



MDM-410

mobile dj mixer

OWNER'S MANUAL

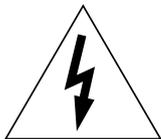
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CONGRATULATIONS !

Thank you for purchasing Vestax's MDM-410 mobile dj mixer.

We suggest that you read through this owner's manual thoroughly to enjoy this product safely and in knowledge of all its special features and suitable applications.



CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



**CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK
DO NOT REMOVE COVER (OR BACK)
NO USER-SERVICEABLE PARTS INSIDE
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL**



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT SAFEGUARDS

READ BEFORE OPERATING EQUIPMENT

This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.

1. Read instructions-All the safety and operating instructions should be read before the appliance is operated.
2. Retain instructions-The safety and operating instructions should be retained for future reference.
3. Heed Warnings-All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow Instructions-All operating and use instructions should be followed.
5. Cleaning-Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
6. Attachments-Do not use attachments not recommended by the product manufacturer as they may cause hazards.
7. Water and Moisture-Do not use this product near water-for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.
8. Accessories-Do not place this product on an unstable cart, stand, tripod, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with product. Any mounting of the appliance should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.
9. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
10. Power sources-This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company.
11. Lightning-For added protection of this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the product due to lightning and power-line surges.
12. Overloading-Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
13. Object and Liquid Entry-Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
14. Servicing-Do not attempt to service product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified personnel.
15. Damage Requiring Service-Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - a. When the power-supply cord or plug is damaged.
 - b. If liquid has been spilled or objects have fallen into the product.
 - c. If the product has been exposed to rain or water.
 - d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
 - e. If the product has been dropped or cabinet has been damaged.
 - f. When the product exhibits a distinct change in performance this indicates need for service.
16. Replacement Parts-When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original parts. Unauthorized substitutions may result in fire, electric shock or other hazards.
17. Safety Check-Upon completion of any service or repairs to product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
18. Carts and Stands-The appliance should be used only with a cart stand that is recommended by manufacturer.
19. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



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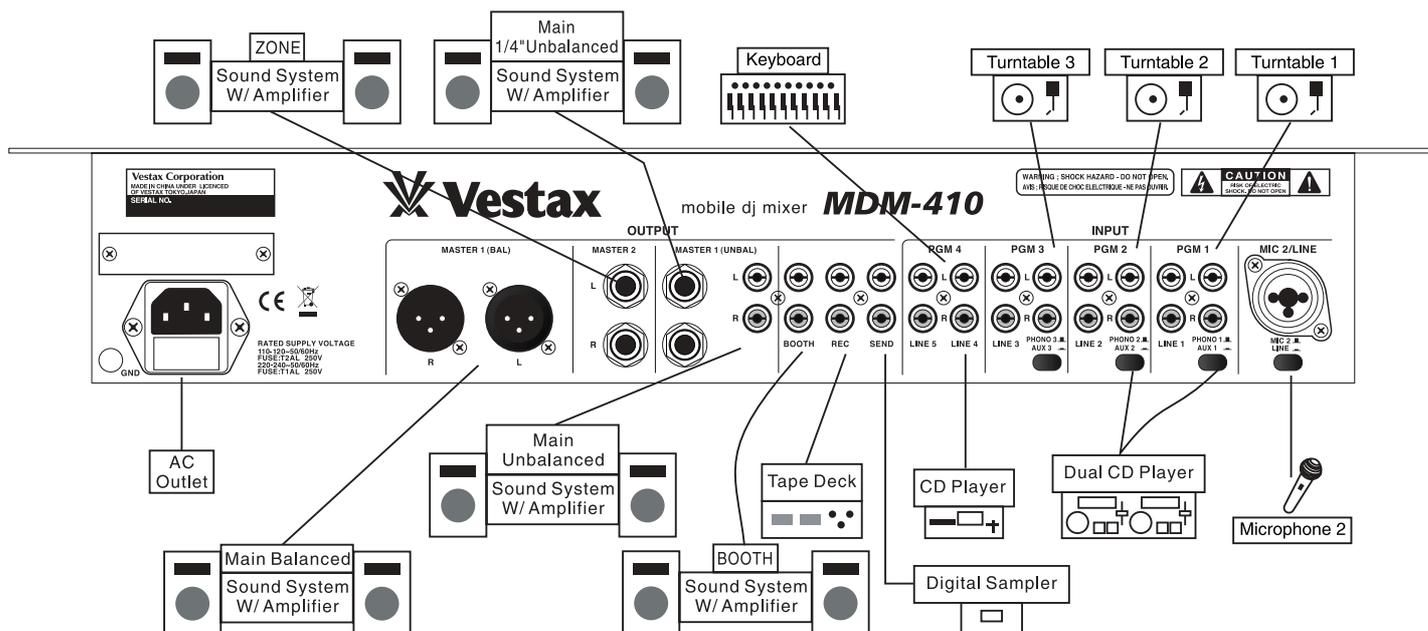
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1. FEATURES

