

# 1 - FEATURES AND FUNCTIONS

## **General:**

- single USB connection to computer
- stand alone CW and FSK operation
- Complete "Computer <-> Radio" galvanic isolation
  - transformer isolation of sound card and radio
  - optical isolation of radio signals
- *Internal USB sound*
  - *Wide range audio level: works with transceiver levels from 100 mV to 1.5 V*
  - *Extremely low noise floor: as low as 0.7 mV effective*
  - *High dynamic range: 84 dB typical, 82 dB minimum*
  - *Supports Voice operation with microphone*
  - *Standard Windows Audio Class device – no custom driver required*
- compatible with most standard MS Windows based logging or control programs

## **Radio control:**

- integrated level converter for CI-V, FIF-232, IF-232, or RS-232
- up to 57600 Baud with handshake support
- supports most Elecraft, Icom, Kenwood, Ten-Tec, Yaesu and other radios
- SDR receiver tracking

## **Other:**

- Programmable LCD status display
- 2 Watt amplifier for monitor/sidetone
- CI-V output for controlling Icom compatible accessories
- Serial output for controlling generic peripherals
- user definable presets to recall all parameters for different control programs or contests
- all parameters stored in EEPROM and reloaded after power up
- integrated chokes and filters for maximum RFI immunity
- Metal/Aluminum case, powder coated and silk screened
- Free, no time limit firmware/software upgrades via Internet

## **Keying:**

- optical isolation of all keying signals from computer
- Hot Switch PA protection with user defined timing
- programmable PTT assertion delay in 1ms steps
- T/R sequencer with extended capabilities
- separately sequenced keying outputs for low noise amplifier or receive antenna control
- supports VOX and CAT T/R switching
- wide range solid state or relay PA and LNA PTT buffers

## **CW:**

- enhanced K1EL WinKey™ with paddle buffer
- front panel speed knob
- selectable side tone capabilities with "paddle side tone" function
- nine (9) user programmable memories
- application independent contest auto-numbering
- supports PS/2 keyboard for CW transmission with type ahead
- supports PS/2 keyboard or keypad for CW "memory keyer" and control
- PS/2 keyboard or keypad CW works without computer connection

### ***Voice (SSB/AM/FM):***

- front panel headset jacks
- rear panel hand/desktop microphone jack
- automatic microphone selection
- selectable preamplifiers allow electret and dynamic microphones in any combination
- Digital Voice Keyer with nine messages up to 120 seconds and unlimited “banks”

### ***Digital (FSK/AFSK/PSK31):***

- Dual channel receive capability
- transformers for DC isolation between radio and sound card
- low noise amplifiers for optimal decode level
- front panel level controls for each receiver
- front panel transmit level controls
- true FSK output
- supports data codes with 5/6/7/8 data bits and 1/1.5/2 stop bits
- unique, hot switch protected FSK keying
- separate PTT output for digital audio mode operation with microphone muting
- nine (9) user programmable memories (FSK)
- supports PS/2 keyboard FSK transmission with type ahead and diddle function
- supports PS/2 keyboard or keypad for FSK message playback and control
- PS/2 keyboard/keypad FSK works without computer connection