

Specifications

General

Frequency range	144–147.995 MHz (2T) 144–145.995 MHz (2E)
Signal type	F3
Operating temperature	–10°C–+60°C
Antenna impedance	50Ω
Power supply requirement	At reception standby (B. SAVE OFF) 25 mA (B. SAVE ON) 8 mA At transmission (Hi: 2 W) 750 mA (Low: 400 mW) 350 mA (TYP)
Dimensions	(W) 58 (66)×(H) 141 (151)×(D) 23 (28) mm The numbers in the parenthesis include projections.
Weight	Approx. 240 g (including antenna and EBP-2N)

Transmitter section

Output power	Hi: 2.0 W, Low: 400 mW (7.2 V)
Modulation system	Reactance modulation
Max. frequency deviation	±5 kHz
Unwanted reflection	Less than –60 dB
Microphone	Built-in electret condenser microphone

Receiver section

Reception system	Double superheterodyne
Intermediate frequency	1st: 16.9 MHz, 2nd: 455 kHz
Sensitivity	12 dB SINAD less than –12 dBμ (0.25 μV) S/N more than 26 dB at –6 dBμ (0.5 μV) input
Squelch sensitivity	Less than –12 dBμ (0.25 μV)
Selectivity	More than ±7.5 kHz at –6 dB Less than ±15 kHz at –60 dB
AF output	More than 200 mW (8Ω load, distortion 10%)
Design and specifications subject to change without notice.	



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PS0049

F0687M0-3000 ©



Instruction Manual

Thank you for purchasing of the ALINCO ALX-2T/E. Read this manual carefully for optimum performance and keep it well for future reference.

Your ALX-2T/E has been manufactured and tested very carefully at the factory and will give you satisfactory operation for many years. Should any defects in material and workmanship, contact your authorized dealer.



ALINCO ELECTRONICS

Accessories

Carefully unpack your transceiver and you will find the following accessories included with the transceiver.

- 1 pc. Flexible antenna
- 1 pc. Battery pack (EBP-3N)
- 1 pc. Hand strap with the tool for memory setting
- 1 pc. Warranty card
- 1 pc. Instruction manual
- 1 pc. Circuit diagram and block diagram
- 1 pc. Ni-Cd Battery charger (EDC-7)
- 1 pc. AC adaptor (2T. EDC-4) (2E. EDC-6)

Features

Your ALX-2T/E is one of the most sophisticated, yet pocket-sized 144 MHz FM hand held transceivers with the easy-to-use thumbwheels and the economical battery power saving function you can buy.

- Memory Channel Setting as desired.
- Priority Function with a "Beep" Sound letting you know there is a signal at the priority channel.
- Battery Power Saving Function extending the Battery Life.
- By pressing LAMP Switch, the LED lights the top of the Thumbwheels.
- The Depth of ALX-2T/E is only $\frac{7}{8}$ " (23 mm).
- High Power (4.0 W) Operation, Long-Time Operation with a variety of optir batteries.
- Touble-free and stable quality because of using 4-layer PCBs.

Before operation

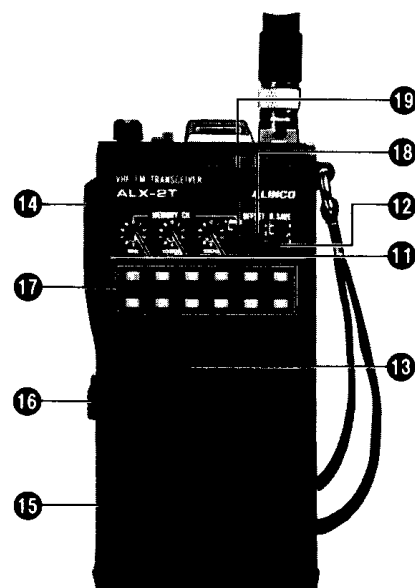
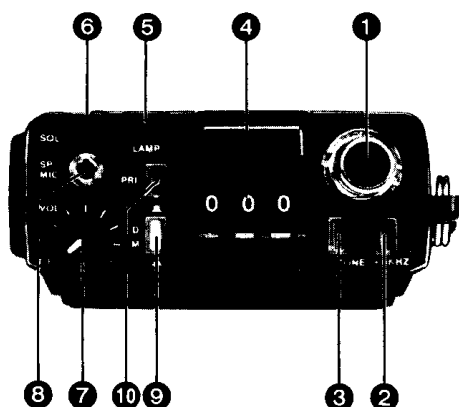
- Be sure to fully recharge the Ni-Cd battery before use.
- Do not overcharge the battery.
- Ensure the supplied flexible antenna is securely tightened.
- The trimmers and cores inside the unit are factory adjusted. Do not touch them. Should the unit require service, contact your authorized dealer.

