1212BL＋ Series
Radio Sweeper

User’s Manual

B. Polarity Test:

1. 1 By pressing SWITCH ⑧P/S, you will have the pulse signal for polarity test at the output end; when not pressing SWITCH ⑧, you will have the sweep signal at the test output end. You can judge the polarity by pressing SWITCH⑧.

1. 2 With the high (H), middle (M) and low (L) selection of range of output, you can change the test level of loudspeakers.

"H" is for general loudspeakers.

"L" is for MYLAR loudspeakers.

"M" is for dome loudspeakers.

1. 3 Condenser MIC: plug it into "MIC" for test.

1. 4 After the connection as described hereinabove, you move the tested loudspeaker near the MIC and LBD is on (pressing one f the polarity switch "+" or "-")—if the red LBD is on, it means the polarity of the loudspeaker at the red terminal of output line is "+"; if the green LBD is on, it means the it means the polarity of the loudspeaker at the red terminal of output line is "-". (POLARITY)

1. 5 For buzzer selection switch supported with LBD, the red indicator is on if the BUZZER switch "+" is pressed and then the buzzer alarms; the green indicator is on if the BUZZER switch "-" is pressed and then the buzzer alarms.

IV. Accessories

4.1 User's Manual (1)

4. 2 Power line (1)

4.3 Condenser microphone (1)

4.4 Output line (1 pair)

1212 Series Radio Sweeper adopts the advanced VCO Circuit, so that the stable and low-distortion sine wave signal is produced. The output scope and frequency is displayed digitally, with the sweep range at above 1: 1000. The starting point and end point of sweep can be set up as desired. (Max. output power for Model B≥20W, for Model D≥40W, for Model E≥60W, for Model F≥80W and for Model G≥100W). This unit has the functions of output delay at power-on and short circuit protection. Meanwhile, you can set up to test the "+" and "-" polarity of loudspeaker, earphone and dynamic receiver of various types, sizes and impedances. With easy operation, this unit is widely applied to acoustics, telecommunications and other many fields, and to the loudspeaker and sound box manufacturers in particular. This unit can produce the aural signal to test the sound and to accurately identify the polarity and pure tone index of loudspeakers.

I. Technical Parameters

A: Audio Frequency and Sweep

1. 1 Frequency domain: 20Hz-20KHz

1. 2 Frequency display error: display values $1\times10^4\pm1$ words

1. 3 Sine wave output scope: (Note: Model 1212BLD, E, F, G have no polarity function)

MP-1212 Model BL^+: 0---12.8vrms 8Ω load

MP-1212 Model D: 0---18vrms 8Ω load

MP-1212 Model E: 0---22vrms 8Ω load

1. 4 Output voltage display error: ±10%

1. 5 Sine wave frequency response: ±0.4dB (KHZ) status

1. 6 Sine wave distortion degree: ≤0.5%, 100HZ-20KHZ, other frequency rangs: ≤0.8%

1. 7 Output power: Model B≥20W, Model D≥40W, Model E≥60W,
Model F≥80W, Model G≥100W, 8Ω load

1. 8 Sweep mode: logarithm

1. 9 Sweep ratio: ≥1: 1000

1. 10 Sweep time: 1S-20S

1. 11 Synchronous output: TTL square wave

1. 12 Power supply: AC110V±10% 50HZ

1. 13 Operating environment: temperature: 0-40℃
Humidity:< RH90%
Atmospheric pressure: 86-105kpa

B: Main Parameters for Polarity Test Function

1. 1 Pulse width: 0.4ms.(0.2ms)

1. 2 Pulse amplitude: > 10VP-P (output scope at "H")
Output amplitude at "High": for general loudspeaker.
"L": Polyester resin (MYLAR) for speaker or moving-coil receiver

"M": For dome speaker

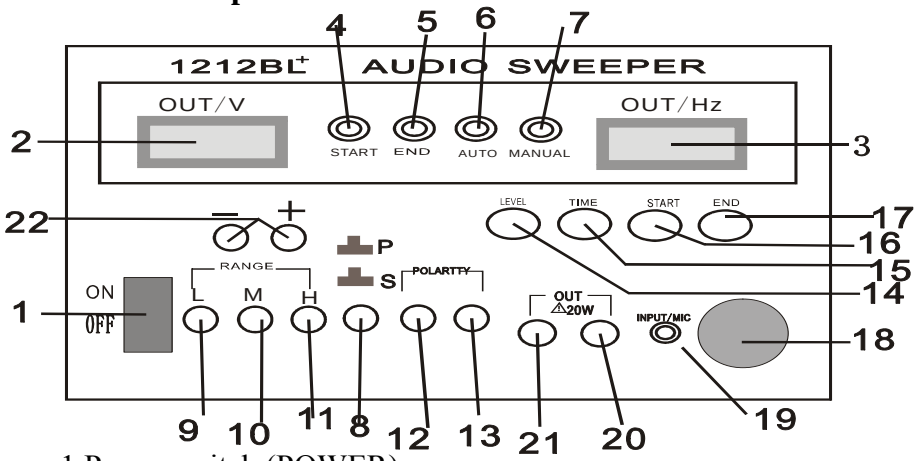
1. 3 Transducer microphone: Condenser microphone

1. 4 Buzzer: May shift "+" and "-" alarm

1. 5 Test sensitivity: ≥25cm

1. 6 Testing speed: 0.2S

II. Panel Description



1.Power switch (POWER)
2.Digital Voltmeter (V)
3.Frequency Display (HZ)
4.Starting Point Selection Switch (START)
5.End Point Selection Switch (END)
6.Automatic Sweep Switch (AUTO)
7.Manual Sweep Switch (MANUAL)

8.Sweep and Polarity Reversing Switch (P/S)
9.Polarity Test Output Low Grade (L)
10. Polarity Test Output Middle Grade (M)
11. Polarity Test Output High Grade (H)
12. 13. "+""-" Buzzer Supporting Polarity Indication Alarm Changeover Switch: "-" indicator is on and "+" polarity indicator is on.
14. Output Range Adjustment (LEVEL)
15. Sweep Speed Adjustment (TIME)
16. Starting Point Adjustment Knob (START)
17. End Point Adjustment Knob (END)
18. Manual Adjustment Knob (MANUAL)
19. MIC Input (MIC)
20. 21. Test Voltage Output End (red, black binding post)
22. Polarity Indicator

III. Instructions

A. Method of Sweep Test

3. 0 Sweep Test Switch ⑧ appears (S/P)

3. 1 Prior to power on, you have to adjust LEVEL to the minimum, and then power on the unit and warm it up for 10min.

3. 2 According to requirements of the tested speaker, you have to select the appropriate starting point and end point frequencies: (the end point frequency shall be higher than that of the starting point, or the sweeping will be stopped).

3. 3 After the correct connection of connecting line, you have to adjust LEVEL, with the output voltage less than 12.8Vrms for Model B, 18 Vrms for Model D, 22Vrms for Model E, 25.5 Vrms for Model F and 28.5 Vrms for Model G.

3. 4 After adjusting the sweep time as required, the unit will go to the sweeping status after you press SWEEP SWITCH.

3. 5 You can press SWITCH ⑦ (MANUAL) to adjust (18) if the manual adjustment is needed. (Note: the range of manual frequency modulation is confined between the starting point and end point.)