

Courtesy of <http://BlackRadios.terryo.org>

VHF/UHF MINIATURE WIDEBAND TUNER

The WJ-8655 is an extremely small [39.5 cubic inches (649 cubic cm)] general-purpose surveillance tuner that provides a frequency coverage from 20 to 2400 MHz. The small size and low power consumption make the unit ideal for surveillance applications where weight and power are critical.

- Frequency coverage:
Standard – 20 to 1000 MHz
UHF Extended – 20 to 2400 MHz
- IF output at 70 MHz – 6 selectable IF bandwidth filters from 1 to 45 MHz
- Low power consumption – 10 to 16 Vdc – 4.25 Watts
– 3.75 Watts using post-IF 70-MHz output only
- Control-compatible with the WJ-8654 Microceptor™ & WJ-8607A Miniceptor™



WJ-8655

MULTICHANNEL DIGITAL TUNER

This tuner provides up to eight RF channels, with a frequency range of 20 to 2000 MHz (tunable 10 to 2600 MHz), and a maximum tuning time of 60 microseconds. An operator can configure the tuner channels via remote control to tune independently, or in a phase-coherent direction finding mode, where channels share common local oscillators (LOs). In either operating mode, each tuner channel provides a digitized 10-MHz instantaneous bandwidth (2 MHz and 25 MHz bandwidths are also available) with 12 bits of precision.

A high-speed SCSI-2 handles remote operation and control of the WJ-9104A. A direct-tuning control interface allows precision triggering and timing.

The tuner design supports a variety of configurations. By changing the LO distribution scheme, the unit can support up to four dual-channels, or a combination of dual-channels and independent channels. Contact the factory to discuss different IF bandwidths, sample rates and analog-to-digital converters.

- 20 to 2000 MHz frequency range (tunable 10 to 2600 MHz)
- Up to 8 phase-coherent or independently tunable channels
- 75 dB SFDR
- 60- μ s tuning speed
- 2 MHz, 10MHz and 25 MHz bandwidths available
- Digitized IF outputs from each channel with 12 bits of precision



WJ-9104A



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WJ-9104B



MULTICHANNEL DIGITAL TUNER

The WJ-9104B provides up to eight RF channels, with a frequency range of 20 to 3000 MHz and a maximum tuning time of 60 microseconds. The WJ-9104B is suitable for various applications, which include precision DF, rapid signal analysis and antenna beamforming. Amplitude and phase distortion within each channel is minimized, as well as amplitude and phase mismatch among channels.

An operator can configure the tuner channels via remote control to tune independently, or in a phase-coherent Direction Finding (DF) mode, where channels share common Local Oscillators (LOs). In either operating mode, each tuner channel provides a digitized 10-MHz instantaneous IF bandwidth (2 MHz and 25 MHz also available) sampled at 25.6 MHz with 14 bits of precision.

The WJ-9104B consists of: Reference/LO Generator Module; LO Distribution Modules; Digital Interface Board; Motherboard; Power Supply and up to eight Digital Tuner Modules.

A high-speed SCSI-2 handles remote operation and control of the WJ-9104B. A direct-tuning control interface allows precision triggering and timing. The unit configuration may include either AC or DC power supply. The WJ-9104B is packaged in a single, standard 19-inch rackmount chassis and weighs less than 70 pounds (31.7 kg) fully loaded.

The WJ-9104B supports two modes of phase-coherent operation: 1x8 and 2x4 configurations. In the 1x8 mode, a channel is selected as the master and the remaining channels are either phase-coherent slaves to the master or independent tuners. The 2x4 mode allows two sets of no more than four coherent channels. In this case, two channels are designated as masters while the other six tuners must be in slave mode or independent.

- 20 to 3000 MHz frequency coverage
- 10-MHz instantaneous BW (2 MHz or 25 MHz also available)
- 85-dB Spur-Free Dynamic Range (SFDR)
- 60 μ s tuning speed
- Up to 8 phase-coherent or independently tunable channels
- Low phase and amplitude mismatch among channels
- Digitized IF outputs from each channel at 14 bits of precision

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MULTICHANNEL DIGITAL TUNER

The WJ-9104C provides up to eight RF channels, with frequency range of 20 to 2000 MHz (tunable 10 to 2600 MHz). A high-speed SCSI-2 handles remote operation and control of the WJ-9104C-X. A Direct-tuning Control interface allows precision triggering and timing. The unit is packaged in a single, standard 19-inch rackmount chassis, and weighs less than 70 pounds (31.7 kg) fully loaded.

An operator can configure the tuner channels via remote control to tune independently, or in a phase-coherent Direction Finding (DF) mode, where channels share common Local Oscillators (LOs). In either operating mode, each tuner channel provides a digitized 10-MHz instantaneous IF bandwidth sampled at 25.6 MHz with 12 bits of precision.

