

Iso-Gard® Line Isolation Monitor (LIM) MLHG6-AU



ISO-GARD®
Line Isolation Monitor

Setup Guide

This document is intended as a guide for the basic physical setup of the Line Isolation Monitor (LIM). This document includes wiring diagrams and typical display indications of the monitor unit (LIM). For complete details, including installation, setup, settings, and troubleshooting, refer to the *Isogard Line Isolation & Overload Monitor Installation and Reference Guide* for the MLHG6 / MLHG6-AU.

Components

The LIM consists of a Line Isolation Monitor display panel only. The Connector Plate, Current Transformer, Test Simulation Module and Remote Display Units are ordered as standalone items. The system is installed in a cabinet or service panel.



WARNING

ELECTRIC SHOCK HAZARD

- Disconnect all power before servicing.
- Reference AS/NZS 3003 for Installation Standard.

Important!

Only qualified maintenance personnel shall install, operate or service this equipment. The setup sheet and the Installation Instructions should not be viewed as sufficient for those who are not otherwise qualified to operate or service this equipment.

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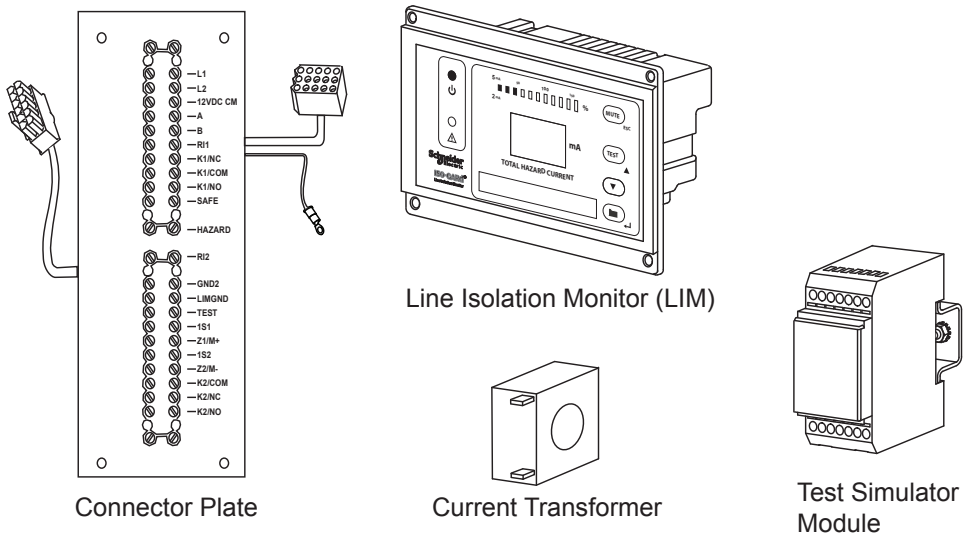
The information in this manual is provided in good faith. Schneider Electric endeavours to ensure the relevance and accuracy of the information, but assumes no responsibility for any loss incurred as a result of its use. Schneider Electric reserves the right to update the information at any time without notice.

August 2013

Included and Orderable Parts

The LIM is supplied with a gasket. Additional components are ordered separately.

Catalogue Number	Component or Accessory Name	Part of Basic LIM	Ordered Separately
MLHG6-AU	Line Isolation Monitor (LIM)	Yes	Yes
MLHG6C-AU	Connector Plate	No	Yes
MLHG6CT-AU	Current Transformer	No	Yes
MLHG6T-AU	Test Simulator Module	No	Yes



Safety

**WARNING**

ELECTRIC SHOCK HAZARD

- Disconnect all power before servicing.
- Reference AS/NZS 3003 for Installation Standard.

The LIM shall be mounted, assembled and wired by qualified personnel only.

The equipment must be disconnected from the power source while being installed.

Technical Support and Product Information

For assistance with technical problems, contact your nearest Schneider Electric sales representative. Contact Information is provided on the back cover of this document.

Technical support email: cis.support@clipsal.com.au

Product Information is available online, go to:

<http://www.clipsal.com/cis>
select Technical and then Medilec.

