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User Manual

Audio and Video Entry Doorphone System
DPV-KV(Monitor),DRC-DW2(Camera)

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www.commax.com

COMMAX Co.,Ltd.



- 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.



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The model number and serial number is located record 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.

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
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.		



This symbol is intended to alert the user to the presence of uninsulated “**dangerous voltage**” 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 unit.

INFORMATION

This equipment generates and uses radio frequency energy and if not installed and used properly; that is, in strict accordance with the manufacturer’s instructions, many cause interference to radio and television reception. It has been type tested and found to comply with the limites for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of the 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:

- Reorient or relocate the receiving antenna.
- Relocate the equipment with respect to the receiver.
- Move the equipment away from the receiver.
- Plug equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio / television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

CAUTION
TO PREVENT ELETRIC 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.

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commax company limited

Important Safeguards

- 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 **Folw 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 cover. 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 oneway. 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 **Overloading** - 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 damaged;
 - b. if liquid has been spilled or objectes have fallen into the unit;
 - c. if the equipment 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 performace - this indicates a need for survice.
- 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 web 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.
- 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.

Note : Do not place this produck directly on wood or simulaated woods surfaces as theses surfaces are easily damaged.

Important Safeguards

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 require, 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 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 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 that system is grounded to provide some protection against voltage surge and built-in 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 commax system installer: This reminder is provided to call the system installer's attention that provides guidelines 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. 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 lightning 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 commax system from possible damage.

Preparation

On Installation

- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc) or near materials (curtains, dropperis) that may block the ventilation slots.
- Do not install the unit near heat sources such as radiators or air ducts or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Keep the unit and glass away from equipment with strong magnets, such as a microwave oven or large loudspeakers.
- Do not place any heavy object on the unit.

On Operation

- When the unit is not in use, turn off the power to conserve energy and to extend its useful life.

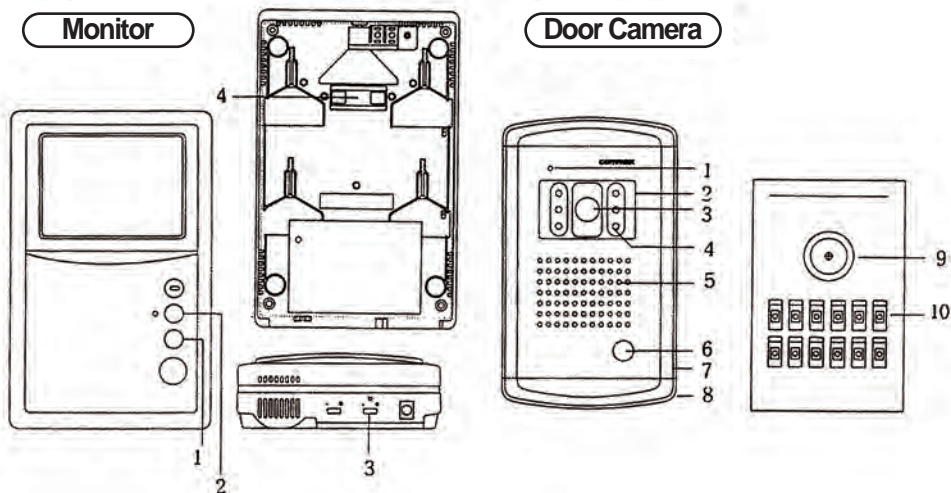
On Cleaning

- Clean the cabinet away, panel and controls with a dry soft cloth, or a soft cloth lightly moistened with a mild detergent solution.
- Do not use any type of solvent, such as alcohol or benzine, which might damage the finish.

On Repacking

Do not throw away the carton and packing materials. They make an ideal container in which to transport the unit. When shipping the unit to another location, repack it as illustrated on the carton.