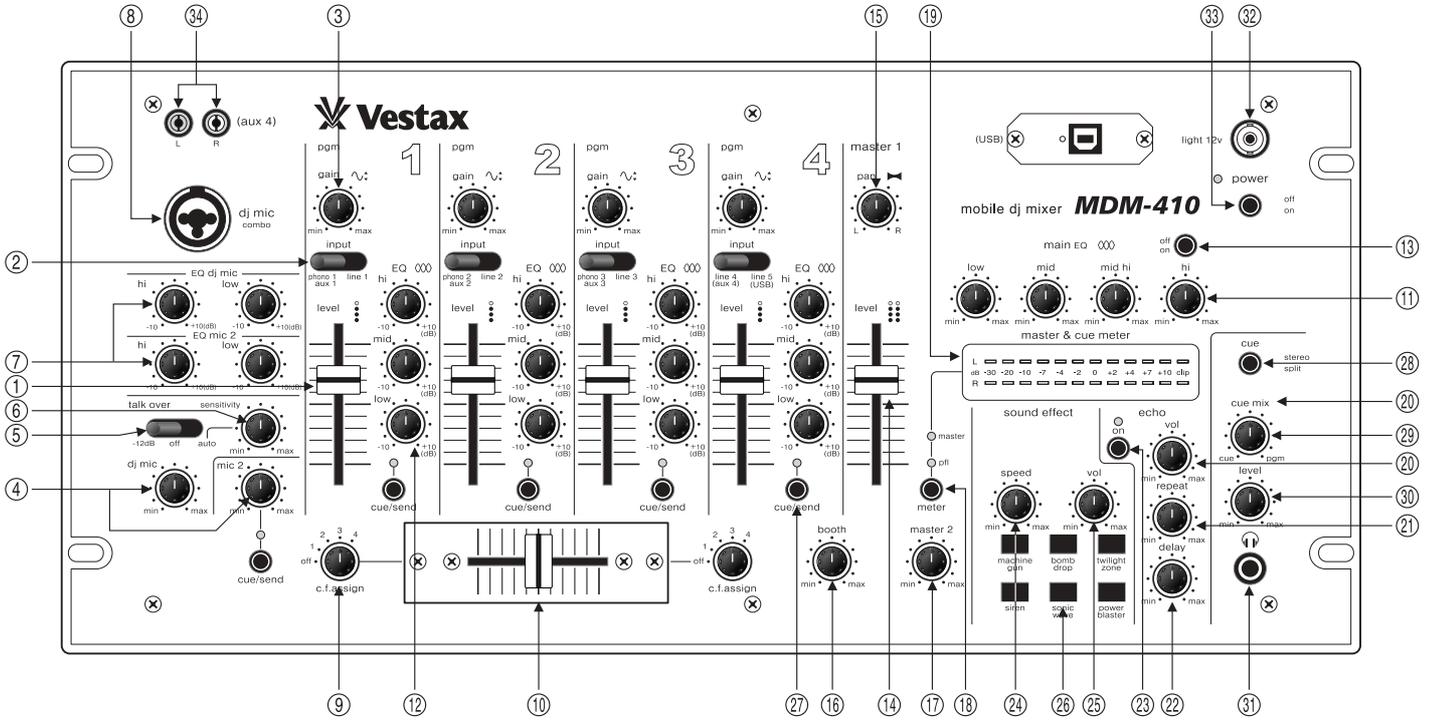
- 4 Space Rack Design
- 4 Band Master EQ and Dual LED Master and cue meter
- 3 Band EQ per Channel to control Low level, Mid Level and High level frequency
- Push button CUE per channel with green LED indicator allowing CUE mix
- XLR-1/4" combo Mic input
- Talk over feature with sensitivity control
- BNC lamp port
- 1/4"headphone input
- 2 band Mic EQ & volume controls Booth and Master2 Outputs
- Selectable Crossfader
- Front RCA AUX input for MP3 Players, Computers or any other audio source
- 5 lines, 2 Mic, 3 phono/aux convertible RCA inputs
- Master (XLR and 1/4"), record, booth, & send RCA outputs, 1/4" Master2 output
- 6 sound effects and ECHO function
- Unit Dimensions: 18.9" × 8.6" × 3.1"

