



TECHNICAL & OPERATION

MANUAL FOR F117A



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CHAPTER 1

INTRODUCTION

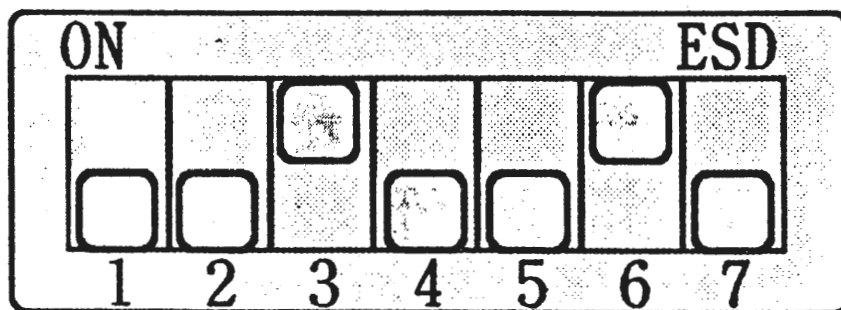
RADIO COMMUNICATION IS A KIND OF CONVENIENT MEDIUM, BUT IT IS VERY EASY TO BE WIRETAPPED. YOU CAN APPLY MANY METHODS SUCH AS SECRET CODES, NUMBERS OR SIGNS FOR SECURITY. BUT THERE ARE MANY DISADVANTAGES.

BECAUSE FOR EMERGENCY CASE, IT USUALLY NEEDS TO COMMUNICATE BY USING OPEN WORDS. THEREFORE , THE F117A IS THE BEST CHOICE FOR YOUR TRANSCEIVER.

CHAPTER 2

WORKING PRINCIPLE

THE F117A USES THE NEWEST DSP (DIGITAL SIGNAL PROCESS) TECHNICS AND COMPRESSION DEMODULATION METHOD. ITS NUMBER OF CODES CAN REACH 128 SETS. (REFER TO THE BELOWING DIAGRAM)



CHAPTER 3

FEATURES

1. POWER CONSUMPTION:

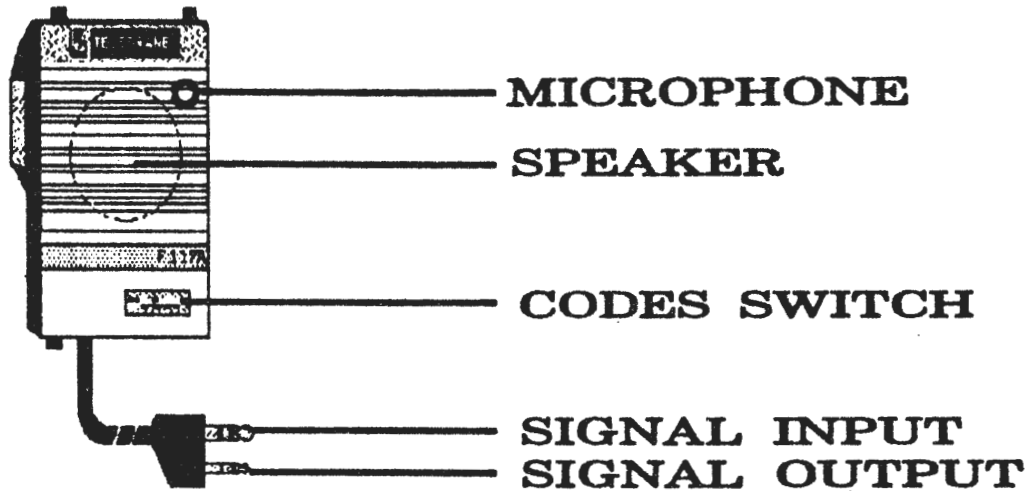
	STAND-BY (SQ OFF)	RECEIVING (SQ ON MIN VOL)	RECEIVING (SQ ON MAX VOL)
RECEIVING	18mA	18mA	200mA
TRANSMITTING:	12mA		

2. CODES: 128 SETS (7 BITS).
3. SUITABLE MODELS : 'STANDARD', 'YAESU', 'ICOM' AND ANY OTHER BRAND MODLE WITH MODIFICATION.
4. BATTERIES: UM-5 X 3.
5. WEIGHT: ABOUT 115 GRAMS (WITH BATTERIES).