Location and Function of Controls



- ① Monitor Off Button
- ② Monitor On Button
- ③ Brightness Control Switch
- ④ Interphone & Video Connector Wafer

- ① Microphone
- ② Protect Window for Camera
- ③ C.C.D. Camera Lens
- ④ Infrared L.E.D.
- ⑤ Speaker
- ⑥ Calling Button
- ⑦ Front Panel
- ⑧ Screw Hole Cover
- ⑨ Angular Field of View For Camera
- ⑩ Monitor & Interphone Connection Terminals

Monitor Installation

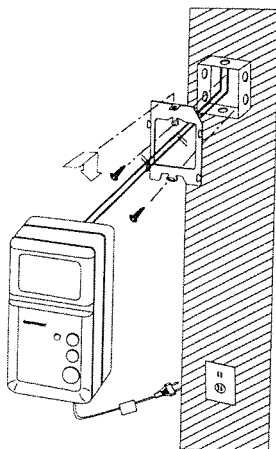
Warning : This installation should be made by a qualified service technician and should confirm to all local building codes.

- A. Connect the routed wires from the camera unit to the monitor wiring terminal exactly as show in the [wiring diagrams] on page 11
- B. Connect the handset cord to the monitor unit.
- C. Attach the wired monitor unit of the wall mounting bracked by setting the monitor over the four bracket books and sliding it down about
 - a. Insert the tiny machine screw into the hole in thd top of the brackets to hold the monitor in place (According to model is abailabel.)

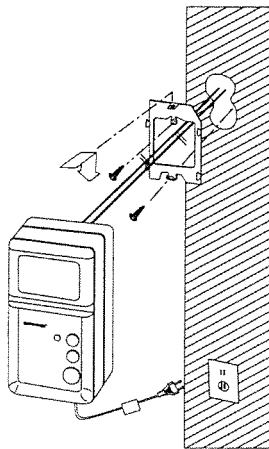
Installation (For Monitor)

Installation For Monitor

- For install in switch box for KS1



- Install for Wooden or Wall Mounted

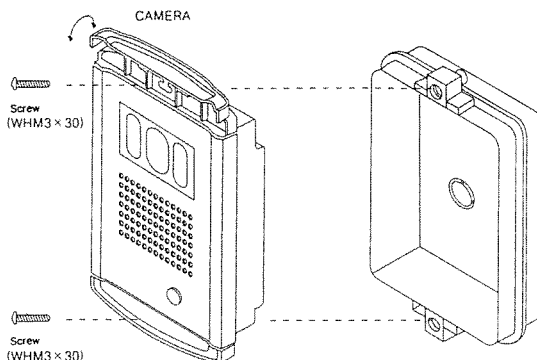


Precaution Of Monitor Installation

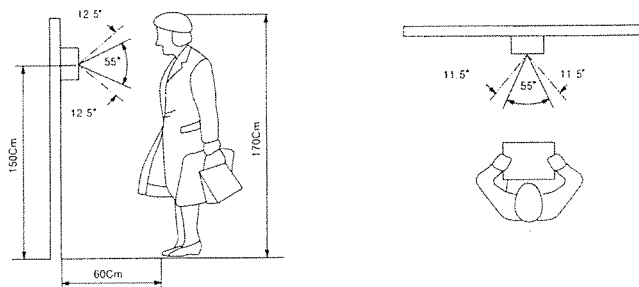
- **Location** : Keep the unit away from locations where it is likely to be exposed to high temperature or humidity - such as near radiators, stoves etc. Also avoid location that are subject to excessive dust accumulation or ventilation, which could cause mechanical damage, and locations subject to strong electromagnetic fields, such as close to broadcast equipment.
- **Ventilation** : The unit has ventilation slots on the side and bottom panels. Do not block these slots.
- **Avoid Physical Shocks** : Strong physical shock to the unit can cause damage. Handle it with care.
- **Do not Open The Case or Attempt Repairs To Modifications Yourself** : This product contains no user-serviceable parts. Refer all maintenance to qualified commax service personnel. Opening the case and tampering with the terminal circuitry voids warranty.
- **Always Power Off Before Making Connecting** : Always turn power OFF before connecting or disconnecting cables. This is important to prevent damage to the unit itself as well as other connected equipments.
- **Handle Cables Carefully** : Always plug and unplug cables - including the AC power cord - by gripping the connector, not the cord.
- **Clean With A Soft Dry Cloth** : Never use solvent such as benzene or thinner to clean the unit. Wipe clean with a soft, dry cloth.
- **Always Use The Correct Power Supply** : Make sure that the power supply voltage specified on the rear panel matches your local AC mains supply. Also make sure that the AC mains supply can deliver more than enough current to handle all equipment used in your system.

