

NAVIGATOR™ SYSTEM PROCESSORS

Loudspeaker
Controller

Matrix Mixer

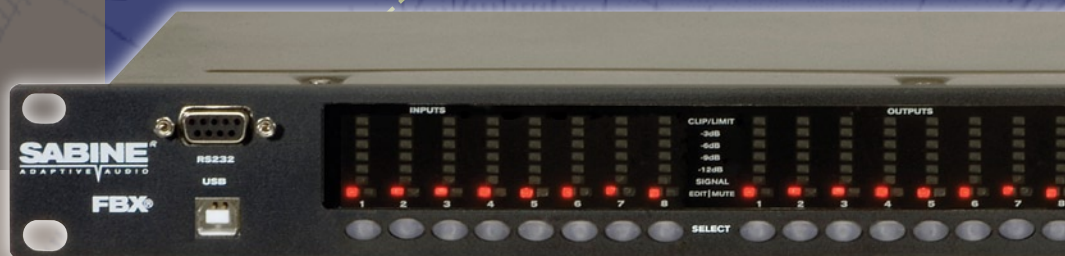
Signal Router

- Superior Sound Quality
- 96 KHz Sample Rate*
- No Limit on DSP Power
- Equalization
- Crossovers
- FBX Feedback Exterminator®
- Gain Management
- Routing
- Delay
- Presets
- Security
- Front panel or software control
- New wall-panel remotes
- RS232, USB, & Ethernet* connectivity

*NAV4802, 8802 only

SABINE®
ADAPTIVE AUDIO

The second generation of Sabine Navigators features a new hardware platform, new remote control software, intuitive wall-mounted remote controls panels, and a broader range of input/output choices for even greater flexibility. The five new Navigators offer fast setup of your production audio rig, easy and secure configuration of your commercial or worship sound system, and complete signal routing for multi-room venues. Steer your way to a better sounding system with the new Sabine Navigators.



The Sabine Navigator line of sound system processors just got bigger and better. Five new models comprise the second generation of Navigators, and they all feature a new hardware platform, new front panel design, new remote control software, and more input/output and control choices for even greater flexibility.

What we didn't change was the superior sound quality – in fact we enhanced it with the edition of 96 KHz sample rates on the top two models – the NAV4802 and the NAV8802.

Unlimited DSP

The Navigator Series is a complete multi-input/output digital system processor with full loudspeaker management, designed for commercial installation and production audio. The latest in available technology is utilized with 32-bit (40-bit extended) floating point processors and high performance 24-bit digital converters. The high-bit DSP prevents noise and distortion induced by truncation errors of conventional 24-bit fixed-point devices.

All functions operate concurrently and are controlled simultaneously. There is no need to compile any files or settings, the powerful Analog Devices SHARC processors handle the DSP processing. Best of all, you never run out of resources! All functions work together, so go ahead and set FBX feedback control filters on every input and compressors on every input and output – no problem!

Better Control

As the name implies, the Navigator is all about control. The new Navigator Remote Control software provides a heads-up display of all systems status and fast access to all parameters. The new version allows you to choose from two main views: Matrix or Mixer.

Equally powerful is the front panel control for those times when you need full access at the rack position. When integrating the Navigator as part of a larger system, choose USB, RS232, or Ethernet as your connection protocol. Serial and Ethernet-based touch screen control is also possible with all Navigators.

The new NAVRC-100 wall panel remote is an attractive, brushed aluminum 2-gang remote control that is wired to the Navigator for trouble-free remote control. The programmable switches are assigned functions, and the built-in LCD displays the name of each preset. Each NAVRC-100 is capable of controlling up to 8 Navigators, and each Navigator can be addressed and controlled by up to 8 NAVRC-100 wall-panels. This makes for a very powerful control system, and allows for multiple control points for multiple Navigators which can be mounted strategically throughout the installation.

Superior Audio Quality

One of the pioneers in the field of digital signal processing, Sabine's research and development into digital filtering technology provides an edge in both sound quality and reliability. The FBX Feedback Exterminator is one of the many innovations originating from the engineers at Sabine. This intense research is applied to all DSP functions of the Navigators, including equalization, level control, delay, polarity, routing, multiple crossover selections, and gain management.

Free firmware and software upgrades are easily done by connecting to Sabine's web site. You can always keep your Navigator current with newly developed algorithms and functions once available. Flexible save and recall functions and complete system security round out these rugged units.

The new Navigators continue the Sabine tradition of simplicity, flexibility, and value. Navigators will improve the sound quality and the adaptability of sound systems for churches, schools, boardrooms, theaters, concert halls, offices, retail outlets, and all levels of touring and production systems.

Contact Sabine today for a test flight of the new Navigator System Processors.

New Sabine Navigator™ System Processors

Set your course for a better sounding system...



- Loudspeaker Controller for Production Audio
- Matrix Mixer for Commercial Audio
- Signal Router for Distributed Audio



NAVRC-100 Wall Panel Remote

For Maximum Fidelity and Connectivity:



NAV8802



NAV4802

For Maximum Value and Flexibility:

...just choose
your destination.