2. QUICK SETUP DIAGRAM

Study this setup diagram. Make sure all faders are at "zero" and devices are off. First, connect all stereo input sources. Next, connect your microphone(s) and monitor headphones. Finally, connect the stereo outputs to the power amplifier(s) and /or audio sources. Plug your audio input sources such as turn tables or CD players first, then your mixer, and finally any amplifiers. When turning off, always reverse this operation by turning off amplifiers, then your mixer, and finally any amplifiers. When turning off, always reverse this operation by turning off amplifiers, then your mixer, and then input devices.



3. FRONT PANEL FEATURES



This section is divided into various functional blocks: Inputs, Microphone, Crossfader, Equalizer, Outputs, and Headphone Cueing. It is important to learn how each of these works.

INPUTS

1. Input faders - to control individual source levels in the mixer.
2. Input Toggle Switches - to select which source will be live to that channel based on what you have connected to the rear panel input section.
3. Pre - fader Gain Controls - to adjust the pre-fader volume for clearer sound.

MICROPHONE

4. Mic Gain Controls - The DJ Mic and Mic2 Fader control the DJ Mic volume and Mic2 volume For the Alto "Combo" connectors.
5. Mic Talkover - Talk over Switch - to control DJ Mic only. Mic 2 activation is controlled only through the Mic 2 level fader. Talk over turns down the input level of the music sources from Channels 1-4.
6. Talk over sensitivity adjust-to determine the point in which auto-talk over activates. The more sensitive the adjustment is , the quieter you need to speak into microphone to activate auto-talk over.
7. Mic Treble and Bass Controls - for fine - tuning the tone of your voice on Both mics through the sound system.
The controls are detented for setting tone " flat". For best results, use a dynamic cardioid microphone.
8. Show "Combo" connector - to allow connection of either a 1/4" jack or an XLR jack. This is ideal for connecting an XLR gooseneck directly into the mixer.

CROSSFADER

9. Crossfader Assign Knob - to determine which input channel will be heard when the crossfader is moved towards the knob.
10. Replaceable Crossfader - to achieve clean segues between the two input channels selected by the Crossfader Assign.



In this example "Hard left" selects Channel 1 and "Hard right" selects Channel 4. With the crossfader centred, both assigned channels are live. Use the crossfader for fast and seam less segues from one selected channel to the other.

Note: The crossfader is user replaceable in case of failure. Simply unscrew the two large screws that hold it in place, lift it out and disconnect its cable. Re-attach the new crossfader and screw the mounting plate back onto the unit-you're back in business!

EQUALIZER

11. 4-Band Main Equalizer (EQ) -

It compensates for differences in source material sound quality. Main Equalizer can be used to tailor the sound to the acoustical requirements of the room. Center frequencies are 60Hz, 700Hz, 4KHz and 15KHz.

