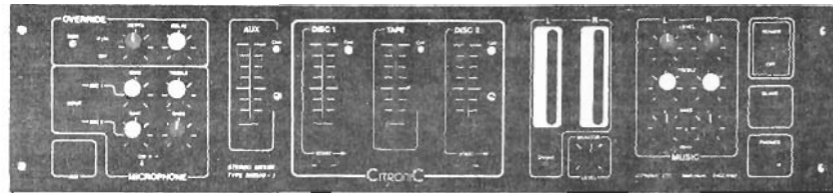
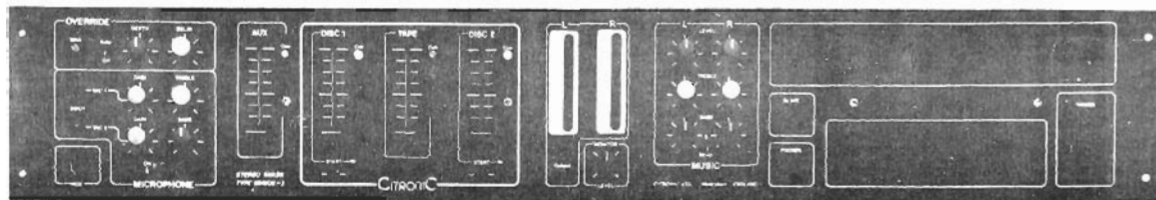


# SM 506 STEREO MIXER

INSTRUCTION MANUAL



SM506-1



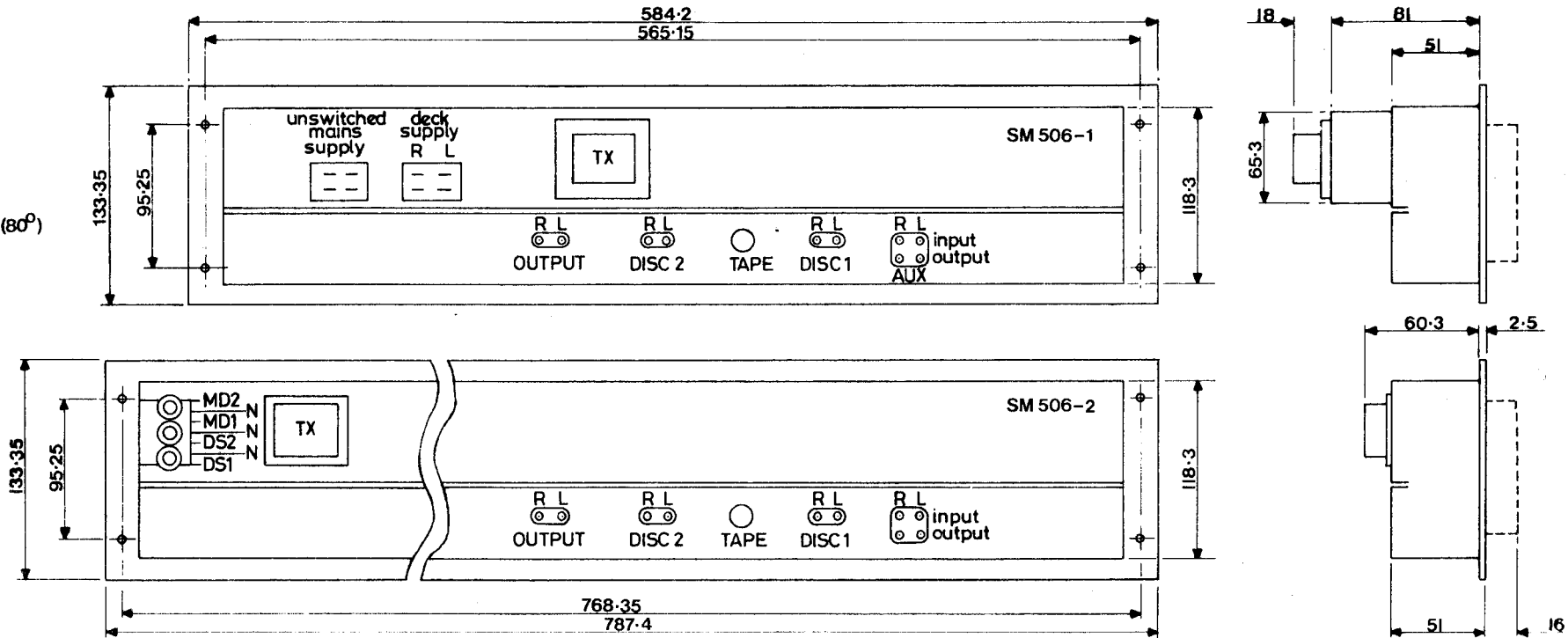
SM506-2

CITRONIC

FIG.1

approx. weight  
5 Kilo per unit

Front Panel  
Fixings  
screw No.8 self  
tapping c'sk. hd.(80°)



**INSTALLATION**

The unit may be mounted in any position provided ventilation is allowed at rear.  
The 506-1 is recommended for rack mounting and the -2 for consoles.  
A cut out .550.. by .121.. is required for the 506-1. Details of clearances are given in Fig. .1.