Document Name	Component Model	Form Number
Isogard Line Isolation Monitor (LIM) Setup Guide	MLHG6-AU	F2417/01
Isogard Line Isolation & Overload Monitor Installation and Reference Guide (Downloadable as PDF)	MLHG6 / MLHG6-AU	F2392/01 (E)
Isogard Connector Plate for LIM Instructions	MLHG6C-AU	F2393/01
Isogard Current Transformer Application Note	MLHG6CT-AU	F2396/01
Isogard Test Simulator Module Application Note	MLHG6T-AU	F2394/01
Isogard Remote Display Unit for (LIM) Setup Guide	MLHG6RD-AU	F2397/01
Isogard Line Isolation & Overload Monitor (LIOM) Setup Guide	MLHG6	F2395/01

Supplies Needed

The installer is responsible for obtaining locally the electrical fittings and hardware used to install the unit according to the wiring rules in the location where the equipment is installed.

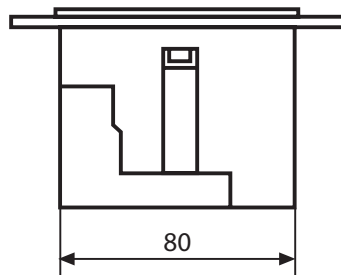
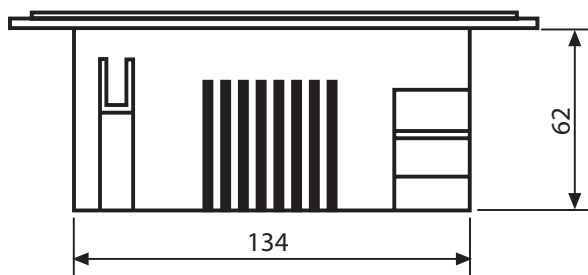
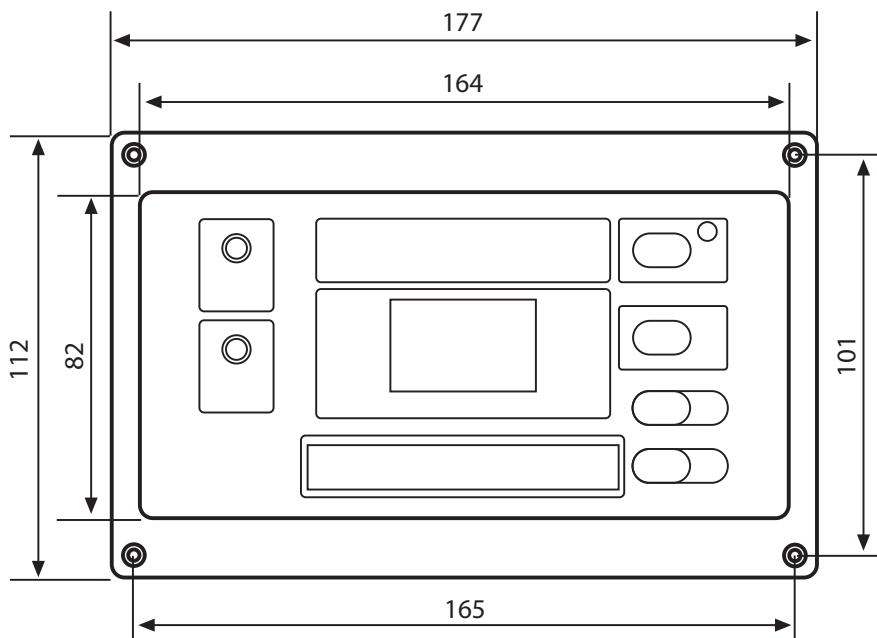
The *Iso-Gard Line Isolation & Overload Monitor Installation and Reference Guide* is essential for the proper configuration and testing of the LIM. The document can be freely downloaded as a PDF file from the Internet at the following location: <http://www.clipsal.com/cis>
select Technical and Product Groups and Medilec.

You can view and print the PDF file using the Acrobat Reader available at <http://www.adobe.com>.

