KENWOOD

SP-930

SPEAKER

We're happy that you've chosen the Model SP-930 for your receiving needs. It has undergone stringent quality control inspection and tests prior to packing and has left our factory in perfect operating condition. Please inspect your SP-930 carefully for any signs of damage in transit. If the unit is damaged, immediately notify the sales representative from whom you purchased the unit.

■ GENERAL

Your SP-930 is a sophisticated external speaker designed to further enchance operation of HF Transceivers. It features precise audio response and matches the KENWOOD HF transceiver in appearance. Its advantages are:

* Built-in selectable tone filters to attenuate high or low frequency response inputs;
* Two channel selectable input and the headphone output through the tone filters.

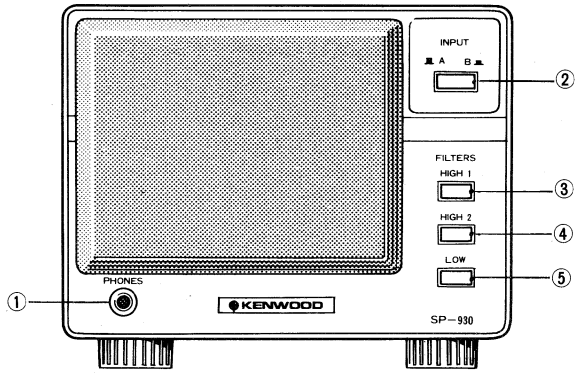
■ SPECIFICATIONS

Speaker used:	10 cm dia.
Rated Input:	1.5 Watts
Impedance:	8Ω
Frequency response:	160 Hz to 8kHz.
Filter cut-off frequency,	
LOW:	430Hz, −3dB.
HIGH 1:	2.3 kHz, −3dB.
HIGH 2:	1.0kHz, −3dB.
HIGH 1 + HIGH 2:	730Hz, −3dB.
Filter attenuation:	−6dB/oct.
Dimensions:	W 180 mm (7-1/16")
	H 140 mm (5-1/2")
	D 288 mm (11-1/3")
Net weight:	1.9 kg. (4.2 lbs.)
Accessories furnished:	Speaker cord, 1 pc. (E14-0101-05)
	1 pin plug, 2 pcs. (E20-1610-05)

■ PACKING

Please save the shipping cartons and packing material. They have been designed for the safe shipping of your unit. There will be considerably less chance of damage if you ship your unit in its original cartons and packing.

■ CONTROLS AND THEIR FUNCTION



Front Panel

1 PHONES connector
Standard headphone output, through the tone filters.

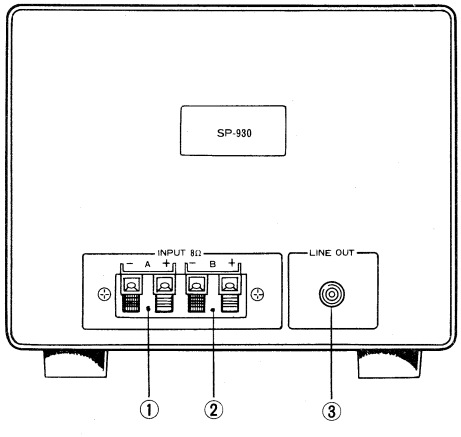
2 INPUT Switch
Selects one of two audio inputs.

3 FILTERS, HIGH 1 Switch
This switch attenuates frequencies above 2.3 kHz; −3 dB at 2.3 kHz, −6 dB/octave.

4 FILTERS, HIGH 2 Switch
This switch attenuates frequencies above 1.0 kHz; −3 dB at 1.0 kHz, −6 dB/octave.

FILTERS, HIGH 1 and HIGH together
These attenuate frequencies above 730 Hz; −3 dB at 730 Hz, −6 dB/octave.

5 FILTERS, LOW Switch
This switch attenuates frequencies below 430 Hz; −3 dB at 430 Hz, −6 dB/octave.



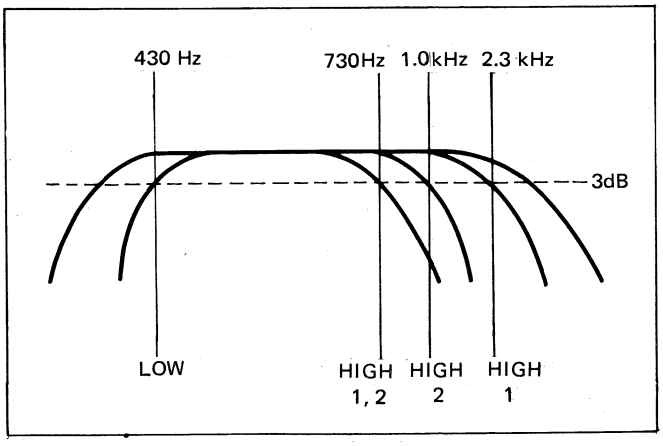
REAR PANEL

1,2 INPUT connectors
Accepts audio output from two sources.

