



CA-814

CENTRAL AMPLIFIER

**INSTALLATION
AND
OPERATING
INSTRUCTIONS**

NOTICE

All information, documentation, and specifications contained in this manual are subject to change without prior notice by the manufacturer.

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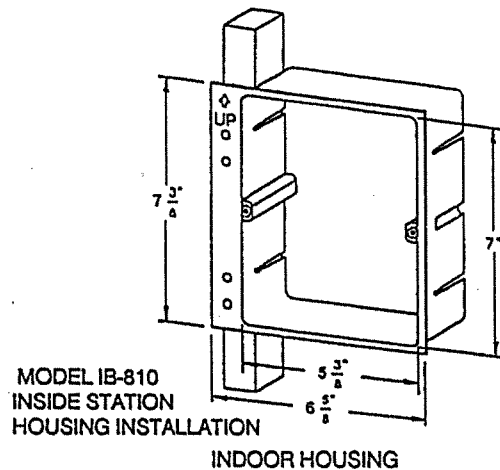
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Introduction

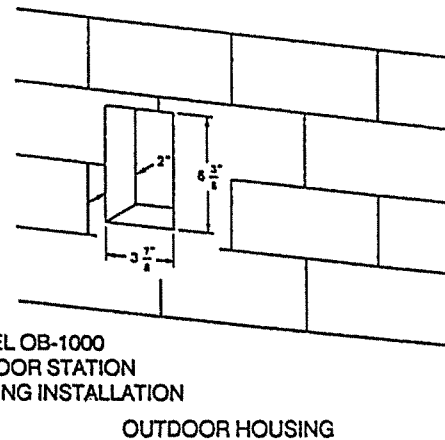
The CA-814 Central Amplifier provides voice communication at every station. A monitoring capability permits listening in to any location. Room stations may be turned off for full privacy. The door station allows hands-free communication.

Installation

1. Install station housings as shown.



Install on wall stud with lip facing out. Fasten with nails to the wood partition. Allow 1" wall space around housing.



Mount flush with outside wall. Nail, screw, or brick into place. Keep panel mounting holes vertical and on the outside.

2. Determine station locations, observing the following restrictions:
 - (a) The maximum number of room stations is 10.
 - (b) The maximum number of room stations per cable is 3.
 - (c) Refer to maximum cable length chart for cable length restrictions.
 - (d) Do not locate room stations too close to each other or back to back on a common wall.

MAXIMUM CABLE LENGTH CHART

(Based on 22 AWG wiring)

Stations Per Cable	Maximum Length (Metre)	Maximum Length (Feet)
1	180	600
2	90	300
3	50	150

3. The CA-814 Amplifier is surface mounted and must be located away from any source of direct heat or extreme cold, in an accessible location. Keep amplifier at least 1 meter (3 feet) away from the transformer and any electrical devices or wiring.
4. Mount the transformer at the fuse panel or any other convenient location. Do not locate closer than 1 meter (3 feet) to the CA-814 Amplifier or any room station.
5. Install wiring between all locations. Keep the transformer wires separate from the station wires. Keep the station wires away from power wiring, transformers and electrical and lighting fixtures. Protect wires from damage by nails.

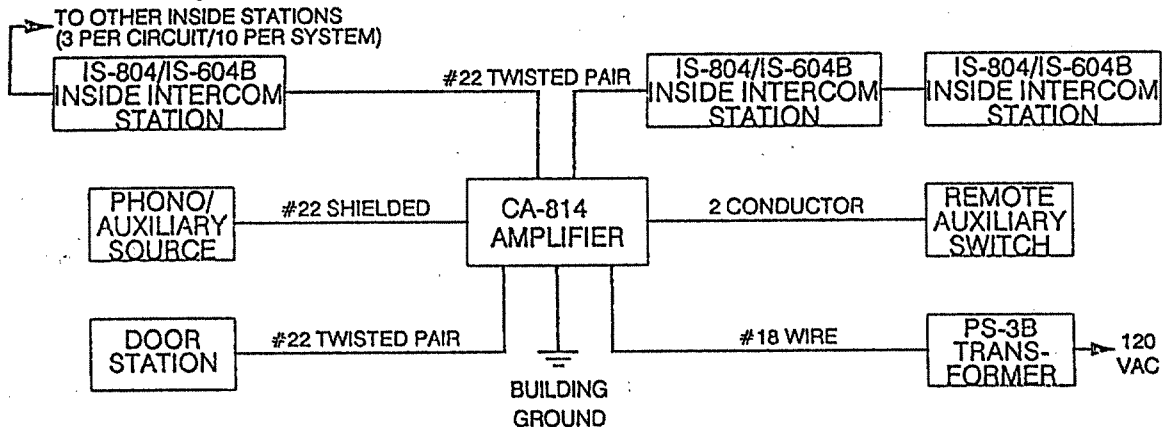
Wiring.

