



The model number and serial number are located on the bottom record the serial number in the space provided below. Refer to these numbers whenever you call upon your Commax dealer regarding this product.

Model No.

Serial No.

**To prevent fire or shock hazard, do not expose the unit to rain or moisture.**

	<b>CAUTION</b> <b>RISK OF ELECTRIC SHOCK</b> <b>DO NOT OPEN</b>	
<b>CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</b>		



This symbol is intended to alert the user to the presence of uninsulated <sup>+</sup> within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

## INFORMATION

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacture's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Relocate the equipment with respect to the receiver.

Move the equipment away from the receiver.

Plug equipment and receiver are on different branch circuits.

## For the customer in Canada

This apparatus complies with the Class B limits for radio noise emissions set out in Radio Interference Regulations.

## CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

- 1. Read Instructions** - All safety and operating instructions should be read before the unit is operated.
  - 2. Retain Instruction** - The safety and operating instructions should be retained for future reference.
  - 3. Heed Warnings** - All warnings on the equipment and in the operating instructions should be adhered to.
  - 4. Follow Instruction** - All operating and use instructions should be followed.
  - 5. Ventilation** - Slots and openings in the cabinet are provided for ventilation and to protect it from overheating. These openings must not be blocked or covered. This equipment should never be placed near a heat source or in a built-in installation such as a rack unless proper ventilation is provided. Never place the unit on carpeting which might block ventilation through bottom slots.
  - 6. Power Sources** - This equipment should be operated only from the type of power source indicated on the marking label.
  - 7. Grounding** - This product is equipped with a polarized alternating - current line plug. This plug will fit into the power outlet only one way. This is a safety feature. If the plug should fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of polarized plug.
  - 8. Power Cord Protection** - Power- supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them; pay particular attention to cords at plugs, convenience receptacles and the point where cords exit from the equipment.
  - 9. Over loading** - Do not overload power outlets and extension cords as this can result in a risk of fire or electric shock.
  - 10. Damage Requiring Service** - Unplug this equipment from the power source and refer servicing to qualified service personnel under the following conditions:
    - a. when the power supply cord or plug is deamed;
    - b. if liquid has been spilled or objectes have fallen into the unit;
    - c. if the quipment has been exposed to rain or water;
    - d. if the equipment has been dropped or otherwise damaged;
    - e. when the equipment exhibits a distinct change in performance - this indicates a need for service.
  - 11. Water and Moisture** - Do not use this product near water, for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.
  - 12. Accessories** - Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the appliance. Any mounting of the appliance should follow the manufacture's instructions, and should use a mounting accessory recommended by the manufacturer.
- Note** : Do not place this product directly on wood or simulated woods surfaces as theses surfaces are easily damaged.
- 13. Object and Liquid Entry** - Never push objects of any kind into this product through openings as they may touch dangerous voltage points or shirt-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

**14. Servicing** - Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

**15. Replacement Parts** - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or having the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

**16. Safety Check** - Upon completion of service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

**17. Power Line** - The commax videophone system should not be located near overhead power lines or other electric light or power circuits, or where it can fall into power lines or circuits. When installing a videophone system, avoid dangerous contact with power lines or circuits.

**18. Attachment** - Do not use attachments not recommended by the product manufacturer as they may cause hazards.

**Outdoor Antenna Grounding** - Be sure the videophone system is grounded to provide some protection against voltage surge and built-up static charges.

**19. Safety Check** - Upon completion of service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

**20. Proper grounding of the mast and supporting structure.**

Grounding of the lead-in wire to the antenna discharge unit.

