

# INSTRUCTION MANUAL

COLOR CAMERA

MODEL  
**ISD-A14**

#### OUTDOOR USE WARNING

WARNING – TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

**Ikegami**

Ikegami Tsushinki Co., Ltd.

#### Ikegami Electronics (U.S.A.), Inc.

37 Brook Avenue, Maywood, N.J. 07607, U.S.A.  
Phone: (201) 368-9171, FAX (201) 569-1626  
[www.ikegami.com](http://www.ikegami.com)

U021042-00

Thank you very much for your wise choice of the Ikegami Color Camera. Please carefully read this Instruction Manual to keep your camera at full capacity. This video camera is equipped with a 1/3" Digital Pixel Sensor (DPS) system.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

#### NOTE:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

#### CAUTION:

ANY CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PART RESPONSIBLE FOR COMPLIANCE COULD VOID THE USERS AUTHORITY TO OPERATE THE EQUIPMENT.

## Instructions for Disposal of Electric and Electronic Equipment in Private Household



#### Disposal of used Electric and Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product, or in the related documents in the package, indicates that this product shall not be treated as normal household waste. Instead, it should be taken to a proper applicable collection point or depot for the recycling of electric and electronic equipment.

By ensuring this product is disposed of correctly, you will help prevent possible negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources.

For more detailed information about recycling of this product, please contact your local city authority, your household waste disposal service or the place where you purchased the product.

## IMPORTANT SAFETY INSTRUCTIONS

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with a dry cloth.
- 7) Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use the attachments/accessories specified by the manufacturer.
- 12) Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15) CAUTION - These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.



## 1. Handling precautions

- Do not install the camera in a water-splashed or highly humid environment.
- Do not use the camera where the ambient temperature drops below -10°C or rises above +50°C. The images and component parts may be adversely affected or the camera may not function correctly.
- Never open the camera case because there are precision electrical and electronic components inside and an accident may result.
- Be sure to turn off the power before installing or making connections.
- Be careful not to drop or give a strong shock to the camera while transporting it.
- Do not touch the image sensor.
- Do not orientate the camera directly towards the sun.
- Images on the screen may look slightly rough at high temperatures because of the image sensor characteristics. This is not a system failure, however.

## 2. General

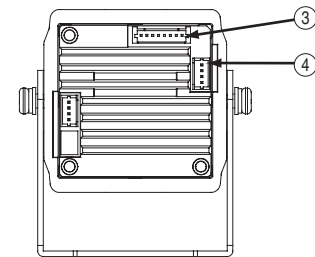
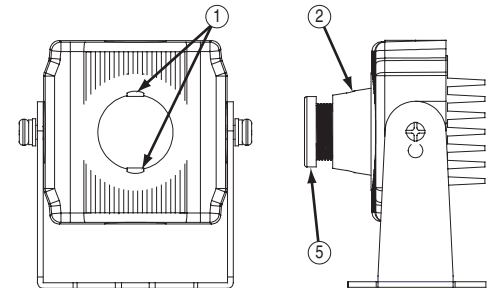
This color camera is equipped with a 1/3" Digital Pixel Sensor (DPS) system. It features WDR, high sensitivity and high resolution, and is equipped with many functions. The camera is best suited for being set up at ATMs and being housed in other systems.

## 3. Features

- (1) Hyper Wide Light Dynamic Range (Hyper WDR)  
The WDR function provides for very effective compensation of high light and dark areas in screen. This situation may occur generally outside or viewing from indoor to outdoor scenes. Even in large light fluctuations, bright-and-dark subjects can be captured and viewed clearly with a natural appearance.
- (2) Small-size cube shape  
The small-size cube shape of the camera allows it to be most suitable to be installed into various devices such as ATM units.
- (3) High-quality picture and high resolution  
The camera is designed for smear-free imaging and low noise. The well-designed DSP, Digital Signal Processor, effectively enhances details, which achieves crisp and sharp images with a high signal-to-noise ratio. The high resolution of a horizontal resolution of 520 TV lines (690HTVL-Effective) is assured.
- (4) Automatic white balance  
Thanks to the automatic follow-up white balance control (ATW), the white balance adjusts itself no matter how great the subject's color temperature fluctuates.
- (5) Automatic Sensitivity Control  
In conjunction with the wide dynamic control by the multi-sampling system, the camera incorporates the automatic sensitivity control function that always provides adequate and bright images even through its fixed-iris lens.

- (6) Scene File  
In addition to normal setting (NORMAL), there are four patterns for scene files (setting files) that are preset beforehand to a particular scene. By selecting those patterns, it is easy to carry out image setting suited to the scene without having to carry out specialized image adjustment.
- (7) FOCUS EZ function  
Thanks to this function, as the focus point is judged at a glance, the focus adjustment is performed easily.

## 4. Names of parts and their functions



- ① **Focus lock screw**  
With focus adjustment complete, this is used to mechanically lock the lens. Tighten up the two screws, upper and lower, to lock the lens.
- ② **Lens mount**  
This is used to mount the lens on the camera.
- ③ **Set-up unit connector**  
Just hook up the set-up unit (sold separately), and the camera's settings can be readily modified. For details on the set-up unit, contact your local salesperson.
- ④ **Video output and DC12V power input connectors**  
This connector is used to connect the video output cable and power input cable. Use the accompanying harness. The power input DC jack is of the Center Plus type.  
\* This installation should be made by a qualified service person and should conform to all local codes.  
\* **Note:** Before making connection, be sure that the power is in the range of DC12V ± 10%. Be very careful not to employ AC power because otherwise the camera may get damaged.
- ⑤ **Lens**  
M12 mount lens can be mounted on the camera.

