

# Digital Mixer D-900

The perfect partner for AV-based presentations. The Mixer features a compact, fully modular design with a 12 in / 8 out configuration, up to 16 presettable sound parameter configurations and full remote control capability.



# High-resolution sound quality capability in a compact, all-in-



## Ready for any requirement.

The new TOA D-901 Digital Mixer is a fully modular, cost-effective and easy-to-operate digital mixer with that be expanded as desired.

## All-in-one design.

The compact D-901 is just 3U-sized but incorporates digital mixer, feedback suppressor, echo as well as output signal processing functions. Its remarkable operational scope allows it to do the work that conventionally would require several different pieces of equipment, proving a cost-effective unit that is perfect for any application.

## Feedback suppressor.

This sophisticated function automatically processes a venue's susceptibility to feedback at certain frequencies through constant monitoring then automatically attenuates the problem frequencies to eliminate feedback for ideal performance.

## Sound processing.

As a full-featured digital mixer, the D-901 incorporates several useful functions to ensure maximum performance. A crossover function allows setting the crossover points and filter slopes to suit multichannel speaker system speakers the D-901 can be used with. A speaker overload protection circuit also works to protect the speakers from overload and distortion, helping to save costs. Full equalization and filter settings can be set to user preferences and these configurations saved to memory. A time delay function is provided to adjust for remote speakers.

## Ergonomic control layout.

Convenient front panel controls and display make it easy to perform all functions and confirm parameter settings without requiring a PC. Another advantage is the ability to store up to 16 sound parameter setting configurations in unit memory for instant recall when required. These include setting crossover parameters for speakers as well as other digital signal processing for precise EQ and filter slope settings as well as time delay settings.

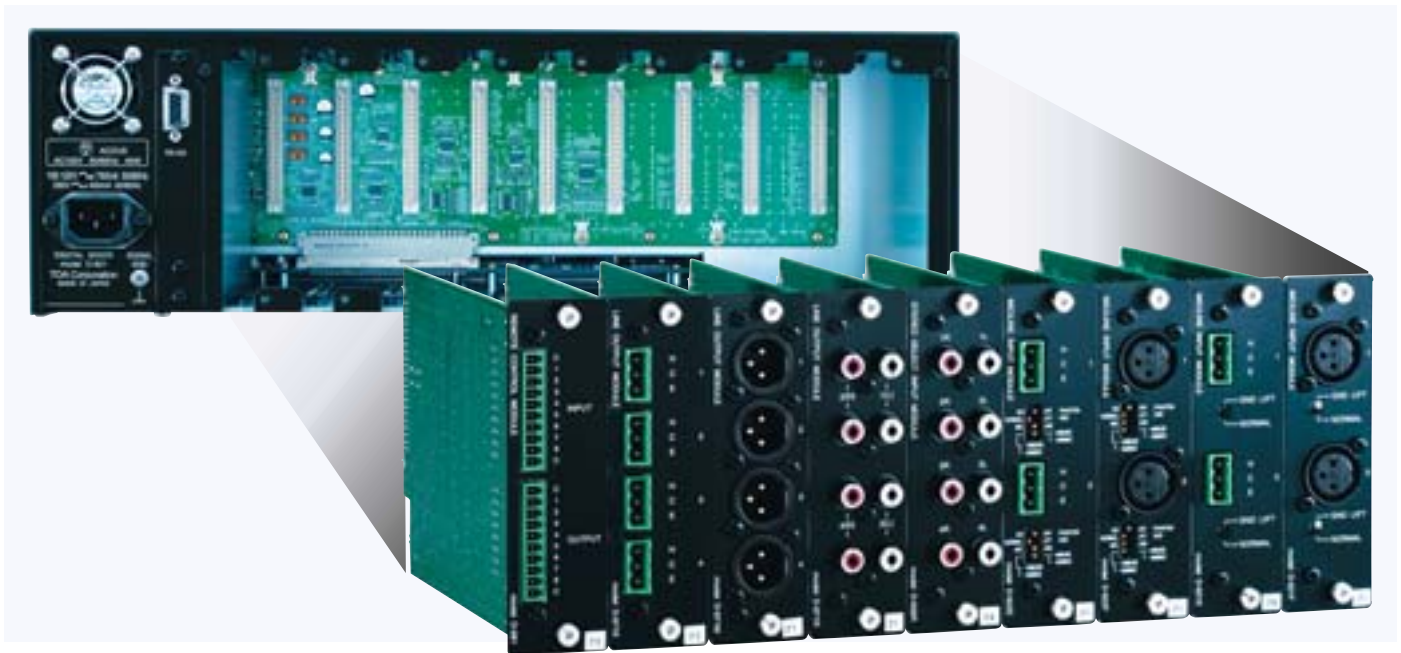
## Wide application scope and remote control ability.