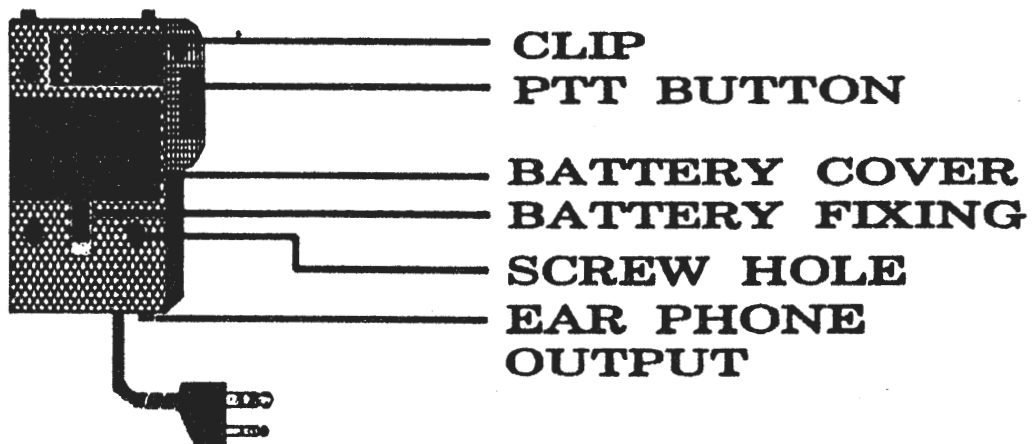
CHAPTER 4

CONFIGURATION

FRONT SIDE



BACK SIDE



TOP



CHAPTER 5

HOW TO USE THE DEVICE

1. SET THE POWER SWITCH OF F117A 'OFF'.
2. PUT IN 3 PCS OF UM-5 BATTERIES AND NOTE ITS DIRECTION. THE POSITIVE IS '+' AND THE NEGATIVE IS '-'.
3. SELECT THE CODES AND TURN THE SWITCH 'ON'. * NOTE: THE CODES SHOULD BE SAME FOR BOTH TWO PARTIES.
4. MAKE SURE BOTH TRANSCEIVERS ARE IN GOOD CONDITION, THEN INSERT THE PLUG OF F117A INTO THE RECEPTACLE OF TRANSCEIVER AND COMMUNICATE WITHOUT SCRAMBLER FUNCTION.
* NOTE: NOW THE SWITCH OF F117A IS ON 'OFF'.

5. TRY TO COMMUNICATE WITH SCRAMBLER FUNCTION (NOW THE SWITCH OF F117A IS 'ON'). WHEN PRESSING 'PTT' BUTTON, IT WILL BE READY FOR 'TRANSMITTING', AND THEN RELEASE THE BUTTON, IT ENTERS 'RECEIVING' FUNCTION.
6. WHEN YOU PRESS 'PTT' BUTTON, SHOULD WAIT AT LEAST 1 SECOND, THEN START TO COMMUNICATE, IF YOU TALKED AT ONCE, IT WILL CAUSE THE OPPOSITE CAN NOT DECODE IMMEDIATELY AND CONVERSATION CAN NOT BE HEARD AT THE TIME OF BEGINNING.
7. THERE IS NO VOLUME CONTROLLER ON F117A. THEREFORE, THE VOLUME IS CONTROLLED BY TRANSCEIVER KNOB, AND IT IS USUALLY SET ON THE LOCATION OF ONE FIFTH OF FULL

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VOLUME.

8. WHEN APPLICATION IS FINISHED OR STAND BY, PLEASE TURN THE POWER SWITCH 'OFF' UNTIL THE OPPOSITE ANSWERS, AND THEN TURN IT 'ON' TO SAVE POWER.
9. TAKE THE BATTERIES OFF, IN CASE OF NOT USE FOR A LONG TIME.
10. WHEN ELECTRICITY OF BATTERY IS POOR, THE OUTPUT VOLUME BECOMES WEAK AND THE TIME OF SYNCHRONIZATION BECOMES LONGER. AT THIS TIME, THE WHOLE BATTERIES SHOULD BE REPLACED.

CHAPTER 6

NOTES

1. YOU CAN GET THE BEST VOICE, IF THE DISTANCE IS KEPT ABOUT 3CM BETWEEN F117A AND YOUR MOUTH.
2. TRY NOT TO USE THE DEVICE IN THE WINDY OR TOO NOISY PLACES.
3. IF THE SWITCH OF YOUR F117A IS 'ON', BUT THE OPPOSITE SWITCH IS 'OFF' OR WITHOUT USE OF F117A, YOU ALSO CAN RECEIVE CLEARLY. IN SUCH CASE, YOU STILL CAN COMMUNICATE WITH OTHERS, IF TURN THE F117A SWITCH OFF.
4. IN ORDER TO SAVE THE POWER, THERE IS NO

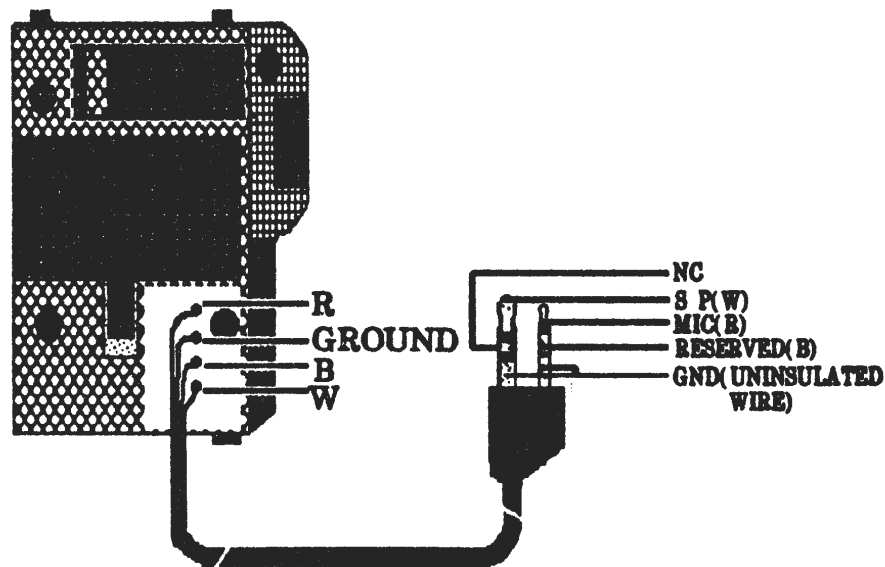
TRANSMITTING LAMP ON F117A. SO PLEASE REFER TO INDICATOR OF TRANSCEIVER.

