



IAM-100

INTEGRATED AREA MONITOR and CONTROLLER INSTALLATION GUIDE

P/N: 6209-9002
Revision 0
January 13, 2016



IAM-100



Controller



CAUTION: DO NOT MOUNT the IAM-100 or controller in an area that may contain flammable liquids or vapors. Operation of electrical equipment in such an area constitutes a safety hazard.



WARNING: Strictly follow the instructions in the User Manuals (part number 6209-9000 and 6709-9000) available at www.MyBacharach.com.

1: OPERATING AREA AND CONDITIONS

The IAM-100 is a system that combines sensor and monitoring features in an integrated unit. It is a stand-alone system used to detect gases in an area, room, zone, airspace or airflow. The IAM-100 can be expanded into large gas detection systems using the optional IAM controller. Up to 16 IAM-100s can connect to an IAM controller. The controller shows any sensor in alarm and has relays for control purposes. These controllers can be connected to each other enabling the construction of large gas detector systems.

The IAM-100 is an ideal solution for gas detection in the following occupied spaces with variable refrigerant flow (VRF) or variable refrigerant volume (VRV) systems:

- hotel rooms
- storage facilities
- conference rooms
- theaters
- apartment blocks
- airports
- office buildings
- light industrial spaces
- air conditioned spaces
- large systems requiring many sensors.

The instrument is powered by 110 VAC/60 HZ or 220 VAC/50 Hz; 11 W Max.

2: SAFETY INSTRUCTIONS

USER MANUAL: Before using this equipment, carefully read and strictly follow the User Manuals (part numbers 6209-9000 and 6709-9000). The user must fully understand and strictly observe the instructions. Use the equipment only for the purposes listed and under the conditions specified in that document.

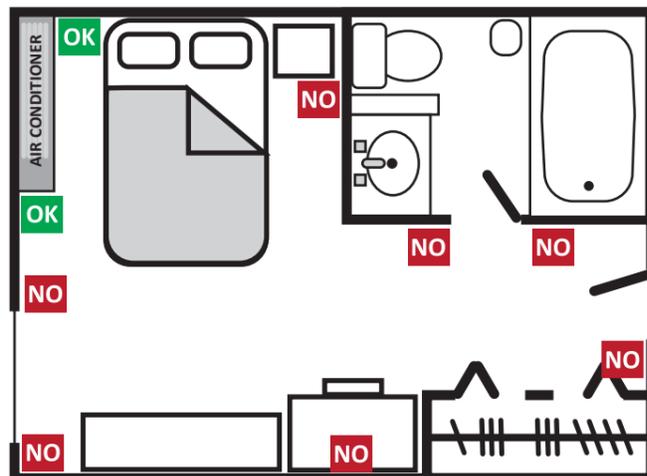
CODE COMPLIANCE: Comply with all local and national laws, rules and regulations associated with this equipment.

GENUINE PARTS: Use only genuine Bacharach spare parts and accessories, otherwise proper functioning of the equipment may be impaired.

TECHNICIAN USE ONLY: This unit must be installed by a suitably qualified technician who will install this unit in accordance with these instructions and the standards in their particular industry/country. Operators of the unit should be aware of the regulations and standards in their industry/country for the operation of this unit. These notes are only intended as a guide and the manufacturer bears no responsibility for the installation or operation of this unit.

Failure to install and operate the unit in accordance with these instructions and with industry guidelines may cause serious injury including death and the manufacturer will not be held responsible in this regard.

SAFE MOUNTING: This monitor must be connected by a marked, suitably located and easily reached switch or circuit-breaker as means of disconnection.



IMPORTANT: For compliance with EN378, at least one detector shall be installed in each occupied space being considered and the location of detectors shall be chosen in relation to the refrigerant and they shall be located where the refrigerant from the leak will collect. In this case refrigerants are heavier than air and detectors should have their sensors mounted low, e.g., at less than bed height in the case of a hotel or other similar Category Class A space. Ceiling voids or other voids if not sealed are part of the occupied space.



CAUTION: Monitoring ceiling voids in a hotel room would not strictly comply with EN378.



