JL Cooper MCS- Panner

The JL Cooper MCS 3000 MIDI Panner provides a joystick for surround panning, along with other output and panner controls.

Requirements

- Pro Tools / HD –series or MIX-series systems.
- The MCS – Panner Controller Personality File, must be installed in the Controllers folder within your DAE folder. (Available from Digi Site).
- MIDI Ports. The MCS-Panner requires MIDI In and Out connections from your MIDI Interface in order to communicate with Pro Tools. Make sure your MIDI Interface has a pair of IN and Out ports available for the MCS –Panner. Connect the MCS-Panner according to the installation instructions provided with it.

ⓘ *Pro Tools can only support a single joystick panner at a time; you cannot attach more then one MCS-Panner, or combine the MCS- Panner with any other supported joystick control surface. Consequently, the MCS-Panner will be automatically disabled when an EditPack is present as a control surface in Pro Tools. You will not be able to enable a MCS-Panner or any other non-Digidesign panning control surfaces in the MIDI Controllers window while an EditPack is enabled as an Ethernet control surface.*

Installation and Configuration

The following are basic instructions for configuring and connecting the MCS-Panner. Refer to the MCS-Panner manual for additional instructions and information.

Dip Switches

On the rear of the MCS-Panner are four dipswitches that must be set. These dip switches define the particular MIDI messages which are sent from the unit and expected by the Pro Tools personality.

DIP Switch Settings on the MCS-Panner

Switches	Position
DIP Switches 1 & 2	OFF
DIP Switches 3 & 4	ON

To Install the JL Cooper MCS-Panner:

1 Connect the serial-to–MIDI cable provided by JL Cooper to the MIDI Interface.

- Connect the serial end to the serial port on the back of the MCS-Panner.
- Connect the double-ended MIDI cable to the appropriate In and Out ports on your MIDI Interface.

2 Make sure the MCS-Panner File is installed in the Controllers folder within your DAE Folder (System Folder > DAE Folder > Controllers). If it is not, download from link.

Configuring OMS and Pro Tools for the MCS Panner

See the configuration instructions in Chapter 1 for complete instructions on configuring OMS and Pro Tools for the MCS-Panner.

MCS-Panner

The JL Cooper MCS-Panner provides nine switches, five rotary controls, and a joystick (with top mounted trigger).

Controls and Functions

The following tables list the function of each control on the MCS-Panner.

MCS-Panner Switch Functions

Switches	Pro Tools Function
Select	Shift
S1	Move Selection Left
S2	Option, used for track and panner window navigation shortcuts
S3	Step Up through Main, Sends and Inserts on Selected track
S4	Step Down through Inserts, Sends and Main on Selected track

MCS-Panner Switch Functions

Switches	Pro Tools Function
S5	Move Selection Right
S6	Right Pan (LED lit when on Right Pan)
S7	Page 1, Page 2 (LED lit for Page 2). Selects the operating mode for the MCS Panner multi-function rotary knobs.
S8	Mute (LED lit when muted).

Rotary Controls

MCS-Panner Rotary Knob Functions

Knobs		
E1	F POS / F DIV	Controls Front Position (L<C>R) in mode page 1, or Front Divergence in mode page 2
E2	LFE / Center % (Percentage)	Controls LFE (Low Frequency Effects) in page 1, or Center Percentage in page 2
E3	F/R / F/R DIV	Controls Front to Rear Position (F/R) in page 1, or Front to Rear Divergence in page 2
E4	R POS / R DIV	Controls Rear Position (L/R) in page 1, or Rear Divergence in page 2
E5	VOL	Controls Panner Volume

Joystick

The Joystick on the MCS-Panner is non-motorized, non-touch sensitive. There is no visual feedback for positional movement when the panner is not engaged. The button on the top provides takeover.

Using the MCS-Panner

This section explains how to navigate (select tracks and panners) and pan using the MCS Panner.

Selecting Tracks and Panners

To Select the previous or next track:

- Press S1 (previous) or S5 (next). The currently selected track's Track Name is outlined in *red*, in the Mix and Edit windows.

To select a track's main, send or insert panners:

- Press S3 and S4 switches to scroll through the track's currently available Main or Send panners. The currently selected Output or Send will be outlined in *blue* as you cycle through the available choices on that track.

If more than one control surface is focused on an output or send, its outline will be highlighted in white.

Selection and Navigation Shortcuts

To go to the first or last track in a session:

- Press Option+S1 to go to the first track.
- Press Option+S5 to go to the last track.

To go directly to the selected track's main output:

- Press Option+S3.

To go directly to the selected track's Send 5:

- Press Option+S4.

Stereo Tracks and Panners

When panning stereo tracks, left and right sides can be planned independently (or unlinked).

To unlink stereo panners:

- Press Control while editing a parameter using the MCS-Panner.

Panning with the Joystick

The MCS-Panner features a joystick for 360° surround panning. There is a trigger button at the top of the joystick. Once the desired Panner or Output window is selected, panning can be input using the joystick (explained below) or the rotary knobs (explained in "Panning with the Rotary Knobs" on page 88).

