

DISCO 421

PROFESSIONAL AUDIO MIXER

Now here's a dandy 4 channel audio mixer that's small (smaller than a breadbox!), light-weight (5½ lbs.), versatile and easy to use. We call it the DISCO 421 because it's designed for disco-teque use and it's portability makes it a sure winner for remote work. It's an ideal mixer for home recording. 4 inputs give you 1 channel for a mono mike, 2 stereo phono channels and 1 hi-level input for tape. Hi-level headphone cueing is easy because the headphone audio automatically switches from program to cue when you turn the pots to cue position! The DISCO 421 has 3 band audio equalization on the front panel. It also features two LED overload indicator lights. The 3½" "easy-read", lighted VU meter is switchable from right to left channel or reads the sum of both channels in center position. This mixer was designed with the operator in mind. Simple to use with its sloping front panel. Simple to carry with 4 "set-down" cushioned legs and handle. DISCO 421 is RUSSCO-RUGGED, solid-state RELIABLE. When you hear the economical low price, you'll have to agree...RUSSCO has done it again!



RUSSCO

SPECS:

INPUTS: (Panel controls set at 1:30 o'clock)

MICROPHONE: Monaural, 200 Ohm balanced, adjustable from .78mV to 7.8mV input. Requires 3 pin inline female connector.

(50 Ohm balanced or medium impedance unbalanced optional)

PHONO (2): Stereo, magnetic, 47KOhms unbalanced, adjustable from 1.5mV to 15mV input. RIAA equalized. Standard 1/4" phono jacks.

LINE: Stereo, 10KOhms unbalanced. 1V input. Standard 1/4" phono jacks.

OUTPUTS:

LINE: Stereo. 600 Ohm balanced at -4 dBm, (.5 VRMS). May be converted to 600 Ohm CT, or unbalanced, or unbalanced at +2dBm. Screw terminals.

HEADPHONES: 8 Ohm or higher impedance phones. Front and rear 1/4" phone jacks. Panel level control. 1 1/2 V output at 8 Ohm. 2 1/2 V output at 600 Ohm.

FREQUENCY RESPONSE:

MICROPHONE, LINE: 20-20,000 Hz $\pm$ 2db.

PHONO: 30-15,000 Hz $\pm$ 3db. ($\pm$ 1db RIAA)

NOISE:

MICROPHONE: -110 dB equivalent at 1 KHz.

LINE: -115 dB equivalent at 1 KHz.

PHONO: -106 dB equivalent at 1 KHz.

-60 db below standard reference level using Shure M44-7 cartridge.

DISTORTION: Less than .35% THD at -4 dBm output.

MAXIMUM OUTPUT: +12 dBm at 1 KHz continuous.

MAXIMUM INPUT LEVELS:

MICROPHONE: 14mV, 200 Ohm, pot at 1:30 o'clock.

PHONO: 100mV, 47KOhm, pot at 1:30 o'clock.

LINE: 10V, 10KOhm, pot at 1:30 o'clock.

CROSSTALK: Greater than 50 db at 1 KHz.

HEADPHONE SWITCHING: All electronic, stereo.

VU METER: 3 1/2", ASA ballistics. Switchable left or right at 0 VU = -4 dBm out. Both at 0 VU = -10 dBm out

Illumination: #1835 lamps, 55V. Switchable to Dim.

OVERLOAD INDICATORS: High brightness LEDs come on when output level exceeds +10 dBm.

