

## 7. How to Contact ProAVM

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## 8. Declaration of Conformity

**Name of Manufacturer:** ProAVM  
**Address of Manufacturer:** 61 Station Road  
Irthlingborough  
Northants  
NN9 5QE

**Product:** MICLIM-IT Mic/Line Limiter

**Declaration:** The product described above complies with the requirements of the Low Voltage Directive (73/23/EEC) and the protection requirements of the EMC Directive (89/336/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Standards:

EN 60065:1993	Safety requirements for mains operated electronic and related apparatus for household and similar general use
EN 55103-1:1997	Electromagnetic compatibility - Product family standard for audio, video, audiovisual and entertainment lighting control apparatus for professional use (emissions - environmental categories E1 to E5)
EN 55103-2:1997	Electromagnetic compatibility - Product family standard for audio, video, audiovisual and entertainment lighting control apparatus for professional use (immunity - environmental categories E1 to E5)

## 9. Warranty

This product is shipped with a 5 year return to base warranty. Please return the product to the company that you bought it from.

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## MICLIM-IT Mic/Line Limiter

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### 1. Introduction

The ProAVM MICLIM-IT is a high quality limiter for microphone or mono line limiting applications. The limiter has a complex programme dependent attack and release time system which is coupled with FET gain reduction to give a clean sound, free of the harshness often associated with VCA based designs.

Switchable phantom power is provided as standard, and clear indication of the amount of limiting is given by a pair of LED indicators. The electronically balanced input and output are switchable between microphone and line levels, allowing easy integration into any system.

The MICLIM-IT is housed in a compact and robust metal case with mounting holes for wall or under desk mounting. An optional 1U rackmounting, RACK-IT, is available from ProAVM distributors.

### 2. Safety & Electrical Hazard

This unit contains high voltages which could be fatal. YOU MUST ALWAYS ISOLATE THE UNIT FROM THE MAINS SUPPLY BY COMPLETELY DISCONNECTING IT BEFORE ATTEMPTING TO OPEN THE CASE.

THIS EQUIPMENT MUST BE EARTHED.

Do not expose this equipment to rain or any other source of water.

In common with all mains operated equipment, only suitably trained competent personnel should attempt to adjust, modify or repair this equipment or operate it with the cover removed. In case of query please contact your local agent or ProAVM. Any unauthorised adjustment, modification or repair of this equipment may invalidate any warranty and/or safety approvals that apply.

Please read all of this manual and familiarise yourself with the controls before attempting to use this equipment. To ensure safety, it is the responsibility of the user to install and operate this equipment in a manner that is within the manufacturers specifications.

### 3. Unpacking The Equipment

This package should contain, in addition to this manual:

1 x MICLIM-IT  
1 x IEC Mains lead

If any items are missing or damaged please inform your supplier immediately.  
Ensure that the MICLIM-IT has been supplied for the correct mains/line voltage for your country.

### 4. Controls and Connectors

Input	3 pin female XLR, electronically balanced. May be unbalanced without affecting gain by linking pins 1 and 3 inside the mating plug. Pin 1 Ground Pin 2 Hot (Phase) Pin 3 Cold (Non-phase)
Input Gain	Multiturn adjustment for input gain.
Input Mode Switch	A two position switch selecting mic or line sensitivity at the input.
48V Phantom Switch	A two position switch allowing 48V phantom power to be applied to suitable microphones.
Limit Indicators	The yellow LED indicates greater than 3dB of gain reduction. The red LED operates when there is less than 3dB of gain reduction left before overload, beyond which distortion rises rapidly.
Output Level	Multiturn adjustment for output level.
Output	3 pin male XLR, electronically balanced. May be unbalanced without affecting gain by linking pins 1 and 3 inside the mating plug. Pin 1 Ground Pin 2 Hot (Phase) Pin 3 Cold (Non-phase)
Output Mode Switch	A two position switch selecting mic or line level at the output.
Power LED	Lights continuously to confirm correct operation of power supply.
Mains Fuse	20mm antisurge mains fuse. 100mA(T) for 230V units 250mA(T) for 115V units DISCONNECT MAINS BEFORE ATTEMPTING TO CHANGE FUSE.
Mains	IEC male connector.

### 5. Operation

Refer to section 4 for a description of the controls and connectors.

#### WARNING - 48V Phantom Power

Some microphones contain an internal preamplifier which requires a phantom power voltage to operate. The microphone documentation will state if this is so and IT IS VITAL TO CHECK THE MANUFACTURER'S INFORMATION BEFORE APPLYING PHANTOM POWER. Applying phantom power to non-phantom-powered microphones or line level sources may cause damage and ProAVM can accept no responsibility for such damage.

### Connections

Refer to section 4 of this manual for the pin assignments of the XLR connectors. The mating (cable) connectors generally have the pin numbers moulded into their body close to the pins themselves. For unbalanced use, connect pin 3 to pin 1 inside the mating connector and connect the signal to pin 2, with pin 1/3 as ground. To achieve specified performance, leads should be of quality screened cable and not exceed 10m in length.

Microphones that require phantom power can only be connected fully balanced. Select the phantom power switch to ON. For all other inputs including line level select the switch to OFF.

Set the input and output mode switches to MIC or LINE as required.

With MIC level output selected, the MICLIM-IT can be connected to MIC inputs that have phantom power of up to 50V.

### Gain Settings

In general, the input gain control determines the input level required before limiting commences and the output level control affects the limited output level that is generated. Below the limit point, the gain between input and output will be a product of both these settings. To attain predictable results, the following adjustment procedure is recommended.

#### 1. Output Level

Apply an input signal to the MICLIM-IT such that the yellow LED is ON, i.e. limiting has commenced. Monitor the output and adjust the output level control (clockwise to increase) to give the level required. Default factory setting is +8dBu with line level output selected but this can be adjusted between 0 and +12dBu. With mic level selected, output levels are approx. 53dB lower.

#### 2. Input Level

If a calibrated oscillator is available, apply an input signal to the MICLIM-IT equal to the desired limit level. Turn the input level control fully anticlockwise then, whilst monitoring the output, wind the control clockwise until the output level stops increasing.

Alternatively, apply the expected input signal and adjust the input level control (clockwise to increase gain) until the yellow LED starts to flicker.

### 6. Specifications

Input	Electronically balanced, >5kohm impedance
Maximum input level	+26dBu (line) / -6dBu (mic)
Input CMRR	60dB typical
Output	Electronically balanced, 600ohm min. load impedance
Limited output level	0 to +12dBu (line) / -53 to -45dBu (mic)
Output noise	< -70dB re. limit point (RMS, 20Hz-22kHz)
Harmonic distortion	0.03% (1kHz THD, +8dBu O/P)
Frequency response	±0.5dB (50Hz-20kHz)
Power supply	230VAC (default) or 115VAC
Power consumption	7VA
Inrush current	<1A
Dimensions (excluding connectors)	294mm x 114mm x 44mm
Fixing centres	4 x 5mm hole on 276mm x 74mm rectangle
Weight	0.8kg unpacked, 1.0kg packed