PANNER TABS
Switch the controls between
Panners 1 and 2

PRESET LIBRARY
Presets by Tony Maserati,
Dave Pensado et al

PATH TYPE
Choose one of four
movement styles for
each Panner

**MODULATION
CONTROLS**
Apply channel delay
and more

SPHERE DISPLAY
Drag the handles
around to set the
Panner ranges

TRIGGER
Run your panning
continuously or
triggered

MIXER
Input, Output and
Panner levels,
and dry/wet Mix

**DYNAMICS
SECTION**
Apply compression
or distortion

MOTION FILTER
A high shelf filter for
dynamically shaping the Panners

GLOBAL SECTION
Route the external sidechain
to the Panner and more

Waves PC MAC

Brauer Motion $99

With a big name behind it and a snazzy GUI, is there more to this ambitious auto-panner than celeb cred and a pretty face?

> Conceived and designed by celebrated US mix engineer Michael Brauer (Coldplay, Florence and the Machine), Brauer Motion (VST/AU/AAX/RTAS) is an auto-panner that independently shifts the two channels of a stereo signal between the left and right and, thanks to the magic of psychoacoustics, front and back of the soundstage.

Two Panners are each set up in their own colour-coded control tabs (green for Panner 1, red for Panner 2), mixed with the dry signal in the Mixer section at the bottom, and collectively visualised in the Sphere Display (see boxout). The plugin comes in stereo and mono-to-stereo versions, the first assigning the left channel to Panner 1 and right to Panner 2, the second duplicating the mono input on both Panners.

Moving targets

The movement of each Panner is programmed in the top area of its Panner section. The auto-

panning can be synced to host tempo, run free at anywhere from 0.05 to 125 seconds per A-B cycle, or set to respond to the amplitude of the input or a sidechain signal (with adjustable sensitivity). Alternatively, Manual mode enables static positioning.

The Panners are set to one of three movement styles in the Path Type menu. Classic

> "Two Panners are each set up in their own colour-coded control tabs – green for Panner 1, red for Panner 2"

cycles between left and right; Circle and Circle Phase move in a horizontal circle with the closest point perceived as being at (Circle) or behind (Circle Phase) the listener position; and X Lights hard pans between left and right. In Synced and Free modes, the LFO controlling the auto-panning has four waveforms (sine, triangle, saw and square) available to all but the X Lights Path Type, which is saw-only. The Offset knob shifts the three markers (see boxout) together and becomes a Pulse Width control in X Lights mode; and the Reverse button flips the direction of movement.

The four controls below the Path Type dial in up to 200ms of channel delay and simulate the effect of distant signals taking longer to reach the ears than nearer ones, as well as reducing the perceived depth of movement and setting the limits of the panning range all the way 'outside the speakers', using the usual mid-side shenanigans to present a 200%-wide image.

The Sphere Display makes setting Panner ranges a snap and looks awesome

"The Dynamics section seems like an unusual feature at first, but quickly proves its worth"

Motion control

How auto-panning is initiated for each Panner is decided in the Trigger section, where one of six modes (including Off) is selected and an input or sidechain Sensitivity threshold defined. The Trigger modes include One-Shot (panning starts when the threshold is exceeded and completes the path when the signal drops below it again), Re-trigger (the same, but with the pan position freezing immediately when the threshold is undershot and continuing when exceeded again) and A to B (panning jumps to the A marker when the signal goes below the threshold and the B marker when the threshold is exceeded). Low frequencies in the input/sidechain can be taken out of the trigger signal with a 16-2000Hz high-pass filter, for tailoring the response to basses and kick drums.

The Dynamics section seems like an unusual feature at first, but quickly proves its worth as a quick and easy way to beef up and saturate each Panner's wet signal, dry signal or both. The Ratio control progressively transitions through compression to hard clipping, with the Drive knob applying gain-compensated input boost, and high- and low-pas filters on hand for curtailing excesses at the output.

Finally, the high-shelving Motion Filter sweeps from 100Hz to 18kHz and incorporates two Path Type-dependent cut/boost settings: Centre/Close and Sides/Far. These set the gain of the shelf when panning reaches the centre of the signal in Classic mode or the closest front-to-back point in Circle and Circle Phase modes, and either edge in Classic and X Lights mode or the furthest point in Circle and Circle Phase modes. The Motion filter does the business when it comes to drawing attention to (or away from) any particular area of the soundstage, and designing frequency-based proximity effects.

Pantastic

Brauer Motion is a surprisingly versatile spatialising toolbox that not only impresses with

The Dynamics and Motion Filter sections enable compression, distortion and dynamic filtering

Music of the spheres

More than just a fancy graphical element, the eye-catching Sphere Display is where you establish the start and end points for the movement of the two Panners, and visualise their action in real time.

The limits of the panning ranges are intuitively set by positioning the green (Panner 1) and red (Panner 2) A and B handles, while the Start handles mark the points at which movement begins. Under the Classic Path Type, for example, with the B handle at the far right and A dragged to the centre, the signal bounces between the centre of the image and the right hand side, while In Circle mode, putting A and B at

the same point either results in 360-degree circular panning or no panning at all, depending on whether they've been dragged towards or away from each other to get them where they are.

The dry signal is represented in the Sphere by a yellow ball that rises upwards and expands as the Mix knob is turned anticlockwise, and each of the three signals can be hidden by deactivating its Show button. In the Mixer below, meanwhile, the two Panners are levelled and muted, and their movement in the Sphere Display is stopped and started by activating and deactivating the two Stop buttons.

---

its intuitive one- and two-dimensional auto-panning, and the remarkable diversity of ways in which its movement can be triggered and shaped, but is also capable of generating a wealth of weird chorusing, phasing, vibrato and pseudo-tremolo effects. The total independence of the left and right channels plays a major role in its success, of course, along with the dry/wet Mix control and convincing Z-axis imaging; but the efficient, fun workflow and comprehensive parameter set come together brilliantly overall.

The Dynamics section and Motion Filter are excellent inclusions as well, giving Brauer Motion a characterful extra sonic dimension. If we could, though, we'd have the compression and distortion split into discrete processors, both rolled into the Motion Filter section, so that they too could be modulated by pan position.

That said, we find ourselves having fallen for Brauer Motion's undulating charms much harder than we expected to. What we assumed would be just an aggregation of conventional panning utilities in a self-contained plugin turns out to be a powerful, well thought-out device with plenty to offer the computer musician when it comes to both regular mixing and creative sound design. **cm**

Web www.waves.com

Alternatively

Cableguys PanShaper
cm231 » 8/10 » €34
Novel multiband panning plugin with detailed LFO waveform editing

Soundtoys PanMan
cm227 » 10/10 » $149
Auto-panning with audio triggering, filtering and more

Verdict

For Comprehensive 2D panning
Totally independent L/R control
Sphere Display works well
Dynamics and Motion Filter are handy
Mono-to-stereo version included
Fab preset library

Against Dynamics could do more

Packing all the panning facilities you're ever likely to need, plus a few cheeky extras, Brauer Motion is a spatialising winner

9/10