The D-901's functions can be conveniently controlled via a conventional remote control that is supplied with the unit. D-901 control is also easy when activated by an external signal trigger. The RS-232C port on the back panel enables the D-901 to be easily interfaced with industry standard control and automation equipment.



D-901 Rear

# and remote control one modular digital mixer.



## D-900 Series Modules

To allow the D-901 Digital Mixer Series to be employed for the greatest performance and cost effectiveness, TOA offers a range of modules to be used with the D-900 Series as requirements dictate.



### D-921F Mic/Line Input Module

The D-921F is a 2-channel input module that accepts both mic and line level inputs. It is equipped with XLR connectors, adjustable input gain sensitivity as well as phantom power for easy operation.



### D-922E Mic/Line Input Module

The D-922E is a 2-channel input module that accepts both mic and line level inputs. It is equipped with terminal block connectors and DIP switches to adjust input gain sensitivity, phantom power and ground lift options for easy operation.



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### D-921E Mic/Line Input Module

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### D-936R Stereo Input Module

Fitting into module slots 1 through 6, this 4 stereo input module can be used to send one or a L+R mix of all the 4 stereo inputs to the D-901. Stereo/mono mode can be set on the front panel.



### D-971R Line Output Module

Conveniently offering 4 line level outputs through terminal block connectors and fitting into slots 7 through 8.



### D-971E Line Output Module

Conveniently offering 4 line level outputs through terminal block connectors and fitting into slots 7 through 8.



### D-971M Line Output Module

Conveniently offering 4 line level outputs through XLR connectors and fitting into slots 7 through 8.



### D-981 Remote Control Module

Optional module that fits into slot 7. Using this module allows external remote control over parameters such as preset memory settings, input and channel level control, mode selection for stereo inputs, and channel on/off.