3 LINE OUT connector
Standard line output through the filters for RTTY, SSTV, or similar use.

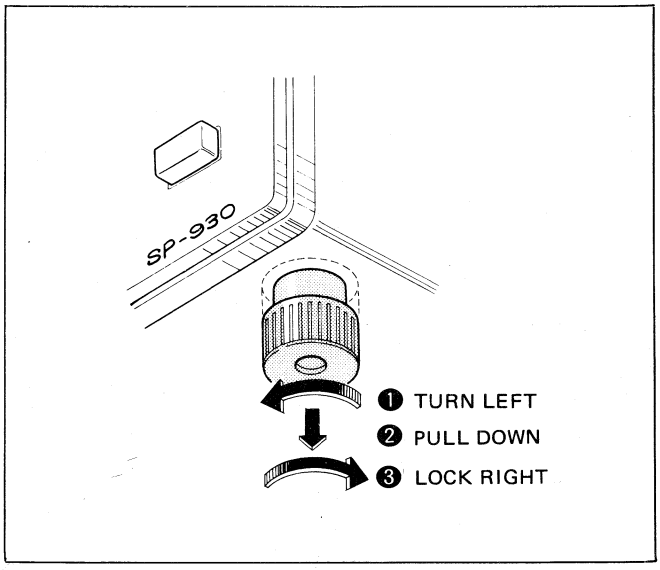
USING COMBINED FILTERS

1. When both HIGH 1 and LOW filters are engaged, the pass bandwidth ranges from 430 Hz to 2.3 kHz.
2. When both HIGH 2 and LOW filters are engaged, bandwidth is 430 Hz to 1.0 kHz.
3. HIGH 1 and HIGH 2, LOW filters engaged, 430 Hz to 730 Hz.



FRONT FEET

The front panel can be elevated for operating convenience by extending the front feet.
Turn the front feet left and pull down.
Then turn right to lock.

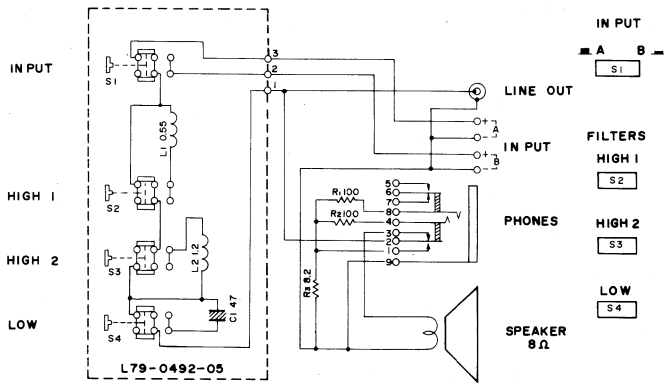


USE OF FILTERS

In general, it is desired that a CW, AM, or similar transmission be received clearly within the usual communication audio bandwidth, 300 Hz ~ 3 kHz. However, QRM, QRN or RFI may lower the overall signal-to-noise ratio at the receiver, resulting in degraded reception. In theory, as the pass-band width of the IF stages is narrowed, the equivalent noise bandwidth will also narrow, thus improving the signal-to-noise ratio. Alternately, the bandwidth of the AF stage can be narrowed to attenuate the noise component, enhancing reception.

Proper filter selection depends on transmission mode and type of noise encountered.

1. SSB: use the HIGH 1 and LOW filters, or the HIGH 2 and LOW filters. In more severe cases, use both HIGH 1 + HIGH 2, and LOW filters.
2. CW: use the HIGH 1 and HIGH 2 filters or HIGH 1 + HIGH 2 and LOW in combination.



A product of
TRIO-KENWOOD CORPORATION
17-5, 2-chome, shibuya, shibuya-ku Tokyo 150, Japan

TRIO-KENWOOD COMMUNICATIONS
1111 West Walnut Street, Compton California 90220, U.S.A.
TRIO-KENWOOD COMMUNICATIONS, GmbH
D-6374 Steinbach TS, Industriestrasse 8A, West Germany
TRIO-KENWOOD ELECTRONICS, N.V.
Leuvensesteenweg 504, B-1930 Zaventem, Belgium
TRIO-KENWOOD (AUSTRALIA) PTY. LTD.
4E Woodcock Place, Lane Cove N.S.W. 2066, Australia