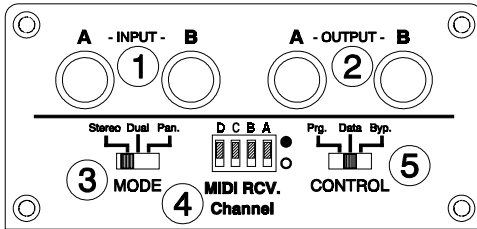


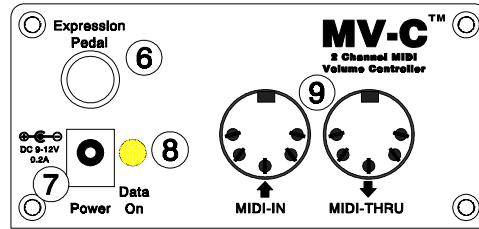
Owners-Manual

Thank you for purchasing this product!

The MV-C is a 2 channel MIDI controllable volume attenuator. With it's variety modes it can be used for a lot of applications. Even mixing automation via MIDI is possible. The MV-C sends and receives PHANTOM Power so that it is possible to stack several MV-C's together. An external expression pedal can control the volume or pan.

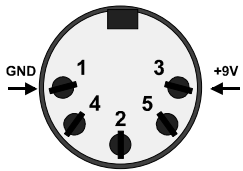


- 1) INPUT A and B
- 2) OUTPUT A and B
- 3) MODE selector Stereo - Dual - Pan.
- 4) MIDI RECEIVE CHANNEL selector (1-16)
- 5) CONTROL selector Prg. - Data - Byp.
- 6) INPUT for a Expression pedal



- 7) Connect a 9V (9V up to 12V) to this jack. Please check the correct polarity before.
- 8) POWER LED : Lit when power is supplied and flashes on each incoming MIDI signal: - Slow: Midi data accepted - Fast: Midi data ignored.
- 9) MIDI IN and MIDI THRU jacks. MIDI-IN receives and MIDI-THRU sends PHANTOM Power.

PHANTOM POWER:



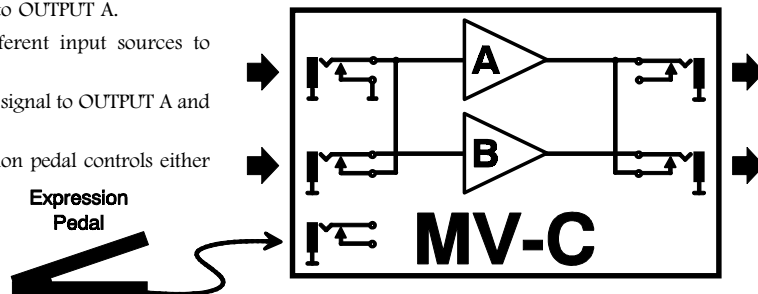
Some other manufacturer are also using the MIDI jacks to distribute power from one unit to another (Phantom power). This is easy to handle and you can probably save nerves, time and money which means you need one power adaptor less. The required power may now be supplied from your MIDI effect or keyboard.

The idea of the polarity and the connection is described in the ELECTRONIC MUSICIAN issued #12/89. Some other manufacturer are also using this idea!

! This is not a standard. Please check your equipment before using it!

MV-C BLOCK DIAGRAM

- 1) If INPUT B is not connected, channel B will be supplied with the signal of INPUT A.
- 2) If OUTPUT B is not connected the signal of channel B is switched to OUTPUT A.
- 3) You can mix two different input sources to OUTPUT A.
- 4) You can mix one input signal to OUTPUT A and B.
- 5) The connected expression pedal controls either volume or pan depending on the MODE setting.