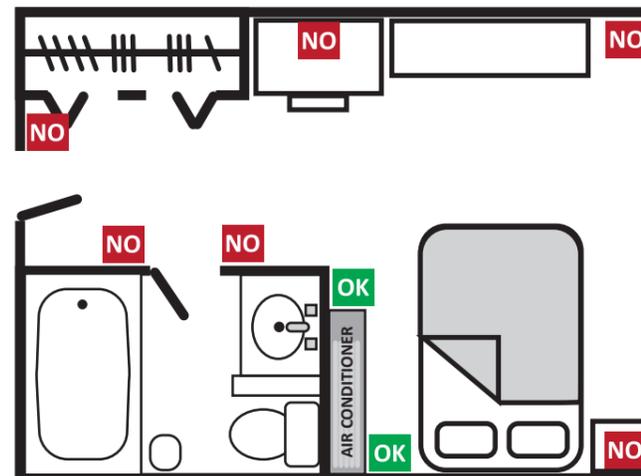
IMPORTANT: Mount in-room sensors at less than the normal heights of the occupants. E.g., in a hotel room this is less than bed height (between 100 and 300 mm [4 and 12 inches] off the floor). Avoid drafts and heat sources (like radiators), and avoid sources of steam.



WARNING: Strictly follow the instructions in the User Manuals (part number 6209-9000 and 6709-9000).

3: WEIGHTS AND DIMENSIONS

IAM-100 Housings	Specifications
Standard	Size: 147x88x62 mm [5.8x3.5x2.4 in] Weight: 633 g [1.4 lbs]
Faceplate (Brushed Steel)	Size: 86x86 mm [3.4x3.4 in] Weight: 86 g [0.2 lbs]



4: MOUNTING

ENVIRONMENTAL CONSIDERATIONS: Carefully consider the full range of environmental conditions to which the instruments will be exposed.

TARGET GAS CONSIDERATIONS: The physical data of the gas or vapor to be detected must be observed.

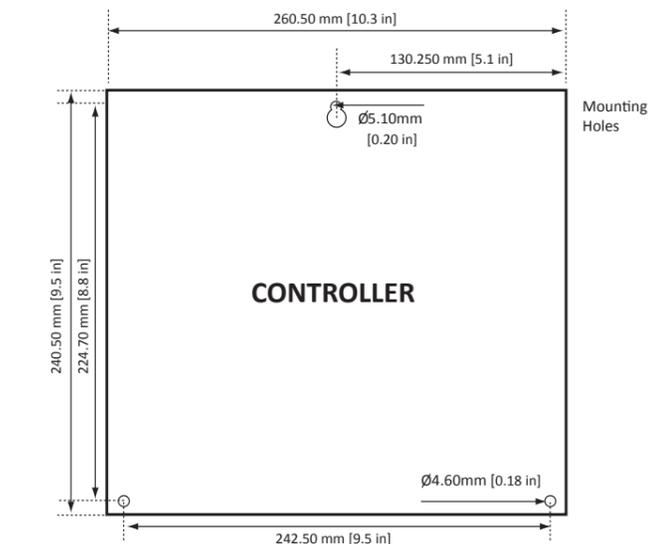
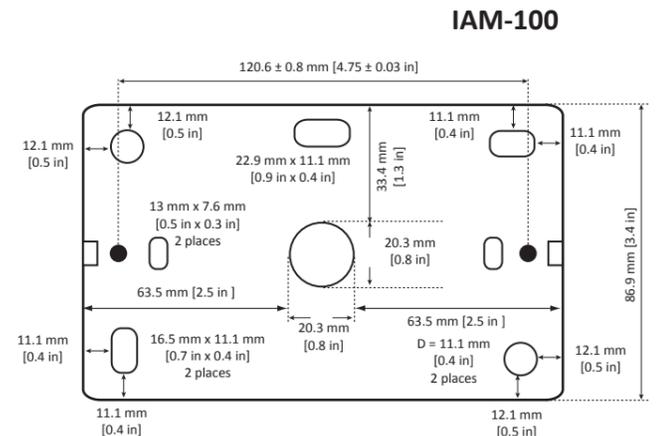
APPLICATION CONSIDERATIONS: The specifics of the application (for example, possible leaks, air movement/draft, etc.) must be observed.

ACCESSIBILITY CONSIDERATIONS: The degree of accessibility required for maintenance purposes must be granted.

ACCESSORY CONSIDERATIONS: The types of optional and accessory equipment that will be used with the system must be kept in mind.

ELECTRONIC CONSIDERATIONS: The system contains sensitive electronic components that can be easily damaged. Do not touch nor disturb any of these components.

Mount the IAM-100 and Controller according to the above considerations, product dimensions (see Section 3), maximum wiring lengths (see Section 5), and the corresponding mounting dimensions shown in the illustrations that follow.