Operation time with batteries

The Operation time with a repetition of Receiving, Transmitting and Receiving Standby is about 30 minutes with fully-recharged EBP-2N and about 90 minutes with EBP-3N.

To communicate over a short distance, set the Battery Save (B. SAVE) Switch to "LOW POWER" to conserve power and thus extend operation time (approx. twice).

Controls and Functions



① **Antenna Connector**—Used to attach the supplied flexible antenna. Ensure that the antenna is securely tightened.

② **+5 kHz Switch**—Depress this switch to increase the operating frequency shown on the thumbwheel by 5 kHz.

③ **TONE Switch**—Activates the TONE Encoder. (1750 Hz TONE SW. 2E ONLY)

④ **Frequency Setting Dials (Thumbwheel Switches)**—Used to set the desired operating frequency. From the left, 1 MHz, 100 kHz and 10 kHz.

⑤ **LAMP Switch**—Press this switch to light the top of the thumbwheels.

⑥ **SQL Switch**—Keep this switch depressed to open the squelch to white noise. (This is not a locked-in switch.)

⑦ **OFF/VOL Control**—Used to turn the unit on and off and adjust the volume level. When this is rotated clockwise, power is supplied and the volume level increases.

⑧ **MIC/SP (Microphone/Speaker) Jack**—Allows connection of an external speaker or an earphone. (Use the optional microphone with earphone to connect here EME-2.)
Note: An external microphone cannot be connected to this jack.

⑨ **D/M (Memory) Switch**—When this switch is pressed on (▲), Memory Channel Frequency is selected. Pressed off (□) Dial Frequency is selected.

⑩ **PRI (Priority) Switch**—Allows the unit to scan the operating channel and the other preset channel by pressing this switch and operating the D/M switch ⑨ (refer to the table below).

The unit will scan either the channel in memory or the channel shown on the thumb-

wheels for 0.5 second every 1.5 seconds. When any signal is found at the priority channel, a "Beep" is heard. In this case, turn off the Priority Switch and use the desired channel.

Operating Channel	Priority Channel	Dial	Memory
Dial	—	—	D/M Switch OFF (□)
Memory	D/M Switch ON (▲)	—	—

•B. SAVE Function takes the priority over the PRI Switch.

⑪ **Memory Channel Dials**—These dials are set in the same way of the thumbwheels. From the left, 1 MHz, 100 kHz and 10 kHz. The frequency set by these dials can be called by pressing the Memory Switch. (To set the frequency desired, use the tool attached to the hand strap.)

⑫ **B. SAVE Switch**—Changes the power level during transmitting and saves the battery power during receiving.

Top: HIGH POWER and B. SAVE ON
Middle: LOW POWER and B. SAVE ON
Bottom: HIGH POWER and B. SAVE OFF

B. SAVE function with a repeated 2.0 second reception stoppage and 0.5 second reception standby cycle saves the battery power. If any signal is received during 0.5 second reception standby, B. SAVE function stops temporarily and resumes when the signal is over.

⑬ **Microphone**—Subminiature, high-sensitive, electret condenser microphone.

⑭ **PTT Switch**—Press this switch and speak into the microphone. The red LED on the thumbwheels lights up.

⑮ **Battery Pack (Ni-Cd Battery)**—Small-sized Ni-Cd battery (7.2 V, 160 mAh). Use optional batteries for your various purposes.

⑯ **Battery Release Button**—Press this button upward and slide the battery pack towards this button to remove.

⑰ **DTMF Button**—When any of these 12 buttons is pressed in transmission mode pressing the PTT Switch ⑭, the corresponding DTMF tone signal is transmitted. (No monitor sound is transmitted.) (ALX-2T ONLY)

⑱ **OFF SET Switch**—When transmitting, setting this switch to "S", the Simplex mode will be operated. By setting this switch to "+" or "-", +600 kHz or -600 kHz Duplex mode will be operated.

⑲ **+5 kHz Switch (for the memory channel)**—Setting this switch to "+5 kHz" increases the frequency of the memory channel by +5 kHz.

