

**Exhibit E**

**User's Manual**

**CIC COMPONENTS IND**

**CO., LTD.**

**FCC ID.: NK2-2400**

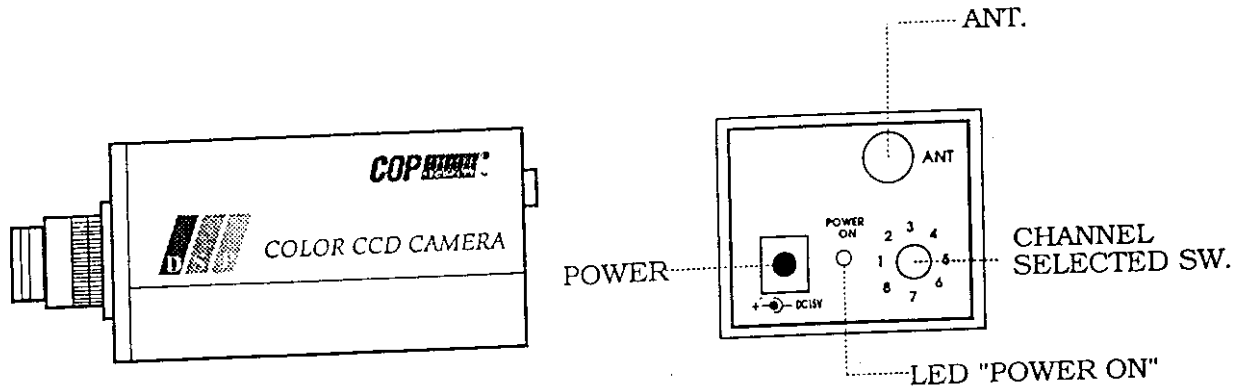
**Wireless Audio Video**

**Transmitter**

# WIRELESS 2.4 GHz COLOR CCD CAMERA

MODEL : 15-2400

March 02/ 87



## FEATURES





- 2400 MHz / 2.4 GHz WIRELESS TRANSMITTER FM DESIGN
- VIDEO + AUDIO
- BOX BUILT-IN 1 MODUL + 1 PCBoard PLL + REGULATOR DC POWER
- 3 CHANNEL SELECTED BY ROTARY SWITCH.
- EASY TO USE WITH ALL TYPES OF CCD CAMERAS
- INCLUDED ANTENNA & POWER SUPPLY

AC/15Vdc

## SPECIFICATIONS

MODEL No:	15-2400			
VIDEO				
VIDEO INPUT SIGNAL	Video Composite 1 Vp.p			
VIDEO INPUT IMPEDANCE	75 Ohms			
MODULATION (Wave 300 KHz 1 Vp.p)	10 TO 14 MHz			
DIFFERENTIAL GAIN	+/- 8%			
DIFFERENTIAL PHASE	+/- 8 Degrees			
S/N RATIO	45 dB Mini			
AUDIO				
AUDIO INPUT SIGNAL	2 Vp.p (maxi)			
AUDIO INPUT IMPEDANCE	1.4 k.Ohms			
MODULATION	35 TO 45 KHz			
DISTORTION FACTOR	+/- 3%			
S/N RATIO	40 dB Mini			
POWER SUPPLY	Regulator 15 +/- 0.2Vdc			
CONSUMPTION	400 mA / Maxi available for camera 250 mA			
FREQUENCY (MHz)	CH1	CH2	CH3	CH4
	24.10	24.42	24.74	
OUTPUT POWER	10 mW			
IMPEDANCE OUTPUT	75 Ohms			
OPERATING TEMP.	0 TO 50 degrees C. / 40 TO 90 degrees F.			
DIMENSIONS	L:102 mm W:87 mm H:41 mm			
WEIGHT	170 g.			



- |   |   |
|---|---|
|  15-1000 |  15-1200 |
|  15-1300 |  15-2400 |

WIRELESS COLOR A/V OBSERVATION SYSTEM  
WIRELESS B/W A/V OBSERVATION SYSTEM

USER MANUAL

MADE IN TAIWAN

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## FEATURE

1. ULTRA HIGH FREQUENCY TRANSMISSION, LESSEN INTERFERENCE.
2. 4 CHANNEL OR 8 CHANNEL TRANSMISSION MODULE IS BUILT IN. OPTION TO SEND SIGNAL BY ANY OF CHANNEL.
3. 4 CHANNEL OR 8 CHANNEL RECEIVING MODULE MAY RECEIVE SIGNAL SIMULTANEOUSLY OR INDIVIDUAL RECEIVING.
4. USER CAN INSTALL 1 CAMERA TO START AND EXPAND TO 4 OR 8 CAMERA ACCORDING TO USER'S DEMAND.
5. RECEIVING MODULE AUTOMATICALLY RECEIVER NEW SIGNALS AS NEW CAMERAS ARE ADDED.
6. RECEIVING MODULE CAN BE ADJUSTED TO MUTE OR CHANGING INTERVALS OF SCANNING.
7. CLEAR AUDIO EFFECT AND STABLE VIDEO DISPLAY.
8. CAN BE CONNECTED TO VCR FOR RECORDING PURPOSE.
9. EASY INSTALLATION WITH OPERATING.
10. WIRELESS TRANSMISSION TO SAVE INSTALLATION COST.