Mounting

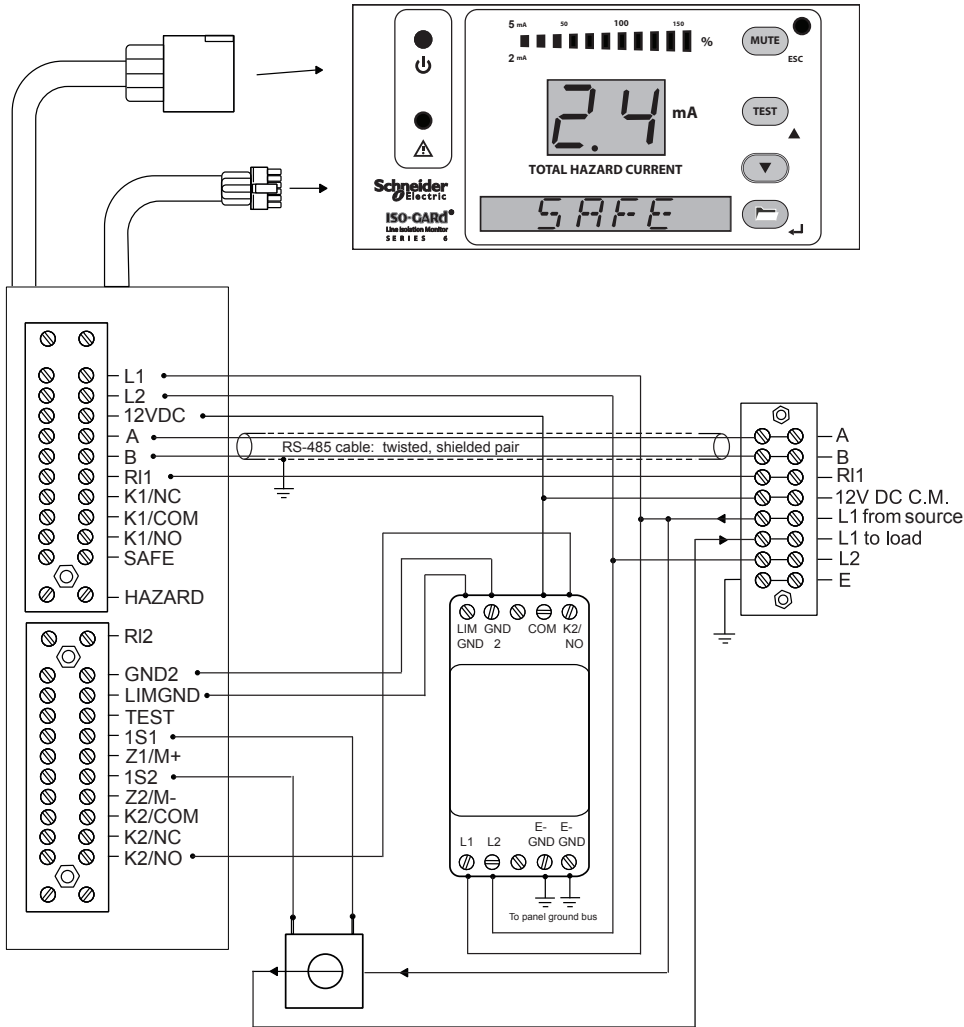
The LIM and associated parts must be installed in a cabinet or service enclosure. Make sure that the LIM is installed at a convenient height for viewing the display and using the front panel buttons to make menu selections. Do NOT install the LIM in a location where it can be damaged by any of the following:

- Doors opening or closing or heavy foot traffic, such as in passageways where equipment carts are used.
- Direct sunlight or direct sources of heat or steam.
- Exposure to harsh chemicals, either liquid or airborne.
- Unauthorised persons tampering with the unit.