Wire the remote stations to the CA-814 Amplifier as shown on the general wiring layout shown below and explained in the following notes:

(a) Use 4WJ (2 twisted pairs #22) wire for all station wiring.

(b) Use 3 conductor #18 wire from the transformer to the CA-814 Amplifier.

Caution: Use only the 16 VAC terminals. Connect the stations as shown, do not reverse polarity.



OPERATING INSTRUCTIONS

Room Station

To TALK, depress the inside talk button and speak in a normal voice. The call will be heard at all room stations that are turned on and not switched to monitor. Release inside button to hear reply. To REPLY to a call, depress inside talk button and speak in a normal voice, release button after talking. To ANSWER the door station, depress the outside talk button and speak in a normal voice, release the button to hear reply.

Door Station

A CALL is placed by depressing the call button of the door station. A chime is heard at all room stations that are turned on and not switched to monitor.

Monitoring

To MONITOR a room, depress the monitor button of the room station to be listened to. Sounds from that room will be heard at all room stations that are turned on. To release the monitor button, depress and release the inside talk button.

Privacy

Releasing the monitor button prevents listening-in to that station. Turning the volume control fully counterclockwise renders the station fully private, no intercom, music or call tone will be heard.

Music

If background music is used, it is advisable to turn volume controls at all stations to a low setting to allow the choice of full volume or background music listening. Turn volume control fully up when using the intercom. The music is automatically silenced during intercom use and when any one station is switched to monitor.

Level Adjustments

System levels (intercom, chime, and aux) can be adjusted at the amplifier. Using a small screwdriver, turn in the direction of the arrow to increase the setting for the appropriate level control. Turn in the other direction to decrease the level.