## GENERAL SPECIFICATION:

Item No.	15-1000	15-1200	15-1300	15-2400
Frequency(MHz)	910	980	1080	1240
Consumption(mA)	1010	1040	1120	1280
Operating Distance	1070	1100	1160	2442
Resolution	1130	1160	1320	2474
Output Power(mW)	1200	1200	1360	
Power Supply	10mV			
Consumption(mA)	DCTSV			
Operating Distance	280	280	280	280
Resolution	150M OUTDOORS, 60M INDOORS			
Image sensor	380 TV LINE			
	1/3" CCD IMAGE SENSOR 290,000 PIXELS			

**MAJOR APPLICATION**

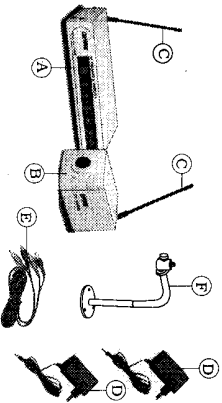
- MANAGE YOUR HOUSE, FACTORY, AND WAREHOUSE MORE EFFICIENTLY.
- SUPERVISE THE OPERATION OF SUPERMARKETS, CHAIN STORES,.....
- MONITOR PUBLIC EQUIPMENT, SUCH AS POWER SUPPLY SYSTEM, WATER ENERGY SYSTEM, ETC.
- SUPERVISE DANGEROUS AREAS.
- RE-CONFIRM AND RE-CHECK THE ALARM OF SECURITY SYSTEM.
- OFFICE MANAGEMENT, TRAFFIC CONTROL, HOME SECURITY MONITORING, ETC.

**STANDARD PACKAGE**

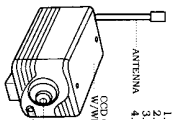
**ONE PACKAGE INCLUDE:**

- A RECEIVER UNIT x 1 PCE
- B TRANSMITTER UNIT x 1 PCE
- C ANTENNA x 2 PCE
- D AC/DC ADAPTOR 15VDC x 2 PCE
- E RCA CABLE / 1.5M x 1 SET
- F CAMERA MOUNTING BRACKET x 1 SET

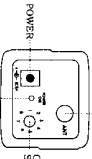
**REMARK : "DSP" COLOR CAMERA IS WITHOUT LENS**



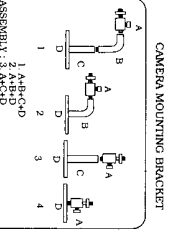
**TRANSMITTER UNIT (15-1000CT / 15-2400CT FOR B/W CCD CAMERA) (15-1000CT/15-2400CT FOR COLOR CCD CAMERA)**



VIDEO CAMERA WITH ANTENNA INSTALLATION PROCEDURE:  
 1. FASTEN ANTENNA AND INSERT INTO POWER TRANSMISSION CHANNEL CAN BE CHOSEN BY USERS.  
 2. TRANSMISSION CHANNEL WITH 2 WAT AUTO IBS AND B/LC "ARSC" FUNCTION.  
 3. FASTEN ANTENNA AND INSERT INTO POWER TRANSMISSION CHANNEL WITH 2 WAT AUTO IBS AND B/LC "ARSC" FUNCTION.  
 4. FINISH ACTION.

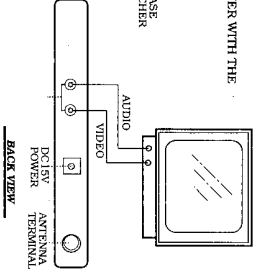
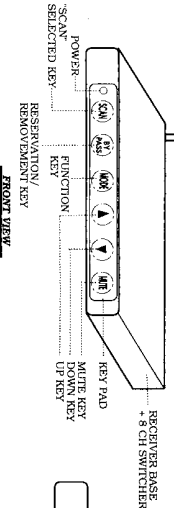


ANTENNA  
 1/8" CCD MICROPHONE  
 CAMERA BASE W/WIRELESS AV MODULE  
 MOUNTING BRACKET HOLD  
 POWER  
 CHANNEL SELECTED SW.  
 ANT.  
 "LED" POWER ON"



**RECEIVER UNIT (15-1000R / 15-2400R)**

RECEIVER / MONITOR INSTALLATION PROCEDURE:  
 1. AUDIO/VIDEO INPUT OF THE RECEIVER WITH THE ANTENNA.  
 2. TURN ON MONITOR AND SET IT TO AV MODE.  
 3. POWER ON THE RECEIVER WITH AV MODE.



