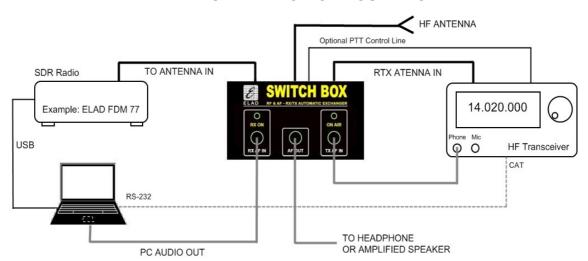
User Manual

Ver. 1.03 July 04, 2008

SDR RADIO CONFIGURATION



FRONT PANEL



REAR PANEL



TECHNICAL SPECIFICATIONS

- Impedance: 50Ω
- RTX SO-239 Connector
- ANTENNA SO-239 Connector
- RX BNC Connector
- PTT Control line RCA jack
- Frequency range: DC -160MHz
- Maximum TX power: 100W
- RF sense threshold: <10mW (1.8MHz–30MHz tested)
- ON time < 20ms</p>
- Release time: < 190ms
- Insertion loss: < 0.3dB @ 144MHz (0.2dB typical)
- RX isolation: > 38dB @ 144MHz (40dB typical)
- Gas discharge protection Power supply: 13.8V DC 200mA

PACKAGE CONTENT

- □ 1 ELAD SWITCH BOX
- □ 2 Mini 1/8" 3.5 mm stereo jack cable
- □ 1 BNC BNC RG58 Cable
- □ 1 DC plug int 2.1 mm ext 5.5 mm

FUNCTIONAL DESCRIPTION

ELAD SWITCH BOX is an automatic T/R switch normally connect the antenna to RX input. When it senses RF power on RTX, the antenna is connected to RTX input. Two operating mode are available, manual and automatic mode.

Manual Mode

Connect the PTT control line of your transceiver to PTT RCA connector in SWITCH BOX rear panel. By grounding PTT, RTX input is connected to the antenna and TX AF IN in the front panel is connected to AF OUT. When RTX is connected to the antenna, RX input is grounded for better isolation.

If PTT is open, the antenna is switched to RX output and AF OUT is connected to RX AF IN.

Automatic Mode

Don't connect PTT control line. When SWITCH BOX senses RF power in RTX input, it automatically switches RTX to antenna, otherwise the antenna is connected to RX.

Note: When SWITCH BOX is not powered, RTX is connected to the antenna to avoid transceiver damage.

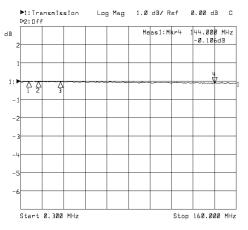
Lightning Protection

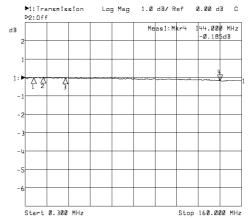
ELAD SWITCH BOX provides gas discharge protection on the antenna input, this is a good solution but is not enough to ensure a complete protection for your system. Please refer to our web site for more information about lightning protection.

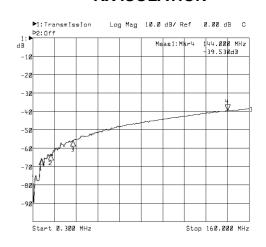
RTX INSERTION LOSS

RX INSERTION LOSS

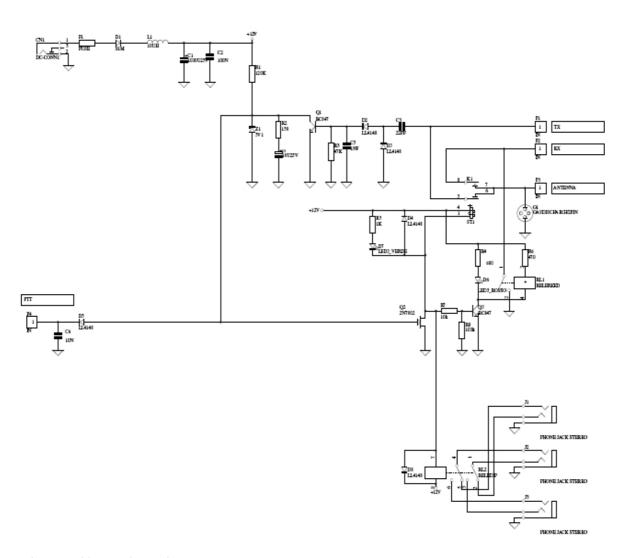
RX ISOLATION







SCHEMATIC DIAGRAM



Specifications may change without prior notice.



