IC-7610

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IC-7610 HF Transceiver

This transceiver is currently connected to the NARC1 computer.

Equipment summary

- Icom IC-7610 (HF + 6m) transceiver
    - Astron RS-35A power supply
- Elecraft KPA1500
    - Elecraft power supply
- Icom SM-50 desk mic
- Clipper PTT footswitch
- Heil Pro-7 headset
- Nifty mini-manual and other manuals are located in the drawer under the radio.
- Dell PC, dual monitor set-up
    - Windows 10
    - WSTJ-X, JS8Call, fldigi suite
    - N1MM, N3FJP

Connect equipment and power-up

- The IC-7610/NARC1 is located closest to the main door off the porch.

1. Connect to the power mains.

    - Power cables are located between the wooden shelf and the east wall.
    - Plug the large 240 V cable (green tag) for the amplifier power supply into the 240 V wall outlet.

Figure 1: IC-7610 power switch

- Plug the smaller 120 V cable for the Uninterrupted Power Supply (UPS) into the 120 V wall outlet.

2. Connect the radio to a suitable antenna.

Before you power up the radio, connect it to a suitable antenna. **The antenna connections are located on the north wall, near the repeater cabinet**. Choose the PL-259 connector with the yellow IC-7610 tag. Plug the cable from the radio into the cable connector for one of the antennas, for example, one of the triband Yagis for 10-20 m. **Please do not remove the N/PL-259 connectors from the antenna feedlines.**

3. Power up the UPS by pushing the front button. The green power light should illuminate.

4. Power up the Astron RS-35A power supply that powers the IC-7610/NARC1. The power supply is located to the right of the Elecraft KPA1500 amplifier.

5. Power up the IC-7610/NARC1 by pressing and briefly holding the power button.

6. Power up the Elecraft KPA1500 amplifier

The IC-7610/NARC1 is connected to the Elecraft KPA1500 amplifier. The power supply for the KPA1500 is under the desk on a small footstool. Check that the KPA1500 power supply is on. If necessary, power-up the power supply by hitting the power switch on the upper rear left side of the power supply. When the amplifier power switch is on, you will see 3 green lights: AC on, High V supply, Low V supply. Power up the KPA1500 by pressing the on switch on the lower right hand side of the KPA1500 front panel.

Log-in to the computer

1. Power up the PC by pressing the power button on the front panel.

2. Log-in using the appropriate password

The IC-7610/NARC1 is connected via USB2 to the NARC1 PC. Open your logging program of choice. NARC has licenses for N1MM and N3FJP's Amateur Contact Log.

To operate digital modes (e.g., FT8/FT4, JS8Call, fldigi), open those programs. See instructions for operating these modes in separate documents.

Figure 2: KPA1500 Power Switch

Basic controls

- Audio levels for the two VFOs are controlledd via separate knobs on the left side of the front panel.

- You may switch operating bands in one of two ways:
  - Buttons located on the right side of the front panel
  - Pressing the frequency on the touch screen.

- Switch operating modes by pressing the mode button on the touch panel.

This opens a window where you can choose the mode of operation. - Hit the arrow button to close the window and save your choice.

- Turn digital noise reduction on or off by pressing the NR button on the left side of the front panel. When NR is on, the NR button will be illuminated.
  - To adjust the amount of noise reduction, press and hold the NR button to open a window on the upper right corner of the touch panel display.
  - Turn the MULTI key to adjust the level of noise reduction.
  - Close the NR window by pressing the MULTI key or by pressing the NR button.
- Adjust preamplifier (`P.AMP`) settings, automatic gain control (`AGC`), Intercept Point (`IP+`), `VOX`, and compression (`COMP`) settings by pressing the corresponding button on the left side of the touch/display screen.

- Adjust touch/display screen settings via the MENU1/MENU2 buttons at the bottom of the touch/display screen.

- Select receive filter settings via the `FILTER` button on the right side of the front panel, below the `TWIN PBT` knob.

- Set RF power by pressing the MULTI button to open a window on the display/touch screen. Press the RF POWER panel to select it, and adjust the output power by turning the MULTI knob.