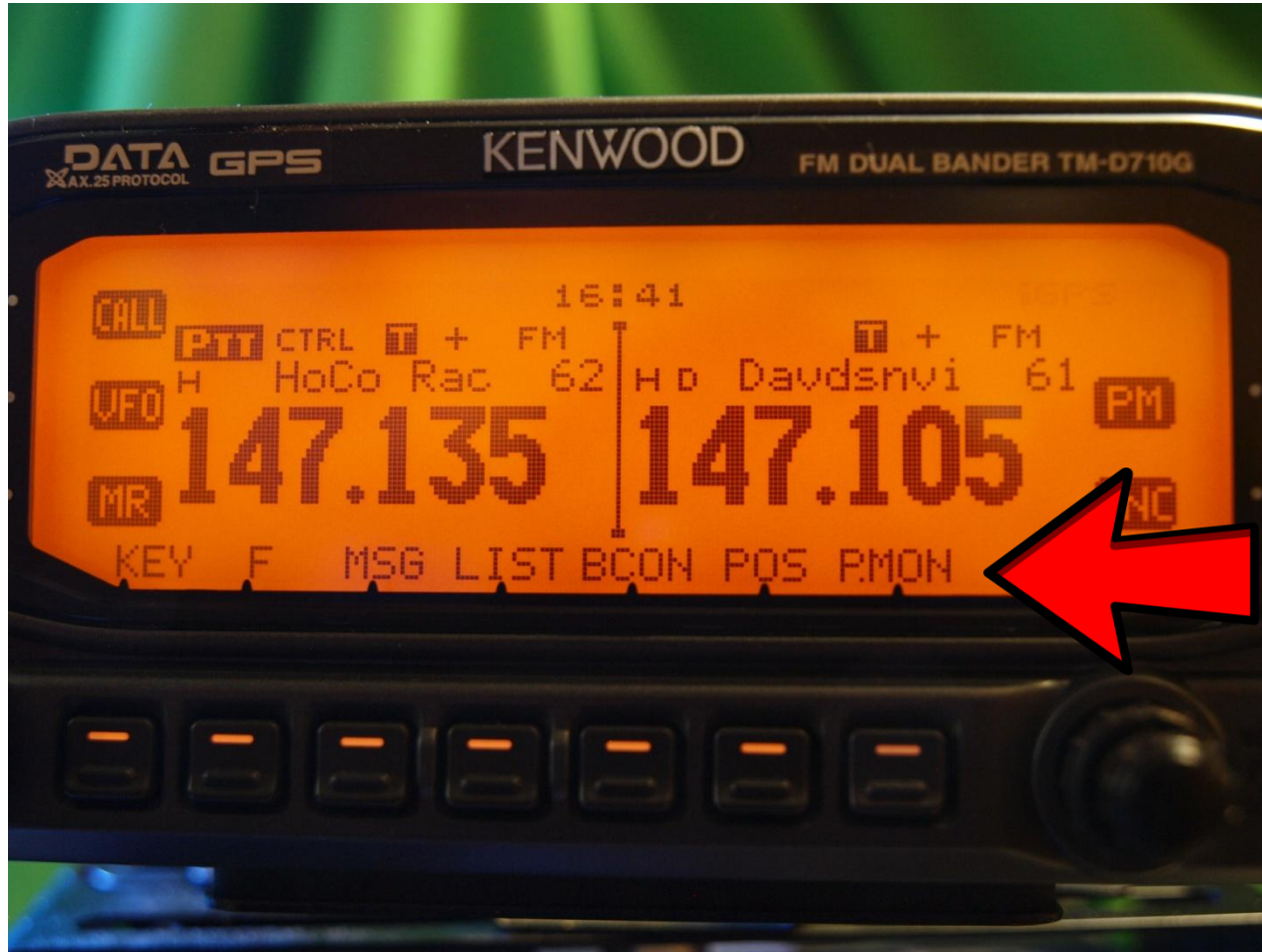
Control Head Overview



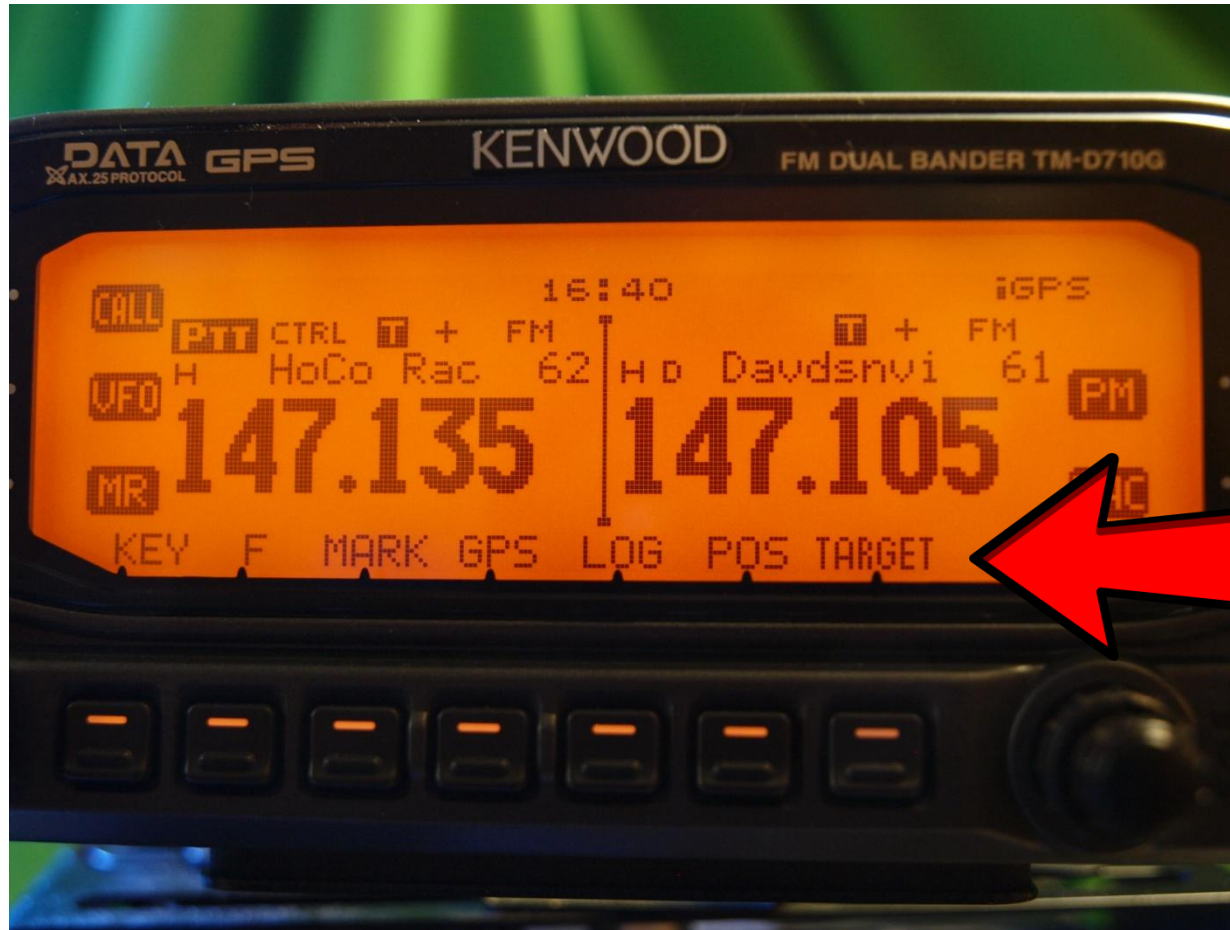
Control Head Menu Options



Control Head Menu Options



Control Head Menu Options



Initial Setup Options

- Entering the Main Menu
 - Push “F” (bottom row, second from left)
 - Then push in “Tuning Knob” (large lower left button)

“CTRL” = Operating Band
“PTT” = TX Band



Main Menu Options



Main Menu Options

- **Audio**
 - 000 – Key Beep
 - 001 – Beep Volume
 - 002 – Ext Speaker
- **TX/RX**
 - 110 – Mic Sensitivity
 - 111 – Weather Alert
- **Memory**
 - 201 – Memory Name
 - 202 – Lock out