KTA980417-0420

MIDI RECEIVE CHANNEL

- 1) Choose a MIDI receive channel (1-16) and adjust the 4 switches (4) regarding to the imprint on the unit or the table:

CH:	D	C	B	A	CH:	D	C	B	A
1	On	On	On	On	9	Off	On	On	On
2	On	On	On	Off	10	Off	On	On	Off
3	On	On	Off	On	11	Off	On	Off	On
4	On	On	Off	Off	12	Off	On	Off	Off
5	On	Off	On	On	13	Off	Off	On	On
6	On	Off	On	Off	14	Off	Off	On	Off
7	On	Off	Off	On	15	Off	Off	Off	On
8	On	Off	Off	Off	16	Off	Off	Off	Off

CONTROL SWITCH:

- 1) Prg.: The MV-C recognizes MIDI program changes 1-127 to adjust the volume or pan (balance).
- 2) Data: The MV-C recognizes MIDI control data to adjust the volume (control # 7) or pan (control # 10) or balance (control # 8).
- 3) Byp.: No MIDI data may change the volume. The MV-C is set to maximum volume (Attenuation = 1:1).

MODE SWITCH

- 1) Stereo: The volume of channel A and B will be adjusted with MIDI program changes or MIDI volume data.
- 2) Dual: The volume of channel A will be separately adjusted with MIDI program changes or MIDI volume data on the set MIDI receive channel. The volume of channel B will be adjusted with the MIDI program changes or MIDI volume data on the 2.nd MIDI receive channel. (Below the set channel number.) E.G. Ch.3 is below Ch.4!
- 3) Pan.: The volume of channel A and B will be simultaneously adjusted with MIDI program changes or MIDI volume data on the set MIDI receive channel. The Pan / Balance will be adjusted on the 2.nd MIDI receive channel. (Below the set channel number.) (CH.16 = Below Ch.1)

MODE:	STEREO	DUAL	PAN
"PRG." Rc. Ch. x	Volume A+B	Volume A	Volume A+B
"PRG." Rc. Ch. x-1	---	Volume B	Pan / Balance
"DATA" Rc. Ch. x	Volume A+B	Volume A	Volume A+B
"DATA" Rc. Ch. x-1	---	Volume B	Pan / Balance

! Switching to any mode will initialise the volume and pan data to "64".

EXPRESSION PEDAL

- 1) Connect an expression pedal to jack (6).
- 2) You can control the volume or pan / balance according to the diagram:

Expression pedal:	Channel A only	Channel B only	Channel A & B
STEREO	Volume A	Volume B reverse	Balance A and B
DUAL	Volume A	No function	Volume A
PAN	Volume A	Volume B reverse	Balance A and B

TECHNICAL INFORMATION

Dimension	: 104x70x44mm	Weight	: 265g
Power	: 9-12V	Consumption	: max. 100mA
Inputs	: MIDI IN, INPUT A+ B, POWER	Outputs	: MIDI THRU, OUTPUT A & B
Attenuation	: 100dB	Channel separation	: > 80dB
Max. Input level	: + 9,5dBm	Max. Output level	: + 8,0dBm
Input impedance	: 1 MΩ	Output impedance	: 10KΩ

Radio and Television Interferences (USA)

This unit has been verified to comply with the limits of a Class B computing device, pursuant to subpart 15 of FCC rules. Operation with non certified or non verified equipment is likely to result in interferences to radio and TV reception.

