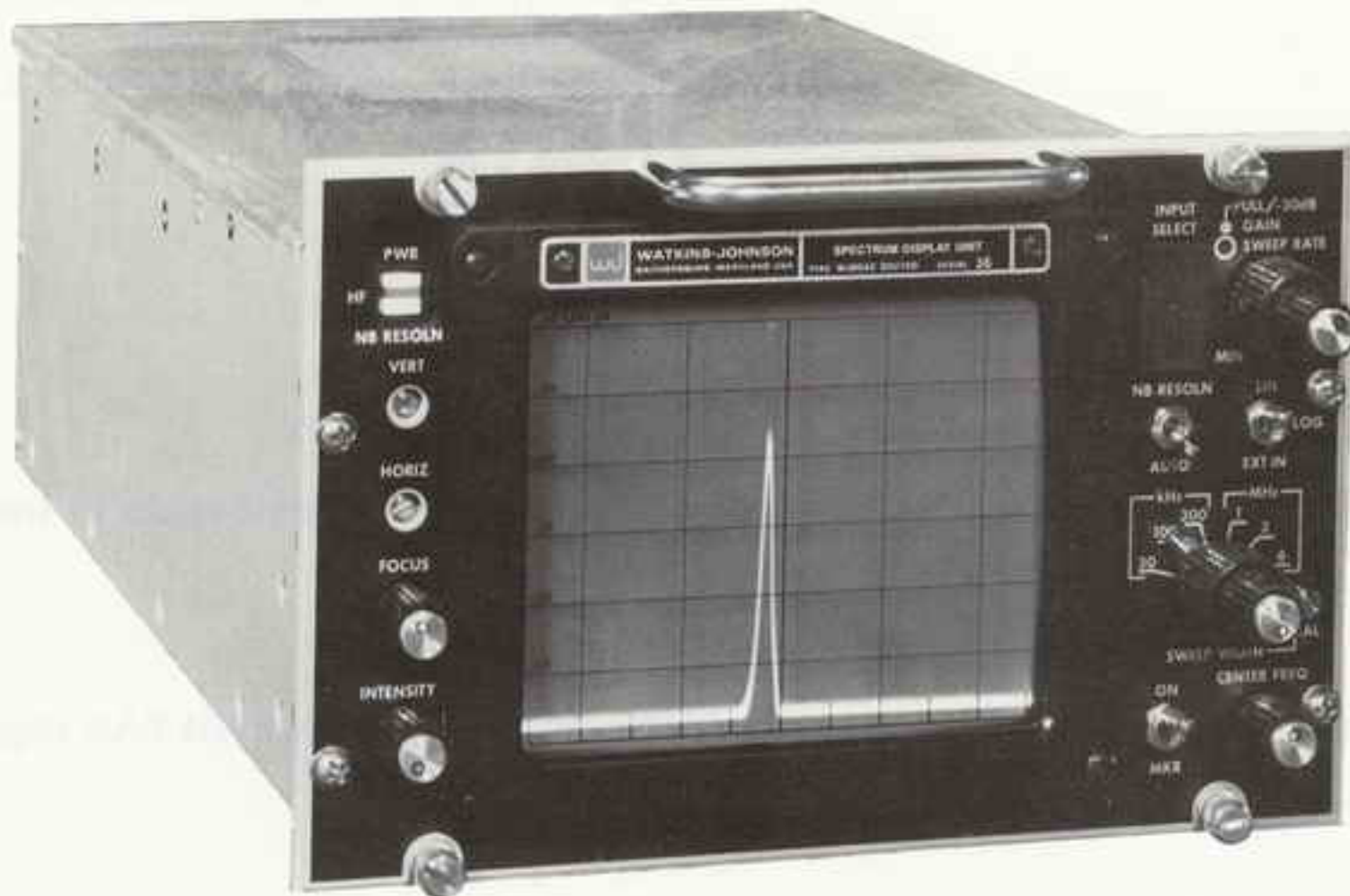


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WJ-9040 SDU100 SPECTRUM DISPLAY UNIT



FEATURES

- Large 5-Inch Diagonal Display
- One-Half Rack Size
- 21.4 MHz Input (455 kHz Optional)
- Switch Selectable/Continuously Variable Sweep Width
- 2 Hz to 40 Hz Sweep Rate
- External X-Y-Z Input Capability
- X-Y-Z Outputs to Ancillary Display

DESCRIPTION

The WJ-9040 SDU100 is a general purpose Spectrum Display Unit designed to present either VLF, HF, or VHF/UHF signal activity on a large 5-inch diagonal Cathode Ray Tube (CRT). This unit is a one-half rack WJ-9040 compatible unit with many standard and optional features available to enhance its versatility. The SDU100 is fully compatible with WJ-8625-X VLF, WJ-8626A-X HF, and WJ-8628-X VHF/UHF series receivers as well as

with other receivers which develop 21.4 MHz or 455 kHz signal monitor (SM) outputs.

The performance of the SDU100 is very good, yielding a third order input intercept point of +5 dBm, 60 dB of instantaneous dynamic range, and wide control range of sweep widths and rates.

When configured with the Multiple Signal Input (MSI) and HF Converter (HFC) options, the SDU100 can accept inputs from up to five VLF, HF, or VHF/UHF receivers. Fine resolution filters, 400 Hz, 2 kHz and 20 kHz, have been incorporated specifically for analysis of signals found in both the VLF, HF, and VHF/UHF spectrums.

