

## Ecler MULTICHANNEL POWER AMPLIFIERS

### MULTIPLE OPERATING POSSIBILITIES: TOTAL VERSATILITY

The crucial advantage of the MPAs lies in their multiple operating possibilities, easily configurable through the switches found on the rear panel. It's therefore possible to feed all channels with a single mono signal or on the other hand use each channel independently, for example for addressing 6 different zones. Between these two furthest apart possibilities lies a wide range of variants with simple stereophonic signal or amplifier combinations for bi-amping applications. Let's see this issue with greater detail.

### FOUR-CHANNEL AMPLIFIERS: MPA4-80, MPA4-150 AND MPA4-400

All three four-channel models offer the same operating possibilities but differ substantially in two basic aspects apart from their output power:

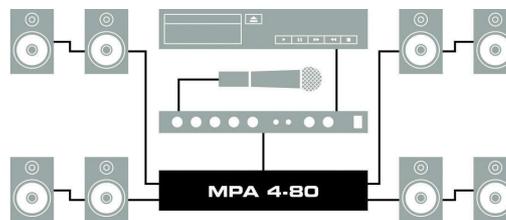
The MPA4-150/400 use SPM Technology (\*), while the MPA4-80 and MPA6-80 both use conventional technology. Additionally, the MPA4-150/400 include active high-pass and low-pass filters for bi-amplification systems.

These are the basic operating modes for these three models:

#### Four mono amplifiers for four different mono inputs.

When setup this way, the MPA4-80 is able to amplify four different audio signals, each one having a dedicated volume control.

*4 or 6 zone office using a SAM 502 mixer with talkover connected to a microphone and a background music source.*



#### Four mono amplifiers for one common mono input.

The amplifier operates now with just one input signal for all amplifiers, but preserves the ability to control each channels volume independently. This setup is useful when distributing signals to different zones.

#### Four mono amplifiers for one common stereo input.

This setup is similar to the previous example but the input is now a stereo signal. The amplifier adds both stereo channels together converting them into a mono signal.

#### Two stereo amplifiers for two different stereo inputs.

Each stereo channel offers a dedicated volume control. Useful for addressing two zones with two different stereo signals.

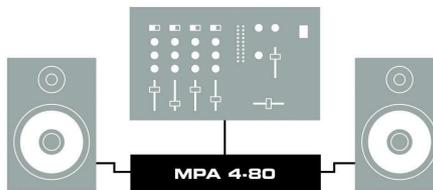
#### Two stereo amplifiers for one common stereo input.

This setup is similar to the previous example but the input is now a single stereo signal which is fed to both amplifiers.

#### Two bridged amplifiers for two different mono inputs or one stereo input.

Now you get a typical stereo amplifier configuration. With a bridged amplifier you obtain doubled output power with a load of at least 8 Ohm.

*Standard stereo amplifier connected to a mixing console. Suitable for a wide range of applications.*



#### Two bridged amplifiers for a common mono input.

The MPA operates now with a single mono signal for two mono amplifiers, each one with its own volume control.

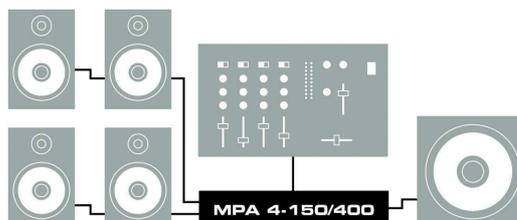
#### Two bridged amplifiers with two mono outputs for a common stereo input.

This setup is similar to the previous example but the input is now a stereo signal. The amplifier adds both stereo channels together converting them into a mono signal.

#### One stereo amplifier and one bridged amplifier for one common stereo input.

Useful for bi-amplified setups, with two amplifiers for mid-range speakers and tweeters and a third (bridged) amplifier for a subwoofer.

*An MPA4-150 or MPA4-400 in bi-amplified configuration is a perfect configuration for a pub, disco bar, small disco and/or mobile DJs.*



## SIX-CHANNEL AMPLIFIERS: MPA6-80 AND MPA6-150

The MPA6-80 amplifier station consists of six 78W/4 ohms amplifiers, while the MPA6-150 offers six 160W amplifiers. Both units can be configured through a set of switches found on the rear panel. The MPA6-150 includes active high-pass and low-pass filters for bi-amplification systems. This allows multiple amplification setups useful in many situations, for example:

### Six mono amplifiers for six different mono inputs.

When setup this way, the MPA6-80 is able to amplify six different audio signals, each one having a dedicated volume control.

### Six mono amplifiers for one common mono input.

The amplifier operates now with just one input signal for all amplifiers, but preserves the ability to control each channel volume independently. This setup is useful when distributing signals to different zones.

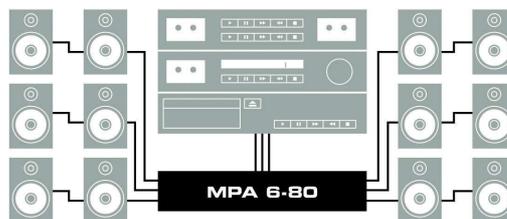
### Six mono amplifiers for one common stereo input.

This setup is similar to the previous example but the input is now a stereo signal. The amplifier adds both stereo channels together converting them into a mono signal.

### Three stereo amplifiers for three different stereo inputs.

Each stereo channel offers a dedicated volume control. Useful for addressing three zones with three different stereo signals.

*Shop with three stereo back ground music programs from three independent sound sources. MPA 6-80 in a triple stereo configuration.*



### Three stereo amplifiers for one common stereo input.

This setup is similar to the previous example but the input is now a single stereo signal which is fed to both amplifiers.

### Three bridged amplifiers for three different mono inputs.

You can address three zones with three different mono signals, keeping the possibility to adjust all three levels independantly. With a bridged amplifier you obtain doubled output power with a load of at least 8 ohm.

### Three bridged amplifiers for a common mono input.

The MPA operates now with a single mono signal for three mono amplifiers, each one with its own volume control.

### Three bridged amplifiers for a common stereo input.

This setup is similar to the previous example but the input is now a stereo signal. The amplifier adds both stereo channels together converting them into a mono signal.

### Two stereo amplifiers and one bridged amplifier for one common stereo input.

Useful for setups where two stereo amplifiers are required and a bridged amplifier which drives a larger enclosure with the L+R sum.

**SPM(\*)** With this technology, ECLER introduced in 1989 a new concept to the world of professional audio: The use of switching field effect transistors. The SPM-Technology (Switching Power Mosfet) has been developed and patented by ECLER, S.A. The use of these parts for audio applications represents a firm and spectacular enhancement comparing to conventional amplifiers. These advantages can be outlined as follows:

- Lower internal resistance than bipolar transistors, which leads to less heating of the amplifier and more powerful and controllable bass. Conventional Mosfets have a 4 to 7 times bigger internal resistance than switching Mosfets.
- The extremely high speed of these devices gives a transparency to the upper frequencies till now only achieved by tube amplifiers. This fact also reduces TIM (transitory intermodulation) to very low levels.

TECHNICAL CHARACTERISTICS	MPA4-80	MPA6-80	MPA4-150	MPA6-150	MPA4-400
POWER 20-20kHz at 1% THD					
1 Channel @ 4Ω WRMS	78	78	147	160	410
1 Channel @ 8Ω WRMS	52	52	100	106	230
All Channels @ 4Ω WRMS	53	58	112	116	310
All Channels @ 8Ω WRMS	40	41	83	84	200
1 Bridged channel @ 8Ω	106	116	224	240	620