

# **USER GUIDE**

## **DM Engineering Mic Pro 2 “Stand Alone” Microphone ON/OFF Lighted Pushbutton Module**

Version 1.2

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**Overview:**

The "MIC PRO 2" ON/OFF LED lighted and silent switching module will upgrade a low cost production mixing board to have the microphone switching features of a professional broadcast console. High reliability and silent LED lighted "MIC ON" and "MIC OFF" buttons enable and disable the mic channel so the mic level control can be left at its optimum setting.

As many microphone channels as your production board has "Insert" jacks for can now be individually controlled by its own "MIC PRO 2", and is ideal for home studio applications and professional studio control of individual microphones for round table, interview room, or conference room applications where a single operator or multiple guests can control their own microphones.

An optional "Y" adapter may be purchased from DM Engineering if other processing equipment such as a Mic Processor is already connected to the "Insert" jack to interface the Mic Pro 2 with the current installation.

Each "MIC PRO 2" also provides a logic low output for interfacing with the DM Engineering Studio SLAVE Auxiliary Relay Pack and Solid State Relay Pack or the HE Superrelay if desired. The SLAVE or Superrelay control output pair is taken from the "Control" and "Common" terminals. For activating the DM Engineering Studio Solid State Relay Pack or other solid state relay that operates at 9-12VDC input range, connect to the "Control" and the "+9 to 2VDC" terminals. Multiple "MIC PRO 2" outputs may be paralleled to control one or more SLAVE Relay Packs for controlling studio muting or one or more Studio Solid State Relay Packs for controlling ON AIR and RECORDING sign functions.

The "MIC PRO 2" is powered by either the supplied DC power supply module, the Studio SLAVE Auxiliary Relay Pack or Superrelay, if used. As many as 5 "MIC PRO 2" switching modules can be powered by one power supply module, Studio SLAVE or Superrelay.

The "MIC PRO 2" may be attached to the side of the production board as shown or it may also be secured to table tops or any other location desired using the supplied hook and loop fastener system, or for a more permanent solution, use the supplied double sided tape. Each "MIC PRO 2" is supplied with a standard 6 foot "Insert" cable. 12 foot cables are supplied as an option at an additional cost.

**Operation:**

Pressing the "MIC ON" button activates the "MIC PRO 2" in a latched on condition and completes the tip and ring connection of the "Insert" jack. Pressing the "MIC OFF" button deactivates the "MIC PRO 2" and disconnects the tip and ring connection of the "Insert" jack. When the unit is in the "OFF" condition it also connects the input of the line level bus input amplifier to ground through a 1K ohm terminating resistor to assure noise free operation. A logic low signal is applied to the Control terminal of the "MIC PRO 2" while in the "MIC ON" condition for interfacing with the DM Engineering SLAVE Relay Pack or Henry Engineering Superrelay, or Solid State Relay Pack if desired. This output is both diode and resistively protected to permit multiple "MIC PRO 2" module Control outputs to be connected together in parallel for external device control by multiple units. (Speaker muting, lighting of "Recording" or "On Air" signs and control of any other devices is

accomplished by an external Studio SLAVE Relay Pack and/or the Solid State Relay Pack.)

#### **Installation:**

1. Clean the side of the mixing board, table top or other surface where the "MIC PRO 2" and cable anchors are to be located with the supplied alcohol swab to remove any residual dirt or grease. This particularly applies to "powder coated" painted surfaces.
2. Attach the "MIC PRO 2" module where desired using either the permanent adhesive squares or the hook & loop fasteners. Route the control cables and secure with the supplied cable ties and anchors.
3. Connect power to the terminal block located on the bottom of the "MIC PRO 2" module. If using the available 9VDC @ 200ma power supply module from DM Engineering, connect the lead with the white stripe to the "+" terminal and the other lead to the "Common" terminal using a small slot screwdriver. If you are using a Studio SLAVE Relay Pack or other power source, make sure that the polarity of the supply voltage is properly connected as marked to avoid possible damage to the unit. The Supply voltage should be in the range of 9-12VDC and requires approximately 45ma maximum per "MIC PRO 2"
4. If external devices such as the Studio SLAVE Relay Pack are to be controlled by a negative going logic level, connect the Mic Pro 2 "Control" and the "Common" terminals to the "Continuous" and "Common" terminals respectively of the Studio Slave Relay Pack or Superrelay. Be sure to observe polarity for proper operation. For activating the DM Engineering Studio Solid State Relay Pack or other solid state relay that operates at 9-12VDC input range, connect to the "Control" and the "+9 to 12VDC" terminals.
5. Attach the supplied Insert control cable (3.5mm stereo plug end) to the "Insert" jack on the side of the "MIC PRO 2". Connect the other end of the cable (1/4" stereo plug end) to the desired microphone "Insert" jack on the mixing board.
6. If other processing equipment is already connected to the "Insert" jack on the mixing board, you may obtain an optional "Y" cable from DM Engineering for the ability to interface the Mic Pro 2 with your processing equipment.
7. Connect any additional "MIC PRO 2" power input leads, "Insert" cables, and "Control" cables to the desired "Insert" jacks and external device terminals as described in steps 3-5.

#### **Warranty Information:**

The DM Engineering MIC PRO 2 is warranted for a period of one year from the date of purchase. This warranty covers materials and workmanship only. Any misapplication, physical, cosmetic or electrical damage from outside sources or by the customer is not covered. The customer must pay shipping costs to the factory, and DME will pay shipping costs to return the warranted equipment to the customer. Any priority shipping costs are to be the responsibility of the customer as ground service is standard. Please contact the factory for an RMA number prior to any returns. Items returned without an RMA may be sent back to the customer unopened.

## **Technical Support**

If you have questions, experience difficulties with the product or require further information please contact DME at: 805-987-7881, toll free 800-249-0487, or E-mail technical support at: [support@dmengineering.com](mailto:support@dmengineering.com), or visit [www.DMEngineering.com](http://www.DMEngineering.com) for the latest User Guide.

## **Specifications:**

Case dimensions: 2.6" wide X 3.0" deep X 1.1" high

Case material and color: Styrene plastic, light grey

Power input and control output connection method: Eurostyle screw terminal block

DC input requirement: 9-12VDC @ 45ma maximum. (Supplied by included power supply module or external Studio SLAVE Relay Pack or equivalent.)

Mounting: Hook and loop fasteners or double sided tape (supplied)

Control output: Logic low upon activation or Mic ON condition, series diode and resistively protected

Operating temperature: 32 to 120F

Humidity: 0 to 95% non-condensing

Shipping Weight: 1 lb. (approximate)

## **Supplied Materials:**

"MIC PRO 2" module

9Volt Power Supply Module

One 6 ft. insert cable assembly with connectors (12 ft. cables are available from DM Engineering for an additional cost.)

Hook and loop fastener materials for removable installation

Double sided adhesive pads for non-removable installation

Alcohol swab

Cable ties, clips, and tie anchors

This User guide