You have to compensate by running the Master output higher:

12. Channel EQ - control 3-band EQ, ± 10 dB at 100Hz, 1KHz, 10KHz.

GENERAL EQ HINTS

- Boost the 60Hz band for deep bass tones and solid kick drum sound. Use sparingly because this dramatically increases demand on power amplifiers and could drive them into "clipping".
- Cut slightly at 700Hz and more at 4KHz for extra clarity
Note: cutting is preferable to boosting.
- Boost 15KHz for a little "sizzle".
- As a general rule, less equalization is better!

13. Main EQ switch-when it is used to adjust the main EQ, switch it on.

OUTPUT

14. Master1 Fader - to control the over all output level.
15. Panning-to adjust the balance of right to left audio.
16. Booth fader -to control speaker volume for a remote booth monitors.
17. Master2 fader -to control speaker volume for a remote zone monitors.
18. Meter Assign -to determine whether pre-fader or master audio is sent to the stereo LED meter. PFL signal is determined by the cue assign switches.
19. Stereo Auto Peak Hold Level Indicator- to track level of audio sent to it by the meter assign. The red LEDs for +4dB, +7dB, +10dB and clip. program peaks for second or two. With peak Metering, it's OK to be "in the red" as long as +10dB or clip aren't constantly lit. When it is used as a master output meter, set the crossover, equalizer and power amp inputs to avoid distortion at each step in the audio chain. Pay attention to the peak meter to avoid sound distortion. When it is used to adjust the PFL levels, accurately match channel levels with the Pre-fader gain controls before mixing them together. The idea is to properly match PFL inputs, not the input with the stereo output meter!
20. Echo volume-to adjust the output level of Echo volume
21. Echo Repeat- to adjust the Echo repeat.Turn the knob counter clockwise.It decreases the echo repeat.Turn the knob clockwise, then it increases the echo repeat.
22. Delay - to adjust the Echo delay
23. ON switch - when you need the echo effects, turn on the switch.

SOUND EFFECTS

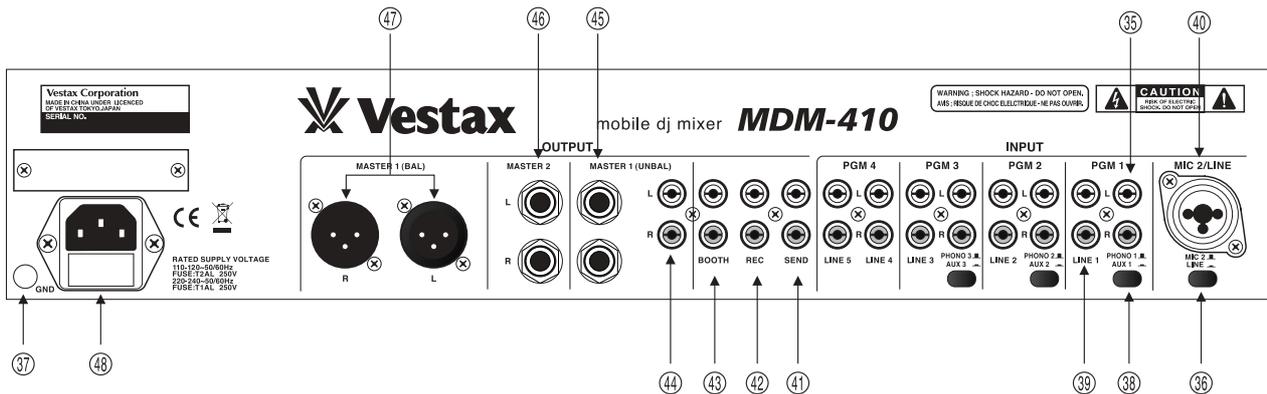
24. Speed-to adjust the speed of sound broadcasting
25. Volume-to adjust sound output level
26. Sound effects-to select 6 Sound effects(1.MACHINE GUN 2.BOMB DROP 3.TWILIGHT ZONE 4.SIREN 5.SONIC WAVE 6.POWER BLASTER)

HEADPHONE CUEING

27. Channel Cue/Send Assign-are used to route PFL channel audio to the Monitor Section. The channel faders do not control the Cue send volume. This audio is also sent to a rear panel output for use with an external sampler or other source such as booth monitor.
28. Split /Blend Cue-controls how PFL and Program audio are sent to your headphones. in split mode, the PFL audio can be heard in you left ear and PGM audio can be heard in your right ear. In blend mode, both PFL and PGM can be heard in both ears.