Main Menu Options

- **DTMF – Nothing to change**
- **Repeater**
 - **403 – Repeater Mode (XB)**
 - **405 – Repeater ID**
 - Enter your call if XB Rptr used
 - **406 – Repeater ID**
 - Morse



Main Menu Options

- **GPS**

- **500 – Setup 1**

- Datum - WGS-84
 - SBAS – ON
 - Com Output – OFF

- **APRS**

- **600 – Callsign**

- **601 – Int TNC**

- Data Band – A
 - Data Speed - 1200



Main Menu Options

- **APRS – Continued**
 - TX Delay – 200
- **AUX**
 - 900 – Power On Msg
 - Change to Location Assigned
 - 906 – Panel PF1
 - Menu
 - 907 – Panel PF2
 - CTRL
 - 908 – MIC PF1
 - A/B



Main Menu Options

- **AUX continued**
 - **909 – MIC PF2**
 - MR
 - **910 – MIC PF3**
 - VFO
 - **911 – MIC PF4**
 - ENTER
 - **918 – Ext Data Band**
 - B-BAND
 - **919 – Ext Data Speed**
 - 1200



Main Menu Options

- **AUX continued**
 - **920 – PC Port Speed**
 - 9600
 - **925 – Date**
 - **926 – Time**
 - **927 – Time Zone**
 - -4:00
 - **928 – Display Partition Bar**
 - **929 – Com Port Baud Rate**
 - 9600



Main Menu Options

- **AUX Continued**
 - **930 – Int Data Band (Packet)**
 - A-Band
 - **998 – Power On Password**
 - OFF
 - **999 – VFO Reset**
 - VFO, Full, Partial, PM, etc



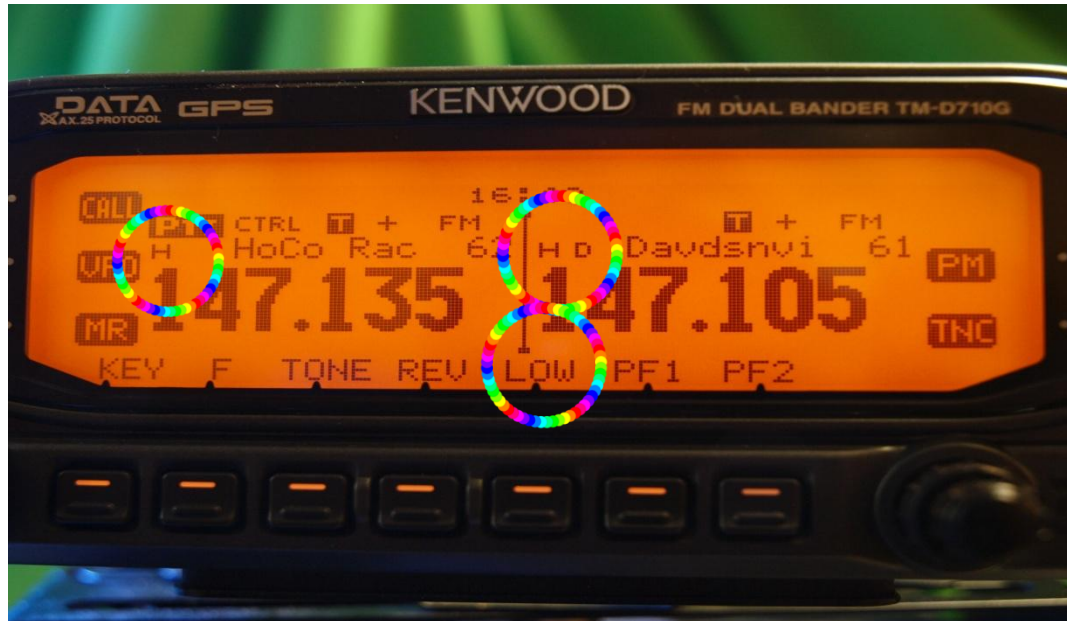
Main Menu Options

- Key through a few options to ensure they work correctly.
- Use the PF keys on the panel and MIC.
- Turn OFF/APRS/PACKET the TNC to check band
- Time correct?
- GPS – ON iGPS displayed
 - Flashing, Position Lock
 - POS for Position Info & Grid Square



