parraid

PORTABLE X-5000/R RECEIVER-BIT SYNC DECOM ETHERNET UNIT

For stand-alone multi-stream real-time data processing and networked telemetry extensions

The high-performance X-5000 and X5000R units accept telemetry signal and IRIG time inputs and provides the industry-standard 1Gbps Ethernet interface for Chapter 10 packet output. The X-5000 and X-5000R may be configured with integrated multiband high-performance receiver modules for RF input, or bit synchronizer modules for noisy baseband data-only input. The X-5000 and X-5000R can provide independent variable-rate decommutation of two digital data/clock inputs or combine RF signals of two multi-band receivers. Both unit types may include Receiver AUX outputs for each RF channel input: Video, AGC, and AM signals. All configurations of the X-5000 and X-5000R include programmable A/B/G IRIG Timecode and provide 100ns resolution of the data and time packet outputs.

The X-5000R has been designed to replace the discontinued "heavy metal" rugged portable Receiver and PCM Data Bricks. The X-5000R provides passive cooling and a sealed enclosure for remote extreme operating conditions. Like the older Brick products, the X-5000R features BNC bulkhead signals for baseband data/clock I-O, audio output and IRIG time input.

NExT Foundation licensing – with Clarity Display software – is provided with the X-5000 for signal and raw data status monitoring, device configuration and control, and data archive support. Standard and Professional levels of NExT licensing are available for in-depth parameter processing, programmable data distribution, simulation, and analysis. With NExT real-time processing software, the X-5000 enables support for the most complex IRIG Ch4 (Class 1 and 2), Ch7, and Ch8, PCM signal inputs. Rx Control and Spectral Display software is also included for receiver support.

KEY FEATURES

PORTABLE

- ▶ Light-weight
- ▶ Compact 1U Size X-5000 and 1.5U X-5000R
- ▶ Commercial X-5000 and Rugged X-5000R enclosures*
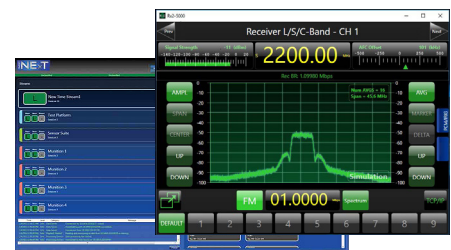- ▶ Optional High-performance Commercial or Rugged laptops

SCALABLE

- ▶ Two telemetry data and modulated IRIG time signal inputs
- ▶ RF L-S-C, noisy data-only, and/or TTL data-clock inputs
- ▶ Single processing platform: multiple units
- ▶ Programmable A/B/G IRIG Time input
- ▶ PCM-Embedded Hot Mic Audio outputs
- ▶ Serial Data/Clock and 1Gbps Ethernet outputs
- ▶ Selectable Chapter 10 UDP - TCP/IP network protocols
- ▶ Quicklook displays, complex decommutation, data storage
- ▶ Optional Receiver AGC, AM, and Video signal outputs

* Refer to specification sheets for more detailed information.
NExT Foundation - for decommutation, display, and storage - and Receiver software
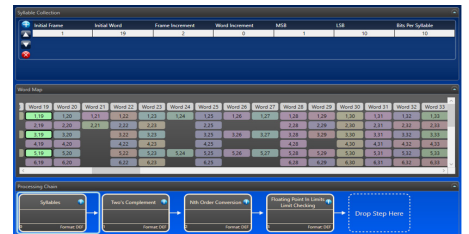*(when unit includes one or two Receivers), is included at no cost.*

The lightweight X-5000 and laptop for data processing provides a comfortable carry-anywhere telemetry groundstation.

No-cost software provides signal status monitoring, decommutation, and raw channel support.

FLEXIBLE

▸ Integrated multi-band high-performance L-S-C receivers and/or 1dB bit syncs

▸ Any PCM input type: IRIG Ch4, Ch7*, and Ch8 - multiple embedded async frames

▸ Bit Sync single-ended and differential inputs - programmable each PCM stream

▸ Independent Data/Clock input and output, each stream, for external decoder

▸ Minimal latency PCM-embedded audio output, programmable, each stream

▸ Status monitoring and data archival to complex processing and display

▸ 10MHz signal interface for multi-unit system - correlated time-data output

▸ Local stand-alone platform or network server for display clients

▸ 2-ch Receiver-Combiner / Best Source configuration

▸ Optional Antenna Control signals, each PCM stream

NExT parameter display and processing support

Front	Back

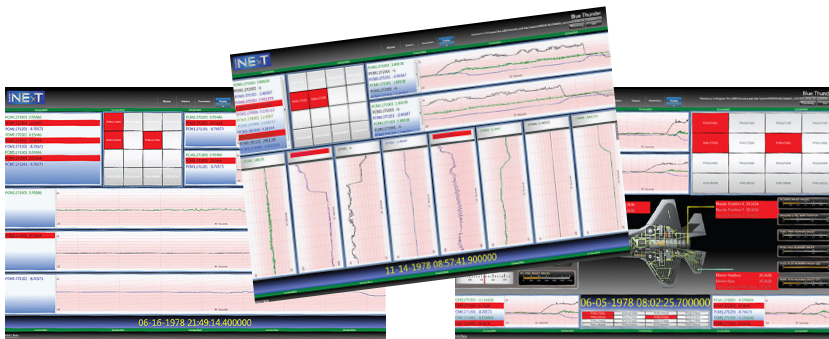*Light-weight portable and rack-mountable X-5000*

Front	Back

Rugged and portable X-5000R unit (requires shelf for rack-mount)

NExT Foundation included with all units; NExT Standard and Professional provide more complex parameter, stream, processing and display support

SYSTEM INCLUDES:

▸ Enclosure braces for 19" X-5000 rack-mount

▸ External AC/DC power supply

▸ SMA-BNC adaptors for X-5000

▸ Three-year Hardware Warranty Support; One-year Software Product Support

▸ BNC breakout cable for Aux Out configuration

▸ High-performance optional commercial / rugged laptops

* NExT Professional licensing required for Chapter 7 input with potential variety of multiplexed signal types.

DESIGN | BUILD | SUPPORT

X5000R-XX-PF Rev 00

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