

# **CITRONIC**

## **CDM:1**

### **Professional DJ Mixer**

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# ***User Manual***

## CITRONIC

Citronic Limited, innovative leaders in the manufacture of professional audio equipment are proud to present the CDM:1 Mixer.

Established in Melksham Wiltshire, in 1972, the company occupies prestigious purpose built factory headquarters.

The Company's award winning product range covers professional audio Mixers, Amplifiers and Signal Processing. Each unit is manufactured to the highest possible standards, and all have an enviable reputation and value for money - the noted hallmark of Citronic products.

Substantial investment has been made in high technology CAD systems, manufacturing control and testing techniques. This sophisticated computerisation, coupled with an extensive research and development program, enable the company to offer an exceptional degree of manufacturing excellence and quality assurance.

Citronic has always listened carefully to the customer, and places tremendous emphasis on market research. This ensures that the exacting requirements of the installer and operator are complemented, without compromise, throughout the entire product range. This unique approach, coupled with a strong input from a highly qualified engineering team, ensures that Citronic maintains its position as a respected leader, in the industry's development.

Citronic has a distribution network throughout Europe, Asia and the Americas.

## WARNING

In order to obtain the best service from the unit we **STRONGLY** recommend that you read this manual before you apply any power.

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## The CDM:1 Professional DJ Mixer

There are 5 inputs, 2 phono (RIAA), 2 line (CD) and 1 microphone. Each channel has its own gain control to give optimum control over mix levels. The monitor section offers stereo headphones output which provides the pre-fade program of the music channels and a Output program LED bar graph display which shows the output level of the mixer. A manual Mic override switch completes the features of this compact entry level mixer .

## Connecting Your Mixer

The following pages give a full description of the connectors and their purpose. You should study this carefully before you power up the mixer to ensure you get the very best performance from your CDM:1.

### **Do's & Don'ts**

There are few general Do's & Don'ts thoughts that you should become familiar with if you have not had a great deal of experience with professional audio systems.

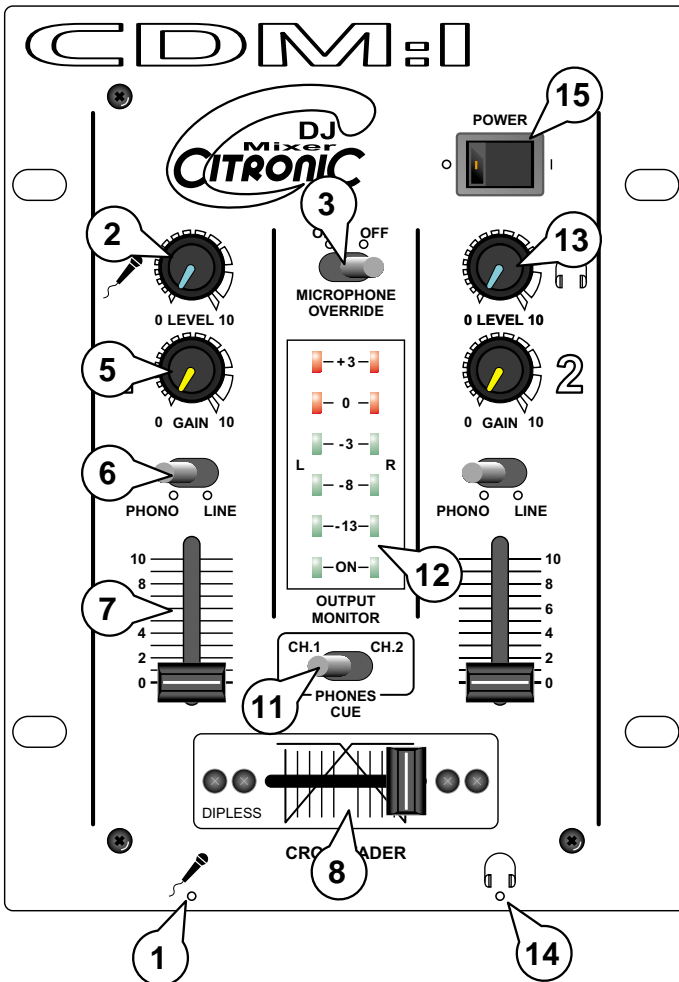
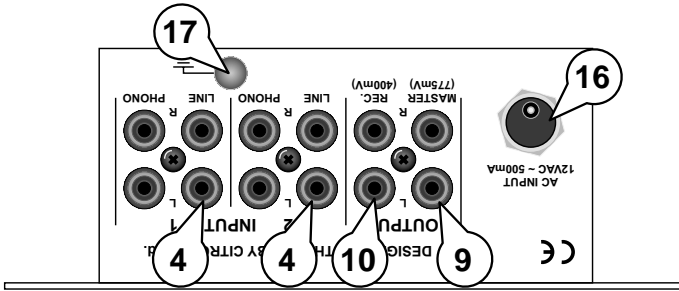
**Cables & Connectors** - Always use good quality cables and connectors. It might seem expensive when you first look at it, but the first time you have a problem in front of an audience you'll bless the day you made that small investment. Over 25 years in the business has taught us that 75% of all problems with DJ systems are simple connector ones. Don't get caught out.

