ACOUSTIC RECEIVER

ARU

Acoustic signal receiver, recorder, analyzer, and player

Rugged, cost-effective, multi-purpose, analog data acquisition and analysis system

Features

- High channel count options
- Playback
- Export via Ethernet, DVD or USB
- Timecode annotation
- Removable system and data drives
- Event Recording
- Several chassis options, including TEMPEST Level III
- HMS and HMS-TORSIC interfaces

Recording:
- Single-ended or differential
- Variable gain on all channels
- 16 or 32-bit format
- Simultaneous sampling up to the highest sample rate on all channels
- Duration only limited by disk size
- Wave64 or IRIG-106 Chapter 10 formats

Analysis:
- Signal level meters
- Signal level history
- Real-time FFT display of all channels
- Real-time high-resolution FFT of a single channel
- Multi-channel oscilloscope
- Extend analysis with SoundView installation
    - ◊ single-resolution multi-channel
- Extend analysis with TrueView processing system
    - ◊ multi-resolution multi-channel
    - ◊ extended time history
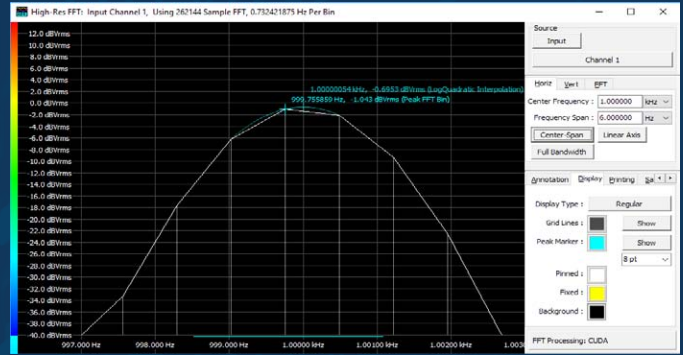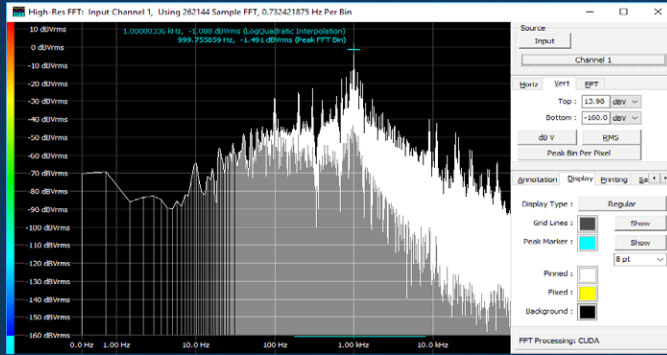   - ◊ aural listening/playback

Playback:
- 1:1 (input:output) signal reproduction
- Real-time data multicasting to thrid-party processing or custom software applications

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Technical Specifications

Analog

Option:	-70K	-01M
Signal Type:	Single-ended or differential	Single-ended or differential
Sample Rate:	4 to 144 kSPS	64 to 4000 kSPS
Bandwidth:	70 kHz	1 MHz
Quantization:	24-bit	24-bit
Input Signal Range:	{±1V, ±2V, ±5V, ±10V, selectable}	{±1V, ±2V, ±5V, ±10V, selectable}
Input Dynamic Range:	114 dB (unweighted)	114 dB (unweighted)
Input Gain Mismatch:	0.005 dB (0.1%) inter-channel	0.005 dB (0.1%) inter-channel
Input Phase Mismatch:	±120 ns inter-channel	±10 ns inter-channel
Input THD:	-100 dB @ -1 dB signal	-70 dB @ -1 dB signal
Input Imgedance:	1 MΩ	1 MΩ
Input Coupling:	DC	DC
Input Filter:	{1Hz high-pass filter, selectable}	-
Input Crosstalk Isolation:	95 dB @ 70kHz	80 dB @ 1 MHz
Output Signal Range:	{±1V, ±2V, ±5V, ±10V, selectable}	{±1V, ±2V, ±5V, ±10V, selectable}
Output THD:	-41 dB @ -3 dB signal	-41 dB @ -3 dB signal
Output Impedance:	170 Ω	170 Ω

Annotation Options

Voice	
Bandwidth:	4 to 8 kHz
IRIG Timecode	
I/O Level:	2 VPP

Storage Media

Type:	SSD or HDD
Form Factor:	2.5"
RAID:	0, 1, 5

Power

Input Voltage Range:	110-240VAC
Input Frequency Range:	50-60Hz
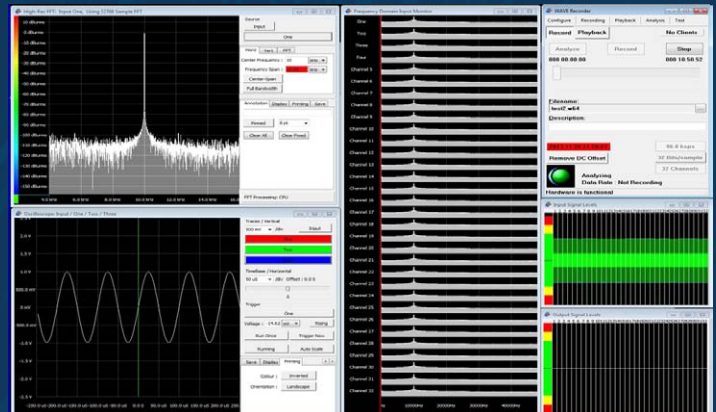
Ordering Options

ARU-BXXX-##-CX

BXXX	Maximum Bandwidth	{82K: 82kHz, 01M: 1MHz}
##	Number of channels	{08 to 1024 (multiples of 8)}
CX	Chassis	{ CN: 4U Rack (TEMPEST-III), CP: Portable, CR: Rack-mount, CW: Workstation }