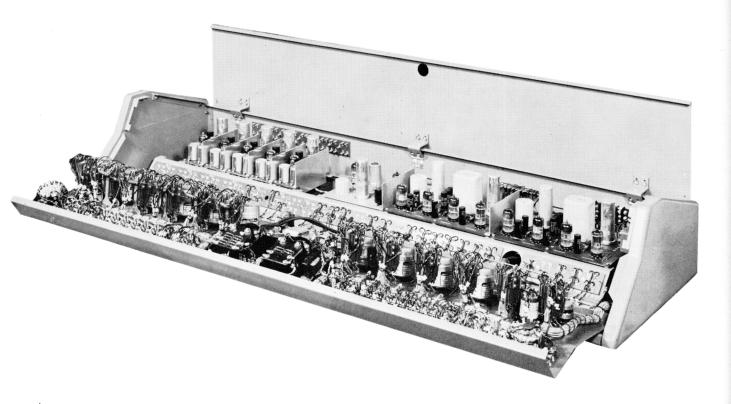


Evidence of "Dualux" acceptance is its wide usage in major market stations and by nearly a score of the country's major recording studios. Outstanding features of the Dualux include (1) Selective monitoring of all major circuits. (2) Eight utility keys for expansion. Six are at the left and two to the right. (3) A three-position high-pass filter for quick program correction. (4) Telephone type keys on all mixing channels for increased flexibility. (5) Five preamplifiers wired for 7 microphones. Up to 22 microphones if all utility keys are used. Space for 2 more preamplifiers provided. (6) Complete inbuilt cue-intercom with front panel listen and talkback. (7) Cue-attenuators on 4 mixing channels used for net, turntables, tapes and remotes. (8) Dual program amplifiers. (9) Fully regulated power supply.



#### **SPECIFICATIONS**

MIXING CHANNELS: 9 keys selected to either program amplifier. Includes 5 microphone attenuators and 4 high-level attenuators with cue position used for turntables, tapes, networks.

MICROPHONE INPUTS: As wired, 7 microphones switchable to 5 preamplifiers. However, by use of auxiliary keys, as many as 22 microphones may be accommodated.

TURNTABLE/TAPE/NETWORK INPUTS: 4 turntables switchable into mixing channels 6 and 7. Network plus 4 tape or projector inputs selectable into either channels 8 or 9 by ingenious keying system to permit fading instead of dumping.

AMPLIFIERS: 2 complete high-gain program amplifiers with individual front panel master gain controls are provided for entire dual operation. 5 preamplifiers with provisions for 2 additional preamplifiers for future expansion. Preamplifier, program amplifier, and monitoring amplifier have printed wiring throughout. Monitoring amplifier and regulated power supply mounted on drop down panel for rack mounting. Monitoring amplifier full 10 watt capacity.

IMPEDANCES: Preamplifier input 30/50 and 150/250 ohms balanced or unbalanced. Remote, network, tape and projectors 600/150 ohms balanced or unbalanced. Output impedance 600/150 ohms balanced to both program amplifiers. Monitoring amplifier, 8 and 16 ohms. Intercom amplifier, 600 ohms.

GAIN: Gain overall, 104 db. From turntable, network, or remote input, 61 db. All measurements  $\pm 2$  db.

RESPONSE: Overall or any segment of program circuit,  $\pm 1.5$  db, 30-15,000 cycles. MONITORING AMPLIFIER:  $\pm 2$  db, 30 to 15,000 cycles.

OUTPUT LEVELS AND DISTORTION: Program line maximum of +8 dbm at 1% or less. Monitoring amplifier maximum of +40 dbm (equivalent to 10 watts) at 1% or less distortion.

NOISE: Microphone input to program output 60 db or better below +8 dbm output, using —60 dbm input. Turntable, network and remote inputs 70 db or better below +8 dbm output. MONITORING CIRCUIT: 60 db below +40 dbm output.

CROSS-TALK: All circuits or segments thereof below noise level with normal levels and control positions.

TUBES: (18) 5879, (4) 12AX7, (2) 12AU7, EL84, (1) OA2, 6AK6, 6080, GZ34.

TOTAL NUMBER OF TUBES: 30.

TOTAL TUBE TYPES: 8.

RELAYS: 3 provided with contacts for muting loudspeakers and turning on warning lights.

SIZE (Dualux): 461/2" wide, 71/2" high, 15" deep.

TOTAL NET WEIGHT: 101 lbs. Packed weight: 205 lbs.

CUBAGE: 9.7 cubic feet.