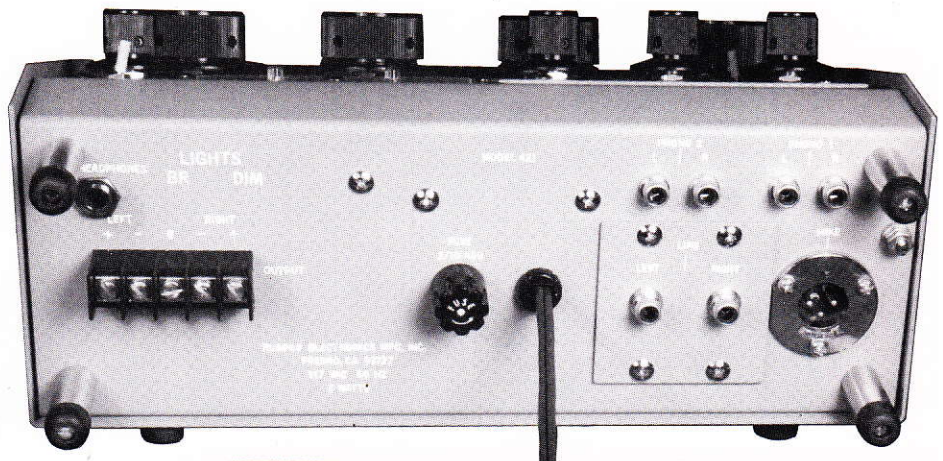
POWER REQUIREMENTS: 117 V, 60 Hz, .2 amps max.

SIZE: 10.75 x 11 x 4.5" (27.31 x 27.94 x 11.43 cm) including cushioned legs.

WEIGHT: 5 1/2 lbs. (2.49 Kg).

COLOR: RUSSCO light blue-grey pebble finish.

DISCO 421



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ELECTRONICS MANUFACTURING INC.

5690 E. Shields Avenue, Fresno, Calif. 93727

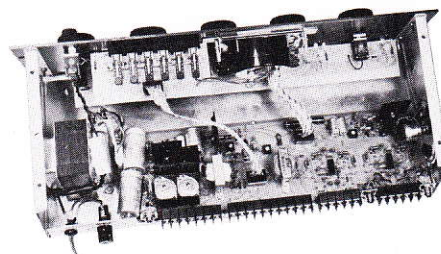
Phone (209) 291-5591

STUDIO/MASTER 505 audio-mixer



RUSSCO'S New STUDIO/MASTER 505 packs a Terrific Value into a compact package at an unheard of Bargain price! Designed for broadcast studio use, this monaural 5 channel mixing console is as modern as tomorrow, with sophisticated features and full integrated circuitry for dependability. The STUDIO/MASTER is engineered for easy operation and simple servicing, and it's as good looking as it's good working!

LOOK AT THE FEATURES! 5 mixing channels, four channels with built-in preamps. Each preamp can be quickly modified to accept microphone, phono or high level signals. The 5th mixer channel accepts 5 balanced, high level input lines, each selected with long-life, push-button switches. The STUDIO/MASTER features push-button on-air switches, with LED indicator lights. It cues on any channel and has a 3½ inch true VU meter. A built-in 25 Watt Monitor Amplifier provides power to your external speaker. A built-in headphone amplifier with stereo headphone jack allows you to use a monitor headset of high or low impedance. The built-in Amplifier features FET muting. A cue amplifier drives a built-in 3 inch cue speaker. Also featured are Allen-Bradley Mod Pots for quiet, trouble-free performance. The STUDIO/MASTER is available as a rack mount model (505R) fitting in a 5¼" by 19" rack space, or as an attractive blue-grey, maroon and black table model (505). When can we send you yours?



Featuring modern integrated solid-state circuitry throughout, the STUDIO/MASTER allows Easy Servicing, with an access panel underneath. The design features quick disassembly for major servicing. P.C. board jumpers select your desired combinations for muting, cue and equalization, and the muting circuit can be connected to operate an on-the-air warning light.

'DESIGNED BY PROFESSIONALS FOR PROFESSIONALS!'

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5690 E. SHIELDS AVENUE, FRESNO, CALIF. 93727 PHONE (209) 291-5591

specifications

INPUTS: 9 Total

Channels 1-4 (Preamps) (Unbalanced)

	Hi Level	Microphone**	Phono***
Sensitivity*	-13dBm	0.8mv	7mv
Max Input	+14dBm	13mv	100mv
Impedance	47K	47K	47K

Channel 5 (Balanced)

*Sensitivity: -10dBm
 Max Input: +18dBm
 Impedance: 600 ohms

OUTPUTS:

Monitor:

Power: 25 watts average
 (14.14 volts RMS across 8 ohm load at 1KHz)

Impedance: 8 ohms

Total Harmonic Distortion: Less than 1%
 at full rated output.