**POWER CONNECTIONS**

Unit is identified for either 240v or 117v operation.  
Conversion requires an internal modification and should only be executed by an authorised dealer.  
Attach a suitable 3 pin plug to the cable supplied

Green/Yellow	—	Earth	'E'
Brown	—	Live	'L'
Blue	—	Neutral	'N'

506-1 Four two pin plugs are supplied for deck and auxiliary outputs.  
Wire colour connections are unimportant to these plugs.  
N.B. The auxiliary outlets are unswitched.

506-2 These are made via a seven way barrier strip. For details of connections see Fig. 6.  
Pass the cables through the grommets provided and clamp cable sheaths to the bracket.

Five fuses are incorporated in both units for supplies to mixer, decks and auxiliaries. Fuse ratings are identified adjacent to fuse carriers. These are accessible after removing rear cover.

**SIGNAL CONNECTIONS**

For input and output sensitivities consult technical specification, and physical location see Fig. 2.  
INPUTS DISC 1 and 2, magnetic cartridge to appropriate rear phono sockets. Matching circuits for ceramic inputs are given in Fig. 4. If used these should be incorporated outside the mixer unit.

TAPE, both playback and record via the rear 5 pin din socket.  
AUX, may be either the rear phono socket or the duplicated front 5 pin din.  
Fig. 5. gives standard connections for 5 pin din.  
MIC 1 and 2, standard 1/2" mono jacks to front panel.

OUTPUTS MAIN MIXER OUTPUT, nominal level, rear phono sockets. A low level output may be taken from tape output phono sockets. The front panel stereo jack socket also provides the main mixer output and allows the channels to be connected together for mono output.

HEADPHONES, a 1/2" stereo jack socket on front panel.

If in doubt as to suitable input and output matching consult your dealer.

**TECHNICAL SPECIFICATION**

All inputs expressed relative to 0dBm (.775v) output.

**MICROPHONES**

Gain Mic 1 25mV to 2500mV @ 47K  
Gain Mic 2 2.5mV to 250mV @ 47K  
Suitable for either 'Hi' or 'Lo' impedance microphones  
TREBLE ± 14dB @ 10KHz, BASS ± 12dB @ 100Hz  
Switch and illumination for 'MIC ON'

**OVERRIDE**

DELAY Return time adjustment .2sec to 1.0sec  
DEPTH Attenuation variable -3 to -30dB  
MAN Push button for override, utilises both Delay and Depth.  
OFF-AUTO Switch for automatic microphone override

