



## Surround Sound Automated Multiformat Panner

### Do Surround Sound Now

Many mixing consoles in use today offer only stereo or possibly quad panning capabilities, and at best provide rudimentary monitoring functions for multichannel audio. Adding Martinsound MAX multiformat monitoring and metering solutions allows you to do contemporary surround sound projects on your existing stereo console, but dynamic surround panning is still a limitation.

### Add Real Surround Panning

PanMAX, Martinsound's multiformat surround sound panner, offers an automated panning solution allowing users to make sophisticated and repeatable dynamic pans for all current standard multichannel audio productions.

### You Want To Pan It Where?

By using a smart interface we call Virtual Panner Rendering™, PanMAX allows the engineer to pan anywhere within a virtual soundfield. PanMAX then emulates the virtual panner position with a multichannel VCA panner as closely as possible for whichever surround sound format is selected, optimizing for the number of channels and speaker positions.

### Just In Case You Might Forget

PanMAX won't! The SMPTE timecode based automation not only remembers to playback your moves on cue, but allows you to record one pan parameter at a time when necessary. Plus, PanMAX automation records only virtual panner information, so the same automation data can be used across most formats!

### Free Surround Sound Report

With the right information you can confidently add surround sound capabilities to your production environment. Request your free copy of Surround Sound Secrets. Phone us now at (800) 582-3555 or visit our website at [www.martinsound.com](http://www.martinsound.com).

# PanMAX

## Add Automated Surround Panning to Your Console



## Dynamic Surround Sound Panning

### PanMAX Automated Multiformat Panner

PanMAX provides straightforward surround sound panning for all the current standard formats of multichannel audio and film production. Why should you consider a standalone surround sound panner? Because, combined with other MAX products, PanMAX fills in the gap to provide cost effective surround sound mixing and monitoring from your current console.

### A Multiformat Panning Solution

The PanMAX system supports standard 5.1 mixing for Dolby® Digital, DTS®, DVD-Audio, and SACD®, but can also handle the new 6.1 formats such as Dolby EX and DTS ES. In addition, PanMAX can tackle SDDS® 7.1 mixing, and even the esoteric IMAX® and IMAX PSE® large-format film schemes. Of course, the older LCRS and Quad formats are also supported, plus with Virtual Panner Rendering™ your panning moves are rendered to playback optimally for each surround sound format.

### Grows to Meet Your Needs

A base PanMAX system is comprised of a comprehensive remote controller and a rU processor containing dual 8-channel VCA panners, providing the user with two channels of automated surround panning. The dual panners operate independently of each other allowing each of the two input channels to be placed anywhere in the virtual soundfield. Engage Stereo Lock and the dual panners unite, providing smooth left-right and front-back panning of stereo sources.

Need to pan more channels? Just add more processors to the system. Up to 14 panners (seven processors) can be accessed through a single remote controller. Need to make sophisticated counterpanning maneuvers between two audio sources in real time? Just add another remote controller. Even more remote controllers can be added, up to the total number of panners in your system.

### Remote Possibilities

The remote controller contains everything you need to get audio sources to jump through surround sound hoops! In addition to the system automation, function, and setup keys, the remote controller includes a pan joystick, three 60mm parameter faders, and a LCD to keep you well informed.

Want to pan quickly around the room? Try that with pan pots! The joystick gives you the advantage of a single control to pan anywhere in the virtual soundfield. When necessary, Joystick Lock holds the Virtual Panner position on either the X or Y-axis while allowing panning on the other axis, preventing dreaded "inter-dimensional wandering."

The Level/Z fader does double duty, generally acting as a Level control. But when PanMAX is set to an IMAX format the fader becomes a Z-axis or height control, enabling panning from the main system to the top of screen speaker.

The Focus control is the result of research that takes divergence to a new level of sophistication that we call Intelligence™. Intelligence integrates with the Virtual Panner Rendering engine, dividing the soundfield into logical Virtual Pan Zones™: Front L-R, Front-Back, Back L-R, and Top. Consequently, Intelligence can spread the audio within a single Virtual Pan Zone or between all Virtual Pan Zones, determined simply by the Focus setting.

The Stereo Width control varies the separation between stereo linked panners, allowing the engineer to expand or collapse the stereo image while panning the stereo source.

The informative LCD indicates:

Selected Panner ID	Setting & value of Level/Z fader
Selected Panner X/Y position	Setting & value of Focus fader
Selected Panner Level or Z setting	Setting & value of Stereo Width fader
Selected Panner Focus setting	Surround Format
Selected Panner Stereo Width setting	Surround Format speaker positions
X/Y position with ID of all Panners	SMPTE Timecode position
X/Y position & coordinates of Joystick	Setup Menus

### Automation To Get It Right

The built-in automation allows pan parameters to be recorded collectively or individually on subsequent passes, making it easy for PanMAX to build complex surround sound positioning and motion. Each panner is capable of storing over 24,000 positions and settings locked to SMPTE timecode, ensuring frame-accurate playback of the memorized sound position and parameters.

The automation also offers step recording of dynamic sound movements, allowing the engineer to mark exact panner positions to specific timecode frames. When played back against timecode, PanMAX generates a linear vector pan between subsequent sets of marks, producing smooth and continuous sound movement with precision positioning at the specified times.

Other automation features include Auto Mute, which silences the outputs of a panner whenever there is no automation data, and an offset function for adjustments against timecode, for example in synchronization with picture actions. Using standard Midi Sys Ex data files, automation data may be archived and recalled using a Midi sequencer or floppy drive. Optionally, panners may be controlled directly through MIDI.

### Not One, But Two Mix Inputs!

Finally, PanMAX provides two 8-channel Mix Inputs to its internal summing buses, making it easy to use lots of units without eating up more console inputs. What? You're out of console inputs? Simply plug your mix bus insert send into a PanMAX Mix Input and the PanMAX Mix Output into your mix bus insert return. PanMAX still has another Mix Input to return lots of units.

### The MAX Family of Solutions

Martinsound's MAX family of multichannel and surround solutions can be added in any combination to your existing stereo production system to extend its capabilities, allowing you to diversify and attract more business. So, whether you require surround sound panning in a standalone product or as part of a comprehensive surround sound add-on system for music recording, post production, broadcast or live performance, PanMAX can help you preserve your existing investment.

Phone us now at (800) 582-3555 or visit our website at [www.martinsound.com](http://www.martinsound.com) for more information on the MAX family of surround solutions, including:

**MultiMAX EX**  
Multiformat Monitor Controller

**PanMAX**  
Automated Surround Panner

**ForMAX**  
Surround Monitoring Formatter

**MonitorMAX**  
Stereo Monitor Controller

**RecordistMAX**  
Recorder Monitor System

**VuMAX**  
Surround VU Meters

And our new  
TMH Qualified  
MAX products

**ManagerMAX**  
Surround 5.1 Bass Management

**BalancerMAX**  
Surround 5.1 Systems Interface

**MicroPannerMAX**  
Surround 5.0 Panner

**FilterMAX**  
Surround 0.1 LFE Filter

**CheckMAX**  
Surround Alignment and Diagnostic Tools



PanMAX is available from selected  
dealers or directly from Martinsound

**(800) 582-3555**

Call to order or find a dealer near you

  
**Martinsound**

1151 W Valley Blvd, Alhambra CA USA 91803-2493  
Phone (800) 582-3555 or +1 (626) 281-3555  
Fax +1 (626) 284-3092 [www.martinsound.com](http://www.martinsound.com)  
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