



DRAWBAR CONTROLLER D9U



USER MANUAL

Congratulations! You are now the owner of D9U drawbar midi controller, please read this manual in its entirety and keep it in a safe place for future reference! Have fun!

D9U is a simple midi controller designed with 9 drawbars and one rear button to select between two banks of control changes. Drawbars are controls used in musical organs for change the volume of a particular sound component: as a drawbar is incrementally pulled out, it increases the volume of its sound. When pushed all the way in, the volume is decreased to zero. First bank sends control change messages commonly used for upper manual of a dual manual organ, second bank sends control change messages used for lower manual.

Crumar D9U is the perfect companion for your organ software and works out of the box with GSi VB3 Tonewheel Organ simulation: just plug the provided USB cable to your computer, it's class compliant (no drivers required) and just start playing organ like a pro!

But D9U is more than this. You can connect it with USB to every keyboards/expanders able to recognize class compliant USB devices and you can add those "drawbars" to your rig. D9U can also be used with traditional MIDI devices that use the common DIN5 connector, but needs a special "MiniJack to DIN5" adapter. This kind of MIDI connection has become a standard in the recent years, but there are two types. The D9U uses TYPE B.

Use a 5V cellphone USB Charger/PSU to power the D9U and use your adapter for the MIDI connection.

CRUMAR D9U - SPECIFICATIONS:

- USB-MIDI controller.
- 9 real drawbars.
- 1 push-button for alternate rows.
- Midi out with mini jack (adapter not included).
- Class compliant and bus powered - max 500mA.
- Can be powered with a phone charger.
- Based on Arduino platform.
- 18cm x 13cm x h3cm.
- Solid Metal constructions.

CONTROL CHANGE MESSAGES:

- FIRST ROW: 12, 13, 14, 15, 16, 17, 18, 19, 20
- SECOND ROW: 21, 22, 23, 24, 25, 26, 27, 28, 29
- Midi Channel: 1

NOTES ON ARDUINO:

What is Arduino?

Arduino is an open-source electronics platform based on easy-to-use hardware and software. Arduino boards are completely open-source, empowering users to build them independently and eventually adapt them to their particular needs. The software, too, is open-source, and it is growing through the contributions of users worldwide.

What does this mean?

This means that the heart of D9U is based on a open-source platform and the project is open to everyone.

As a finished product, D9U works with the specifications written in this manual: feel free to explore the world of Arduino but keep in mind that we don't offer support on coding or hardware modifications of D9U. You can always ask the Arduino community that is everyday growing and always very helpful!

You can find project files and source codes here:

https://github.com/ZioGuido/Crumar_D9U

Informations on Arduino here:

<https://www.arduino.cc/>

For more informations please visit www.crumar.it

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Last update: May 2020.