Dugan-MY16

from Dan Dugan Sound Design

Functions & Features

- Automatic detection of active mics with automatic control of individual channel and overall gain.
- No speech cutoff due to late fader activation, for smooth, uninterrupted sound.
- Effective background noise and feedback suppression without the need for noise-gate type threshold level settings.
- Easy setup: simply insert on the appropriate mixer input channels and raise the faders.
- One card provides automatic mixing for up to 16 channels at 48 kHz, or 8 channels at 96 kHz.
- Up to 8 cards can be used simultaneously to handle up to 128 channels at 48 kHz, or 64 channels at 96 kHz.
- Channels can be grouped to make up to three independent automatic mixers.
- Can also function as an 8-channel auto-mixer + 8-channel ADAT interface.
- Dugan Control Panel software application provides remote control and level monitoring capability.

Specifications

Supported sampling frequencies	44.1, 48, 88.2, 96 kHz
Connectors	ADAT Optical (24 bit, 44.1 or 48 kHz) x 2, RJ-45 (10/100 BASE T)
Compatible devices	PM5D/-RH, DSP5D, CL5/3/1, M7CL-48ES/-48/-32, LS9-32/-16, DM2000, DM1000, 02R96, 01V96/96i, DME64N/24N

Dan Dugan Sound Design

Dan Dugan Sound Design specializes in automatic mixing technology, with automatic mixer inventor Mr. Dan Dugan at the helm. Initially licensed by the Altec company for their automatic mixers, the unique algorithm of the Dugan Speech System™ is now being made available in high-performance automatic mixing systems under the Dan Dugan Sound Design brand. Dan Dugan products have become standards in broadcast studios, conferences, and houses of worship in the United States, prized for their outstanding performance and reliability.
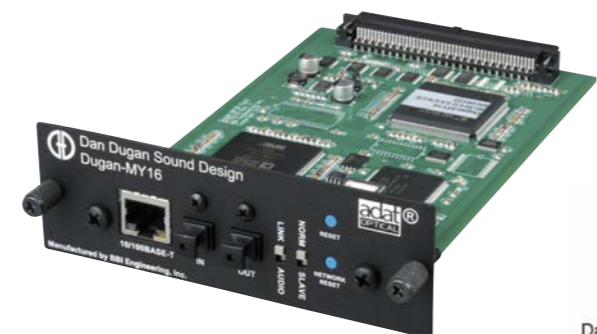
Dan Dugan Sound Design
The Dugan-MY16 is exclusively distributed by Yamaha.

LPA610

P10024293

Printed in Japan

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# Fully automatic multi-mic mixing that delivers smooth, professional sound.

Professional Automation for Multi-microphone Mixing

The Dugan-MY16 is an automatic mixing card for Yamaha digital mixers that employs advanced technology from Dan Dugan Sound Design. When multiple microphone inputs need to be mixed without a script or pre-planned gain changes, the Dugan-MY16 can automatically optimize gain distribution over multiple faders so that the engineer is free to concentrate on the quality of the mix, rather than being chained to the faders. It's almost like having a talented assistant engineer keeping track of fader levels, lightening the overall workload and maximizing efficiency.
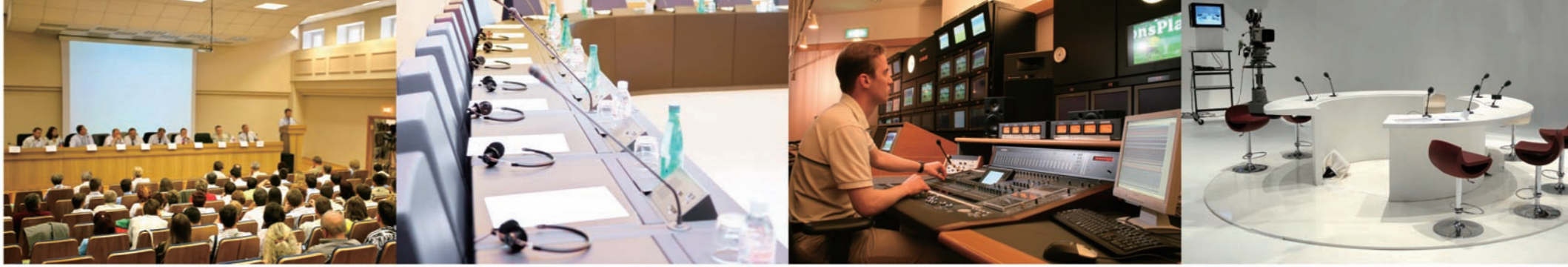
System Example

• Setup is accomplished by simply inserting the Dugan processor into the appropriate input channels of the mixer (post-fader insert recommended) and raising the corresponding channel faders.