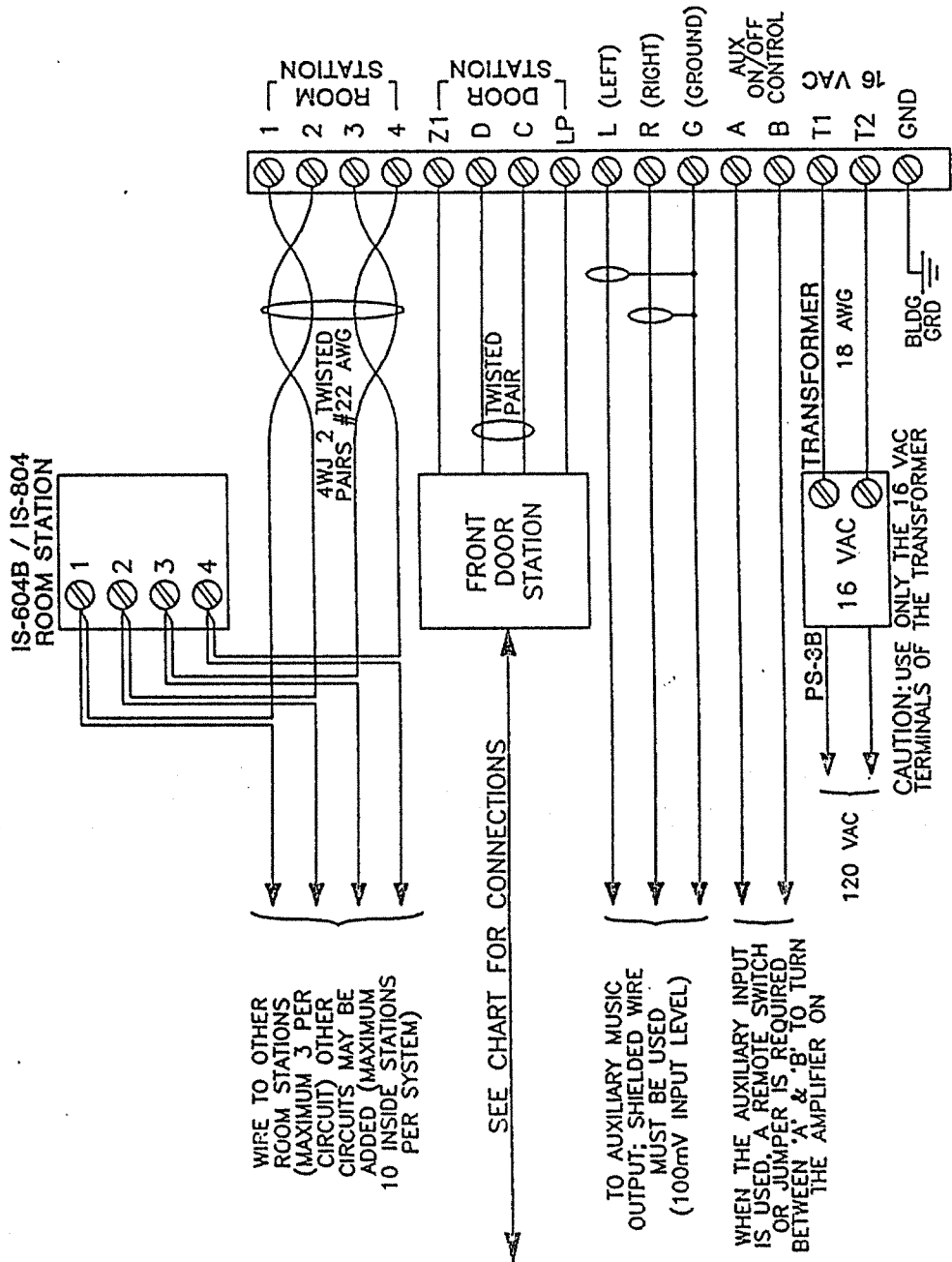
TROUBLESHOOTING

If the equipment fails to operate as indicated in the operating instructions, check the following items:

1. Entire system dead *Check:*
 - (a) 16 VAC at transformer secondary
 - (b) 16 VAC at amplifier terminals T1 and T2
 - (c) 120 VAC at transformer primary
2. No sound from room station *Check:*
 - (a) Volume control turned down
 - (b) Monitor button is depressed
 - (c) Wiring to terminals 3 and 4
 - (d) Connections to amplifier 3 and 4
3. Intercom volume too low *Check:*
 - (a) Station volume set turned down
 - (b) Amplifier volume control setting too low
4. Squealing or howling *Check:*
 - (a) Amplifier volume set too high
 - (b) Stations located too close to each other
 - (c) Twisted pair wiring not used or pairs interchanged
5. Station unable to talk *Check:*
 - (a) Volume control turned down
 - (b) Wiring to terminals 1 and 2
6. Unable to talk to door *Check:*
 - (a) Connections to door station
 - (b) Wiring to amplifier terminals C and D
 - (c) Room station volume turned down
7. Unable to listen to door *Check:*
 - (a) Wiring to terminals 1 and 2
 - (b) Station volume set too low
8. No chime *Check:*
 - (a) Connections at door station call button
 - (b) Wiring to amplifier terminals C and Z1
9. Hum or buzz *Check:*
 - (a) Station wiring installed too close to power fixtures.

DOOR STATION CONNECTIONS	DOOR STATION MODEL #	RADIO MODEL # EP-814A
OS-803 BLUE WHITE RED	D C Z1 LP	D C Z1 LP
OS-1000 BLUE YELLOW RED WHITE	D N/C Z1 C	D N/C Z1 C
OS-1001 1 2 3 4	D N/C Z1 C	D N/C Z1 C

N/C = NO CONNECTION



Warranty and Warning Information

Warning Please Read Carefully



Note to End Users This equipment is subject to terms and conditions of sale as follows:

Note to Installers

This warning contains vital information. As the only individual in contact with system users, it is your responsibility to bring each item in this warning to the attention of the users of this system. Failure to properly inform system end-users of the circumstances in which the system might fail may result in over-reliance upon the system. As a result, it is imperative that you properly inform each customer for whom you install the system of the possible forms of failure.

System Failures

This system has been carefully designed to be as effective as possible. There are circumstances, such as fire or other types of emergencies where it may not provide protection. Alarm systems of any type may be compromised deliberately or may fail to operate as expected for a variety of reasons. Some reasons for system failure include:

Inadequate Installation

A Fire Alarm system must be installed in accordance with all the applicable codes and standards in order to provide adequate protection. An inspection and approval of the initial installation, or, after any changes to the system, must be conducted by the Local Authority Having Jurisdiction. Such inspections ensure installation has been carried out properly.