Wiring

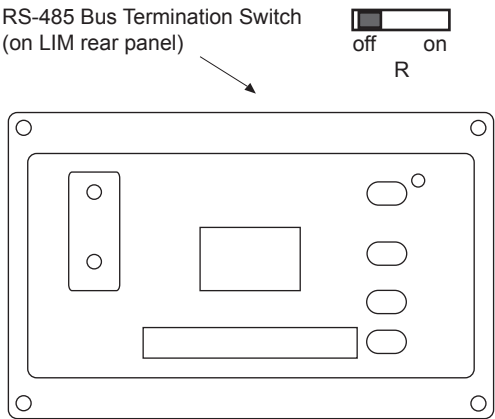
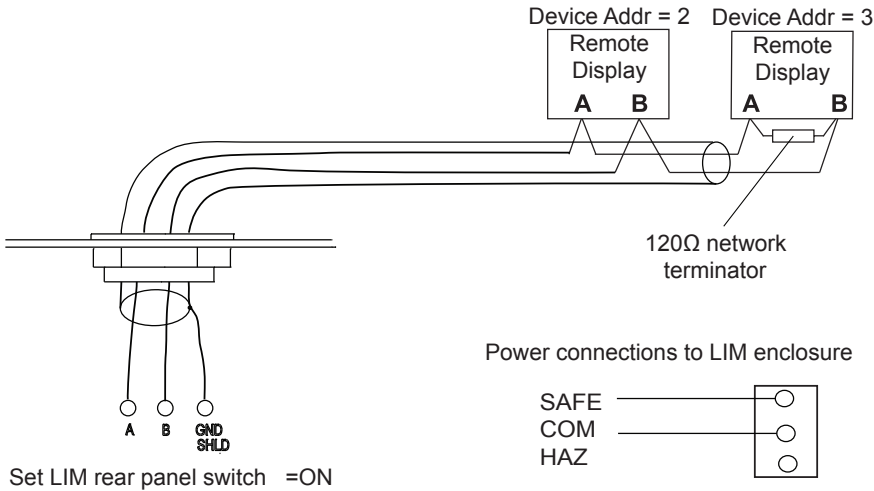
The LIM shall be wired by qualified personnel only. Be sure to isolate the equipment from line voltages during installation.



RS-485 Bus Wiring

The network cable used to connect the RS-485 devices must have insulation rated at the highest voltage present in the enclosure.

Keep the network cable segregated from line voltage conductors.



LIM Panel Display Normal Operation

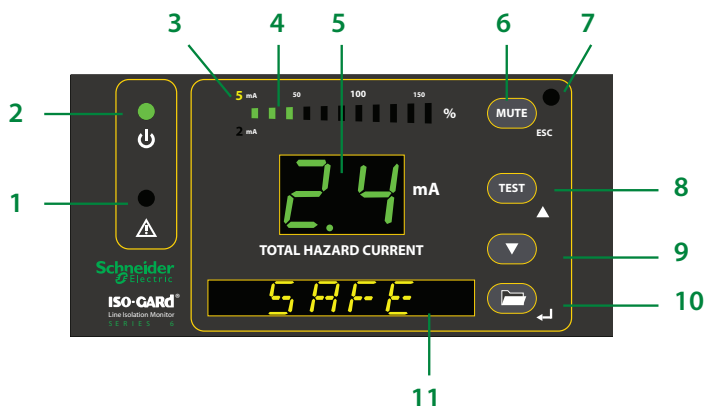


Figure Ref.	Panel Feature	Normal State
1	HAZARD LED (yellow)	Not illuminated.
2	SAFE LED (green)	Illuminated. Will be in the system normal condition when the displayed Total (Prospective) Hazard Current is below the 5mA response value.
3	Measuring range indicator light (yellow)	Illuminates when the 5mA THC response value has been activated.
4	LED bar graph	In a system normal condition, only the green bars are illuminated.
5	Seven-segment display of Total (Prospective) Hazard Current	Green in colour for the system normal condition.
6	MUTE button / ESC key	Moves to a higher level in the menu.
7	MUTE LED	Not illuminated in the system normal condition.
8	TEST button	Activates self-test. / UP key: Moves up in the menu and increases values.
9	DOWN key	Moves down in the menu and decreases values.
10	MENU key	Enters the main menu. / ENTER key: Confirms entries.
11	Digital display.	Reads SAFE in the normal condition. Displays menu options when in Menu mode.