Automatic sweep reverse of the display is provided when WJ-8628-X receivers and frequency extenders are used with the SDU100. A DC signal is superimposed on the SM input line from the WJ-8628-X which becomes active when the receiver IF spectrum becomes inverted, causing the SDU100 to invert its display, therefore normalizing the presentation.

SPECIFICATIONS

Input Frequency	21.4 MHz (455 kHz optional)
Sweep Width	0 to 6 MHz variable: 30, 100, 300 kHz and 1, 3, 6 MHz switch selectable in VHF/UHF. Defaults internally to 30 kHz for VLF/HF input with variable control
Sweep Rate	2 Hz to 40 Hz
Vertical Display Modes	Logarithmic -- 60 dB range Linear -- 20 dB range
Third Order Input Intercept Point (3IP)	+ 5 dBm
Resolution	2 kHz and 20 kHz in VHF/UHF
Display Size	5 inch diagonal
Sweep Reverse	Auto or Manual
Front Panel Controls	Intensity, Focus, Horizontal, Vertical, Center Frequency, Sweep Width - Switched and Variable, Sweep Rate, Gain, -30 dB Attenuator Lin/Log/Ext In, Marker On, Resolution Select
Dimensions	5.25 inches high 8.0 inches wide 14.4 inches deep
Power Consumption	15 watts
Operating Temperature	0 to 50°C
Storage Temperature	-40 to +70°C

OPTIONS

SDU100/HFC: VLF/HF input at 455 kHz with plug-in resolution filter of 400 Hz bandwidth. Internal DIP switches determine selection of 21.4 MHz or 455 kHz mode.

SDU100/MSI: Five selectable inputs by front panel five position select switch.

The WJ-9040 SDU100 can be configured with both MSI and HFC options to provide a SM PAN display from a user selected range of up to five VLF, HF and/or VHF/UHF inputs.

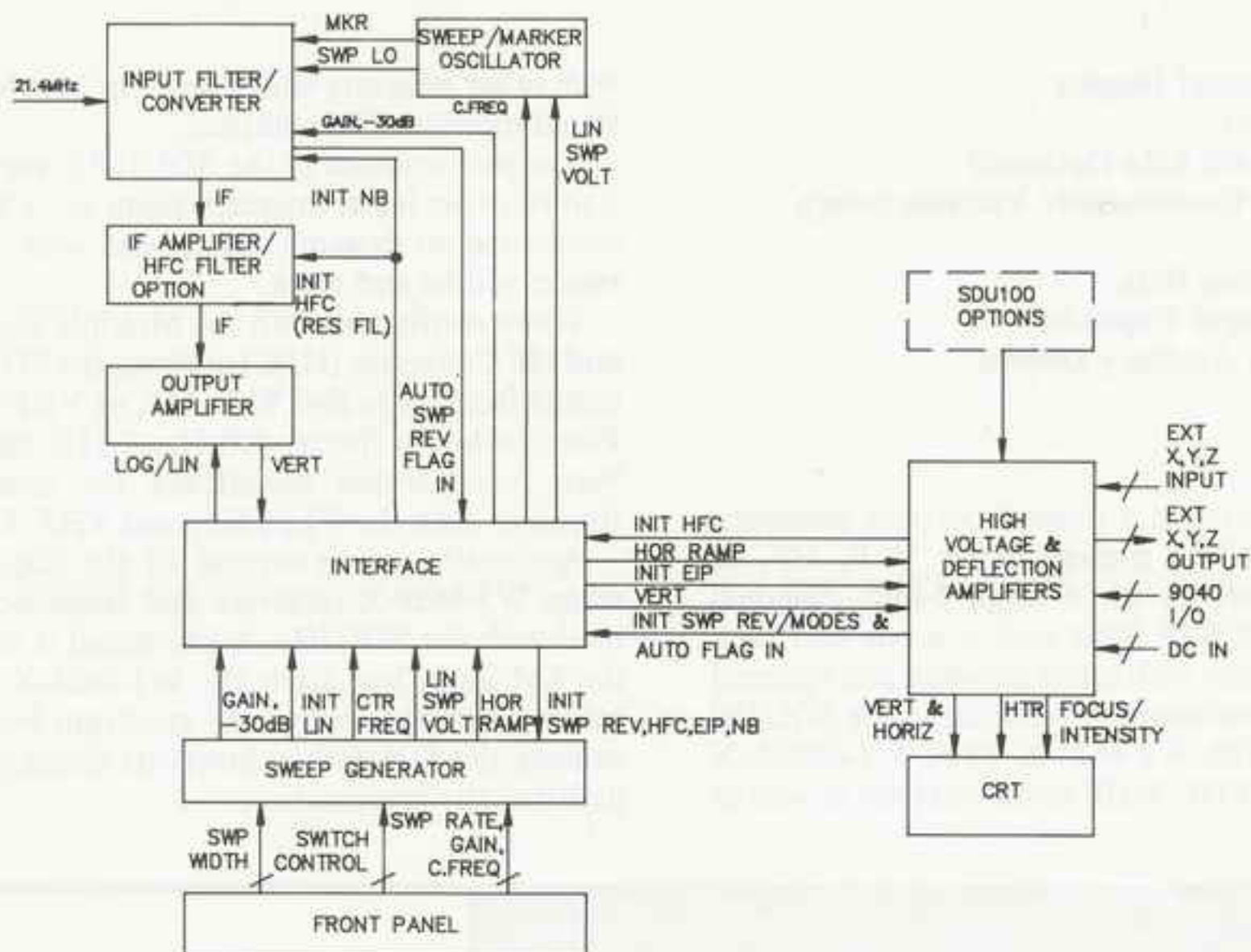


Figure 1. SDU100 Block Diagram