

**TECHNICAL SPECIFICATIONS**

## Input details:

Line inputs            -10dBm (250mV) 20K $\Omega$   
C.D. inputs            +0.8dBm (850mV) 20K $\Omega$   
Phono inputs          -41.5dBm (6.5mV) 47K $\Omega$

Mic inputs            -22dBm (61mV) 22K $\Omega$

Main output           775mV (0dBm) minimum load 600 $\Omega$

## Record outputs

Din                    220mV (-11dBm) 150K $\Omega$   
Phono                775mV 10k $\Omega$  minimum load

Headphone output: 0.75w into 32 $\Omega$  (optimum) 8 $\Omega$  minimum load.

**User Guide****DM700 Consoles****Cloud Electronics Limited**

140 Staniforth Road Sheffield S9 3HF England  
Telephone 0114 244 7051 Fax 0114 242 5462

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## INTRODUCTION

There are five consoles in the DM700 Series, which offer a combination of different formats, i.e. some with mixer only others with either a mono or stereo power module.

All consoles are fitted with the DM700 mixer which is dedicated for discotheque use.

## MUSIC CHANNELS

The Discmaster 700 Mixer has 5 Stereo Music inputs, which are controlled by the 4 channel faders.

Deck 1 & 2 are dedicated Phono inputs and are RIAA Equalised.

Auxiliary Channel 1 is dual purpose and has two inputs connected it i.e. a line level source such as a tape deck can be connected at the same time as a C.D. player. Connection to these inputs is by way of jack sockets on the front panel.

Auxiliary Channel 2 is suitable for tape decks etc, connection is via a Din socket on the front panel.

Connections for the Din socket are:-Left Channel Pin 3, Right Channel Pin 5, earth Pin 2.

## CROSSFADE

The Crossfade control is conveniently positioned below the channel faders. A low profile control knob is used so as not to obstruct the operation of the faders.

This fader control is used to fade smoothly from one channel to the other. With the control in the fully left position, Auxiliary Channel 1 and deck 1 are operative, in the fully right position, Auxiliary Channel 2 and deck 2 are operative.

For normal operation the crossfade control should be positioned centrally: a centre detent aids positive positioning, and in this position, all 4 channels can be mixed in the normal way.

## NOTES ON POWERED CONSOLES

1. Never obstruct the flow of air to the rear heat sink. It is quite normal for the heat sink to reach temperatures in excess of 60°C.
2. Never connect the output signals of one amplifier to the output signal of another, such a connection will not give increased power and may cause failure.
3. Do not connect the output ground lead to the Mixer signal ground. This would lead to a ground loop causing an audible hum and possible oscillations.
4. Do not use speakers that are not adequately rated for the output power or have a total circuit impedance of less than 4 ohms. We recommend that 8 ohm speakers are rated at 125 watts minimum and 4 ohm speakers at 175 watts minimum.

Rotate the platter by hand to check the belt is fitted correctly then refit the circlip and rubber mat.

Transit screws are fitted to this turntable and these should be turned anti-clockwise to secure the turntable whilst in transit.

It is vitally important that these are turned fully clockwise when the console is in use, to reduce the possibility of acoustic feedback.

The pickup arm should also be secured by the clip on the arm rest for transit.

### **MAINS INPUT & FUSE**

The mains input connector on the front panel has an integral fuse holder, the fuse can only be removed without the mains cable inserted.

Ensure that only the correct value fuse is fitted. The mains on-off switch controls the power to both the mixer and power amplifier if fitted.

A spare fuse is supplied in the compartment in the fuse carrier.

### **CONSOLES WITH INTEGRAL POWER AMPLIFIERS**

The Windsor and Sandringham and Caernarfon consoles are fitted with a powerful Mos-Fet amplifiers modules capable of delivering 125 watts RMS.

The Windsor and Caernarfon are fitted with 2 to provide Stereo output, the Sandringham has 1 which provides a Mono output.

Maximum power is delivered into a 4 ohm load but speakers with impedance ratings between 4 and 16 ohms are satisfactory.

The speaker output is via a 2 pole ¼" jack sockets, these are positioned on the left of the mixer panel on the Caernarfon, and at the rear of the console on the Windsor and Sandringham.

