

# TS-480HX/480SAT EXTENDED FUNCTION

## ■ Type (Market Code) Settings (TX-RX unit : X57-663X-XX A/2)

CPU type	Mass-production market code type	Chip resistor settings			
		R216 (1k $\Omega$ )	R217 (1k $\Omega$ )	R218 (1k $\Omega$ )	R219 (1k $\Omega$ )
K	K	No	No	No	No
K2		No	No	No	Yes
H		Yes	Yes	Yes	Yes
E	E	No	Yes	Yes	No
E2		No	Yes	No	No
E3		No	No	Yes	No
E4		Yes	No	Yes	No

Table 1

## ■ RX Frequency Range

Type	RX frequency (Hz)	
	1.9M, 3.8M, 7M, 10M 14M, 18M, 21M, 24M, 28M	50M
K	$30\text{k} \leq f < 30\text{M}$	$30\text{M} \leq f < 60\text{M}$
K2		
H		
E		
E2		
E3		
E4		

Table 2

## ■ TX Frequency Range

Type	TX frequency (Hz)										
	1.9M	3.8M	7M	10M	14M	18M	21M	24M	28M	50M	
K	$1.8\text{M} \leq f$ $< 2\text{M}$	$3.5\text{M} \leq f$ $< 4\text{M}$	$7\text{M} \leq f$ $< 7.3\text{M}$	$10.1\text{M} \leq f$ $< 10.15\text{M}$	$14\text{M} \leq f$ $< 14.35\text{M}$	$18.068\text{M} \leq f$ $< 18.168\text{M}$	$21\text{M} \leq f$ $< 21.45\text{M}$	$24.89\text{M} \leq f$ $< 24.99\text{M}$	$28\text{M} \leq f$ $< 29.7\text{M}$	$50\text{M} \leq f$ $< 54\text{M}$	
K2	$1.705\text{M} \leq f$ $< 2\text{M}$	$3.1\text{M} \leq f$ $< 4.1\text{M}$	$6.9\text{M} \leq f$ $< 7.5\text{M}$	$9.9\text{M} \leq f$ $< 10.5\text{M}$	$13.9\text{M} \leq f$ $< 14.5\text{M}$	$17.9\text{M} \leq f$ $< 18.5\text{M}$	$20.9\text{M} \leq f$ $< 21.5\text{M}$	$24.4\text{M} \leq f$ $< 25.5\text{M}$	$28\text{M} \leq f$ $< 30\text{M}$		
H	$1.8\text{M} \leq f$ $< 1.825\text{M}$	$3.5\text{M} \leq f < 3.55\text{M}$ $3.79\text{M} \leq f < 3.8\text{M}$	$7\text{M} \leq f$ $< 7.1\text{M}$	$10.1\text{M} \leq f$ $< 10.15\text{M}$	$14\text{M} \leq f$ $< 14.35\text{M}$	$18.068\text{M} \leq f$ $< 18.168\text{M}$	$21\text{M} \leq f$ $< 21.45\text{M}$	$24.89\text{M} \leq f$ $< 24.99\text{M}$	$28\text{M} \leq f$ $< 29.7\text{M}$		
E	$1.81\text{M} \leq f$ $< 2\text{M}$	$3.5\text{M} \leq f < 3.8\text{M}$									$50\text{M} \leq f$ $< 52\text{M}$
E2	$1.83\text{M} \leq f$ $< 1.85\text{M}$									$50\text{M} \leq f$ $< 50.2\text{M}$	
E3	$1.81\text{M} \leq f$ $< 1.85\text{M}$										
E4			$50.2\text{M} \leq f$ $< 51.2\text{M}$								

Table 3

## ■ TX Frequency Range Expansion

1. Turn the transceiver OFF. Then disconnect the DC cable from the transceiver.
2. Remove the top case.
3. Loosen the 4 screws to remove the shield cover.

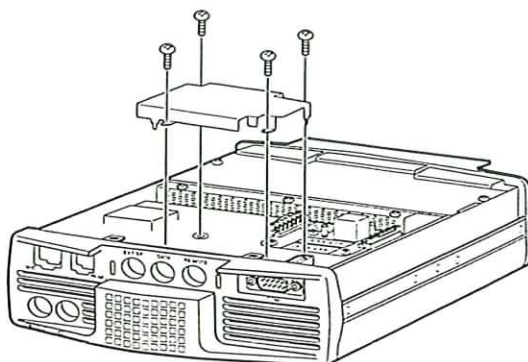


Fig. 1

4. Remove the chip resistor R221 (1k $\Omega$ ) to be mounted on the component side (near the microcomputer IC204) of the TX-RX unit (A/2).

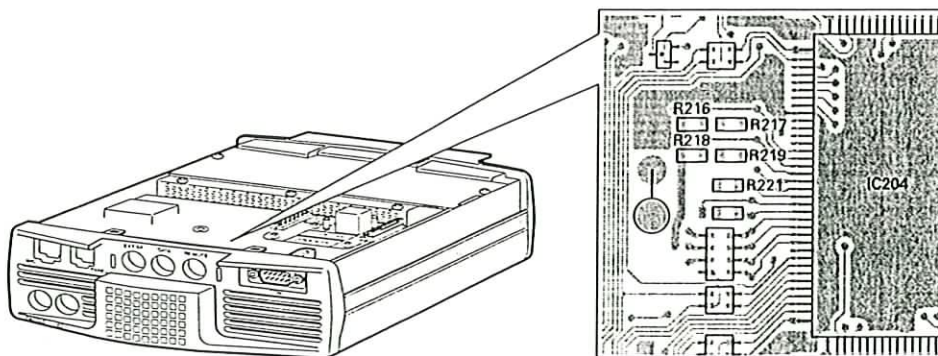


Fig. 2

5. Reinstall the shield cover removed in step. 3 above in its original position and tighten the 4 screws.
6. Reconnect the DC cable, which was disconnected in step.1, to the transceiver.
7. Turning the transceiver ON after the above extension, the transceiver performs full reset, by itself.  
All memory contents and menu settings are initialized to the factory default values.

## ■ TX Frequency Range Expansion

Type	TX frequency (Hz)	
	HF	50M
K, K2, H, E, E2, E3, E4	$1.705\text{M} \leq f \leq 30\text{M}$	$49\text{M} < f < 54\text{M}$

Table 4