

Table 1-1. Type RS-111-1B-12 Receiving System, Specifications

Type of Reception . . . . .	AM, FM, CW
Frequency Range . . . . .	30-1000 mc in four bands: Band A, 30-60 mc; Band B, 60-300 mc; Band C, 235-500 mc; Band D, 490-1000 mc
Input Impedance . . . . .	To operate from 50-ohm source
Noise Figure . . . . .	Band A, 4 db max; Band B, 6.5 db max; Band C, 10 db max; Band D, 12 db max
Image Rejection . . . . .	Band A, 60 db min; Band B, 50 db min; Band C, 65 db min; Band D, 75 db min
IF Rejection . . . . .	Band A, 54 db min; Band B, 80 db min; Band C, 80 db min; Band D, 90 db min
Oscillator to Antenna Conduction . . . . .	Band A, 15 $\mu$ v max; Band B, 15 $\mu$ v max from 60-260 mc and 25 $\mu$ v max from 260-300 mc; Band C, 8 $\mu$ v max; Band D, 75 $\mu$ v max
IF Bandwidths . . . . .	Four total, two operating simultaneously: 2 mc and either 20 kc, 75 kc, or 300 kc selectable from front panel.
Band A and Band B Sensitivity	
20-kc Bandwidth . . . . .	AM: 1 $\mu$ v input, modulated 50%, produces 10 db (s plus n)/n min FM: 2 $\mu$ v input, modulated at 1 kc with 7-kc deviation, produces 21 db (s plus n)/n min
75-kc Bandwidth . . . . .	AM: 2 $\mu$ v input, modulated 50%, produces 10 db (s plus n)/n min FM: 3 $\mu$ v input, modulated at 1 kc with 25-kc deviation, produces 21 db (s plus n)/n min
300-kc Bandwidth . . . . .	AM: 4 $\mu$ v input, modulated 50%, produces 11 db (s plus n)/n min FM: 4 $\mu$ v input, modulated at 1 kc with 100-kc deviation, produces 21 db (s plus n)/n min
2-mc Bandwidth . . . . .	AM: 11 $\mu$ v input, modulated 50%, produces 10 db (s plus n)/n min FM: 12 $\mu$ v input, modulated at 1 kc with 750-kc deviation, produces 21 db (s plus n)/n min
Band C and Band D Sensitivity	
20-kc Bandwidth . . . . .	AM: 2 $\mu$ v input, modulated 50%, produces 10 db (s plus n)/n min FM: 4 $\mu$ v input, modulated at 1 kc with 7-kc deviation, produces 21 db (s plus n)/n min
75-kc Bandwidth . . . . .	AM: 8 $\mu$ v input, modulated 50%, produces 17 db (s plus n)/n min FM: 6 $\mu$ v input, modulated at 1 kc with 25-kc deviation, produces 21 db (s plus n)/n min
300-kc Bandwidth . . . . .	AM: 8 $\mu$ v input, modulated 50%, produces 10 db (s plus n)/n min FM: 8 $\mu$ v input, modulated at 1 kc with 100-kc deviation, produces 21 db (s plus n)/n min
2-mc Bandwidth . . . . .	AM: 22 $\mu$ v input, modulated 50%, produces 10 db (s plus n)/n min FM: 24 $\mu$ v input, modulated at 1 kc with 750-kc deviation, produces 21 db (s plus n)/n min
Band A and Band B Output Stability	
20-kc/75-kc/300-kc Bandwidths . . . . .	AM: Output varies less than 3 db for input range of 2 to 10,000 $\mu$ v FM: Output varies less than 2 db for input range of 1.5 to 10,000 $\mu$ v
2-mc Bandwidth . . . . .	AM: Output varies less than 4 db for input range of 4 to 10,000 $\mu$ v FM: Output varies less than 4 db for input range of 4 to 10,000 $\mu$ v
Band C and Band D Output Stability	
20-kc/75-kc/300-kc Bandwidth . . . . .	AM: Output varies less than 4 db for input range of 4 to 10,000 $\mu$ v FM: Output varies less than 2 db for input range of 3 to 10,000 $\mu$ v
2-mc Bandwidth . . . . .	AM: Output varies less than 4 db for input range of 8 to 10,000 $\mu$ v FM: Output varies less than 4 db for input range of 8 to 10,000 $\mu$ v
Outputs from 20-kc/75-kc/300-kc Bandwidth	
Audio Amplifier Response . . . . .	Within 3 db from 100 cps to 40 kc
Audio Output Power . . . . .	0.1 watt, min, into 600-ohm load, balanced or unbalanced
Video Amplifier Response . . . . .	Within 3 db from 50 cps to 150 kc
Video Output Level . . . . .	5 volts rms across a 10K unbalanced load
Narrow Band AM Video Output . . . . .	100 mV, rms across 1 M $\Omega$ unbalanced load