• The Dugan Control Panel software is a JAVA application that runs on Windows and Mac computers, providing remote control and level monitoring for the Dugan-MY16.

Dugan Control Panel

Up to 16 microphones

CAT5e cable

PC

LS9
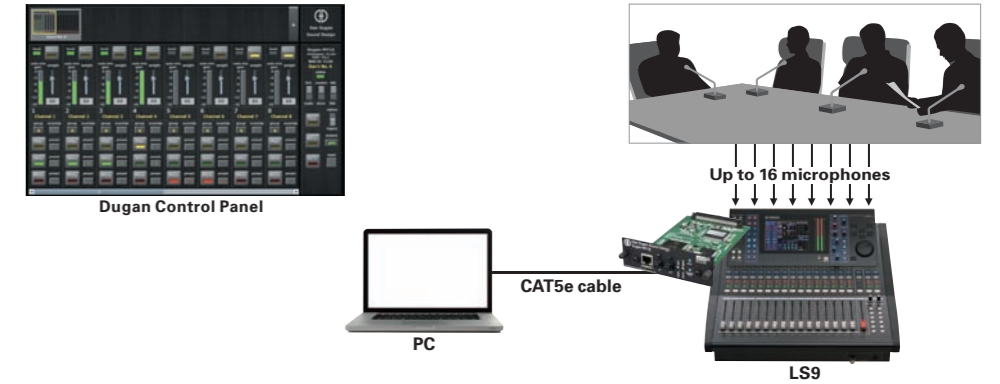
Dugan-MY16 Gain Control Operation

The Dugan-MY16 uses the innovative Dugan Speech System™ to control gain, distributing microphone gain across the entire system in order to retain the natural ambience of a single microphone. This remarkable system achieves automatic mixing without distracting level changes, inconsistent ambience, or other problems associated with automatic mixing using noise gates. The illustration shows the input and gain levels for three microphone inputs.

❶ No one speaking

When nobody is speaking all input levels are low and the gain levels are equal. The microphones are not muted. The gain is equally distributed between them.

Input Level(dB)

Resulting Gain (dB)

Mic1 Mic2 Mic3
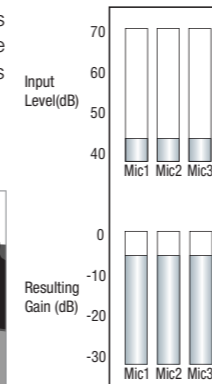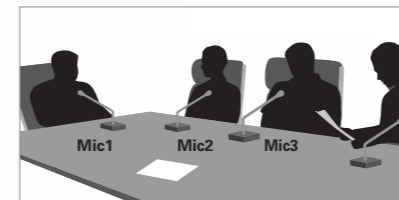
❷ One speaker

When one person is speaking the gain of the corresponding microphone is instantaneously raised to 0 dB while the gain of the other two microphones is lowered. The same occurs in any channel when only one person is speaking.

Input Level(dB)

Resulting Gain (dB)

Mic1 Mic2 Mic3
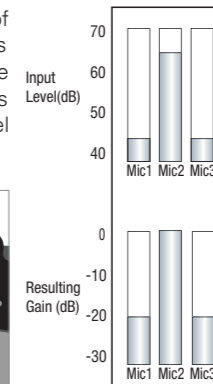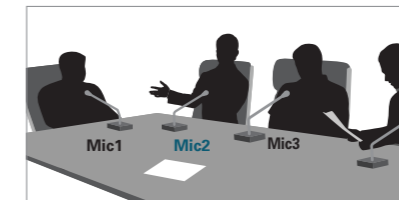
❸ Multiple speakers

When two people speak at the same time the gain is equally distributed between the two active microphones so that the total gain remains constant, and the gain of the remaining microphone is lowered.

Input Level(dB)

Resulting Gain (dB)

Mic1 Mic2 Mic3

Dan Dugan Sound Design
Dugan-MY16

Manufactured by BBI Engineering, Inc.