Installation (For Door Camera)

Installation For Flush Mounted



Installation Position

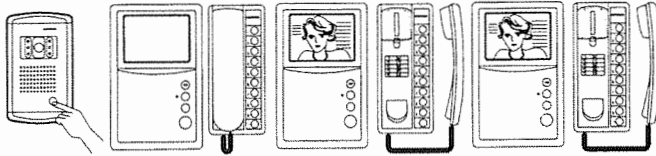


Precaution of Camera Installation

Warning : This installation should be made by a qualified service technician and should confirm to all local building codes.

- **Do not Aim The Camera At the Sun :** Do not aim the camera at the sun or point it at the sun even if you are not shooting.
- **Do not Shoot Intense Light :** Framing intense light such as a spotlight may cause bloom or smear. A vertical stripe may appear on the screen. However, this is not a malfunction.
- **Treat The Camera With Care :** Do not drop the camera or subject it strong shock of vibration. Otherwise, the camera may malfunction.
- **Never Touch Internal Parts :** Do not touch the internal parts of the camera other than that parts specified. Otherwise, the camera may malfunction. **Plug Off When You Do Not Intend To Use The Camera For A Long Time.**
- **Do Not Slash Water On The Camera :** Install the camera where the camera can kept dry. If camera gets wet, turn off power and contact you dealer.
- **Install The Camera Where No Video Noise Appear :** If cables are wired near electric lightning wires or a TV set, noise may appear in images. In this event, relocate or reinstall equipments.
- **Check The Ambient Temperature And Humidity :** Avoiding using the camera where the temperature is hotter or colder than specified. Otherwise, the quality of images may deteriorate or internal parts may be affected. Specialcare is required to use the camera at high temperature and humidity.
- **Should You Notice Any Trouble :** If any trouble occurs while you are using the camera, turn off the power and contact your dealer. If you continue to use the camera when there is something wrong with it, the trouble may much worse and an unpredictable accident may occur.

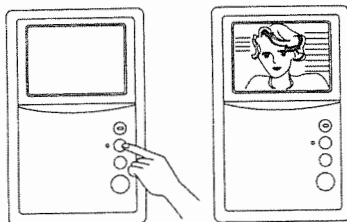
1. Calling Visitor



Calling to desired home on the porch

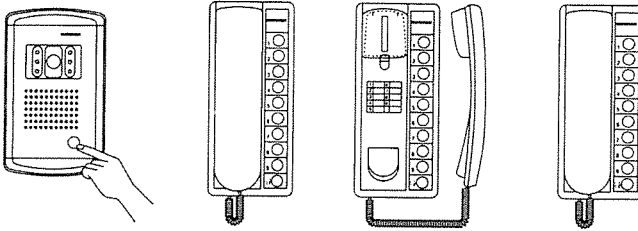
- When a visitor turn on push button on the door camera panel at the entrance to the building an electronic call signal (TP-nKV) is sent to the internal unit and, after approx 6 seconds, the monitor will show the picture of the person who is calling By pushing [ON] button on the monitor.
- Either picking up with the handset (TP-nKV), conversation with the visitor.
- If you conversation with wished, picking up the handset with conversation may be started which will last for about 60 seconds. Calling the visitor, no communicated with the visitor, after 60 seconds +/- 10 seconds automataclly release).
- Over communicated with the visitor, for opening your door, turn on the #1 button on the interphone (TP-nKV).
(For use connection the camera, selected without DIP-SW #1 of TP-nKV).
- On conversation with visitor, turn on the [OFF] button is monitor power off only, No lifted the handset, all operating is off.