5. THE INDICATION OF RECEIVING STRENGTH WHEN APPLIED F117A MUST BE OVER $0.7 \mu V$ (ABOUT 3 COLUM), OTHERWISE IT IS DIFFICULT TO SYNCHRONIZE, AND CAN NOT TO BE USED. HENCE THE DISTANCE OF COMMUNICATION IS SHORTER.
6. IF THE DEVICE CAN NOT BE USED AS NORMAL, PLEASE REFER TO CHAPTER 8 'PROCEDURES WHEN MALFUNCTION OCCURRED'.

CHAPTER 7

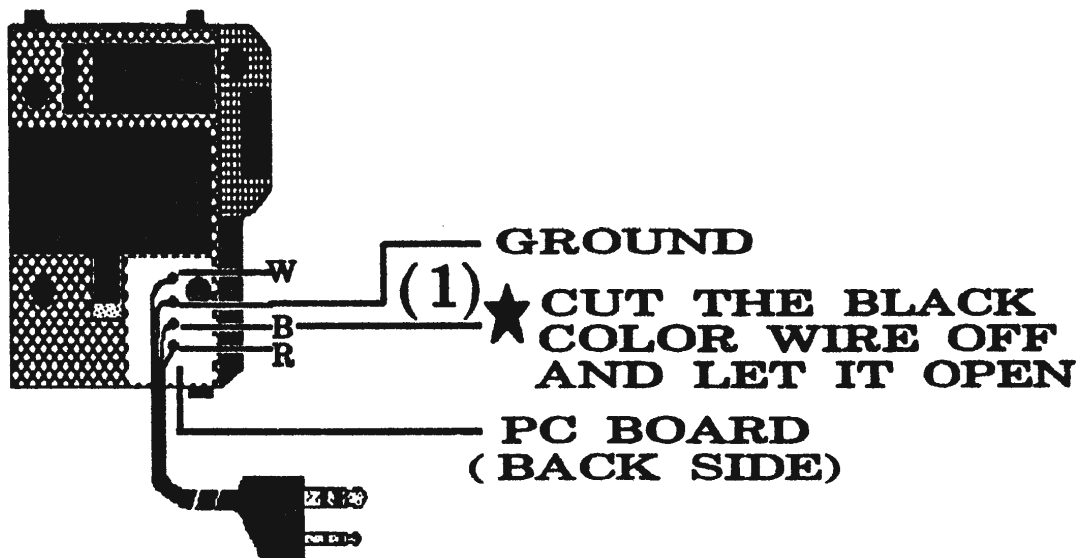
HOW TO MODIFY

1. **F117A** IS COMPATIBLE WITH BRAND 'STANDARD' , 'YAESU' , 'ICOM' TRANSCEIVER EXCEPT C520,C620.THE FOLLOWING DIAGRAM IS STANDARD CONNECTION OF **F117A**.



CIRCUIT DIAGRAM

2. FOR 'KENWOOD' SERIES EXCEPT TH-75 MODEL, IT MUST BE MODIFIED AS THE FOLLOWINGS:



(2)

★ R & W EXCHANGED POSITIONS.

3. FOR BASE-STATION TYPE TRANSCEIVER, YOU HAVE TO CUT THE ORIGINAL PLUG OFF AND PREPARE ANOTHER CONNECTOR AND DO AS THE ABOVE MODIFICATION.

CHAPTER 8

PROCEDURES WHEN MALFUNCTION OCCURRED

IN CASE OF MALFUNCTION HAPPENED ,
PLEASE DO AS FOLLOWINGS :

1. INSPECT THE VOLUME OF TRANSCEIVER WHETHER IT IS APPROPRIATED, ON THE SITE OF ABOUT ONE FIFTH OF FULL VOLUME.
2. THE PLUG WHETHER IT IS INSERTED CORRECTLY.
3. THE CODES OF BOTH PARTIES WHETHER THEY ARE SAME EXACTLY.
4. THE TRANSCEIVER, WHETHER IT BELONGS TO SUITABLE MODELS? 'STANDARD', 'YAESU' OR 'ICOM'.
5. INSPECT THE BATTERIES WHETHER THEY ARE POOR ELECTRICITY.
6. INSPECT 'PTT' BUTTON WHETHER IT HAS BEEN LOCKED.
7. CHECK THE DISTANCE OF COMMUNICATION, WHETHER IT IS OVER THE RANGE.

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