## SPECIFICATIONS

### • D-901 Main Unit

<b>Power Source</b>	AC 100 – 120V, 230V, 50/60 Hz
<b>Power Consumption</b>	40W
<b>Operating Temperatures</b>	+5° C – +40°C
<b>Frequency Response</b>	20 – 20,000 Hz (±1 dB) (±4 dB Input)
<b>Input</b>	12 channels (maximum), Module type (option)
<b>Output</b>	8 channels (maximum), Module type (option)
<b>Signal Processing</b>	
<b>Feedback Suppression</b>	12 filters (Auto + Dynamic)
<b>Equalizer/Filter</b>	Parametric equalizer: 20 – 20,000 Hz, ±15 dB, Q: 0.267~69.249 Filter: High-pass filter 20 – 20,000 Hz, 6 dB/oct, 12 dB/oct      Low-pass filter 20 – 20,000 Hz, 6 dB/oct, 12 dB/oct Notch filter 20 – 20,000 Hz, Q: 8.651 – 69.249      All-pass filter 20 – 20,000 Hz, Q: 0.267~69.249 High shelving filter 6 kHz – 20 kHz, ±15 dB      Low shelving filter 20 – 500 Hz, 15 dB Horn equalizer 20 kHz, 0 – +18 dB; 1 dB steps
<b>Compressor</b>	Crossover filter: 20 – 20,000 Hz, 6 dB/oct, 12 dB/oct, 18 dB/oct, 24dB/oct Threshold : -20 dB~+20 dB, 1 dB steps Ratio : 1:1, 2:1, 3:1, 4:1, 8:1, 12:1, 20:1, ∞:1 Attack time: 0.2 – 100 ms Release time : 10 ms – 5 s Gain : -∞ – +10.0 dB
<b>Delay Matrix</b>	Delay time : 0~682.6 ms, 0.021 ms steps 12 x 8
<b>Preset memory</b>	16
<b>Auxiliary Function</b>	System Lock capability
<b>Control</b>	RS-232C D-sub connector (9p), Remote control module (D-981) (option)
<b>Front Panel</b>	Preset memory recall key: 8 / LCD indicator, Screen shift key (up, down, left, right), Setting knob Input level indicator: 2-color LED / Output level indicator: 2-color LED Channel selection key: 12 for input channel, 8 for output channel / Channel volume adjuster: 1 for input channel, 1 for output channel
<b>Rear</b>	Input module slot x 6 (2 slots shared for input and output modules) Output module slot x 2 / Remote control module x 1
<b>Finish</b>	Panel: Aluminum, Hairline finish, Black (Munsell N1.0 approx.) Case: Coated steel plate, Black (Munsell N1.0 approx.), 30% gloss
<b>Dimensions</b>	482.6 mm (W) x 132.6 mm (H) x 320 mm (D), excluding protruded portions
<b>Weight</b>	6.9 kg
<b>Accessories</b>	Power cord x 1, Rack mounting screw x 4, Rack mounting metal fitting (comes installed on the main unit) x 2

### • Input Module Specifications

Model	D-921F	D-921E	D-922F	D-922E	D-936R
<b>Input</b>	2 channels, balance -50/-36/-10/+4 dB Phantom power source (+15V, Usable when set to Microphone) Ground lift switch	-50/-36/-10/+4 dB (4-pin dip switch)	2 channels, balance Phantom power source (4-pin dip switch) Ground lift switch	(selection of 1 stereo or 4 stereo mixng -10dB)	4 stereo or 4 stereo mixng -10dB
<b>Input Connector Type</b>	XLR	Terminal block	XLR	Terminal block	RCA pin jack
<b>A/D Converter</b>	24 bit	24 bit	20 bit	20 bit	24 bit
<b>Frequency Response</b>	20~20,000 Hz (±1 dB, +4 dB input)				
<b>Sampling Frequency</b>	48 kHz				
<b>Dynamic range</b>	100 dB (JIS-A) or higher (+4 dB input)	85 dB (JIS-A) or higher (+4 dB input)			100 dB (JIS-A) or higher
<b>Total Harmonic Distortion</b>	Under 0.05%	Under 0.2%			Under 0.05%
<b>Finish</b>	Panel: Coated steel plate, Black (Munsell N1.0 approx.), 30% gloss				
<b>Dimensions</b>	35 (W) x 119.5 (H) x 175.5 (D) mm				
<b>Weight</b>	150 g	140 g	135 g	120 g	145 g

### • Output Module Specifications

Model	D-971M	D-971E	D-971R
<b>Output</b>	4 channels, +4 dB, Electronic balance	4 channels (each accommodates 2 lines), -10 dB	
<b>Output Connector Type</b>	XLR	Terminal block	RCA pin jack
<b>D/A Converter</b>	24 bit		
<b>Frequency Response</b>	20~20,000 Hz (±1 dB)		
<b>Sampling Frequency</b>	48 kHz		
<b>Dynamic range</b>	100 dB (JIS-A) or higher		
<b>Total Harmonic Distortion</b>	Under 0.05%		
<b>Finish</b>	Panel: Coated steel plate, Black (Munsell N1.0 approx.), 30% gloss		
<b>Dimensions</b>	35 (W) x 119.5 (H) x 175.5 (D) mm		
<b>Weight</b>	165 g	140 g	145 g