2. Video Monitoring



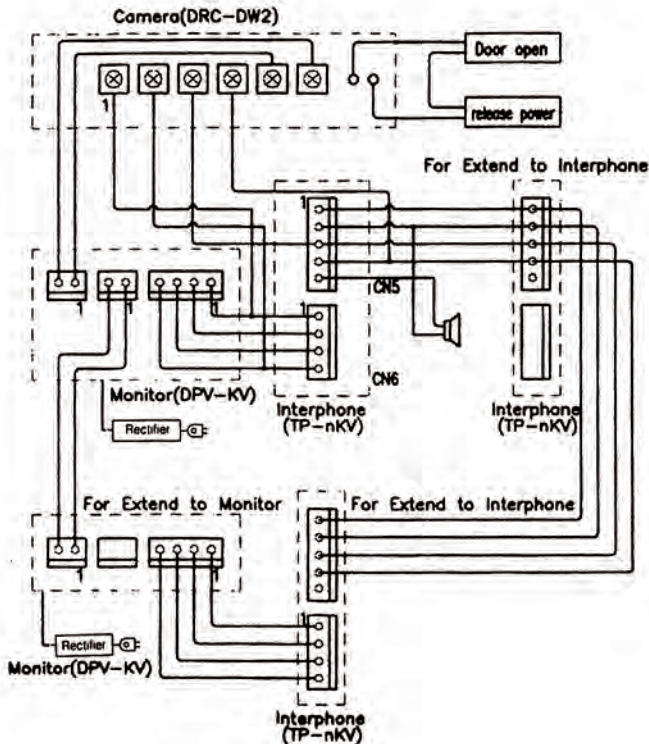
- On Checking the outdoor, turn on the [ON] button, you can see the outdoor and 60 seconds +/- 10 seconds if you wanted.

3. Conversation with the Interphone (TP-nKV)



- Turn on the (CALL) button on the camera, ding-dong electronic sound chime bell on the interphone (TP-nKV)
- Picking up the handset (TP-nKV) conversated with the visitor as like telephone.
- Over communicated with the visitor, no lifted the handset for all operation off.
Turn on the #1 button on the interphone (TP-nKV), If you wanted permitted on visitor for automatically opening the porch (Selected DIP-SW of TP-nKV without #1).

Wiring Diagram



When selecting the location for attaching your unit, please remember...

- Bottom panel should be of sufficient strength to permit attaching on the wall mounted.
- Allow adequate space on the both side of the unit for proper ventilation, across to cable or miscellaneous and unit for viewing easy.
- An electrical outlet should be within reach of the AC line cord with the cord extended and secured.
- The area directly below the unit should not be used for cooking, radiator or by other appliances generating heat or steam.
- Hold the unit and bottom panel in various locations while you think through what will be the most convenient location in your visitors placece.
- Keep in mind your normal work pattern, especially the use of other countertop electrical appliances.

Installation Camera

External Units With Built-in Camera

It is important to position the video camera away from direct sources of light (such as lamps, sunlight, reflecting surfaces, etc).

If it is not possible the monitor will show a poor contrast in the darker areas. This is due to the fact that brightness is adjusted automatically on the lighter part of the picture.

Entrance Call Units

This solution is appropriate for special applications. The selection of the most suitable lens and the possible of the monitor camera (which may be

hidden) will permit flexible coverage of the entrance area.

Lighting

In the case of installations, however, with manually monitor camera it is always necessary to light up the subject with appropriate lamps whose size is to be determined in relation to the surface to the area which can be viewed by the monitor camera and to make sure that there is no light discontinuity between the monitor camera and the subject to be viewed.

This can be obtained by placing the light sources well behind the monitor.

Do not install lamps in such a manner that intense light, either direct or reflected, can infringe upon the monitor camera.

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 for Qualified Service Technician.
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 Center or International Business Division. Please don't open the cabinet and attempt to repair the unit, as this will avoid 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.

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.

Checking List

- Monitor ----- 1 Unit
- Door Camera ----- 1 Unit
- Bracket for wall mounted ----- 1 Unit
- Flushed Box Fixed Type (M3 x 30mm) ----- 2 Piece
- Bracket Fixed Screw for wall mounted ----- 2 Piece
(T4x18mm)

- Monitor Fixed Screw (M3x8mm) ----- 1 Piece
- Connector (4Px250) ----- 1 Piece
- Connector (2Px100) ----- 1 Piece

Specifications

Monitor for DPV-KV

Power Source	DC 17V (YK-17100)
Picture Tube	4" B/W Flat Type
Power Consumption	
Operating	450mA
Nomal	10mA
Communication Method	Common Method
Transmitted Method	Interphone 4 Wires
	Camera 2 Wires
Calling Sound	Electronic Chime
Video Receiving Time	60 ±10 Seconds
Communication Distance	
For 0.65mm Cable	50m
Operating Temperature	0°C ~ +40°C
Operating Humaidity	Less tha 90
Dimensions (W/H/D)mm	139 / 215 / 55
Weight (kg)	2.5