5: WIRING



NOTE: To make wiring connections, you must first open the the IAM-100 by removing the two front cover screws. Remove the metal faceplate and locate the connection terminals.

Refer to the User Manuals (part numbers 6209-9000 and 6709-9000) available at www.MyBacharach.com for detailed wiring instructions.



NOTE: The maximum wire size into terminal blocks is 1.5 mm² [16 AWG].



WARNING: The main power supply cable should be of an approved type based on local regulations. Connection to the main power supply must be made via an approved, readily-accessible, switched and fused plug and socket (or as per local wiring regulations) which should be within 10 feet (3 meters) of the control unit.

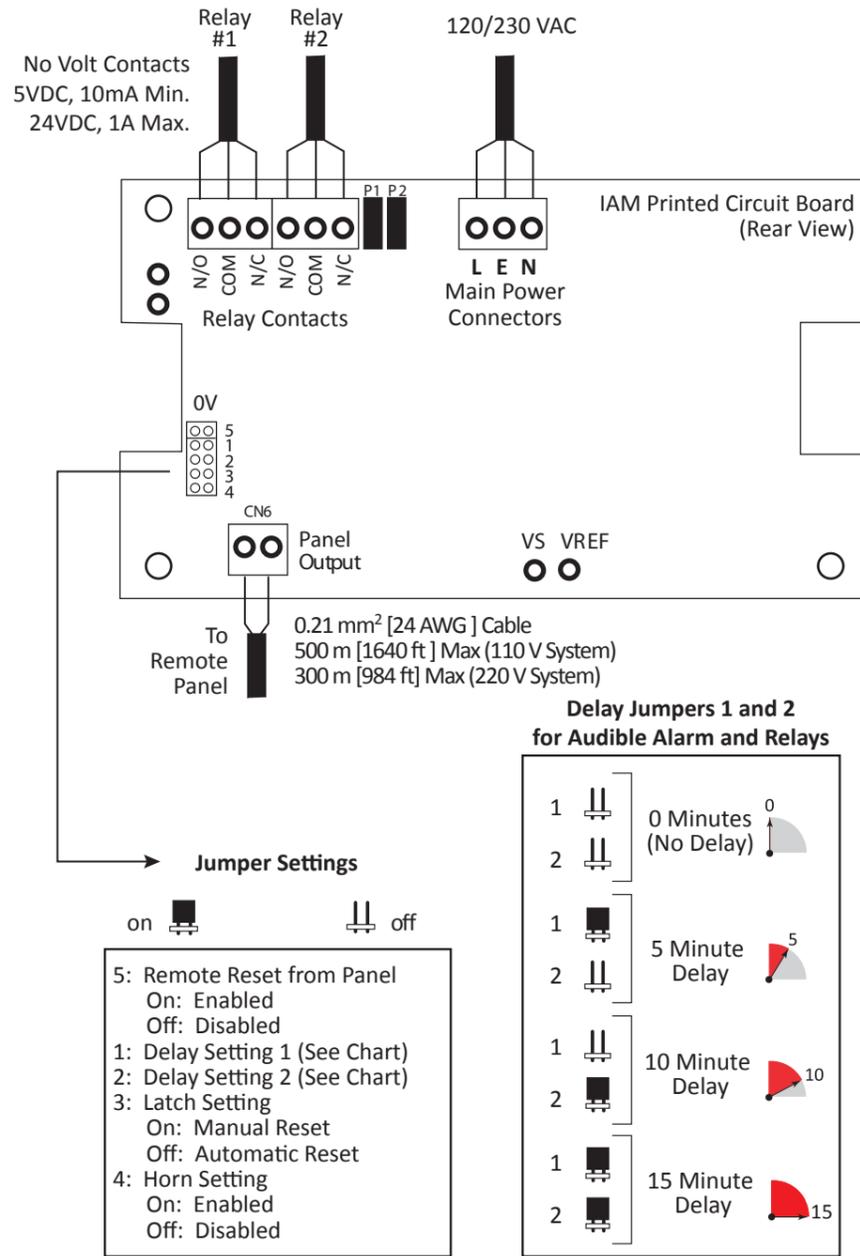


SHIELD WIRE WARNING: Connect the shield of the power wires to the earth ground of the central control system (e.g., chassis, ground bus bar, etc.).

- Strip 0.2 to 0.25 inches (5 to 7 mm) of wiring insulation.
- Connect the wires as indicated.