Program:

Level: +4 or +8dBm, for OVU, +17dBm maximum

Impedance: 600 ohms

Frequency Response: 20 to 15 KHz, ± 1 dB

Total Harmonic Distortion: Less than 0.5% at 1KHz,
 +8dBm out.

Noise: Greater than 60dB below +4dBm output
 referenced to -50dBm input level.

Headphone: Level: 0dBm

Impedance: Hi down to 8 ohms

Cue:

Power: 1 watt average

Speaker: 8 ohms, 3 inch

On-Air Light (Relay Driver)

Voltage: -24 VDC

Current: 40ma (600 ohm coil)

* Mixer Pot at 1:30 o'clock position, O VU out.

** Referenced to low impedance microphone source.

*** At 1KHz.

CONTROLS:

* Input mixing — 5 each, with cue

* Monitor level — 1 each, with power switch,
 on front panel.

Master level

Cue level

Headphone level

} Trim pot on main P.C. Board

** On-Air key switches (Channels 1-4) — 4 each,
 push-button, alternate latching, DPDT.
 Input selector switches (Channel 5) — Push-button,
 interlocked, 5x DPDT.

P.C. Boards:

Main Board — Input and Output Amplifiers.

Pot Board — Mixing busses and booster amp.

Hi Level Board — Hi level input switch, Power indicator
 and VU meter leads.

P.C. Interconnections: 16 pin DIP plugs and flat cable.

Size:

Rack Mount — 8" deep x 5 1/4" high x 19" wide

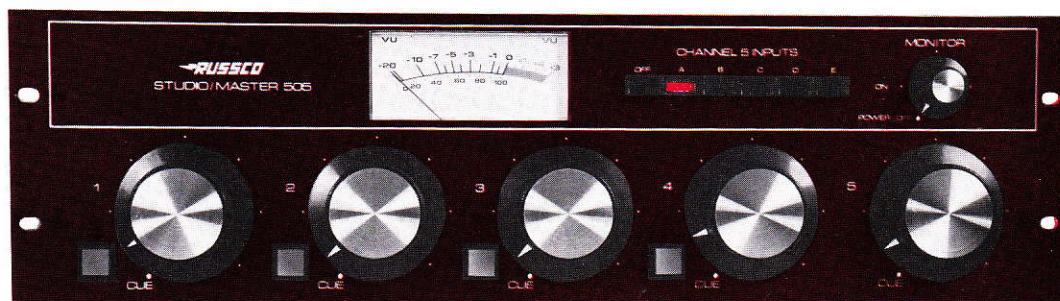
Desk Mount — 8" x 5 1/2" x 20 1/4"

Weight: 14 pounds

Power Requirements: 117 VAC, 60Hz, 100 watts

* Allen-Bradley MOD POT, Hot-molded element,
 rated at 100,000 rotations

** Grayhill series 46, rated at 250,000 operations.



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studio/master 505S stereo audio-mixer

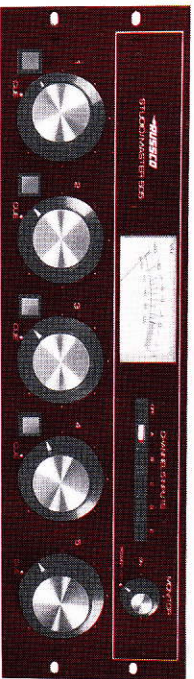


Your next stereo mixer can be as good looking as it is good working! RUSSCO's STUDIO/MASTER 505S guarantees you dependability and rugged construction in a modern, compact design. This 5 channel mixer features FET (field effect transistor) switching and long life, integrated circuitry. You'll find ease of operation with push-button switching, LED light indicators and reliable Allen-Bradley Mod Pots. Ready to work for you, the STUDIO/MASTER 505S includes plug-in preamps, cue amp and cue speaker. With quick-change coupled P.C. boards and an easy-access panel underneath, servicing is simple. Only RUSSCO could bring you this attractive, feature laden stereo mixer at such a reasonable price! Naturally, we offer an accessory monitor amplifier and RUSSCO's famous turntables in matching colors and design.

