Installation Manual
and Operating Instructions

3 Channel - VOX - MOH - Phone
and VoIP Interface

MD35M - 35 WATTS
MD60M - 60 WATTS
MD120M - 120 WATTS

IMPORTANT NOTE: THIS OPERATING MANUAl IS PROVIDED AS AN INSTALLATION AND
AS AN OPERATING AID. MIEG CORPORATION and MEM AUDIO DOES NOT ASSUME ANY
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TRACT FOR ANY DIRECT CONSEQUENTIAL OR INCIDENTAL LOSS OR DAMAGE ARISING
FROM THE INSTALLATION, USE OR INABILITY TO USE THIS PRODUCT.

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

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REV. 1.1
DESCRIPTION AND APPLICATIONS

- 3 Channel Inputs
- Wide Frequency Response
- Very Low Distortion
- Balanced Microphone Input
- Phantom Power on MIC Input with Selector
- Balanced Telephone Paging Input
- VoIP Telephone paging Input
- Tel and Mic Vox Sensitivity Control
- Auxiliary Input With Stereo Summing
- Auxiliary Input Gain
- Independent Input Controls
  Bass and Treble Controls
- VOX - Voice Activated Muting
- Direct Muting or Unmuting
- 12 Volt Accessory Power Output
- 600 ohm or 10K (VoIP) MOH Output
  with Separate Output Level Control
- 8 ohm, 25 Volt & 70 Volt
  Output Impedance
- Rack Mounting with Optional Kits

UNPACKING

Immediately upon receipt of the amplifier, inspect the unit and shipping container for indications of improper handling or in transit damage. The equipment was carefully inspected and tested before leaving the factory. Notify the Transportation Company immediately if any damage is found. ONLY THE CONSIGNEE CAN FILE A CLAIM WITH THE CARRIER FOR DAMAGE DURING SHIPMENT. Be sure to save the carton and packing material as evidence of damage for the shipper inspection. DO NOT SHIP the unit back to the factory unless authorized by the factory.

IN TRANSIT DAMAGES ARE NOT COVERED BY THE MEM WARRANTY.

SPECIFICATIONS

Power Output: 35/60/120 Watts RMS
Distortion: Less than 0.5% THD
Frequency Response: 20 - 20,000 Hz ± 2 db
Inputs:
- Input 1: Auxiliary
- Input 2: Microphone Balanced
- Input 3: Telephone Transformer Balanced
Sensitivity & Z:
- Input 1: Mic=1 Mv - 250 ohm balanced
- Input 2*: Tel=100 Mv - 600 ohm balanced
- Input 3*: Aux=200 Mv - 47K ohm
  - VoIP 50K ohm 100 Mv unbalanced
Hum & Noise:
- Input 1: Mic -70 db, Aux/-75 db
- Input 2: VoIP 50K ohm
- Input 3: Transformer balanced
Telephone Input: 600 ohm Transformer balanced
Music on Hold Output: 600 ohm-1 Volt Transf. balanced
- Input 3: VoIP 10K - 1 Volt unbalanced
Output Impedance: 8 ohm, 25 Volt and 70 Volt line
Controls:
- Front Panel: AUX Volume, MIC Volume,
  Telpage Volume, Bass, Treble
- Rear Panel: AUX Input Gain, MOH Level
  MIC/TEL Vox Sensitivity
Phantom Power: On MIC Input w/internal jumper
MOH Source: AUX Input
Tone Control Action: +/-10 db at 100 Hz and 10 K hz
Voice Activated Muting
VOX:
- MIC/TEL mutes AUX Input
Direct Muting: External Contacts
- Mutes or Unmutes MIC Input only
MIC Unmuting: Optional Rack Kits
Power Requirement: 120 Volt, 50-60 Hz
Power Consumption: 110/230/600 VA
Terminations: Phoenix Connectors, RCA Jacks
Housing Finish: Black
Dimensions: 12.5"W., 8.5"D., 1.75"H.
  (317.5x215.9x44.45mm)
Net Weight: 10.95 Lbs
  (5.0 Kg)