29. Cue Mix-controls the mix of PFL and PGM signals to your headphones. When the slider is moved to the left, all you will hear is the cue source. When the slider is all the way right, you will hear what is playing through the master output. By blending, beats can be matched exactly and segues can be smooth when a song is cued.
30. Cue Level-to adjust cue volume.
31. Cue output-for your 1/4"headphone.
32. 12V BNC Connector-allows a 12-volt gooseneck lamp to be connected directly to the mixer.This light is readily available from your Numark dealer.
33. Power Button-turns unit off and on.
34. Aux4 input-the input controlled by CH-4.

4. REAR PANEL FEATURES



35. Phono Inputs-for attaching your turntables. When these connectors are used,signal is fed directly to the high-quality RIAA phono pre-amplifiers. Line level sources will overload the sensitive phono pre-amps and will cause distortion.
36. Mic/line input switch-to select Mic or Line input.
37. Grounding lug-for turntable connection. Always use this connection when using turntables. (your turntable cable should have a grounding wire)
38. Aux/Phono Input switch-to allow line level equipment to be plugged into your phono inputs giving you a total of four input options.
39. Line Inputs-are unbalanced RCA jacks for connecting stereo audio from line level sources such as CD players, HiFi VCRs, cassette and reel-to-reel tape decks, DAT machines, laser discs, tuners,even synthesizers or other mixing consoles.
NOTE: Plug mono audio sources into both Left and Right inputs using a "Y" cable connector.
40. Mic Input-for alto "Commo" (1/4" or XLR plug).
41. Send Outputs-to temporarily send channel PFL signal to an external sampler or other source. When there is signal output, the PFL cue buttons should be pressed down.
42. Record Outputs-are unbalanced RCA jacks used to send the output of the program to any connected recording device.
43. Stereo Booth Outputs- unbalanced RCA jacks controlled by the Booth Level control.
44. Stereo Main Outputs- unbalanced RCA connectors controlled by the Master fader.
45. Stereo Main Outputs- unbalanced 1/4" plug connectors.
46. Stereo Main Outputs-unbalanced 1/4" plug controlled by zone level.
47. Stereo Balanced Main Outputs- low-impedance XLR type connectors controlled by the Master fader.
48. IEC Power Connector- to plug power cord in.

5. SPECIFICATIONS

		NOMINAL INPUT LEVEL	IMPEDANCE
INPUT	LINE/AUX:PGM1 ~ 4(RCA PIN/UNBALANCED dBv)	0dBv	10k Ω
	PHONO IN:PGM1 ~ 4(RCA PIN/UNBALANCED dBv)	-47dBv	-47k Ω
	MIC IN:(COMBO IN dBv)	-55dBv(VR max,att '-12db)	10k Ω
		NOMINAL OUTPUT LEVEL	IMPEDANCE
OUTPUT	MASTER OUT	0dBV(1.0v)	220 Ω
	BOOTH OUT	0dBV(1.0v)	220 Ω
	REC OUT	0dBV(1.0v)	220 Ω
	HEAD PHONES OUT	0.5watt into 47k Ω	
S/N RATIO	LINE	More than 90dB	
	PHONO	More than 80dB	
	MIC	More than 75dB	
FREQUENCY RESPONSE	LINE/AUX	20Hz-22kHz \pm 0.5dB	
	PHONO	\pm 1dBexcept for controlled attenuation at -3dB	
	MIC	80Hz-18kHz \pm 0.5dB	
EQ	EQUALIZER	\pm 10dB @ 60Hz,700Hz,4kHz,15kHz	
POWER CONSUMPTION	10 Watt typocal		
	17 Watt with full headphone output		
DEMENSIONS	480 \times 220 \times 80mm		
WEIGHT	5.5kgs		

IMPORTANT!

**Please read this manual carefully before operating
this unit for the first time.**

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Vestax Corporation