Power Failure

Control units, smoke detectors and many other connected devices require an adequate power supply for proper operation. If the system or any device connected to the system operates from batteries, it is possible for the batteries to fail. Even if the batteries have not failed, they must be fully charged, in good condition and installed correctly. If a device operates only by AC power, any interruption, however brief, will render that device inoperative while it does not have power. Power interruptions of any length are often accompanied by voltage fluctuations which may damage electronic equipment such as a fire alarm system. After a power interruption has occurred, immediately conduct a complete system test to ensure that the system operates as intended.

Failure of Replaceable Batteries

Systems with wireless transmitters have been designed to provide several years of battery life under normal conditions. The expected battery life is a function of the device environment, usage and type. Ambient conditions such as high humidity, high or low temperatures, or large temperature fluctuations may reduce the expected battery life. While each transmitting device has a low battery monitor which identifies when the batteries need to be replaced, this monitor may fail to operate as expected. Regular testing and maintenance will keep the system in good operating condition.

Compromise of Radio Frequency (Wireless) Devices

Signals may not reach the receiver under all circumstances which could include metal objects placed on or near the radio path or deliberate jamming or other inadvertent radio signal interference.

System Users

A user may not be able to operate a panic or emergency switch possibly due to permanent or temporary physical disability, inability to reach the device in time, or unfamiliarity with the correct operation. It is important that all system users be trained in the correct operation of the alarm system and that they know how to respond when the system indicates an alarm.

Automatic Alarm Initiating Devices

Smoke detectors, heat detectors and other alarm initiating devices that are a part of this system may not properly detect a fire condition or signal the control panel to alert occupants of a fire condition for a number of reasons, such as: the smoke detectors or heat detector may have been improperly installed or positioned; smoke or heat may not be able to reach the alarm initiating device, such as when the fire is in a chimney, walls or roofs, or on the other side of closed doors; and, smoke and heat detectors may not detect smoke or heat from fires on another level of the residence or building.

Software

Most Mircom products contain software. With respect to those products, Mircom does not warranty that the operation of the software will be uninterrupted or error-free or that the software will meet any other standard of performance, or that the functions or performance of the software will meet the user's requirements. Mircom shall not be liable for any delays, breakdowns, interruptions, loss, destruction, alteration or other problems in the use of a product arising out of, or caused by, the software.

Every fire is different in the amount and rate at which smoke and heat are generated. Smoke detectors cannot sense all types of fires equally well. Smoke detectors may not provide timely warning of fires caused by carelessness or safety hazards such as smoking in bed, violent explosions, escaping gas, improper storage of flammable materials, overloaded electrical circuits, children playing with matches or arson.

Even if the smoke detector or heat detector operates as intended, there may be circumstances when there is insufficient warning to allow all occupants to escape in time to avoid injury or death.

Alarm Notification Appliances

Alarm Notification Appliances such as sirens, bells, horns, or strobes may not warn people or waken someone sleeping if there is an intervening wall or door. If notification appliances are located on a different level of the residence or premise, then it is less likely that the occupants will be alerted or awakened. Audible notification appliances may be interfered with by other noise sources such as stereos, radios, televisions, air conditioners or other appliances, or passing traffic. Audible notification appliances, however loud, may not be heard by a hearing-impaired person.

Telephone Lines

If telephone lines are used to transmit alarms, they may be out of service or busy for certain periods of time. Also the telephone lines may be compromised by such things as criminal tampering, local construction, storms or earthquakes.

Insufficient Time

There may be circumstances when the system will operate as intended, yet the occupants will not be protected from the emergency due to their inability to respond to the warnings in a timely manner. If the system is monitored, the response may not occur in time enough to protect the occupants or their belongings.

Component Failure

Although every effort has been made to make this system as reliable as possible, the system may fail to function as intended due to the failure of a component.

Inadequate Testing

Most problems that would prevent an alarm system from operating as intended can be discovered by regular testing and maintenance. The complete system should be tested as required by national standards and the Local Authority Having Jurisdiction and immediately after a fire, storm, earthquake, accident, or any kind of construction activity inside or outside the premises. The testing should include all sensing devices, keypads, consoles, alarm indicating devices and any other operational devices that are part of the system.