**Switching on your system** - Get into the habit of turning on the mixer and all the inputs to it before you turn on the amplifiers. The CDM:1 has been designed not to harm your amplifiers or speakers if you turn the amplifiers on first, but this may not be true of the inputs plugged into the CDM:1 Mixer. Play safe, always turn on your amplifiers last.

**Power Supply** - The power supply to your CDM:1 is 12V AC and is connected by a 2.1 x 5.5 x 9.5mm connector.

The CDM:1 is presented with an external AC adaptor rated at 12VAC 500mA.

**Crossfader** - The crossfader is the most used feature on your mixer and great care has been taken in the choice of components for this function. Even so, it is the most likely thing to wear out first on your mixer, so we've made it quick and easy to replace. Don't get caught out, always carry a spare.



## **Microphone**

### **1) Microphone Input**

A ¼" jack socket is mounted on the bottom face of the mixer for connecting your microphone.

Unbalanced Input Wiring:	Tip:	Positive	(HOT)
	Ring:	Ground	(SHIELD)
	Sleeve:	Ground	(SHIELD)

Input Impedance: 1K Ohm

Input Sensitivity: -53dBu (1.6mV)

### **2) Level Control**

The microphone has it's own gain control allowing maximum level control and will accommodate most microphones, both low and high impedance's to 600 Ohms.

Range: <-70 to 53dB

### **3) Mic Override Switch**

The CDM:1 offers the facility to attenuate the main music program manually.

ON: This attenuates the "live" music program by 20dB.

OFF: The music channels are not affected.

## **Music Channels**

### **4) Input sockets**

Phono Input: RIAA Equalised Stereo Phono Sockets.

Input Impedance: 47K Ohm

Source Impedance: Typical Magnetic Cartridge

Sensitivity: 3.8mV (-46dBu)

Line Input: Standard Stereo Phono Sockets:

Input Impedance: Typically 10K Ohm

Source Impedance: 2K Ohm (MAX)

Sensitivity: 150mV RMS (-14dBu)

### **5) Input Gain Control**

This allows the matching of input signal levels of each channel when the input faders are at the same position.

Range: <-70 to 14dB

## 6) *Input Selection Switches*

Selects either Phono or Line on the main input channels.

## 7) *Input Fader*

A high quality 30mm fader for controlling the mix level of the input to the main output.

## 8) *Crossfader*

A super fast action dipless crossfader between the input channels. The dipless action means that the signal only changes in level after the mid point.

The crossfader is easily and quickly replaced by removing the 2 outer pozi countersunk screws on the crossfader panel and unplugging the attached ribbon connector.

## 9) *Unbalanced Master Output*

Master stereo program output is provided by standard unbalanced phono sockets.

Level	=	0dBu (775mV RMS)
Output Impedance	=	< 50 Ohm
Load Impedance (MIN)	=	5K Ohm

## 10) *Record Output*

This output is used for additional feed to such items of equipment as tape recorders. The output level of the signal is 400mV.

## 11) *Cue Switch*

This control selects the input signal on the respective channel and routes it to the headphones output.