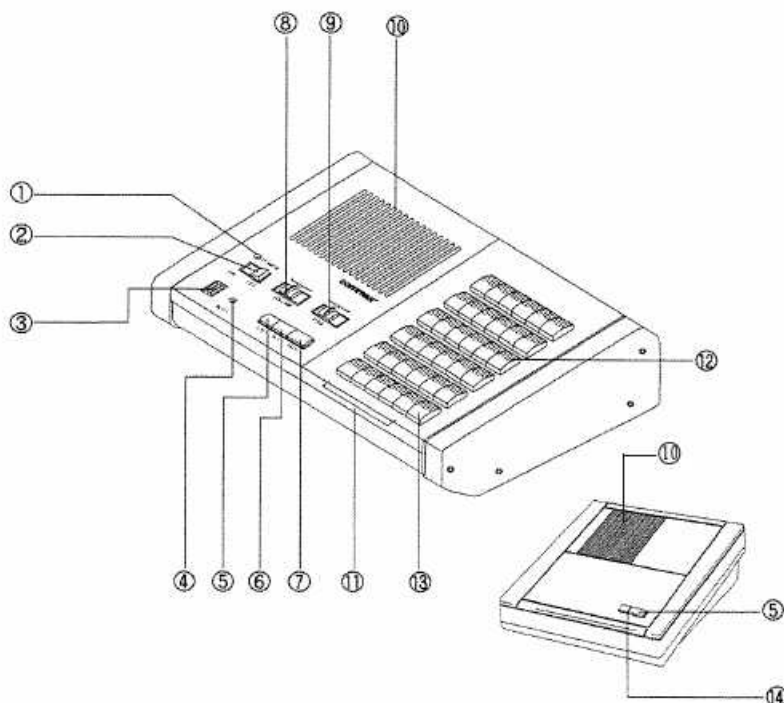
- Size of grounding conductors.
- Location of antenna-discharge .
- Connection to grounding electrodes.
- Requirements for the grounding electrode.

Note to it's system installer: This reminder is provided to call the video system installer's attention to Article 820-40 of NEC that provides guide lines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

**21. Outdoor Cable Protection** - All outdoor connections should be protected from moisture. Even if the connection is installed under a weatherproof cover. Internal heating can draw moisture or condensation into the covering of the unit and affect its operation. We do not recommend the use of silicon seal, since it has a tendency to form air pockets.

**22. Lighting** - For added protection for this product before a lighting storm, or when it is left unattached and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges. Be sure your antenna is properly grounded, as defined above. If you live in an area heavily prone to lightning storms, it is recommended that you invest in power-line, telephone line, RF cable and Actuator/Polarization surge protectors to protect your videophone system from possible damage.

## Location and Control of Functions



- ① **POWER Indicate L.E.D.** : Shows the power On status of the unit.
- ② **Power Switch** : Turn on the main power to the unit.
- ③ **Microphone** : Place next to your mouth for intercom conversations.
- ④ **Annunciator L.E.D.** : Indicates called party is busy when lit. Also lights when calling other stations.
- ⑤ **Calling Button** : Turn on the button, an electronic call tone will sound at the master and can speak and listen : "Hands free".
- ⑥ **Broadcasting Button**: Using for all broadcasting.
- ⑦ **TALK Button** : Transmitted signal to sub station or master station.
- ⑧ **Volume Control for reception** : Adjust that volume increase or decrease for reception.
- ⑨ **Calling Control for Transmission** : Adjust that volume increase or decrease for transmission.
- ⑩ **Speaker** : Output conversation.
- ⑪ **Selector Buttons** : Selected substation for communication.
- ⑫ **Lamps** : Call from the sub station is OFF, turn on the selector button is ON.
- ⑬ **Group Button** : Using for group broadcasting.
- ⑭ **Privacy Button** : When pressed, this button prevents master from listening-in or eavesdropping with hands free.

## Features

- 10, 20 or 30 call master with connection for add-on selectors available.
- 10 watt output for powerful communication.
- Up to one masters and any combination of subs multi - station.
- Up to circuit wires may be available.
- Separate transmitting and receiving tone volume controls on panel.
- Master station designed either for desk top use or wall mounting applications.
- Call tone volume adjustable for individual station requirements.
- Privacy switch(Sub station) for loudspeaking microphone prevents monitoring or eavesdropping by another master while in privacy position.