- Frequency range from 20 to 2000 MHz
- 10-MHz instantaneous BWs (others available)
- 75-dB Spur-free Dynamic Range (SFDR)
- 500 μ sec tuning speed
- Up to 8 phase-coherent or independently tunable channels
- Digitized IF outputs from each channel at 12 bits of precision

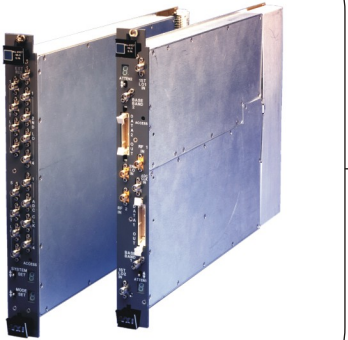


WJ-9104C



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WIDEBAND TELECOM TUNER

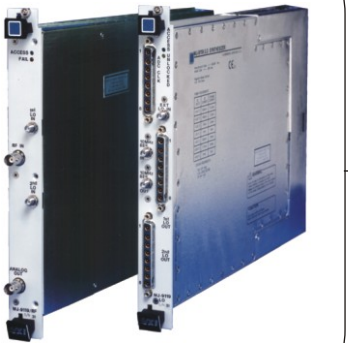


WJ-9107

The WJ-9107 is designed for the reception of cellular and PCS signals, and is suitable for multichannel applications requiring a high degree of phase and amplitude matching and stability. It consists of a dual-channel tuner and a dual-tuned synthesizer, each housed in a single-slot C-size VXI module. The nomenclature for these two units are the WJ-9107/DTM Dual-Tuner Module and the WJ-9107/DLO Dual Local Oscillator Module respectively. Each WJ-9107/DTM converter channel can digitize a 25-MHz bandwidth to facilitate user Digital Signal Processing. The WJ-9107/DLO Module provides synthesized tuning over cellular, cordless, wireless data and PCS bands.

- 800 to 1000 MHz & 1700 to 2000 MHz frequency range
- 1-MHz tuning resolution
- High SFDR: 75 dB
- 7-band preselection
- 12-bit analog-to-digital converter

HF TUNERS



WJ-9119A
WJ-9119A-1

The WJ-9119A and WJ-9119A-1 cover the 0.1 to 32 MHz frequency range, providing a 95-dB instantaneous SFDR in 4-MHz (WJ-9119A) or 8-MHz (WJ-9119A-1) bandwidths. The tuners specifically interface with Hewlett-Packard's E1430A (WJ-9119A) and E1437 (WJ-9119A-1) analog-to-digital converters for both single and multichannel applications.

The tuners use state-of-the-art architecture and component technology. Direct frequency converted paths ensure maximum performance for any input frequency. The units also incorporate special circuit design techniques and components, including a BAE SYSTEMS proprietary mixer.

- Frequency range from 0.1 to 32 MHz
- 250-kHz tuning resolution
- High SFDR: 95 dB, typical
- RF Tuner Module and Local Oscillator Synthesizer Module each housed in a single-width C-size VXI module
- Phase & amplitude stability between channels
- Built-in test circuitry

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DUAL HF TUNER

The WJ-9127 Dual HF Tuner covers the 0.1 to 32 MHz frequency range, providing 100-dB instantaneous SFDR in a 4-MHz bandwidth. Two tuners are housed in a single C-size VXI module.

The WJ-9127 combines state-of-the-art architecture with advanced component technology.

Direct and frequency converted paths ensure maximum performance for any input frequency.

The unit also incorporates special circuit design techniques and components, including a BAE SYSTEMS proprietary mixer. The tuner is designed specifically to interface with Hewlett-Packard's E1430A analog-to-digital converter.

- Frequency range from 0.1 to 32 MHz
- 4-MHz bandwidth
- High SFDR: 100 dB, typical
- 2 channels per 6U VXI slot
- VXI register-based control
- Excellent phase & amplitude stability between channels
- Designed for use with the WJ-9119 LO module
- Built-in test circuitry



WJ-9127

HF TUNER

The WJ-9128A HF Tuner covers the 0.1 to 32 MHz frequency range. Direct and frequency converted baseband tuning ensures maximum performance for any frequency input. The unit also owes its performance to unique circuit design techniques and components, including a BAE SYSTEMS proprietary mixer. The tuner consists of an RF Tuner Module and a Local Oscillator Synthesizer Module. Each is housed in a single-width C-size VXI module.

- Frequency range from 0.1 to 32 MHz
- 250-kHz tuning resolution
- High SFDR: 88dB, minimum
- 2-MHz bandwidth
- Internal 14-bit analog-to-digital converter
- Built-in test circuitry
- High-speed fiber optic digital output



WJ-9128A