

2. SPECIFICATIONS AND ACCESSORIES

2-1. SPECIFICATIONS

General		Transmitter-B	
Mode	J3E (LSB, USB) A1A(CW), A3E(AM) F3E(FM) F1A(FSK)	28MHz	SSB, CW, FSK, FM 110W (MAX) 20W (MIN) AM 40W (MAX) 10W (MIN)
Memory Channels	100 Channels.	Modulation	SSB Balanced modulation.
Antenna impedance	50 ohms. (With Antenna Tuner 20~150 ohms.)		FM Reactance modulation.
Power requirement	K and P type (120VAC±10%) M type (120/220VAC±10%) E type (230VAC±10%) T type (220/240VAC±10%) X type (120/240VAC±10%)		AM Low level modulation.
Power dissipation		Spurious radiation	Less than -40dB
Receive mode with no input signal	110W	Carrier suppression (with 1.5kHz reference.)	More than 40dB.(TS-950S) More than 50dB.(TS-950S DIGITAL)
Transmit mode	700W (7.5A)	Unwanted sideband suppression (with 1.5kHz reference)	More than 50dB.(TS-950S) More than 60dB.(TS-950S DIGITAL)
Operating temperature	-10 to +50°C (+14 to +122°F)	Maximum frequency deviation (FM)	Less than ±5kHz.
Frequency stability	Less than ±10 PPM.(TS-950S) Less than ±0.5 PPM.(TS-950S DIGITAL)	Frequency response (-6dB)	400 to 2600Hz.(TS-950S) 200 to 3100Hz.(TS-950S DIGITAL)
Frequency accuracy	Less than ±10 PPM.(TS-950S) Less than ±0.5 PPM.(TS-950S DIGITAL)	XIT variable range	±9.99kHz.
Dimensions (W×H×D)	409×154×446mm (Projections included 16-3/22"×6-1/16"×17-9/16")	Microphone impedance	500 ohms to 50k ohms.
Weight	23kg (50.6lbs)		
Transmitter-A		Receiver-A	
Frequency range		Circuitry	
160m band	1.8 to 2.0 MHz	Main SSB, CW, FSK, AM	Quadruple conversion superheterodyne.
80m band	3.5 to 4.0 MHz	FM	Triple conversion superheterodyne.
40m band	7.0 to 7.3 MHz	Sub SSB, CW, FSK	Double conversion superheterodyne.
30m band	10.1 to 10.15 MHz	Frequency range	100kHz to 30MHz.
20m band	14.0 to 14.35 MHz	Intermediate frequency	
17m band	18.068 to 18.168 MHz	Main	1st : 73.05MHz 2nd : 8.83MHz 3rd : 455kHz 4th : 100kHz
15m band	21.0 to 21.45 MHz	Sub	1st : 40.055MHz 2nd : 10.695MHz
12m band	24.89 to 24.99 MHz		
10m band	28.0 to 29.7 MHz		
Output Power		Sensitivity	
(With auto antenna tuner in "THRU").		SSB, CW (at 10dB S + N/N)	
1.9~24MHz SSB, CW, FSK, FM	150W (MAX) 20W (MIN)	100kHz~150kHz	Less than 2.5 μV
AM	40W (MAX) 10W (MIN)	150kHz~500kHz	Less than 1 μV
		500kHz~1.62MHz	Less than 4 μV
		1.62MHz~30MHz	Less than 0.2 μV

Receiver-B

AM(at 10dB S + N/N)		
100kHz~150kHz	Less than 25 μ V	
150kHz~500kHz	Less than 10 μ V	
500kHz~1.62MHz	Less than 32 μ V	
1.62MHz~30MHz	Less than 2.0 μ V	

FM(at 12dB SINAD)		
28MHz~30MHz	Less than 0.5 μ V	

Selectivity

SSB, AM(N), FSK

-6dB	: 2.4kHz
-60dB	: 3.8kHz

AM(W)

-6dB	: 6kHz
-50dB	: 15kHz

CW(N)

-6dB	: 250Hz(TS-950S DIGITAL)
-60dB	: 550Hz(TS-950S DIGITAL)

CW(W)

-6dB	: 2.4kHz (TS-950S)
	: 400Hz(TS-950S DIGITAL)
-60dB	: 3.8Hz (TS-950S)
	: 900Hz(TS-950S DIGITAL)

FM

-6dB	: 12kHz
-60dB	: 24kHz

Image ratio		More than 80dB.
1st IF rejection		More than 70dB.
Notch filter attenuation	..	More than 45dB.
RIT variable range		$\pm$ 9.99kHz

quelch sensitivity

SSB, CW, FSK, AM

100kHz~150kHz	Less than 6.3 μ V
150kHz~500kHz	Less than 2.5 μ V
500kHz~1.62MHz	Less than 10 μ V
1.62MHz~30MHz	Less than 0.5 μ V

FM	28MHz~30MHz	Less than 0.32 μ V
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Output	1.5W across 8 ohms load. (10% distortion)
Output load impedance	8 ohms.

2-2. ACCESSORIES

Unpack your TS-950S/950S DIGITAL carefully and confirm that it is supplied with the following accessories.

Dynamic microphone

T91-0352-15 1 ea.

DIN plug (7-pin)

E07-0751-05 1 ea.

DIN plug (13-pin)

E07-1351-05 1 ea.

Fuse (6A)(M type only)

F05-6021-05 1 ea.

Control location sticker

B42-3371-04 1 ea.

Instruction Manual

B50-8298-XX 1 copy.

External control Instruction Manual

B50-8351-XX 1 copy.

Warranty card

(U.S.A., Canada and Europe version only) 1 ea.

Attach the control location sticker on the upper case where it can be seen easily .

After unpacking

Shipping container:

Save the boxes and packing in the event your unit needs to be transported for remote operation, main-tenance, or service.

Notes

1. Circuit and ratings are subject to change without notice due to advancements in technology.
2. Remember to keep the transmitting output power within the power limitations of your license.