ACCESSORIES

MRK 1 - Standard 19” Rack Mounting Kit. Black finish. Complete with hardware
MRK 2 - Dual Amplifier 19” Rack Mounting Kit. Black finish. Complete with hardware
1) Read these instructions carefully.
2) Keep these instructions.
3) Heed all Warnings.
4) Follow all instructions.
5) DO NOT use this apparatus near water.
6) Clean ONLY with a damp cloth.
7) DO NOT block any of the ventilation openings. Install in accordance with the instructions provided.
8) DO NOT install near any heat sources such as radiators, stoves, or other apparatus (including amplifiers) that produce heat.
9) DO NOT mount amplifier into a container or a closed unventilated closet while operating.
10) DO NOT place any object or accessory equipment such as Tuners, Mixers, Cassette Decks, etc. on top of the amplifier. Obstructing or closing the cabinet ventilation openings may cause overheating.
11) DO NOT defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade and or the third prong is provided for your safety. When the provided plug does not fit into your outlet, consult a certified electrician for replacement of the obsolete outlet.
12) Use only the attachments and accessories specified in this manual.
13) Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a person, and serious damage to the product. If a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
14) Unplug this apparatus during lighting storms or when unused for long periods of time.
15) Refer all servicing to qualified service personnel only. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
16) DO NOT replace fuses unless power cord is removed from the AC wall outlet.
17) DO NOT install accessories unless the power cord is removed from the AC wall outlet.

WARNING

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. DANGEROUS HIGH VOLTAGES ARE PRESENT INSIDE THE ENCLOSURE. DO NOT OPEN THE CABINET. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.
**MDM SERIES INTEGRATED AMPLIFIERS**

**FRONT PANEL CONTROLS**

1. AUXILIARY Volume Control
2. MICROPHONE Volume Control
3. TELEPHONE Volume Control
4. BASS Control
5. TREBLE Control
6. MASTER Volume Control

**REAR PANEL INPUTS - OUTPUTS**

1. AC Power Cord
2. Chassis Ground Screw
3. 12 Volt Accessory Power Tap
4. Speaker Output
5. AUX Input
6. Mic Vox Circuit Off/On
7. Tel Vox Circuit Off/On
8. MOH 10K/ 600 Ohm (VoIP)
9. Tel Input 10K/ 600 Ohm (VoIP)
10. MOH Balanced Output
11. Unmute/ Mute Terminal
12. Microphone Balanced Input
13. Telephone Balanced Input
14. AC Line Fuse
15. AUX Input Gain
16. MOH Output Level
17. MIC Vox Sensitivity
18. TEL Vox Sensitivity

**RACK MOUNTING**

A) Procure the optional accessory MRK1 Rack Mount Kit. Fig. 4B Optional MRK2 side by side kit.
B) Turn amplifier up side down and remove the four rubber feet by removing the four center pins.
C) Remove three screws on each side of the amplifier holding the amplifier cover.
D) Install the rack kit brackets by using the self-tapping screws provided.
### Troubleshooting Chart

This Troubleshooting Chart is provided to the installer as an aid in locating and correcting possible problems that may arise during installation or after use. This chart should only be used by qualified personnel trained in repair and maintenance of electrical apparatus.

<table>
<thead>
<tr>
<th>Problem Symptoms</th>
<th>Probable Cause</th>
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<tbody>
<tr>
<td>Amplifier is completely dead.</td>
<td>1) No voltage present at AC outlet.</td>
</tr>
<tr>
<td>Power indicator does not glow.</td>
<td>2) AC line fuse open.</td>
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<tr>
<td></td>
<td>3) Defective or open power cord.</td>
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<td></td>
<td>4) Power switch inoperative.</td>
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<td></td>
<td>5) Power transformer winding open.</td>
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<td></td>
<td>6) Power indicator defective or disconnected.</td>
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<tr>
<td>Power indicator glows but there is no output from the amplifier.</td>
<td>1) Input controls setting not adjusted properly.</td>
</tr>
<tr>
<td></td>
<td>2) Speaker wires shorted.</td>
</tr>
<tr>
<td>Loud hum or crackling sound from the speakers.</td>
<td>3) Speaker(s) line interrupted.</td>
</tr>
<tr>
<td>Output level changes cyclically</td>
<td>4) Microphone or program source interrupted.</td>
</tr>
<tr>
<td>Sound is intermittent.</td>
<td>1) Microphone inputs incorrectly wired.</td>
</tr>
<tr>
<td>Sound is distorted and overdriven.</td>
<td>2) Open ground or shield in input cables.</td>
</tr>
<tr>
<td>Acoustic feedback or loud squeal occurs when amplifier is turned on.</td>
<td>3) Speaker terminals shorted to chassis ground.</td>
</tr>
</tbody>
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### AC Line Fuse Replacement