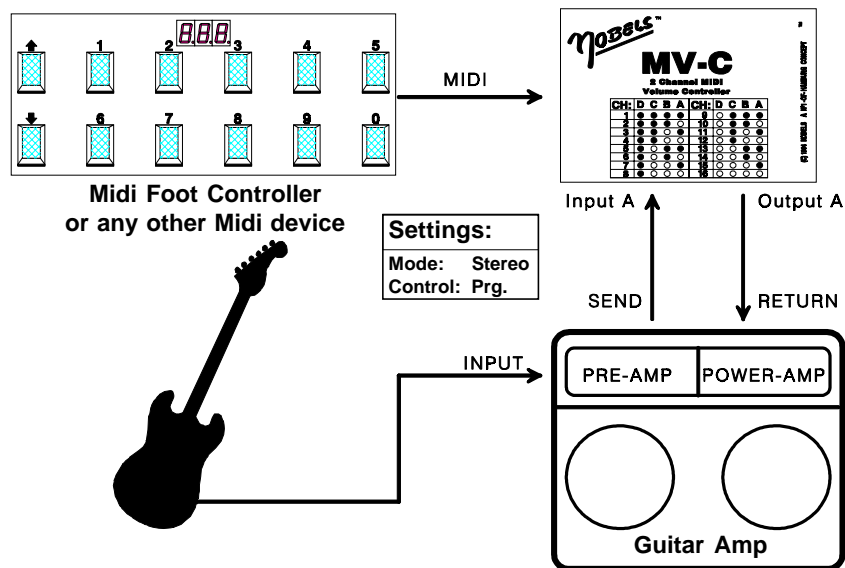
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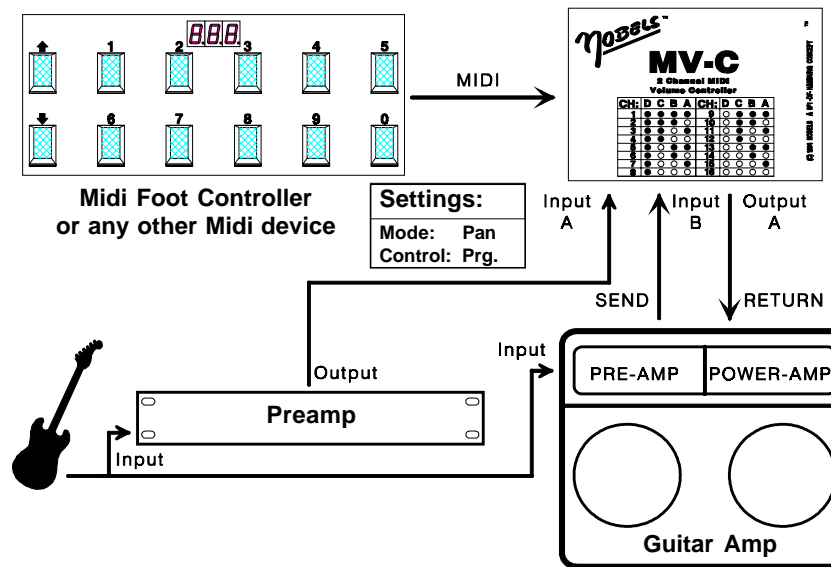
Written and designed by Kai Tachibana.

APPLICATIONS:

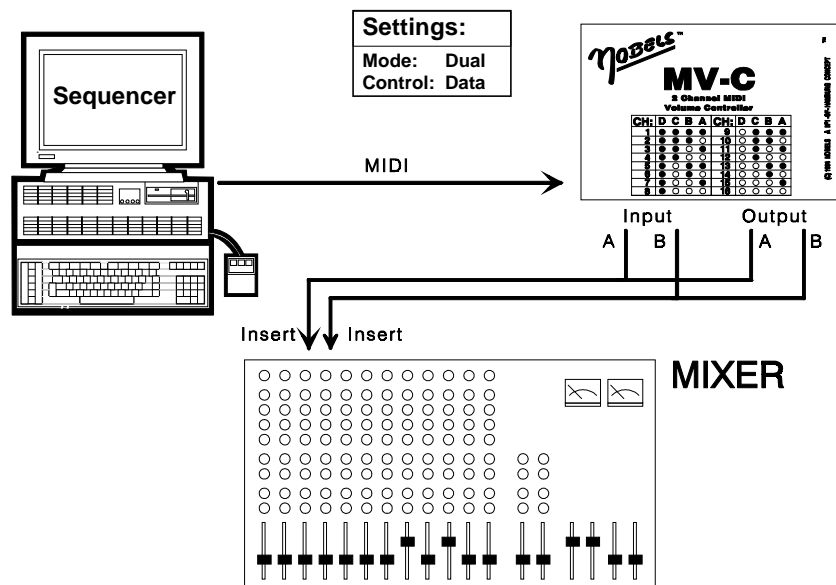
1) Using the MV-C to control the master volume of your equipment:



3) Using the MV-C to change / mix between both preamps via any MIDI controller:



2) Using the MV-C to control the volume of two separate channels of a mixing console via any sequencer:



4) Using the MV-C to control the volume and pan of your stereo equipment¹:

¹ The MIDI controller must be able to send on two different channels! E.g.: Ch.15 + Ch.16.

