

The Lower Manual is a MIDI controller designed as an extension of your organ setup. It functions as a lower manual for the Mojo61 or for any other single-manual organ equipped with a MIDI IN port. Thanks to its modular design, it is compatible with most MIDI device on the market.

Main features:

- MIDI OUT port.
- Type "B" USB connector.
- 6 dip switches for configuring the main functions.
- PULSE waterfall keyboard (mod. 6105WF), 61 velocity-sensitive notes.

Connecting to the Crumar Mojo61:

The Lower Manual is designed for direct integration with the Mojo61.

- Place the Mojo61 on top of the Lower Manual, inserting the 4 support pins into the 4 holes on the top of the Lower Manual.
- Connect the supplied MIDI cable (all 5 pins wired) to the MIDI port of the Lower Manual.
- Connect the other end of the cable to one of the two MIDI IN ports of the Mojo61.
- Turn on the Mojo61 and select the "EXT-LOWER" function.

In this configuration, the Mojo61 powers the Lower Manual and the two instruments are fully integrated. When the VB3 sound is selected, the Lower Manual functions as the lower manual of a tonewheel organ. No further connections are required and any dip switch settings are automatically bypassed. The Lower Manual recognizes the presence of the Mojo61 through the power supplied over the MIDI cable (power over MIDI).

WARNING: do not connect the Lower Manual, using the supplied cable or any other 5-pin MIDI cable, to equipment that provides power over MIDI with different specifications: doing so may damage the instrument. If in doubt about the specifications, use a MIDI cable with only 3 pins wired (the most common type).

Use as a Universal Master Keyboard:

In addition to direct connection with the Mojo61, the Lower Manual features a type "B" USB port and 6 configuration dip switches, making it usable as a master keyboard with any equipment fitted with a MIDI IN port, as well as computers, tablets, and similar devices.

- USB port: when connected to a computer, it provides both power and data. The instrument is automatically recognized as a USB MIDI device, and can be used, for example, with VST softwares.
- Physical MIDI port: transmits MIDI data simultaneously with the USB port and can be connected to any equipment fitted with a MIDI IN input.

If only the traditional MIDI OUT port is used, the USB connector can be used solely to power the instrument, via a 5V power adapter or a mobile phone charger.

WARNING: a mobile phone charger is not the same as a power adapter. Poor-quality chargers can cause malfunctions such as stuck notes, unexpected restarts, and general instability: use only good-quality power adapters. "Fast chargers," if not correctly configured, may also damage the instrument.

Configuration via Dip Switches (check the illustration on the back of this page):

The dip switches allow the following functions to be configured:

- 1) MIDI Channel : Selection of the channel, from 1 to 16.
- 2) Velocity (ON / OFF):
 - OFF: MIDI messages are sent upon closing of the first contact, allowing for fast organ playing.
NOTE OFF messages always retain release velocity reading, which is useful for accurately simulating the key-release noise of a tonewheel organ.
 - ON: the keyboard responds to the expressiveness of key pressure, ideal for example for piano sounds.
- 3) Pass-thru (ON / OFF): When enabled, this function routes MIDI messages received via the USB port and sent by external sources to the MIDI OUT connector, adding them to those generated by the Lower Manual itself.

WARNING: after any change to the dip switches, the instrument must be turned off and back on for the new configuration to take effect.

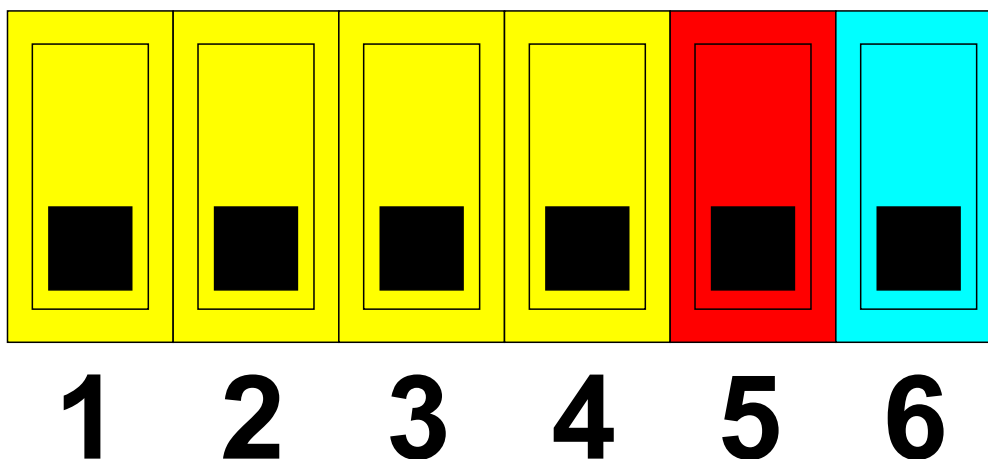
This device is a professional musical instrument, it's not a toy. Please keep the instrument and the packaging bag out from the reach of small children. Do not open or modify this device, do not expose to moisture, water, direct sunlight and extreme weather, please use only the provided power supply. Do not connect it to damaged or incompatible devices, with damaged connectors, cables or power supplies. This instrument can only be used in domestic or similar environments. It may cause interferences if not correctly installed. This product complies with the european Directive 2011/65/EU on the restriction of hazardous substances. WEEE notice: the product must not be disposed of with household waste, it must be taken to the appropriate collection point.

MADE IN ITALY BY VMConnection - VIA LUCIO VERO 2, RONCADE (TV)- www.crumar.it

CRUMAR[®]

UNIVERSAL LOWER MANUAL MIDI CONTROLLER

DIP SWITCHES CONFIGURATION



MIDI CHANNEL				VELOCITY	PASS-THRU
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	CH-1		CH-9		YES		YES
	CH-2		CH-10		NO		NO
	CH-3		CH-11				
	CH-4		CH-12				
	CH-5		CH-13				
	CH-6		CH-14				
	CH-7		CH-15				
	CH-8		CH-16				