**CAUTION: TO REDUCE THE RISK OF FIRE REPLACE ONLY WITH THE SAME TYPE OF FUSE.**

Procure a Fuse Type: GMA UL

Turn amplifier power switch to the Off position. Remove power cord from AC outlet. Insert the tip of a cross screwdriver inside the Fuse Holder Cross screw, turn screw counterclockwise and remove the fuse by pulling outwardly. Replace Fuse in fuse holder.
REPLACEMENT PARTS
Please provide complete information when you request replacement parts from either the Factory or a MEM Authorized Distributor. Be certain to include the Part Number and Description as it appears on the parts list, the Model Number of the unit and if possible the Serial Number and the date of purchase of the unit. Replacement parts inventory is maintained specifically to repair MEM products. Part sales for other reasons or applications will be declined.

ORDERING FROM THE FACTORY
Print all information on a purchase order form and mail to:
MIEG CORPORATION
2300 CLEMENTS FERRY ROAD, SUITE 202
CHARLESTON, SC 29492

Be sure to include the following:
- MEM part number
- Part description
- Quantity required
- Model number of the unit
- Serial number of the unit
- Your payment or your authorization for COD shipment for parts not covered by the Warranty or if your company has a current account with the factory

RETAIN ORIGINAL IN WARRANTY PARTS UNTIL YOU RECEIVE REPLACEMENTS. PARTS THAT SHOULD BE RETURNED TO THE FACTORY WILL BE LISTED ON YOUR PACKING SLIP.

For your convenience replacement parts are also available through MEM Authorized Distributors and Dealers nation wide. Obtain a location list directly from the Factory or your regional MEM Representative.

TECHNICAL CONSULTATION
- Need help with your installation?
- Need help with the operation of the unit?
- Need help with a repair?

Call or write for assistance. You will find our Technical Dept., eager to help or assist you with any technical problem you may have encountered except “Customizing” for a unique application.

The effectiveness of our consultation service depends on the accuracy of the information you furnish. Be sure to tell us:
- The Model and Serial number of the unit
- The date of purchase
- An exact description of the problem
- All you have done in attempting to correct the problem

Call our Customer Service phone number:
1-843-819-8883

REPAIR SERVICE
Repair service for out of warranty MEM products may be obtained form your local MEM distributor or any other qualified repair station.

In warranty repairs must be returned to the Factory. Prior authorization must be obtained from the Factory. Products received without authorization will be refused by our Receiving Department.

IN WARRANTY REPAIR SERVICE
Call or write the Factory to obtain an authorization to return the product for repairs.

Pack the equipment in the original carton or in a strong carton with at least THREE INCHES of resilient packing material on all sides, top and bottom. Seal the carton with reinforced tape and mark it FRAGILE on at least two sides. Remember, the Carrier will not accept liability for shipping damages if the unit is improperly packed.

EQUIPMENT RECEIVED IN DAMAGED CONDITION DUE TO POOR PACKING WILL BE REFUSED AND THE WARRANTY COVERAGE IS AUTOMATICALLY VOIDED.

The MEM Limited Warranty provides:

The examination of the returned product must disclose in our judgement, a manufacturing defect. The warranty does not extend to any product that has been subject to misuse, neglect, accident, improper installation or where the serial number of the product has been removed or defaced.

Ship via insured prepaid via UPS, FedEx, DHL or USPS to:
MIEG CORPORATION
2300 CLEMENTS FERRY ROAD, SUITE 202
CHARLESTON, SC 29492
ATTN: SERVICE DEPARTMENT
The equipment will be returned freight prepaid after repairs.

Be sure to include the following:
- Your name and address
- Date of purchase and copy of invoice
- A brief description of the problem
- A return address shipping label

OUT OF WARRANTY REPAIR SERVICE
Follow return instructions as per in warranty repair service. Prior to performing all necessary repairs, you will be advised of the charges and at that time a written authorization by you will be required including authorization to return the equipment COD for the service and shipping charges. This will avoid unnecessary delays in returning the equipment to you.