Operation

Reception

Rotate the OFF/VOL Control clockwise to supply power and set the desired frequency by the Thumbwheel Switches.

As the squelch is preset at the factory, nothing will be heard unless there is a signal present. By pressing the squelch button, white noise will be heard. Adjust the OFF/VOL Control for the desired volume level.

Transmission

Set the desired transmit frequency by the Thumbwheel Switches.

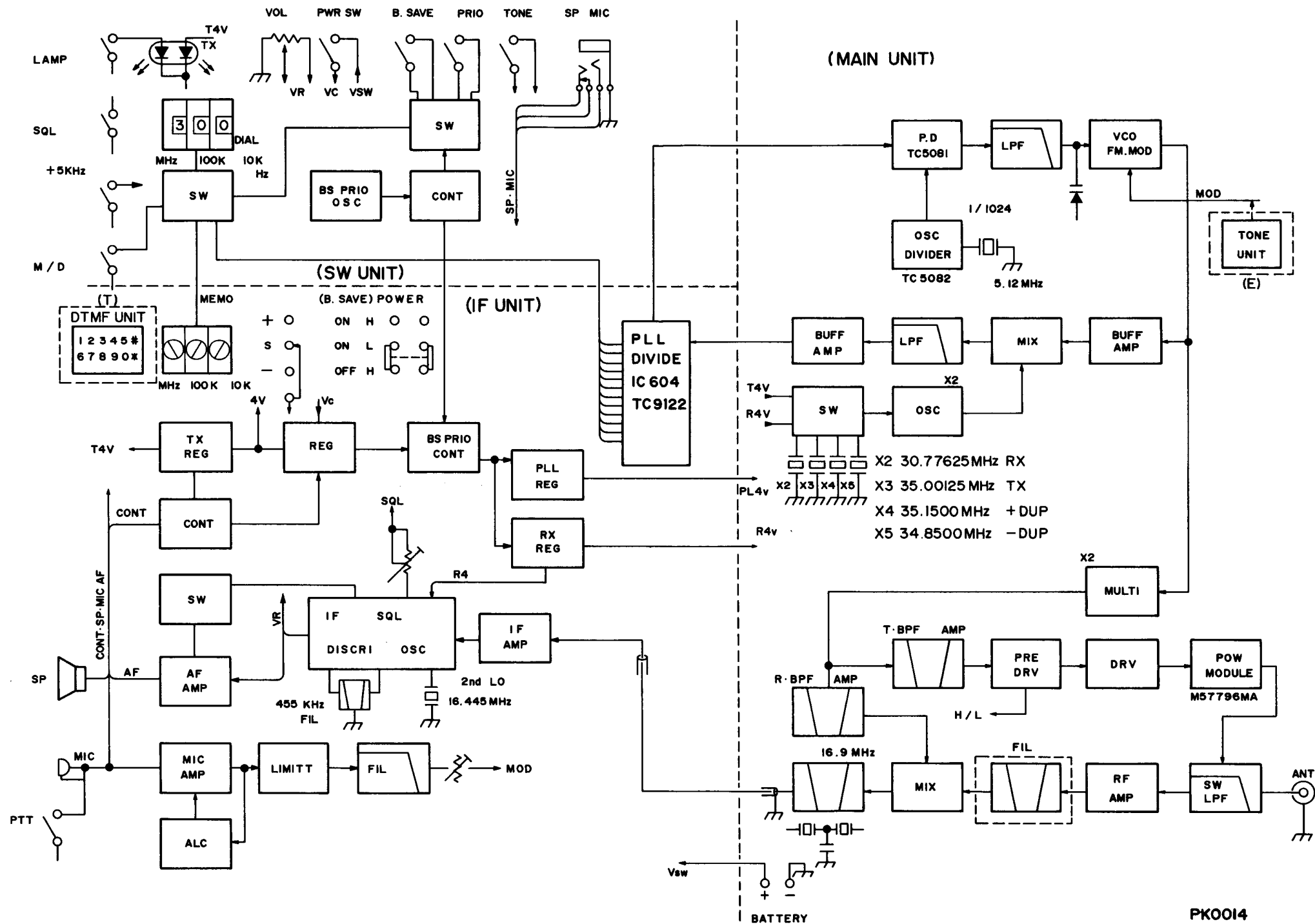
Check to see that the frequency is not busy.

Press the PTT Switch and speak into the microphone. The red LED on the thumbwheels will light.