## Operations

### Master Station

Check that power supply is plugged into power outlet, master station power switch is ON and the power lamp is lit.

- Receiving a Call :**
- 1). A call from sub is annunciated by an intermittent electronic tone, which will remain at master.
  - 2). Depress selector button above the illuminated LED.
  - 3). Press TALK switch to make reply and release same to listen to sub.
  - 4). Upon completing conversation, depress OFF button.

- Placing a Call :**
- 1). Select the sub station you wish to communicate with and depress its selector button.
  - 2). Press talk switch and talk to station. Release talk switch for response from the sub station.
  - 3). Remember to depress OFF button upon completing conversation.

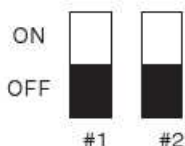
If master station receives a call during communication, the call will be annunciated only by the lamp (the call tone will not sound until master station depresses the OFF button corresponding to the existing communication).

**All call :** For making announcement to all sub station at a time, the all call switch can be depressed which cuts out incoming signals. Make an announcement while pressing the all call switch which will be transmitted to the speakers in all sub stations.

**Selective Group Call :** A maximum of one sub stations may be selected at a time for communication; however, the incoming voice and background noise would make this impractical for monitoring.

Master station has pre-setting volume DIP switch located on back of the unit and diary-use tone switches located on the front panel, each allowing individual adjusting of reception and transmission volumes. When adjusting pre-setting volume controls, be sure to set both volume switches on front panel at MIDDLE position.

Voice volume adjustment during communication can be made as desired by the switches on the front panel. At the end of every communication, set each voice control at MIDDLE position.



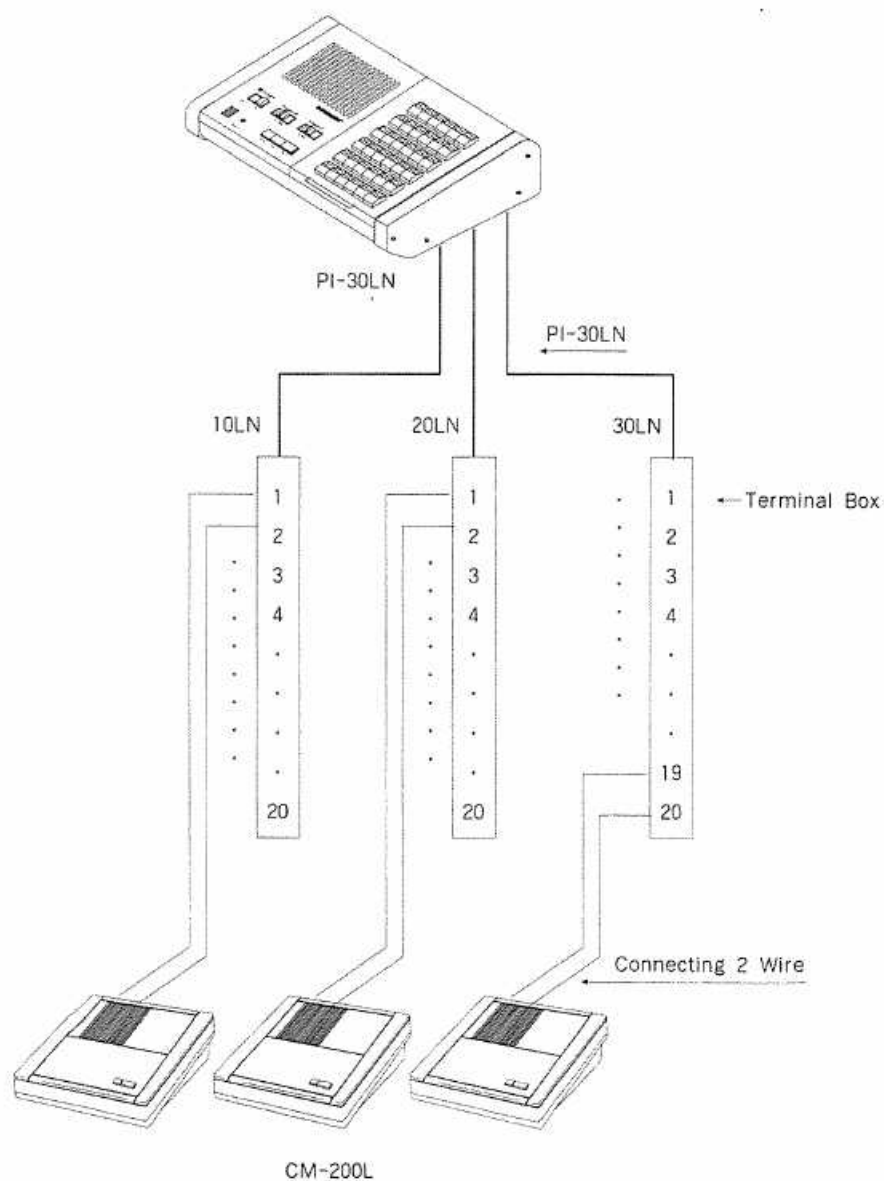
**1. #1. Adjust waiting time control :**