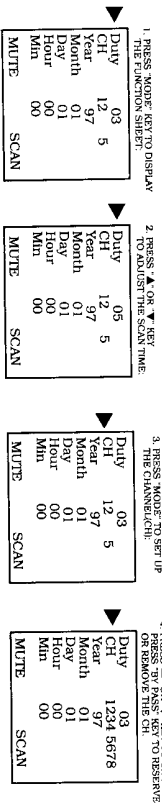
FRONT VIEW  
 BACK VIEW

### OPERATING INSTRUCTION

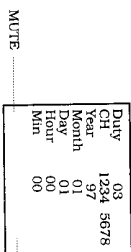
#### MODEL 15-1000 AND 15-2400:

THESE 2 MODELS ARE OPERATING WITH "ON SCREEN CONTROL" INSTEAD OF NORMAL CCTV SYSTEM TO OPERATE ON THE PANEL.

PLEASE SET UP THE FUNCTION AS FOLLOWING PROCEDURE:



- \*\* THE PROCEDURE OF SETTING UP THE "YEAR" "MONTH" "DAY" "HOUR" AND "MIN" SAME AS ABOVE OPERATION \*\*
3. DISPLAY "MUTE" ON THE SCREEN : SILENCE STATUS
  - NON-DISPLAY "MUTE" ON THE SCREEN : CHANNELS AUTO SWITCHING ONE BY ONE
  4. DISPLAY "SCAN" ON THE SCREEN : FIX ONE CHANNEL ON THE SCREEN
  - NON-DISPLAY "SCAN" ON THE SCREEN



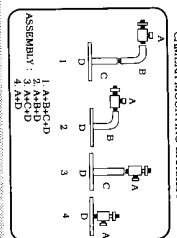
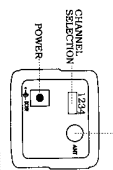
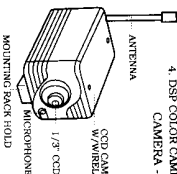
MUTE

SCAN

### TRANSMITTER UNIT (15-1200T / 15-1300T FOR B/W CCD CAMERA) (15-1200CT/15-1300CT FOR COLOR CCD CAMERA)

VIDEO CAMERA WITH ANTENNA INSTALLATION PROCEDURE:

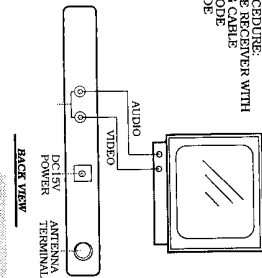
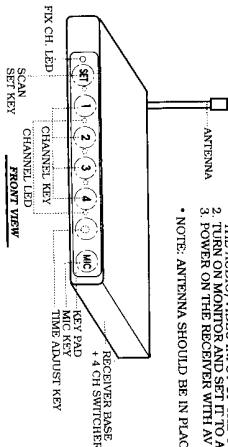
1. FASTEN CAMERA MOUNTING RACK AT THE APPROPRIATE PLACE
2. CONNECT CAMERA CABLE TO THE TRANSMITTER UNIT
3. TRANSMISSION CHANNEL CAN BE CHOSEN BY USERS. "ASC" FUNCTION CAMERA - SET JUMPER 1 RECEIVER - SET CHANNEL 2
4. USE COLOR CAMERA WITH 2 WAY AUTO IRS AND "BLC" "ASC" FUNCTION CAMERA - SET JUMPER 2 RECEIVER - SET CHANNEL 2



### RECEIVER UNIT (15-1200R / 15-1300R)

RECEIVER / MONITOR INSTALLATION PROCEDURE:

1. CONNECT AUDIO/VIDEO OUTPUT OF THE USING CAMERA TO THE AUDIO/VIDEO INPUT OF THE RECEIVER WITH CABLE
  2. TURN ON THE RECEIVER WITH AV MODE
  3. POWER ON THE RECEIVER WITH AV MODE
- \* NOTE: ANTENNA SHOULD BE IN PLACE



BACK VIEW

**OPERATING INSTRUCTION**

MODEL 15-1200 AND 15-1300:

**THIS UNIT IS CONTROLLED BY ADVANCED MICRO PROCESSER AND EASY INSTALLATION AS BELOW:**

**A. INSTALL ONE CHANNEL:**

TRANSMISSION : SET JUMPER 1

RECEIVER - SET CHANNEL 1

**B. INSTALL MORE THAN ONE CHANNEL:**

- (1) INSTALL EACH CAMERA RESPECTIVELY ACCORDING TO THE CAMERA INSTALLATION PROCESS
- (2) SET UP THE JUMPER 1, 2, 3. ● OF CAMERA RESPECTIVELY
- (3) POWER ON THE RECEIVER AND THE LED INDICATOR WILL LIT  
PRESS THE "SET KEY + CHANNEL" FOR CAMERA 1  
PRESS THE "SET KEY + CHANNEL" 2" FOR CAMERA 2  
CHANNEL 3 AND CHANNEL 4 ARE SAME AS ABOVE. THE LED WILL EXTINGUISH AND THE CHANNEL LED INDICATOR WILL START BLANKING ORDERED BY YOUR SET UP.

**C. IF DESIRE TO RECEIVE A PARTICULAR TRANSMISSION CHANNEL FROM A CAMERA, SIMPLY PRESS THE CH1, CH2, CH3, CH4 KEY AS YOUR DESIRE.**

**D. PRESS "MIC" KEY FOR QUIET TRANSMISSION**

**\* SUGGESTION:**

PUT THE 4CH CAMERA AT THE NEAREST POSITION AND 1ST CAMERA AT THE FAREST POSITION THAT WILL MINIMIZE THE INTERFERENCE.

**SELF DIAGNOSIS AND RESOLUTION**

Symptom	Possible Cause	Resolution
Power Off	Power is not hooked up	Insert power cord to a socket
Power On, but not operable	Static effect Power is not connected properly	Unplug power cord and re-plug back in after a few minutes Insert power cord to a socket
No Picture, No Sound	Power is not turned on Antenna on the receiver is not connected or worn out Audio/Video wire touch each other	Turn on the power key Check if the antenna is worn or is not connected properly. Check if the wire is from or is not connected properly
Sound great, picture poor	Antenna is not connected properly or wire is worn out Possibly effected by terrain	Check if the wire is worn or is not connected properly Remove antenna from the effected area
Sound poor, picture great	Possibly effected by terrain Volume was set too high	Remove antenna from the effected area
Cannot record Image / Sound	The writeable knob is broken on tape cartridge Audio/Video wire touch each other Pre-set recording function has started	Lower the volume Change a new tape Check if the wire is worn or is not connected properly Turn off pre-set function

**WARRANTY CARD / CARTE DE GARANTIE / GARANTIESCHEN / TARJETA DE GARANTIA**

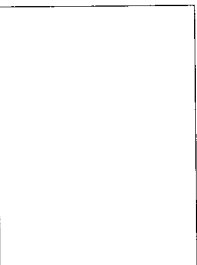
THE PRODUCT IS OFFERED ONE YEAR PERIOD OF WARRANTY FROM THE PURCHASED DATE. IF THE DEFECT IS FROM THE PRODUCTION PROCESS OR DUE TO THE NORMAL USE AS DESCRIBED IN THE USER MANUAL.

CE PRODUIT EST SOUS LA GARANTIE D'UN AN DES LE JOUR DE VOTRE ACHAT. AU CAS OU L'ENDOMMAGEMENT S'ARRIVE LE PROCÉDE DE LA PRODUCTION OU SOUS L'UTILISATION NORMALE SUIVANT NOTRE MANUEL D'UTILISATION.

DAS PRODUKT WIRD ANGEBOTEN MIT EINER GARANTIEFRIST VON EINEM JAHR AB VERKAUFSDATUM, WENN DER DEFECT HERVORHT VOM PRODUKT- TONSPROZESS ODER AUFTRITT BEI GEWOHNLICHIEM GEBRAUCH WIE IM VERBRAUCHERHANDBUCH BESCHRIEBEN.

ESTA GARANTÍA CUBRE UN PERIODO DE UN AÑO DESDE LA FECHA DE COMPRA. LOS SERVICIOS DE POST-VENTA SON GRATIS DURANTE ESTE PERIODO. GARANTIZAMOS QUE EL PRODUCTO, QUE COMPRA UD., SE LIBRA DE CUALQUIER DEFECTO EN MATERIAL Y OPERACIÓN BAJO USO NORMAL COMO DESCRITO EN EL MANUAL DEL USUARIO.

MODEL NO. / N° DE MODELL/  
MODEL NR.



SERIAL NO. / N° MATRICULE /  
SERIEN NR.

PURCHASED DATE /  
JOUR D'ACHAT /  
VERKAUFSDATUM /  
FECHA DE COMPRA

DISTRIBUTOR / DISTRIBUITOR /  
VERKAUFER/ FIRMA DEL DISTRIBUITOR