LIM Panel Display Hazard (Alarm)

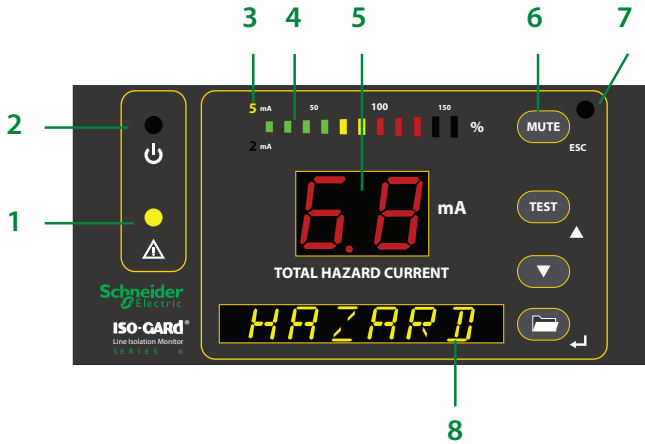


Figure Ref.	Panel Feature	Hazard (Alarm) State
1	HAZARD LED (yellow)	Flashes yellow.
2	SAFE LED (green)	Not illuminated.
3	Measuring range indicator light (yellow)	Indicates the 5 mA trip level has been activated.
4	LED bar graph	In a system alarm condition, the red bars will be illuminated.
5	Seven-segment display of Total (Prospective) Hazard Current	Red in colour in a system alarm condition.
6	MUTE button / ESC key	Pressing the Mute button will silence the audible alarm and activate the yellow Mute LED.
7	MUTE LED	Will illuminate yellow after the Mute button has been pressed and the detected fault is still present on the system.
8	Digital display.	Reads HAZARD.

Navigating the Main Menu

Accessing the main menu

Hold the “MENU” button for at least one second. The device will enter into menu mode. The first item in the menu, “VALUES,” will appear. The number “1” will flash.

Entering the password prior to menu navigation

Many submenu options may be password protected. Passwords are entered as three digit numbers. The default password is **807**. When applicable, follow the below procedure to enter the password:

- 1. A flashing number illustrates which number is currently in focus.
- 2. Use the UP/DOWN arrow key to select the correct number.
- 3. Confirm with the ENTER button.
- 4. Repeat for the next numbers until the last number is confirmed.
- 5. Settings may now be modified until the menu is exited. Reentering the menu will require a reentry of the password.

When a parameter is changed and confirmed with the enter key, the change will have an immediate effect. The unit will continue to operate while settings are modified.

Exiting the menu

Press the ESC key to return to the last step in the menu. Repeat this step until the display has returned to the main screen. If the unit is idle in the menu for 5 minutes, the device will automatically return to the main screen.

Menu structure

Refer to the *Isogard Line Isolation & Overload Monitor Installation and Reference Guide* (Downloadable as PDF) for a complete diagram of the menu.

Initialising the Clock

The LIM utilizes date/time stamping. When initially energized, use the menu diagram below to set the date and time. If message code 8.80 appears on the display panel, setting the time and date will clear this alarm automatically.

4. SETTING	7. Clock	Tm 10.34 A	Time: am/pm
		Dy 23/12	Date: day/month
		Yr 2011	Year
		DST off	Daylight saving time: auto/off (North America time zones only)
		EXIT	

Specifications

Parameter	Value
Catalogue Number	MLHG6-AU Line Isolation Monitor (LIM)
Operating voltage	220-240VAC typical, 50Hz, Single phase
Measurement current limit	10-100A max (see Note)
Electrical power and signal connections	Quick-connect sockets (an earthing wire must be connected from the Connector Plate to the enclosure.)
Application	Indoor only.
Digital display	Seven segment LED.
Test function	In conjunction with the Test Simulation Module.
Hazardous current threshold	Menu selectable.
No user serviceable parts inside.	

Note: When used in the LIOM, the maximum measurable current is 45A.

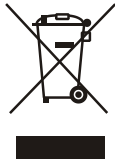
Standards Complied

Declarations of Conformity

Australian/New Zealand EMC & Electrical Safety Frameworks and Standards



Regulation	Standard	Title
Safety	AS/NZS3100	General safety requirements.
Performance	AS/NZS4510	Isolated electrical supply systems for medical use -- Design and performance requirements.
EMC	AS/NZS 61000-6-3	General EMC Emissions requirements.



Do not dispose of this product to landfill or by incineration. This product should be disposed of by a licenced electronic waste disposal agency. In some locations it is an offense to dispose of electronic items improperly.

Warning

Changes or modifications not expressly approved by Schneider Electric could void the user's authority to operate the equipment.

Technical and Sales Support

For assistance with technical problems or warranty enquiries, contact your nearest Schneider Electric sales representative.

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Product Information

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Contact us: clipsal.com/feedback

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