Security and Insurance

Regardless of its capabilities, an alarm system is not a substitute for property or life insurance. An alarm system also is not a substitute for property owners, renters, or other occupants to act prudently to prevent or minimize the harmful effects of an emergency situation.

IMPORTANT NOTE: End-users of the system must take care to ensure that the system, batteries, telephone lines, etc. are tested and examined on a regular basis to ensure the minimization of system failure.

Limited Warranty

Mircom Technologies Ltd. together with its subsidiaries and affiliates (collectively, the “Mircom Group of Companies”) warrants the original purchaser that for a period of three years from the date of shipment, the product shall be free of defects in materials and workmanship under normal use. During the warranty period, Mircom shall, at its option, repair or replace any defective product upon return of the product to its factory, at no charge for labor and materials. Any replacement and/or repaired parts are warranted for the remainder of the original warranty or ninety (90) days, whichever is longer. The original owner must promptly notify Mircom in writing that there is defect in material or workmanship, such written notice to be received in all events prior to expiration of the warranty period.

International Warranty

The warranty for international customers is the same as for any customer within Canada and the United States, with the exception that Mircom shall not be responsible for any customs fees, taxes, or VAT that may be due.

Conditions to Void Warranty

This warranty applies only to defects in parts and workmanship relating to normal use. It does not cover:

- damage incurred in shipping or handling;
- damage caused by disaster such as fire, flood, wind, earthquake or lightning;
- damage due to causes beyond the control of Mircom such as excessive voltage, mechanical shock or
- water damage;
- damage caused by unauthorized attachment, alterations, modifications or foreign objects;
- damage caused by peripherals (unless such peripherals were supplied by Mircom);
- defects caused by failure to provide a suitable installation environment for the products;
- damage caused by use of the products for purposes other than those for which it was designed;
- damage from improper maintenance;
- damage arising out of any other abuse, mishandling or improper application of the products.

Warranty Procedure

To obtain service under this warranty, please return the item(s) in question to the point of purchase. All authorized distributors and dealers have a warranty program. Anyone returning goods to Mircom must first obtain an authorization number. Mircom will not accept any shipment whatsoever for which prior authorization has not been obtained. NOTE: Unless specific pre-authorization in writing is obtained from Mircom management, no credits will be issued for custom fabricated products or parts or for complete fire alarm system. Mircom will at its sole option, repair or replace parts under warranty. Advance replacements for such items must be purchased.

Note: Mircom’s liability for failure to repair the product under this warranty after a reasonable number of attempts will be limited to a replacement of the product, as the exclusive remedy for breach of warranty.

Disclaimer of Warranties

This warranty contains the entire warranty and shall be in lieu of any and all other warranties, whether expressed or implied (including all implied warranties of merchantability or fitness for a particular purpose) And of all other obligations or liabilities on the part of Mircom neither assumes nor authorizes any other

person purporting to act on its behalf to modify or to change this warranty, nor to assume for it any other warranty or liability concerning this product.

This disclaimer of warranties and limited warranty are governed by the laws of the province of Ontario, Canada.

Out of Warranty Repairs

Mircom will at its option repair or replace out-of-warranty products which are returned to its factory according to the following conditions. Anyone returning goods to Mircom must first obtain an authorization number. Mircom will not accept any shipment whatsoever for which prior authorization has not been obtained.

Products which Mircom determines to be repairable will be repaired and returned. A set fee which Mircom has predetermined and which may be revised from time to time, will be charged for each unit repaired.

Products which Mircom determines not to be repairable will be replaced by the nearest equivalent product available at that time. The current market price of the replacement product will be charged for each replacement unit.

The preceding information is accurate as of the date of publishing and is subject to change or revision without prior notice at the sole discretion of the Company.

WARNING: Mircom recommends that the entire system be completely tested on a regular basis. However, despite frequent testing, and due to, but not limited to, criminal tampering or electrical disruption, it is possible for this product to fail to perform as expected.

NOTE: Under no circumstances shall Mircom be liable for any special, incidental, or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability, or any other legal theory. Such damages include, but are not limited to, loss of profits, loss of the product or any associated equipment, cost of capital, cost of substitute or replacement equipment, facilities or services, down time, purchaser's time, the claims of third parties, including customers, and injury to property.

MIRCOM MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ITS GOODS DELIVERED, NOR IS THERE ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, EXCEPT FOR THE WARRANTY CONTAINED HEREIN.



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