Note: The distance between the microphone and your mouth is approx. 2" (5 cm).

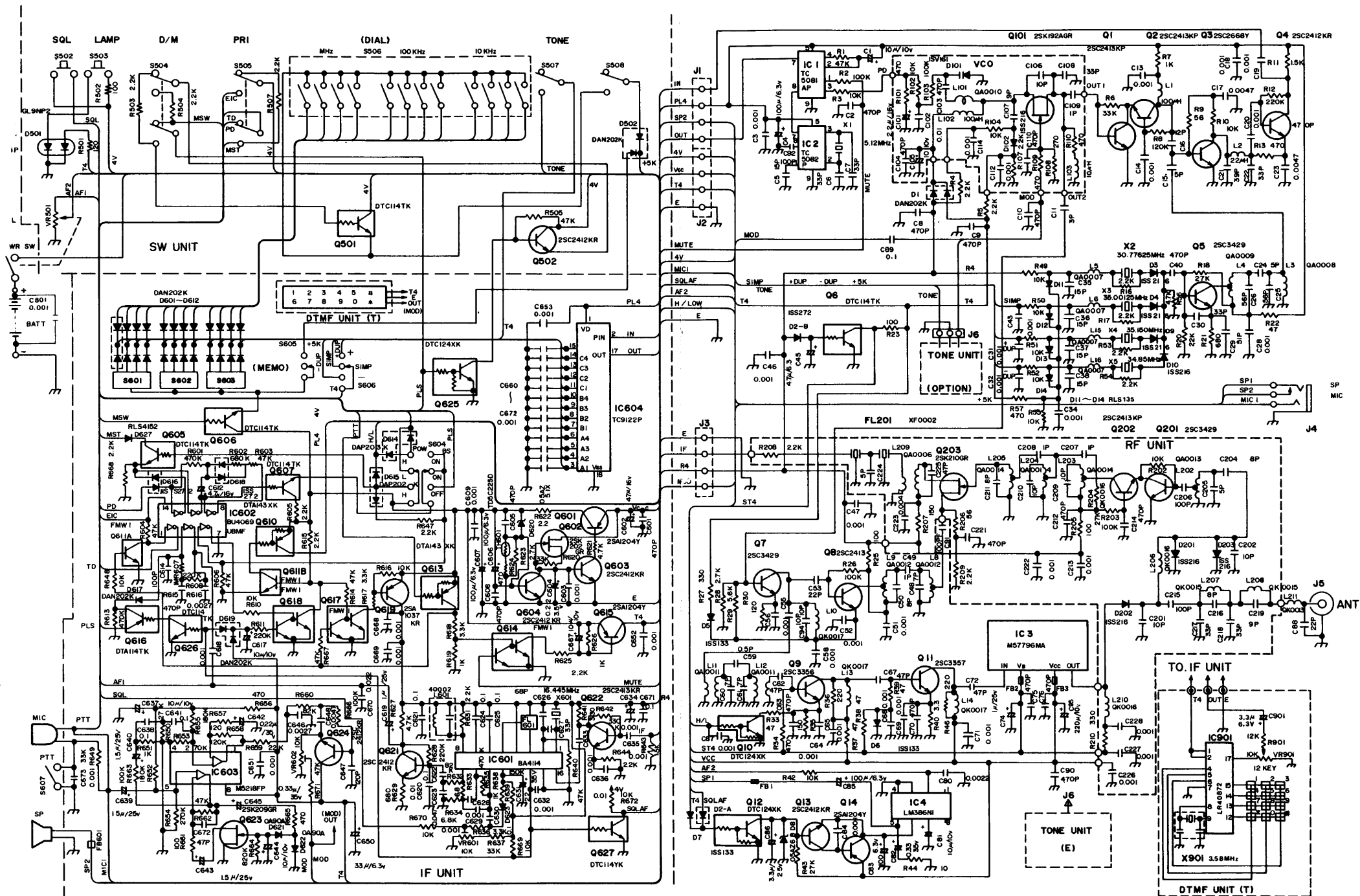
Advices on operation

- Operate or store the unit out of direct sunlight, away from stoves, radiators and other sources of heat, away from rain, and away excessive dust, vibration or shock.
- This unit is operated with batteries. Never supply the AC current directly to the unit to avoid any error or damage.
- When High Power Operation with EBP-6N (9.6 V, 450 mA), do not continue transmitting for a long time to prevent internal heat build-up.



ALX-2T/E

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