## 12) *LED Monitor Display*

Twin 5 segment LED ladders shows the output signal level of the mixer.

The LED ladder has a range of -13 to +3dB. The optimum running level of 0dB which is indicated by the first red LED.

## 13) *Headphone Level Control*

Sets the desired level to the headphones. The headphone program depends on the position of the cue switch.

## 14) *Headphone Socket (Standard Stereo ¼" Jack)*

L/H Channel:	Tip
R/H Channel:	Ring
Ground:	Sleeve
Minimum Load Impedance:	32 Ohms

## 15) Power Switch

This switches the AC power to the mixer ON and OFF.

(Note: Be sure to switch on the power to your mixer before switching on the amplification system.)

## 16) AC supply Socket

The CDM:1 mixer is supplied with an external AC power supply unit. This unit is 12VAC 500mA and is supplied as either a moulded 2 pin UK 3 pin plug dependant on the country of use. The supply to the mixer is provided by a 2.1 x 5.5 x 9.5mm plug connector.

## 17) Earth Stud

Star point earth for auxiliary equipment e.g. Turntables.

## 6: Technical Specification

<b>Parameter</b>	<b>Mic</b>	<b>Phono</b>	<b>Line</b>
Sensitivity	-53dBu (1.6mV)	-46dBu (4mV)	-14dBu (150mV)
Input Impedance	1K	47K	50K
Max. Gain	53dB	RIAA	14dB
S/N Ratio*		73dB	> 82dB
Freq Response**	32Hz - 44KHz	RIAA	16Hz - 20 KHz

### Noise Floor

Main L,R Output:	-84dBu
Mic Pre-Amp T.E.I.N: (Total Equivalent Input Noise)	-109dBu

### Dimensions:

Width:	166mm
Height:	220mm

### Headphones

Load:	32 Ohms min.
Power:	400mV @ 32 Ohms

Depth: 65mm

Weight: 1.5kg

### Cut-out required:

Freq Response:***	28Hz - 16KHz
S/N:	85dB

Width: 130mm

Height: 210mm

### Output

Master L,R Output:	Unbalanced Phono: 0dBu (775mV RMS)
Record Output:	Unbalanced Phono: -6dBu (400mV RMS)

Note: \* : Measured at output 22Hz-22KHz Filtered  
\*\* : Measured at 1dB w.r.t. @ 0dB ref. At Mixer Output  
\*\*\* : Measured at mixer output, 30 KHz Filtered

## **Your Guarantee of Satisfaction**

This product is guaranteed to the original purchaser against defects in material and workmanship for one year from the date of initial purchase. Activate this guarantee at the time of purchase by returning the Guarantee Card to the address on the front page. Keep a copy of your sales receipt for proof of guarantee status, should it be necessary.

The crossfader itself is a replaceable part and is only guaranteed against defective workmanship. The slider selected for the crossfader function has been chosen for its excellent mechanical properties. In a discotheque application the extensive use of this facility means that the number of operations in a twelve month period can exceed the manufactures electrical specification.

If a malfunction occurs, the dealer who supplied the unit will be happy to handle the repair. When returning a unit, use the original factory carton - do not chance inadequate packing materials. Simply tape a note to the unit describing the malfunction.

If your unit is out of guarantee, we recommend that you return it to an authorised Citronic dealer for repair or service. Experienced personnel, supported by specialist testing equipment, will be able to find and correct the fault in the most efficient and cost effective way.

## **8: CE Marking**

### ***EMC Conformity***

The CDM:1 has been tested to demonstrate compliance with the EMC 89/336/EEC directive, under which the following harmonised standards apply:

- |                  |                                 |
|------------------|---------------------------------|
| i) EN55020       | Electromagnetic Immunity        |
| ii) EN61000-4-2  | ESD Immunity                    |
| iii) EN61000-4-4 | Voltage Transient Immunity      |
| iv) EN58001-1    | Generic Emissions Compatibility |

### ***Electrical Equipment Safety Regulation (1994)***

The CDM:1 has been designed and tested to demonstrate compliance to the LVD 73/23/EEC directive, using the following standard.

- i) EN60065 Safety Requirements for mains operated electronic equipment for household and similar general use.