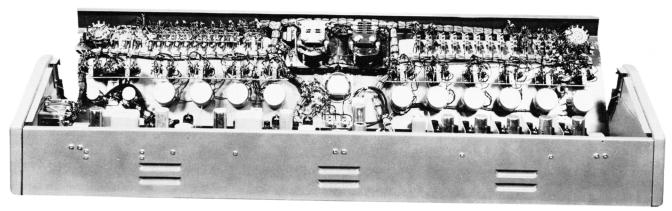
SERVICING: Front panel hinges down to service. Audio amplifier strip hinges up.

POWER CONSUMPTION: 155 watts.

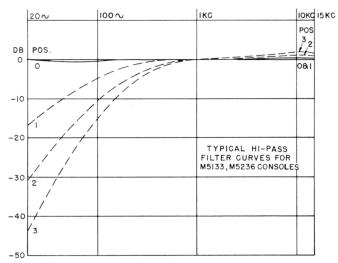
FINISH: Cabinet in medium gloss gray. Front panel metallic with escutcheons in etched black aluminum. Control knobs supplied with kit of color disc inserts for coding.

METERING: Two standard 4" illuminated VU meters recessed behind front panel for easy vision at correct eye level. One meter across program line at all times, the second may be switched across either program line; both meters calibrated +8 dbm output (may be altered for higher or lower levels on request).

PATCH PANEL: All main circuits brought to terminal board and strapped together so that normaling jacks, standard, and patch panels may be used where desired.



Rear view of Dualux. Note no rear terminations, allowing Dualux to fit against wall where desired.



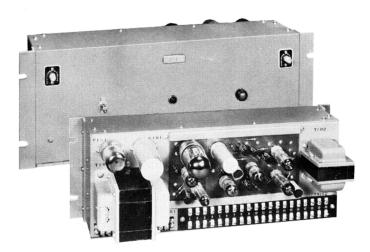
Graph showing four curves Dualux front panel control equalizer.

REMOTE LINES: 5 switched into channel 9, also into cueing system. Each remote key has cue/talk-back/mix positions. Duplicate line isolation transformers in channels 8 and 9 to handle any unbalanced condition.

EQUALIZER (High-Pass Filter): Direct front panel control for Program Channel A. A flat position and 3 selected response curves allow immediate elimination of hum, rumble or extraneous circuit noise at low frequencies. (See response curves).

CUE-INTERCOM SYSTEM: Loudspeaker and switching facilities directly in front center of Dualux console. May be used with M-5303 sub-station or any similar equipment for studio talk-back, providing following exclusive features:

• Interlocked and cannot interfere with programming.



Fully regulated power supply. Relays are powered from main power supply and located inside of drop-panel housing.

- 8 external intercom circuits selected with front panel switch.
- 8 cueing circuits selected with front panel switch.
- High gain amplifier provides adequate level for monitoring all intercom circuits.
- All inputs and outputs padded, plus isolation networks where necessary, to allow selection of any circuit without adjusting gain control where levels within 20 db of normal.
- Front panel phone jack will cut cue speaker when phone plug inserted.
- Intercom speaker mutes when announcing from control room.
- Intercom system will listen and talk back on following circuits:

RMT. 1	Turntable Cue*
RMT. 2	Studio A
RMT. 3	Studio B
RMT. 4	Studio C
RMT. 5	Mixer Bus A*
	Mixer Bus B*

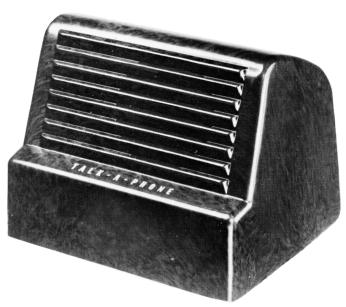
\* Listen only.



Dualux and desk. Desk designed specifically for the Dualux, with sides and back of 16 gg. stretcher level furniture steel finished in medium gray. Top is of formed linen formica in charcoal gray attached to seasoned 5-ply birch. Three wiring troughs extend down the inside rear to conceal wiring from console to floor. Leveling screws are on all four corners. Size: 47" wide, 30" front to back, height 29" adjustable to 30\(^1/\_4\)". Shipped knocked down.

#### ORDERING INFORMATION

Dualux speech input console with tubes and ready to install	
Extra preamplifiers for above	
Extra muting relays for above	AK-11939
Intercom sub-station for above	M-5303
100% spare tube complement for above	TK-294



M-5303 sub-station for studio intercom to talk back to control board. Includes matching transformer.