- ON : Off after calling signal
- OFF : Continues until turn on the selector button

**2. #2. Adjust calling signal :**

- ON : Signal Stroke
- OFF : Signal Continuously

# Wiring Diagram



## Troubleshooting Guide

### Before You Call

Try the Troubleshooting Guide on the following pages. If you still can't solve your problem, try one more thing before you call.

1. Pull the Power Plug from the AC receptacle.
2. Wait 10 minutes.
3. Plug the unit back in and try your procedure again.

### Getting Help

If you still can't correct an operating problem, contact your dealer. If your dealer is unable to solve your problem, contact Commax Customer Service. Please don't open the cabinet and attempt to repair the unit, as this will void your warranty.

Unplug the unit and refer servicing to qualified service personnel when:

- The power supply or plug is damaged.
- The unit has been exposed to rain or water.
- A solid object or liquid has fallen into the unit.
- The unit exhibits a distinct change in performance or will not operate normally.
- The unit has been dropped or the cabinet has been damaged.

### Maintaining Your Unit

The only maintenance that your unit should require is an occasional dusting *DO NOT* spray any liquids on the unit.

### To Service The Unit

Customer Service may be reached at 1-080-902-2222

### Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or those which have the same characteristics as the original part. Unauthorized substitutions may result in fire, electrical shock or other hazards.

### Safety Check

After completing any service or repairs to this unit, ask the service technician to perform safety checks to determine that the unit is in proper operating condition.



## Specification

Model No.	PI-10LN/20LN/30LN CM-200L
Power Source	95-235V~, 60Hz (For North America standard) power supply
Current Consumption	180mA (Maximum)
Power Consumption	2A (paging) -30 wires
Calling	Press button station selection A single chime sounds when call button is depressed
Communication Output	180mA maximum at master (with receive tone control at master) 180mA maximum at sub. (with transmit tone control at master)
All Call Output	10W system of up to 10 sub station
Type of communication	Press-to-talk loudspeaking communication
Calling	Master station : Called by tone and lamp (remain until answered) Sub station : Called by voice from master, after pre-tone sounds
Communication Distance	2000m/0.65mm

*External design, Features and Specifications of the can be changed without any notice, for promoting the quality of the product.*



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*Printed In Korea / 2010.10.103*

# User Manual

**HIGH POWER WIRED INTERCOM**  
PI-10LN(Master), PI-20LN(Master)  
PI-30LN(Master), CM-200L(Sub.)



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- Thank you for purchasing COMMAX products.
- Please carefully read this User's Guide (in particular, precautions for safety) before using a product and follow instructions to use a product exactly.
- The company is not responsible for any safety accidents caused by abnormal operation of the product.