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features

5 stereo mixing channels; four channels with plug-in stereo preamps which can be quickly modified to accept hi-level line, microphone or phono signals. The 5th channel accepts 5 stereo, hi-level, balanced input lines selected by a push-button switch to give you a total of 9 stereo input channels. Cue switches on all pots combining both channels. Cue on any channel can be deactivated by removing a jumper on the P.C. board. Channels 1 thru 4 feature push-button on-air switches with LED indicator lights and monitor muting with an FET switch that can be deactivated. FET program line switches on channels 1 thru 4 provide fast, quiet switching, and can also be externally controlled by DC switching. DC switching allows operation of tape, turntable start relays, studio warning light, etc. Dual true ballistic VU meters monitor program outputs continuously. A built-in headphone amplifier with stereo headphone jack allows the use of a monitor headset of high or low impedance. A cue amplifier drives a built-in cue speaker. The STUDIO/MASTER 505S is available as the 505SR rack mount model mounting in a 5 1/4" space.



studio/master 505 rack mount - monaural

specifications

INPUTS: 9 total stereo

Channels 1-4

(Preamps) (unbalanced) (stereo)

Hi Level Microphones** Phono***

Sensitivity* —10dBm 1.00mv 10mv

Max Input +14dBm 13mv 100mv

Impedance 47K 47K 47K

Channel 5

(Balanced, 5 stereo inputs, switched)

*Sensitivity: —10dBm

Max Input: +18dBm

Impedance: 600 ohms

OUTPUTS:

Monitor: (external package)

Program: (stereo)

Level: +4 or +8dBm, for OVU,

+17dBm maximum

Impedance: 600 ohms

Frequency Response: 20 to 15KHz ± 1 dB

Total Harmonic Distortion:

less than 0.5% at 1KHz, +8dBm out.

Noise:

Greater than 60dB below +4dBm out.

referenced to —50dBm input level.

Headphone: (stereo) level 0dBm

Impedance: Hi down to 8 ohms

Cue: (mono, both channels mixed)

Power: 1 watt average

Speaker: 8 ohms, 3 inch

On-Air Light (relay driver)

Voltage: —24 VDC

Current: 40ma (600 ohm coil)

* Mixer Pot at 1:30 o'clock position, 0 VU out.

** Referenced to low impedance microphone source.

*** At 1 KHz

CONTROLS:

* Input mixing - 5 each, stereo ganged with cue.

* Monitor level - 1 each, stereo ganged with power switch.

Master level (right & left channel)

Cue level

Headphone level (right & left channel)

** On-Air key switches (Channels 1-4)

4 each, push-button, alternate latching, SPDT.

Input selector switches (Channel 5)

Push-button, interlocked, 5x 4PDT.

P.C. Boards: (seven total)

Main board

Four preamp boards (plug in)

Pot board and hi-level switch board

connect by cable to main board.

P.C. Interconnections: flat cable and multi-pin plugs.

Audio Switching: DC controlled field-effect transistor switches on channels 1-4.

Push-button switch on channel 5.

Audio Mute: DC controlled FET switch.

* Allen-Bradley Mod Pot, hot-molded element, rated at 100,000 rotations.

** Grayhill series 46, rated at 250,000 operations.

STUDIO/MASTER 505S

deluxe desk top model

Size: 8" deep x 5 1/2" high x 20 1/4" wide

STUDIO/MASTER 505SR rack mount model

Size: 8" deep x 5 1/4" high x 19" wide

Weight: 14 pounds

Power Requirements:

117 VAC, 60 HZ, 100 Watts.

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