**DISC 1 & 2**

Input 3.0mV @ 1KHz RIAA 37K Stereo

**AUX & TAPE**

Input 150mV @ 100K Stereo  
Output 100mV @ 10K Stereo for recording

**CUE (on above)**

Push button with indication

**DECK START**

Operation by toggle with indication and electronic coupling

**L & R MONITORING**

Two off, eleven digit LED displays

**HEADPHONES**

Controlled by monitor level control 60 + 60 mW into 8 ohm Stereo

**MUSIC L & R TONE**

TREBLE ± 18dB @ 10KHz, BASS ± 14dB @ 100Hz

**M - S**

Mono stereo switch

**GENERAL**

**NOISE LEVEL**

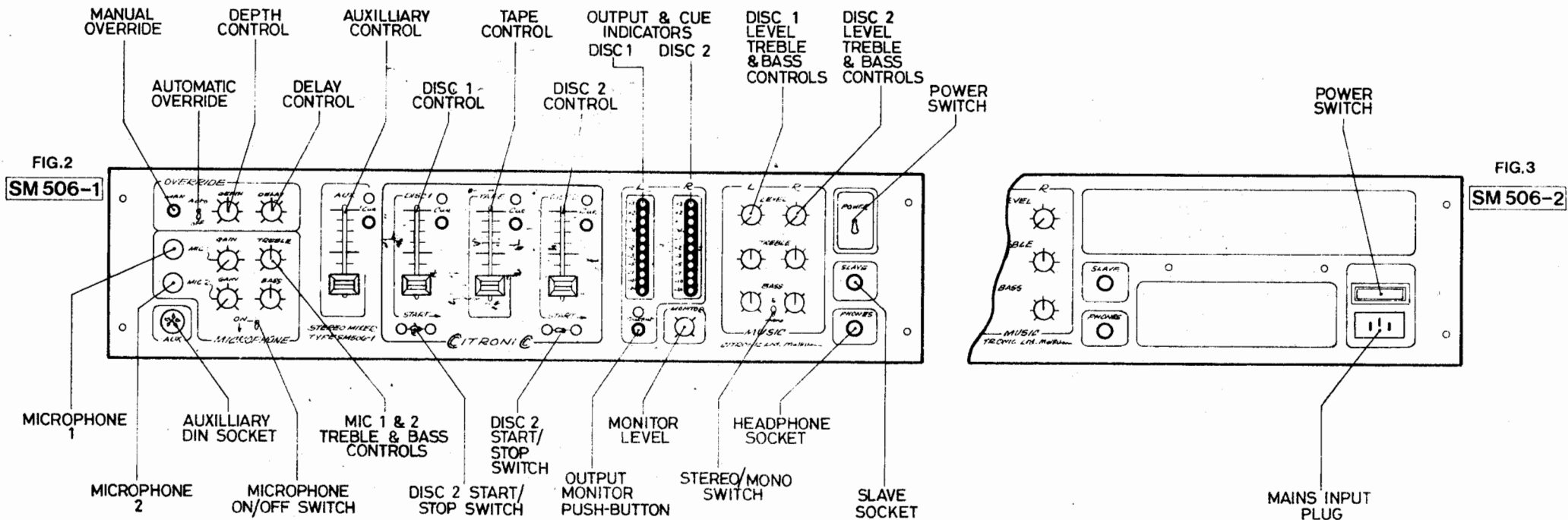
Aux Inputs -70dB  
Disc -65dB  
Microphone -60dB

**OVERLOAD**

20dB on all inputs

**DISTORTION**

Better than .08%



## OPERATING INSTRUCTIONS

For the following, reference is made to Fig. 2 and Fig. 3.

Set the following control knobs to the mid-scale position:—  
DEPTH, DELAY, TREBLE (3), BASS (3) and LEVEL (2)

Set the following control knobs to a fully anti-clockwise position:—  
GAIN (2) and MONITOR.

Set slider controls (4) at lower position.

Switch on power switch located top right hand corner on SM506-1, and bottom right hand corner on SM506-2.

### DISC 1

Pressing the 'cue' button will direct the signal from disc 1 input to the LED display and the headphones via the monitor level control.

An indication of signal presence is given by the vertical column of lamps. This signal may also be heard on the headphones at the required level set by the monitor level control.

The input signal can thus be 'cued', the facility to remote stop/start the turntable (switch directly below the slider) will assist in this operation. A green light indicating power to the turntable. The actual method of cueing will depend on the operator and the type of ancillary equipment used, e.g. slip mats or instant start.

The linear fader increases the output level of the 'cued' signal.

Overall tone compensation may be effected by the 'L' and 'R' treble and bass controls. For mono operation switch M-S to M.

One method of operation is to set the linear fader to maximum and adjust the output 'L' and 'R' controls for the required output level to the power amplifier.

### DISC 2, TAPE & AUX

The procedure is similar to Disc 1, the appropriate channel being selected by the cue button with lamp indication. For cueing more than one input simultaneously, press the required channel cue buttons.

The LED display has been designed for indication only and it is quite in order for it to remain fully in the 'red' whilst in use for cueing.

### MICROPHONES

With a microphone in Input 1, switch to the 'On Air' state, indicated by the red lamp, and increase the gain until the required output level is obtained. If sufficient output cannot be obtained then insert microphone in 'Mic 2' and repeat the operation. Tonal output characteristic of speech may be adjusted by the microphone Treble and Bass controls. The latter will to a degree effect acoustic feedback when high levels of speech are required. The microphone output is not affected by the 'L' and 'R' level and tone controls.

The gain controls will not reduce the microphone signal to zero, if required this is executed by the 'Mic On' switch.

### MICROPHONE OVERRIDE

Press the 'MAN' button and adjust the 'DEPTH' control for the level of background music required. The 'DELAY' control may also be set to give the return time of the music after releasing the push button.

Automatic operation of the above (when speaking into the microphone) is when the toggle switch is in the AUTO position.

### OUTPUT LEVEL INDICATION

This is achieved by the O/P button, the LED display and the headphones are now monitoring the output signal. 0dB on the display (.775v) may now be used in conjunction with a suitable amplifier to indicate a normal or overload (RED) condition. It must be emphasised that the LED colour indicated in this mode is only valid when used with a compatible power amplifier with reference to signal input levels.

## SIMPLE FAULT FINDING

The following is a chart of possible faults and remedies intended for the user to check before involving a Dealer or Service Engineer.

