

KENTON

LD-2

Level display unit

Operating manual

INTRODUCTION

Congratulations on your purchase of the **LD-2** level display unit. The **LD-2** is very easy to use, but please take a few moments to read through the manual to avoid any operational difficulties.

CONNECTIONS

MIDI In

Plug your MIDI pedal, controller or sequencer's MIDI Out into here. The **LD-2** has no MIDI thru, so it will need to be at the end of your MIDI chain, or fed from a thru box. Note that if you are using several MIDI devices "daisy chained" together, data may get corrupted to the devices at the end of the line. Best practise is to use a "Thru Box" if you are using more than 3 devices chained together.

DC IN 9-12V

Plug the power adapter into here. The unit will take an adapter with an output in the range of 9-12V either regulated or unregulated. The socket is a 2.1mm type with centre positive. Do not use an adaptor with an output voltage higher than 12V, and the **LD-2** must not share an adaptor with any other device. Failure to observe this will invalidate your warranty, and will probably damage the other device, the **LD-2** and/or the power supply.

DISPLAY

The display has two types of readout. Firstly numbers are displayed in numeric format. This can be either 0-127 as used by MIDI or alternatively 0-20. Secondly, there is a 20 segment bar readout where a value of zero will show no bars, and a value of 127 will show all bars, with intermediate values showing a proportionate number of bars.

USING THE **LD-2**

First connect the supplied power supply to the DC input socket on the left side of the unit, then connect your MIDI signal cable to the MIDI In socket.

When power is applied to the **LD-2**, the words **KENTON LD-2** will scroll across the display, then three horizontal bars will show, indicating that no valid message has been received yet.

The factory default is to display the value of any message sent by controller #7 on MIDI channel #1.

CHANGING THE CONTROLLER & MIDI CHANNEL

To change the MIDI message being displayed, use a small screwdriver or matchstick (or similar) to press (then release) the learn button. The display will then show the letters "L r n" for learn. The learn button is deliberately recessed to prevent accidental re-assignment.

The next controller message received on any MIDI channel will be stored, so that any subsequent message received from that controller on that MIDI channel will be displayed both on the 7 segment display, and on the bargraph.

The controller and channel information is saved in non-volatile memory, so the unit will "remember" its assignments for the next time it is used.

CHANGING THE NUMERIC DISPLAY MODE

To change the display mode to 0-20 or back to 0-127, hold the learn button in for a few seconds. At first it will display L r n (learn), but after several seconds it will show 20 for 0-20 mode or 127 for 0-127 mode. If you continue to hold the button in, it will continue to toggle between the two modes. When the mode you want to use is displayed, release the button and the unit will be ready to use again. This setting is also stored in the non-volatile memory.

LIST OF CONTROLLER NUMBERS

Controller Number	Control Function
0	Bank select MSB
1	Modulation wheel or lever
2	Breath controller
3	Undefined
4	Foot controller
5	Portamento time
6	Data entry MSB
7	Main volume
8	Balance
9	Undefined
10	Pan
11	Expression controller
12	Effect control 1
13	Effect control 2
14-15	Undefined
16-19	General purpose controllers (1-4)
20-31	Undefined
32-63	LSB for controllers 0-31
64	Damper pedal (sustain) (Hold 1)
65	Portamento on/off
66	Sostenuto
67	Soft pedal
68	Legato footswitch (val 0-63=normal 64-127=legato)
69	Hold 2
70	Sound controller 1 (default=sound variation)
71	Sound controller 2 (default=timbre/harmonic content)
72	Sound controller 3 (default=release time)
73	Sound controller 4 (default=attack time)
74	Sound controller 5 (default=brightness)
75-79	Sound controllers 6-10 (no defaults)
80-83	General purpose controllers (5-8)
84	Portamento control
85-90	Undefined
91	Effects 1 depth (formerly external effects depth)
92	Effects 2 depth (formerly tremolo depth)
93	Effects 3 depth (formerly chorus depth)
94	Effects 4 depth (formerly celeste (detune) depth)
95	Effects 5 depth (formerly phaser depth)
96	Data increment
97	Data decrement
98	Non-registered parameter number LSB
99	Non-registered parameter number MSB
100	Registered parameter number LSB
101	Registered parameter number MSB
102-119	Undefined
121-127	Reserved for channel mode messages

FACTORY DEFAULTS

If you want to reset your **LD-2** to its factory default settings, you can do so by applying power to the unit whilst holding the learn button pressed.

`Fd` (factory defaults) will momentarily be displayed when this has been done.

The factory default settings are:
MIDI channel #1
Controller #7 (MIDI volume)
Numeric display in 0-127 mode

SPECIFICATIONS

Power Input	9-12V DC – mains adaptor supplied
Power	300mA, 2.1mm plug (centre positive)
MIDI	In only
Display	3 x 7 segment display and 2 x 10 segment bargraph
Weight	285 gms
Dimensions	119 x 54 x 40 mm
Non-volatile memory	EEPROM (no back-up battery required)

WARRANTY

The **LD-2** comes with a 12 month (from purchase date) back to base warranty, (i.e. customer must arrange and pay for carriage to and from Kenton Electronics).



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