

A New Concept In Professional Video Test & Measurement!



PHABRIX®

Designed in the spirit of the already successful and award winning portable Phabrix Sx series, the new Rx series promise a “new beginning” for test equipment in the pro-video industry. The new Rx2000 by Phabrix brings all of the unique Phabrix portable features into racked instruments – the Rx2000 is promising to become one of the most flexible solutions in the market today.



The Rx2000 system consists of a Main Unit and a variety of modules allowing the user extreme flexibility in system design. The main unit (Rx2000) is housed in a 19” 2RU standard rack mount and provides space for up to 4 modules. The instrument provides 2 x 4.3” screens; one is used for picture/source identification and the other screen for control and test screens. As well, the Rx2000 also provides a full resolution rasterized HD-SDI output enabling you to see your test screens in full 1080 x 1920 resolution. And, since the output is HD-SDI, you can effortlessly route your test screens to any point in your facility.

The Rx2000 main unit supports the HD-SDI and SD-

SDI functions of installed modules; adding 3G support requires the PHRX03G option; this option is part of the main unit and all Phabrix SDI related options support 3G-SDI as long as the main unit has the PHRX03G option installed.

NOTE : The Rx2000 does not work by itself; it is meant to be equipped with modules.

Available Modules include :

Rx-A Dual Input, Single Channel Module : Dual input analyzer provides waveform, vector, picture and status displays in various screen combinations. The Rx-A can only show one source at a time and can accept the Rx-EA Eye Pattern Mezzanine module.



Rx2000 Side View Showing “Tilt-In Bay Mechanism”

Rx-2A Dual Input, Dual Channel Module : Similar to the Rx-A above, the Rx-2A can show two SDI sources simultaneously.

Rx-GA Single Channel, Single Generator Module : Similar to the Rx-A above, the Rx-GA adds a single output generator. The Rx-GA includes an analyzer and generator in one module and can accept the Rx-EA Eye Pattern Mezzanine module.

Rx-EA Eye & Jitter Module : Eye pattern mezzanine module provides eye pattern and jitter measurement capabilities to the Rx2000. This option does not take up a slot; it actually installs on the Rx-A, Rx-2A and Rx-GA modules and provides eye pattern and jitter measurement capabilities for the signals being analyzed by these modules.

Rx-G Single Generator Module : Multi-format SDI generator provides a variety of test patterns, control over embedded audio signal generation and allows the use of bitmaps to upload your own test pattern.

Rx-2G Dual Generator Module : Multi-format SDI generator similar to the Rx-G above but provides 2 outputs enabling dual link and 3D (2 x HD-SDI signals) operation.

Available Options include :

Rx-03G 3G-SDI Compatibility : Adds 3G-SDI compatibility to the Rx2000 Main Unit. Once this option is added to the Rx2000, all SDI related Phabrix modules will also be compatible with 3G-SDI (in addition to HD/SD-SDI which is standard).

Rx-OEA Advanced Eye & Jitter Option : The Advanced Eye & Jitter option requires the presence of the Eye Pattern module (Rx-EA). This advanced measurements option provides an additional jitter screen and several enhancements to the eye pattern display; it is primarily focused toward broadcast equipment laboratories and manufacturing facilities who have the need for high-end analysis tools.

Rx-OSD SDI Analysis Option : The SDI analysis option provides the engineer with a detailed view of the data words contained within the SDI stream. This allows the analysis of complex faults and is particularly useful when determining compatibility issues between equipment and when debugging new product developments within an R&D environment. Detail within the active SDI stream can be viewed with continuous update. Analysis can be obtained from the generated or received SDI stream allowing quick comparison checks.

Rx-OS Command Scripts With Print Reports : This option allows a series of pre-defined actions to be run through within the PHABRIX Sx using a script stored in internal memory. It can be used to automatically step through a sequence of instrument states, controlling the generator, analyser and logging

functions. A print report feature allows an internal html form to be auto filled with parameters set and subsequently downloaded and printed.