Output Power

- Shown in the display as “H”, “M”, or “L”



- Each band is set independently
- Using Kenwood Software each channel can be set individually as well

Output Power – UHF & VHF

- Options are:

- H – 50W
- M – 10 W
- L – 5 W



- Changes are Per Band
- To Change (“CTRL” active)
 - Push the “LOW” button on the bottom bar; 5th from the left.
- Power indicator cycles through H-M-L



Entering a Simplex Frequency

- **Choose Either band**
 - Push the VOL/SQL button of the band you want to use
 - CTRL must be displayed on the chosen band. PTT may also be. CTRL must be displayed on the band you want to use.
- **Press “VFO” button left side vertical buttons.**



Entering a Simplex Frequency



Entering a Simplex Frequency

- You will see something like this. NO memory info will be displayed. Just the VFO.
- To enter the freq either
 - Turn the tuning dial
 - Hit “A” on the MIC and use the keypad to enter.
- If either black background “T” or “-” or “+” will need to be removed.



Entering a Simplex Frequency

- Hit the **“TONE”** button
bottom bar, third from left
 - May need to hit **“KEY”** to
bring up the correct button
bar
- **“F”** Function key to bring up
“T-SEL” Tone Select and
“SHIFT”



Repeater Operation

- Auto Repeater Offset is on.
- Use the Keypad for direct entry or use Tdial
- Verify Shift (-/=). If incorrect Press “F” then “SHIFT” as needed.
- Set the PL (CTCSS). Press “TONE.” Pressing once activates TX encoder.



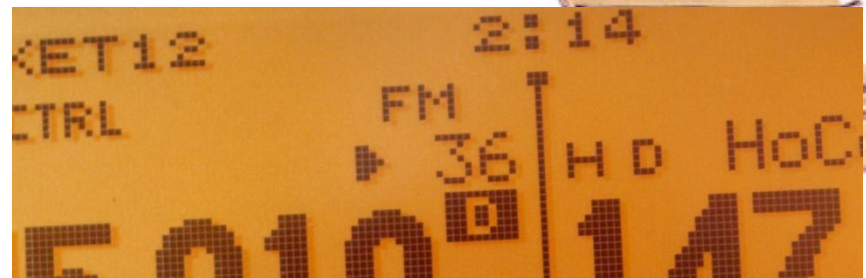
Repeater Operation

- Press “F” then “T-SEL” and rotate TDial to select correct tone then press TDial to accept.



Program Memory Channels

- Working Repeater or Simplex ready to be stored.
- Press “F” then rotate TDial to Memory Channel. Channels will FLASH
- FILLED IN ARROW channel has data
- EMPTY ARROW channel is empty



Naming Memory Channels

- Select Channel you want to label. “MR” then “Tdial” to select if needed.
- AUX Menu, #200, “Memory”
- “Memory Name” field should display
- Use “Tdial” or keypad for direct entry



Delete Memory Channels

- Display channel you want to delete
- Turn off the radio
- Press & Hold “MR” while powering on the radio
- Message will ask if you want to delete Memory Channel #XXX
- Push “TDial” to confirm or ESC to exit.



GPS

- Push “GPS” to start the internal GPS. “iGPS” will be displayed. “iGPS” will FLASH when locked.
- Press “POS” to get your position data. Grid Square



Battery Saving Settings

- **Reduce output power**
 - Press “LOW” until “L” is displayed.
 - Closer Repeater
- **Turn off the GPS**
 - Push “GPS” to turn it off
- **Turn off the TNC**
- **Display just one band**
 - Push one of the VOL/SQL knobs

*Disconnect from power
If the radio is not being used.*



Crossband Repeater

- **Menu # 405 – Callsign**
- **Menu #406 – Morse ID**
- **Cannot operate in Single band mode or weather channel mode**
- **TOT is locked at 3 min**
- **Resetting the radio will not cancel the Repeater mode**
- **Duplexer/Lock ON/Sep Bands**



Crossband Repeater

- Turn power off
- Press & HOLD “TONE” button then power on.