NAV480



NAV360



NAV240



NAVIGATOR TOOLS

Equalization

- Parametric, Shelving, High & Low pass, 6-bands per each I/O
- FBX Feedback Exterminator, 8 filters per input

Crossovers

- Multiple types and presets
- Three filter types
- Slopes to 48 dB

Gain Management

- Gain on all I/Os
- Compressors
- Limiters

Routing & Delay

- All inputs to all outputs
- Polarity
- 450 msec available per channel (NAV4802, NAV8802)

Performance

- 96 KHz Sampling Rate (NAV4802, NAV8802)
- 48 KHz Sampling Rate (NAV240, NAV360, NAV480)
- 24-bit A/D, D/A Converters
- 32-bit (40-bit extended) processing

Memory and Security

- 30 programs, save and recall
- Multiple security levels, software & front panel
- All firmware and software upgradeable

Controls

- Front panel: Instant menu access and linking for each I/O; Gain LEDs for each channel; LCD, datawheel
- Remote: Navigator Remote Control Software via USB, RS232 Serial, Ethernet (NAV4802, NAV8802)
- Options: Digital Audio I/O, Wall-Panel Remote Interface

Models

- NAV4802: 4 in 8 out System Processor, with Ethernet, USB, RS232
- NAV8802: 8 in 8 out System Processor, with Ethernet, USB, RS232
- NAV4802-DA: with Digital Audio I/O
- NAV8802-DA: with Digital Audio I/O
- NAV4802-RC: with Wall-Panel Remote Interface
- NAV8802-RC: with Wall-Panel Remote Interface
- NAVRC-100: Wall-mounted Remote Control Panel (requires -RC Series Navigator)
- NAV240: 2 in 4 out System Processor, with USB, RS232
- NAV360: 3 in 6 out System Processor, with USB, RS232
- NAV480: 4 in 8 out System Processor, with USB, RS232

NAVIGATOR SPECIFICATIONS

Inputs and Outputs

Input Impedance: >10k Ohms
Output Impedance: 50 Ohms
Maximum Level: +20dBu
Type: Electronically balanced

Audio Performance

Frequency Response: +/- 0.1dB (20 to 20kHz)
Dynamic Range: 115dB typ (unweighted)
CMMR: > 60dB (50 to 10kHz)
Crosstalk: < -100dB
Distortion: 0.002% (1kHz @+4dBu)

Digital Audio Performance

Processor: 40-bit
Sampling Rate: 96 kHz (4802, 8802); 48kHz
(240, 360, 480)
Analog Converters: High Performance 24-bit
Propagation Delay: 1.5ms

Front Panel Controls

Display: 4 x 26 (4802, 8802) / 2 x 16 (240, 360, 480)
Character Backlit LCD
Level Meters: 5 segment LED
Buttons: Mute/Edit Controls, Menu Controls
Data Encoder: Embedded Thumb Wheel

Connectors

Audio: 3-pin XLR
RS-232: Female DB-9
USB: Type B
Ethernet: RJ45 (4802, 8802)
Power: Standard IEC Socket

General

Power: 100-240 VAC (50-60Hz)
Dimensions: 19"x1.75"x9" (483x44x229 mm)
Weight: 7lbs / 3.2kg

Audio Control Parameters

Gain: -40 to +15dB in 0.25dB steps
Polarity: +/-
Delay: Up to 650ms per I/O (4802, 8802); 50ms
per I/O (240, 360, 480)
Equalizers (8 per I/O)
Type: Parametric, Hi-shelf, Lo-shelf
Gain: -30 to +15dB in 0.25dB steps
Bandwidth: 0.02 to 2.50 octaves (Q=0.5 to 72)
Crossover Filters (2 per Output)
Filter Types: Butterworth, Bessel, Linkwitz Riley
Slopes: 6 to 48dB/oct

Compressor/Limiters

Threshold: -20 to +20dBu
Attack: 0.3 to 100ms
Release: 2 to 32X the attack time

FBX Filters

8 independent FBX digital filters per channel, each switchable between
FBX fixed filters and FBX dynamic filters
Filter depth: Maximum automatic depth adjustable from -6 to -40 dB
Filter width: user-controllable from 2.50 to .02 octave
Resolution: 1 Hz from 20 Hz to 20 KHz
Time required to find & eliminate feedback: typically 0.3 seconds @ 1 KHz

System Parameters

No. of Programs: 30
Program Names: 12 character length
Delay Units: ms, ft, m
Frequency Modes: 36 steps/oct, 1Hz resolution
Security Lock: Lock/Unlock, by menu and function
Copy channels: All parameters
Channel Names: 6 character length

Remote Control

Navigator Remote Control Software

- RS232 & USB: Standard on all units
- Ethernet: Control up to 16 Navigators per session; requires network switch

NAVRC-100 Wall-mount Remote Control Panel

- RS422 Control of up to 8 Navigators per panel; each Navigator can be addressed by up to 8 panels

Upgrades

Operating system firmware stored in Flash RAM. All future upgrades for firmware and software downloadable from Sabine website using Upgrade Wizard.

Notes:

Below approximately 200 Hz the feedback filters become slightly wider to increase the feedback and rumble capture speed at these low frequencies.

Tests performed using an Audio Precision System One model 322 or equal.

Specifications subject to change without notice.

Back Panels



NAV8802: 8 in 8 out System Processor



NAV4802 & NAV480: 4 in 8 out System Processor



NAV360: 3 in 6 out System Processor



NAV240: 2 in 4 out System Processor

One-year limited warranty
Patented†
Other Patents Pending

SABINE[®]
ADAPTIVE AUDIO

Complete Operating Guide & Catalog
available at our website

www.Sabine.com

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