Rx-OZ Programmable Zone Plate : This option adds a range of pre-programmed zone plate patterns along with user defined controls over several parameters which can be saved to custom buffers. In use the zone plate can be used to test a range of video processing requirements using horizontal, vertical and temporal (time) controls. Temporal control is particularly useful for testing up/down converters and applications which compress signals. Aspect ratios can be tested using the horizontal and vertical controls.

Rx-OF Advanced Formats For Rx-A and Rx-GA : This option introduces a variety of new formats to the standard set of 76 currently available. The new formats include 4:2:2 YUV, 4:4:4 RGB and 4:4:4 YUV at 10/12 bit and 3G level A and B. For broadcast manufacturers the new option allows rigorous testing of many more formats, beyond the standard signals used in traditional broadcasting. Among the support for 3G level B is the ability to generate and analyze signals such as SMPTE 425-B carrying 1 x 372M dual link payload.

Rx-OB D Dolby E Analysis : This option allows the display of Dolby-E meta data present in a selected audio stream and determines whether the Dolby-E packet is timed correctly on the SDI video stream. The Dolby-E may be monitored from any of the SDI input embedded audio channel pairs or the AES input. In use the start menu window displays both the V Bit information and PCM values along with a snapshot of the Dolby E metadata if a Dolby E signal is present. The peak audio levels included in the Dolby-E meta data packet are displayed on the Analyzer Audio Meters page.

Rx-XOL Loudness Metering : Provides essential measurement features for monitoring and analyzing audio loudness.

Rx-OVNC Ancillary Status : Monitors and reports issues in the Vanc/Hanc areas of SDI signals.

NOTE : *The above information is preliminary and subject to change without notice. The Rx2000 is a brand new concept; delivery is scheduled for July 2011.*



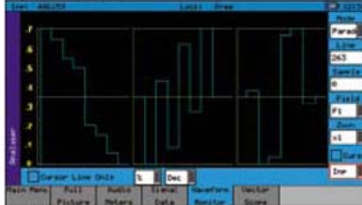
Rx2000 Rear Panel with one module installed; 3 slots open.

Below : Rx2000 Sample Screens

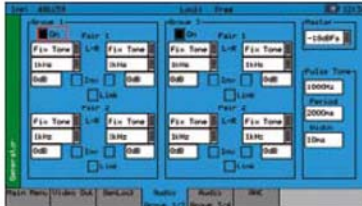
Standard



Top level menu



Waveform



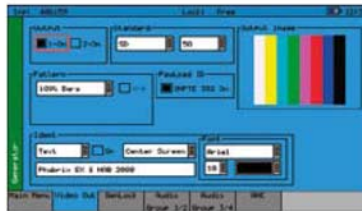
Audio pair grouping menu



Picture Monitor



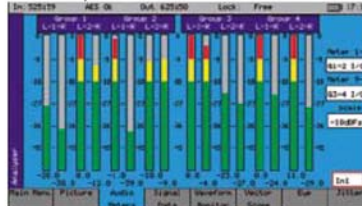
Audio channel status menu



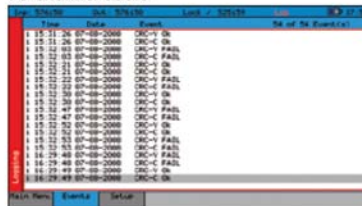
Video generator



Vectorscope



16 Channel audio

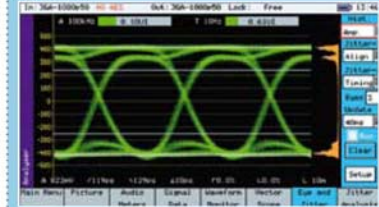


SDI fault logging menu

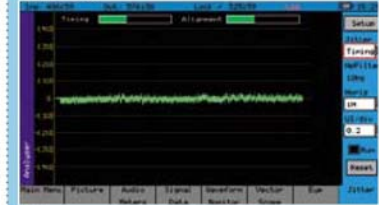


SDI status and payload menu

Options:



EYE menu



Jitter menu



Signal Data menu



Signal Ancillary data display



Script command window menu