### **MUSIC EQUALISATION**

Comprehensive Equalisation is provided by way of the 5 Band Stereo Graphic Equaliser and the Treble and Bass controls.

The Graphic Equaliser should be set to achieve the best balance of the audio spectrum taking into account the loudspeaker system and the room acoustics.

We would recommend that a suitable record or CD which contains a good Bass, bright Mid range, and extended High frequencies be used as a regular reference.

With the Treble, Bass, and Graphic controls all set midway the reference source should be played and the Graphic faders adjusted to achieve optimum performance from the system.

The Treble and Bass controls should then be used to compensate for variance between record, CD, tapes etc.

N.B. The Graphic Equaliser has no effect on the Microphone channels.

### **MUSIC GAIN**

The music gain control is used to adjust the overall music level, in normal operation the music channel faders should be used in the full position and the gain adjusted to give the desired volume level.

### **AUTO VOICE OVER (AVO)**

The automatic voice over facility is used to reduce the level from the music channels when the microphone is in use.

The rotary control marked AVO adjusts the sensitivity of the trigger circuits. The fully anti-clockwise setting of the AVO control renders the gain reduction circuits inoperative.

Whilst the microphone is in use, adjust the AVO control starting from the fully anti-clockwise position until the desired amount of music level reduction is achieved.

Too high a setting of the AVO control may cause the trigger circuits to be over sensitive and activate music gain reduction prematurely.

### MICROPHONE INPUT

The microphone input is medium impedance and suitable for both High & Low impedance microphones, low impedance microphones will require a higher gain setting than High impedance microphones to obtain the same volume.

An LED adjacent to the muting switch illuminates when the microphone channel is on.

It is good practice to have the microphones muted whilst the music is playing; this eliminates the possibility of feedback and removes the risk of impairing the quality of the music from the pick up of unwanted signals.

Connection is by way of ¼" mono jack socket on the front panel.

### MONITORING

Monitoring of all the Music channels and the output is very easily selected by pressing the appropriate push button on the PFL Select switch, the selection automatically deselected the previous choice.

A LED below the push buttons will illuminate to indicate the selection. When a selection has been made the signals are then routed to the LED VU Meter and the headphone amplifier.

The powerful amplifier will drive headphones with impedances from 8 to 600 ohms, but for maximum output level, an impedance of between 8 and 32 ohms is recommended.

Connection is by way of a ¼" mono jack socket on the front panel.

### SIGNAL OUTPUT TO POWER AMPLIFIERS

The output of the DM700 mixer is connected by two ¼" mono jack sockets on the front panel and the output level is 775mV (0dBm).

When the mixer is used in the STEREO mode, connect the left and right output to the respective inputs on a STEREO power amplifier. If the mixer is to be used in the MONO mode connect from the output marked LEFT/MONO to the power amplifier.

If additional amplification is required with a Caemarfon this can be simply connected by following the details above.

### RECORDING

It is possible to record the main output signal via the 5 pin din tape socket.

Connections are as follows:- Left Channel Pin 4, Right Channel Pin 1, earth Pin 2.

The signals are at Line Level, and should be connected to the appropriate input on the tape deck.

### TURNTABLES

The turntables fitted to the DM700 Series consoles have a speed selector and pitch control on the base plate.

When the desired speed has been selected the slider should be adjusted if necessary. Strobe markings on the side of the platter indicate the correct speed setting when the relevant band appears stationary.

The tone arm can be raised and lowered by means of a viscous damped cue arm and the counter balance weight on the rear of the tone arm can be adjusted to suit a variety of cartridges.

With the Stanton 500, the correct weight is obtained with weight position as close to the arm pivot as possible.

Should it ever be necessary to refit or replace the drive belt, remove the rubber mat, this will expose a circlip around the centre spindle which secures the platter, carefully remove the circlip and lift up the platter.

The belt should then be fitted around the centre hub of the platter taking care that the belt is not twisted.

Via one of the holes in the platter a loop should be formed in the belt either by a small screwdriver, pen or similar object.

The platter should then be refitted on the centre spindle making sure that the loop in the belt is positioned round the motor pulley.