FAULT	REMEDY
Deck start lamps fail to illuminate upon power on	<ol style="list-style-type: none"> <li>1. Check fuse in mains plug.</li> <li>2. Check wiring connections in mains plug.</li> </ol>
Turntables fail to rotate	<ol style="list-style-type: none"> <li>1. Check that deck start switch is enabled (red lamp illuminates) on the mixer control panel.</li> <li>2. Check that the switch on the turntable is positioned to 'on'.</li> <li>3. Check deck fuses under mixer cover, for location and value see Paragraph 9 of 'setting up' instruction.</li> <li>4. Check power output connectors, see Paragraph 6 for SM 506-1 and Paragraph 7 for SM 506-2 of 'setting up' instruction.</li> </ol>
No sound from left or right turntables	<ol style="list-style-type: none"> <li>1. Check cue lamps, if illuminated, check that the level controls are correctly set and check the output plugs on the rear of the mixer.</li> <li>2. If the cue lamps fail to illuminate, check the input connectors at the rear of the mixer; see Paragraph 6 for SM 506-1 and Paragraph 7 for SM 506-2 of 'setting up' instruction.</li> </ol>
Left or right channel not operating	<ol style="list-style-type: none"> <li>1. Carry out checks as above.</li> </ol>
Microphone not operating	<ol style="list-style-type: none"> <li>1. Check that microphone is switched to 'on'.</li> <li>2. Check microphone connector.</li> </ol>
Auto over-ride not operating	<ol style="list-style-type: none"> <li>1. Check that auto over-ride is switched to 'auto'.</li> </ol>
No record or play back signal from auxiliary socket	<ol style="list-style-type: none"> <li>1. Check system using a 'mirror' din lead.</li> </ol>

It is recommended that the dealer is consulted if any of the above remedies fail to effect a cure.

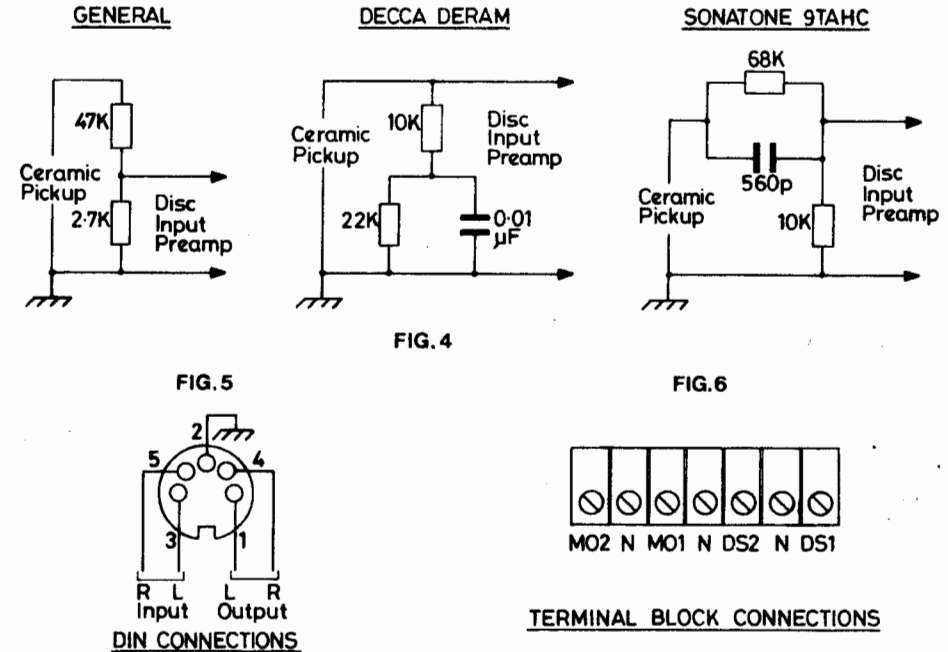
## CONDITIONS OF GUARANTEE

The equipment described in this document is guaranteed for 12 months from date of purchase provided that the attached card has been filled out completely legibly and correctly and returned to Citronic Limited within fourteen days of purchase subject to the following terms.

1. Free replacement to the dealer from where the equipment was purchased of any component or materials that, in the opinion of the Manufacturer, have proved to be unserviceable due to faulty manufacture, assembly or components.
2. Labour charges incurred for replacing faulty components or materials will be borne by the manufacturer, only when the equipment is returned to Citronic Ltd.
3. Return carriage costs will be borne by the purchaser. It is emphasised, however, that labour costs will be charged to the customer if, on receipt, the equipment does not display the fault claimed.
4. It is conditional on the foregoing that equipments returned to the dealer or manufacturer by national or commercial transport must be adequately packed. Any damage resulting from inadequate packaging will be advised to the sender and charges made for replacement materials and labour.
5. The dealer must be approved by Citronic Limited.
6. The equipment must be new when purchased from the dealer.
7. The guarantee is extended to the original purchaser only and is invalidated if the equipment has been misused, accidentally or wilfully damaged, or has been modified in any way.
8. Claims must be made through the dealer.

APPLICABLE IN U.K. ONLY

## CERAMIC PICKUP MATCHING CIRCUITS



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