## 5. Warranty and after-sale service

- Please consult Ikegami Electronics (U.S.A.) Inc. or your dealer for full warranty information. Your dealer will repair or replace free of charge within the warranty period according to the warranty coverage.
  - For repairs after the expiration of the warranty period, consult your dealer or local salesperson. It will first be judged whether the trouble is repairable or not. Charged servicing will then be made upon request of the user.
  - Before you ask for servicing, take trouble of reading the Instruction Manual. If the unit still fails, take note of the model number, date of purchase, problem, etc. in detail, and inform your dealer or sales representative.
  - If you have questions about the after-sale service, contact your dealer or local salesperson.
- \* We suggest you ask for preventive inspection earlier.

## 6. Specifications

- |  |  |
|--|--|
| (1) Image Sensor:                      | 1/3-inch Pixim DPS CMOS sensor   |
| (2) Pixel Number:                      | Approx. 410,000 pixels,<br>758 (H) x 540 (V)   |
| (3) Scanning system:                   | NTCS: 525 TV lines / 59.94Hz,<br>2 : 1 interlace<br>PAL: 625 TV lines / 50Hz,<br>2 : 1 interlace   |
| (4) Sync system:                       | Internal synchronization (Crystal-lock)  |
| (5) Video output:                      | VBS 1.0Vp-p/75 ohms  |
| (6) Resolution:                        | Horizontal: 520 TV lines<br>(high-resolution mode 690TVL-Effective)  |
| (7) S/N ratio:                         | Over 50dB (p-p/rms)  |
| (8) Minimum object illumination:       | ISD-A14-25 : 0.7Lx/F2.1<br>(S-UP OFF; VBS output: 50%)<br>ISD-A14-29 : 0.6Lx/F2.0<br>(S-UP OFF; VBS output: 50%)<br>ISD-A14-36 : 0.5Lx/F1.8<br>(S-UP OFF; VBS output: 50%) |
| (9) Day/Night switching:               | Digital Day/Night<br>Auto or Manual, Selectable  |
| (10) Wide Dynamic Range:               | Built-in and Variable  |
| (11) AGC:                              | ON (AGC, HYPER-AGC)/<br>OFF (LOW, MID, HIGH)   |
| (12) Electronic Sensitivity Control:   | Built-in, On (AUTO) or Off Selectable<br>Maximum 32 times  |
| (13) White Balance Control:            | ATW/ATWex/AWC/MANUAL,<br>Selectable  |
| (14) DETAILED correction:              | Built-in   |
| (15) Digital Noise Reduction:          | Built-in, On or OFF, Selectable<br>(DNR function)  |
| (16) Color rolling reduction function: | Built-in, On or OFF, Selectable<br>(CRR function)  |
| (17) Private Mask Setting:             | Built-in. Up to 8 areas  |
| (18) Optimum Monitor Output Selection: | Built-in, CRT or LCD types, Selectable   |
| (19) Camera ID:                        | 1 Line, up to 24 characters<br>(alphanumeric and symbols)  |
| (20) Local set-up function:            | Selections and settings possible<br>on screen display<br>(The set-up unit (sold separately) is<br>required.)   |

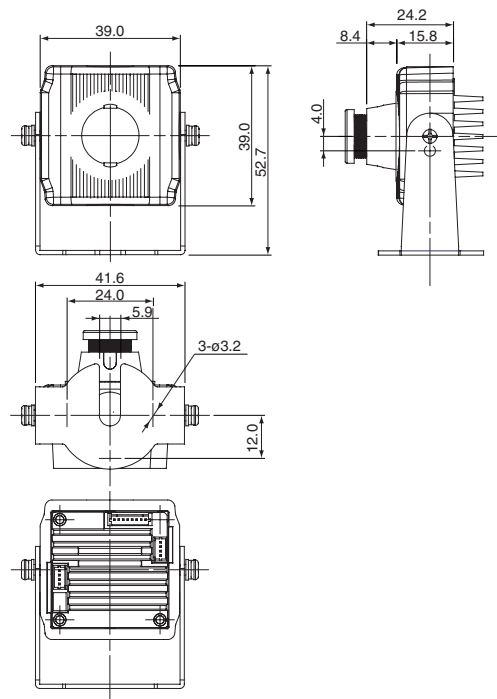
- (21) Remote set-up function: Available (Multiple image communication method by exclusive remote controller (sold separately))
- (22) Operating Temperature and Relative humidity: -10 to +50°C, RH 30% to 90% (No Condensation)
- (23) Lens mount: M12 mount
- (24) Lens: M12 fixed focal lens (f2.5mm/f2.9mm/f3.6mm)

Focal length (f)	Lens mount	Maximum aperture ratio(F)	View angle (H)	View angle (V)
2.5mm	M12	2.1	113.4°	85.9°
2.9mm	M12	2.0	90.8°	64.7°
3.6mm	M12	1.8	63.0°	53.0°

- (25) Power Requirement: DC12V±10%
- (26) Power Consumption: 1.6W
- (27) Outer dimensions: 39.0(W)×39.0(H)×32.5(D) mm (protrusion included)  
Approx. 80g
- (28) Weight: Approx. 80g
- (29) Input/output connectors: ·VIDEO OUT BNC  
·DC12V DC jack  
(Applicable plug: 5.5 mm dia., x 2.1 mm dia., Center Plus)
- (30) Supplied accessories: Instruction Manual, 1 Copy  
Power/video integrated cable, 1 pc.

\* Specifications and design are subject to change for product improvements without notice.

## 7. External Appearance



## 8. Setup Flow Chart