Camera for DRC-DW2

Mounting Type	Flush Mounted Type
Trnasmitted Method	Interphone 4 wires (Poarity)
	Monitor 2 Wires
Power Source	DC 12V 180mA
	(Power From monitor)
Communication Method	Synchronous Communication
Pick-Up Device	1/3" CCD
Scanning Frequency	Horizontal : 15.75KHz (For EIA/15.625KHz)
	Vertical : 60Hz (For EIA)
	50Hz (For CClR)
Angular Field of Lens	Horizontal : 68°
	Vertical : 55°
Angular Field of Adjust	Up/Down : 25°C Left/Right : 23°C
Minimum Illumination	0Lux (300mm front camera)
Light	Infrared L.E.D
Operating Temperature	-10 ~ +40
Operating Humidity	124 / 186 / 50
Weight (kg)	1.12

External design, Features, Functions and specifications of the product can be changed without any prior notice., For opromoting the quality of the product.

LIMITED WARRANTY

To Original Consumer Purchaser at Retail

Video Doorphone, Monitor, Sound System, Nurse Call System and Components

COMMAX'S, Commax company limited, warrants only to the original consumer purchaser of retail each COMMAX Video Entry Doorphone Entry System, Intercom System, CCD Camera, Sound System, Nurse Call System and Component which it sells under this limited warranty to be free from defects in materials and workmanship under conditions of normal home use. This limited warranty is for normal as one (1) year on all electrical and mechanical components (Refer below). This limited warranty runs from the date original purchase for consumer use.

Responsibilities for You and COMMAX Brand.

1. You must retain your sales receipt or provide other proof of purchase date. Promptly completing and informing the seller is one way of providing proof of purchase date. If you have no such proof, when the warranty will run from the date of shipment by Commax's products. You should also keep this warranty for your records (Refer indicated to Use And Guide and see your unit serial number in the space provided below).
2. If you desire warranty service, you must notify Commax's within the applicable warranty period.
 - For ninety days from the original date of purchase or receipt as a gift box, carton box and use care guide, Commax will, at its position, repair or replace a defect product at no charge to you.
 - For an additional nine months, Commax will furnish a free major components (available) in exchange for defective parts. Labor is not included during this period.
 - Parts and / or replacement product supplied under this warranty may be new or rebuilt at Commax's option.
3. Within a reasonable period after proper notification, Commax's or an authorized Commax Service Center (Control to International Business Division) shall, at its option, repair or replace the defective parts(s) or the affected component. Replacement may be with factory refurbished parts or components. You are responsible for any packing, shipping, and insurance charges associated with sending the component to the authorized service center for repair or replacement.
4. This warranty does not cover charges for any assembly, installation, set-up or removal, or adjustment of controls.
5. This warranty shall be void if any product marking or label has been altered, defaced, or removed, or if any product component has been altered, modified, used improperly, or had its housing opened.
6. COMMAX' PRODUCTS IS NOT RESPONSIBLE FOR DAMAGES CAUSED BY IMPROPER ASSEMBLY, INSTALLATION, SET-UP OR REMOVAL, DAMAGES OR INOPERABILITY CAUSED BY ASSEMBLY OR USE WITH INCOMPATIBLE PRODUCTS, RECEPTION PROBLEMS CAUSED BY INADEQUATE SECURITY SYSTEM, OR DAMAGES CAUSED BY MISUSE, ALTERATION, IMPROPER MAINTENANCE, SHIPMENT, ACCIDENT OR ABUSE, AS TO ANY OUTDOOR COMPONENT, THIS WARRANTY DOES NOT COVER THE PAINTING OR PLATING.

How to Obtain Warranty Service

To obtain warranty service, you must :

1. Call or write COMMAX's Technical Service Department (International Business Division) within the applicable warranty period at :
Commax Products, Technical Service Dept., 81-080-902-2222 (#513-11, Sangdaewon-dong, Jungwon-ku, Seongnam-city, Kyungki-do, Korea)

When you call or write, explain the problem. Ask whether the component should be returned for service or retained by you for servicing in place. Ask for a Return Material Authorization number and for the address to send the component, if the component is to be returned. Do not send the component to the above address. If you write, be sure to include a copy of your sales receipt or other proof of purchase date, a copy of your warranty, your phone number and return address.

MEMO