To pan with the joystick:

1. Select the track you want to pan (see "Selecting Tracks and Panners" on page 87).

2. Press the Takeover button at the top of the joystick and begin panning.

Constraining Joystick Panning

Joystick panning can be constrained (or guided) to straight-line trajectories. Though the joystick will not constrain its movement, being non-motorized, the resulting panning moves will be constrained to the initial pan movement and direction.

To constrain panning to initial direction:

- Press the Select switch (or the Shift key) + pan using the joystick.

To constrain joystick panning to vertical (front/rear):

- Enable 3-Knob mode in the current Panner window (click its icon). When 3-Knob mode is engaged, horizontal (left and right) movements are ignored. Front/rear position along the current 3-Knob trajectory follows the joystick front/rear position.


See "Panning with the Rotary Knobs" on page 88.

Joystick Position and Takeover

The Takeover button engages absolute position when pressed. Therefore it is possible to have jumps in position when takeovers are done.

To minimize this, try to have the joystick as near as possible to the pan cursor's position, then trigger takeover. For example, place the joystick at the 12:00 position when automating pan moves starting from the default, 12:00 position of a track's pan cursor. Some offline automation smoothing may need to be done to eliminate undesirable snaps in position.

For details on Pro Tools automation, and surround panning, consult the Pro Tools Reference Guide.

Panning with the Rotary Knobs

The MCS-Panner rotary knobs provide direct control of Front, Rear, and Front/Rear Divergence, Center percentage, LFE level and channel Volume.

The MCS-Panner follows Pro Tools panning mode selection (3-Knob or standard).

Page 1 and Page 2 Modes

The rotary knobs on the MCS-Panner are multi-function controls that can be used for knob-based panning, or for divergence and parameter editing. Page 1 and 2 are selected with the S7 switch, as explained in the following instructions.

Fine-Adjust Mode

The MCS-Panner supports fine-adjust mode for all rotary controls, using the standard Pro Tools command.

To pan in fine-adjust mode:

- Command-rotate any knob.

To pan using the knobs:

1. Select the track and output you want to pan (see "Selecting Tracks and Panners" on page 87).

2. Make sure that the MCS-Panner is in Page 1 mode (the S7 "Page switch" LED is lit in Page 2 mode, off in Page 1).

3. Adjust the Front, Rear, or Front/Rear Position knobs as appropriate.

3-Knob Panning Controls

Pan Parameter	Rotary Knob
Front Position	Use E1
Rear Position	Use E2
Front/Rear Position	Use E3

Adjusting Other Parameters

The MCS-Panner rotary knobs can adjust channel volume, LFE contribution, Divergence parameters, and Center Percentage.

Channel Volume

To adjust channel volume:

- Use E5 (in either Page 1 or Page 2 mode)'

LFE

To adjust the LFE slider:

- Use E2 (make sure the MCS-Panner is in Page 1 mode).

Adjusting Divergence and Center Percentage

The MCS-Panner can adjust a panner's divergence and center parameters.

To adjust divergence:

1. Press S7 to put the MCS-Panner in Page 2 mode (the S7 LED is lit to indicate Page 2).

2. Adjust the Front, Rear, or Front/Rear Divergence knobs as appropriate.

Divergence Controls

Parameter	Rotary Knob
Front Divergence	Use E1
Rear Divergence	Use E4
Front/Rear Divergence	Use E3

To adjust Center Percentage:

1. Press S7 until the MCS-Panner is in Page 2 mode (the S7 LED will be lit).

2. Rotate E2 as desired.

Using Multiple Control Surfaces

Multiple control surfaces, and their current track or control focus, are indicated in Pro Tools using color outlines of the track or controls associated with each device.

Track selection (focus) of the MCS-Panner is indicated with a red outline of the Track Name.

Output and Send selection (focus) is indicated with a blue outline around the output or send display in the Mix and Edit windows.

When more than one control surfaces is focused on the same Output or Send, its display will be outlined in white.

MCS-Panner Information

JL Cooper's MCS-Panner features a high quality joystick mechanism, with function switches and LEDs. It is used 2 ways:

1. As a self-contained stand alone controller or
2. Connected to a JL Cooper MCS-3000 Series Controller (3800, 3400, or 3000)

1.
To operate the MCS-Panner as a self-contained controller, you will also need the optional **MCS-PAN-MIDIKIT**. The MCS-PAN-MIDIKIT consists of a special cable to provide MIDI IN an OUT, a power supply, and operation notes relating to specific digital mixers. Refer to the MCS-Panner Operation Notes included with the MCS-PAN-MIDIKIT for the proper DIP switch settings.

2.
You may physically join the MCS-Panner to another MCS-3000 series controller using the optional **MCS-Joiner**.

To connect the MCS-Panner to another JL Cooper MCS-3000 Series Controller, use the modular cable included with the MCS-Panner. Be sure to make all connections with the power off.

No external Power supply is required when connecting the MCS-Panner to a MCS-3000 Series Controller. The MCS-Panner obtains its power from the MCS-3000 Series Controller and data to and from the MCS-Panner is passed through the MCS-3000 Series Controller.

On the rear of the MCS-Panner is a four position DIP switch which selects the Panner's device ID number. The switch should be set when power is disconnected from the Panner. Notice that the switches are numbered so that the ON position is toward the bottom of the Panner.

To connect a single panner to another MCS-3000 series Controller, all four switches should be OFF (UP).