



Dan Dugan Sound Design

Model D-3 Automatic Mixing Controller



Applications

- Broadcast news, talk and game shows
- Conference reinforcement and video taping
- Film and television dialogue, reality shows
- Multiple wireless mics for theater and opera
- Boardrooms, teleconferencing, distance learning

Features

- Digital I/O for digital consoles
- Eliminates late upcuts
- Reduces PA feedback and studio noise
- Convenient remote control panel
- Link multiple units for up to 64 inputs

The Model D-3 Automatic Mixing Controller helps professional audio mixers handle multiple live mics without having to continually ride their individual faders. The eight-channel Processor patches into the digital insert points of a digital audio mixing console. The Model D-3 detects which mics are receiving input and makes fast, transparent cross-fades, freeing the mixer to focus on balance and sound quality instead of being chained to the faders. The D-3's voice-controlled crossfades track unscripted dialogue perfectly, eliminating cuing mistakes and late fade-ups while avoiding the choppy and distracting effects common to noise gates.

The Model D-3 incorporates three Dugan-patented technologies:

- The Dugan Speech System™ automatically manages any number of live mics in unscripted talking situations.
- The Dugan Music System™ offers automatic downward expansion to help reduce feedback and noise pick-up in live music performances (opera, back-up vocalists). Thresholds are adjusted automatically through continuous monitoring of ambient noise levels.
- Dugan Gain Limiting™ provides continuous, stepless NOM master gain control to prevent feedback and ambient noise build-up when used with either the Music System or with manual or remote mic switching.

The combination of these three Dugan technologies make the Model D-3 a unique audio industry tool. Professional connectors and default control settings marked on the unit allow it to be set up and running with any digital console in minutes.

290 Napoleon St. Studio E, San Francisco, California 94124

(415) 821-9776 Fax: (415) 826-7699

www.dandugan.com

dan@dandugan.com



I wanted to let you know how much easier the Model D has made my life.

Keith Carroll, PA Mixer, Who Wants to be a Millionaire

Smooth transitions were present throughout and all the voices were heard without noticeable coloration.

Jan Pritzl, Milwaukee Public Television

The on-mike sound is improved, with less hollowness than in the past.

Bill Beam, WABC-TV

It worked great. We are always amazed!

Dan Frazier, Dan Frazier Productions

I could leave all of the wireless lav panel mics potted up without any problem.

Bob Phillippe, AVHQ

An irreplaceable component of every business event. Absolutely awesome!

Ken Newman, Audio Applications

Control Panel

Connectors	Two five-pin male XLRs for combined control and power cable. Cable may be connected to either the left side or the rear of the Control Panel.
Dimensions	3RU H = 2.5 in (6.4 cm) D = 5.0 in (13.0 cm) W = 17.0 in (43.0 cm); 19 in (48 cm) with rack ears
Weight	7.2 lb (3.25 kg); 9.1 lb (4.10 kg) shipping with box and control cable

Processor

Audio I/O	Eight AES/EBU digital inputs on four female XLR connectors. Eight AES/EBU digital outputs on four male XLR connectors
Gain	unity
Sample Rate	Input: 32 kHz - 96 kHz (integral sample rate conversion) Output: 48 kHz
Bit Depth	24 bits
Audio Latency	1.2 ms
Frequency Response	10 Hz to 22 kHz, ± 0.0075 dB
Output Noise	-125 dBFS (20 Hz to 20 kHz), -128 dBAFS
Distortion	-125 dB
Synchronization	Sources (48 kHz only) AES input pair 1/2 (default), 3/4, 5/6, or 7/8 Internal Word Clock in DARS input Word Clock Output 48 kHz
Linking	optical ring, up to 8 units (64 channels)
Connectors	Audio AES/EBU XLR (female inputs, male outputs) DARS input XLR female Word Clock I/O BNC coaxial Control Panel 5-pin female XLR 10 BASE T RJ-45 Host RS-232 DB-9 Linking ADAT optical Remote (Logic I/O) DB-25 Power plug-in screw compression terminal strip
Logic Inputs	Eight channel mutes, System Override, System Mute (all momentary, while held). TTL, active low (contact to ground).
Logic Outputs	Eight channel active flags. Active low, maximum applied voltage 30 V, maximum current sinking 300 mA momentary, 100 mA sustained, inductive load permitted. Internal 51 k Ω pull-up to 5 V.
Power	12 W; 9–24 VDC either polarity, or 9–18 VAC. Supplied power supply unit: input 90–264 VAC, 47–63 Hz; output 12 V, 5 A Approved UL, CSA, TUV
Dimensions	2RU H = 3.5 in (8.8 cm) D = 10.0 in (25.0 cm) W = 19.0 in (48.0 cm)
Weight	11.5 lb (5.2 kg) 14.5 lb (6.5 kg) in shipping box with power supply 23.6 lb (10.6 kg) entire system in two shipping boxes