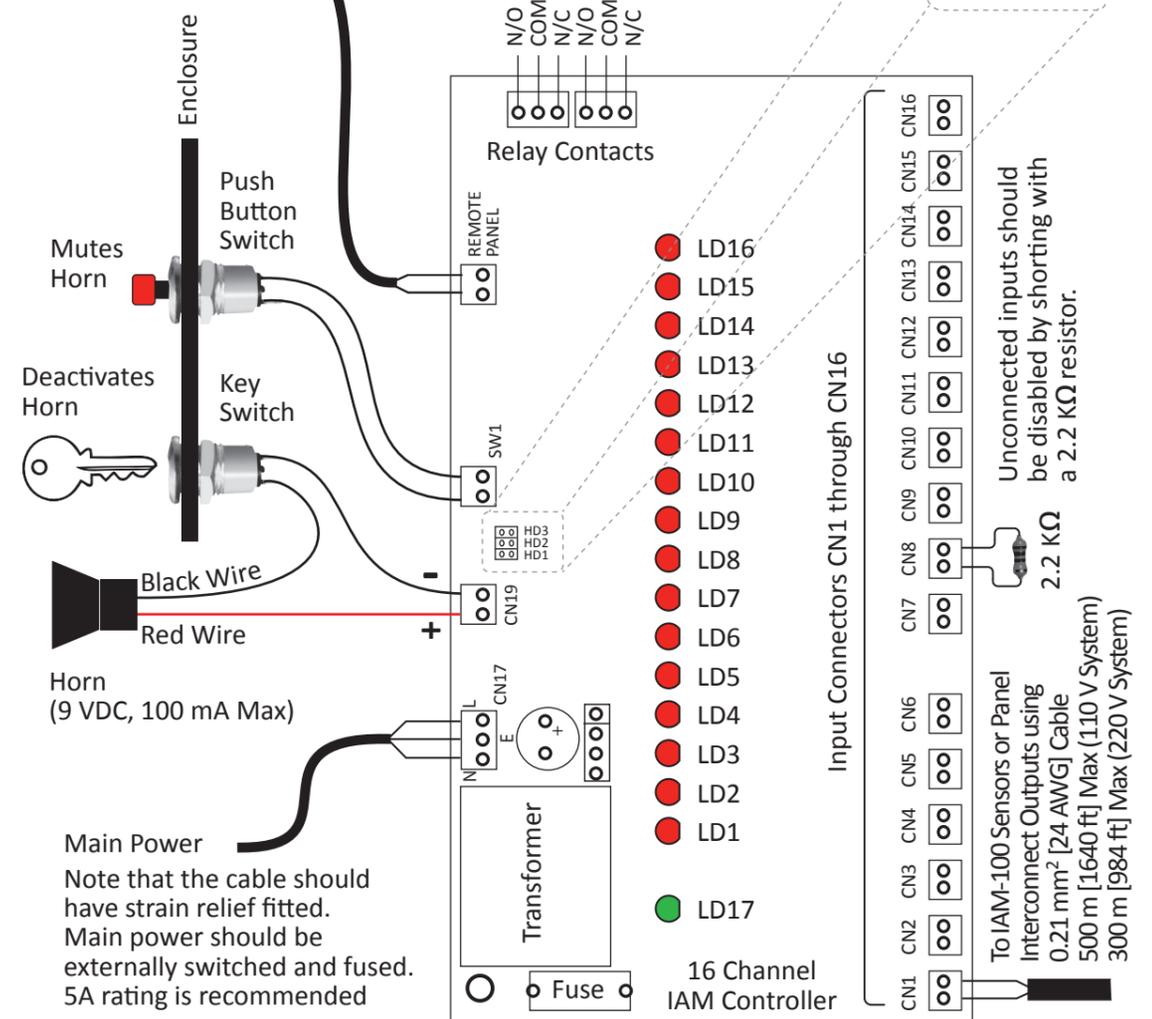


NOTE: After wiring is completed, carefully re-assemble the enclosure and its components, noting the keyed ribbon cable and sensor connectors. After installation is complete, be sure to refer to the User Manual (part number 6109-9000) available at www.MyBacharach.com for detailed instructions on registering the sensors and configuring the IAM-100 for proper operation.



Jumper Settings
 HD1: Not Used (Do Not Remove Link)
 HD2: Not Used
 HD3: Remote Reset:
 Enabled (Link Fitted)
 Disabled (Link Removed)

NOTE: Remote Reset MUST be disabled on Master Panel.



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