

CCD COLOR CAMERA
IK-7200A

Please read this manual thoroughly before use, and keep it handy for future reference.

Record in space provided below the Model # and the Serial # as found on the label on the bottom of this unit.
Model # IK-7200A Serial # _____
Retain this information for future reference.

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COMPONENTS

(1) Camera 1
 (2) Accessories 1
 (a) Mounting Bracket 1
 (b) Instruction Manual 1
 (c) Screws (for Shade) 1
 (d) Screws (for Mounting Bracket) 3
 (e) Anchor 3
 (f) Alignment Sticker 1

For information on our latest products and peripheral devices, refer to the following Web page.
 ■ <http://www.toshibasecurity.com>

The above URL is subject to change without prior notice. If the URL changes, refer to the Toshiba website(<http://www.toshiba.com>.)

IMPORTANT SAFEGUARDS

- Read Instructions**
Read all the safety and operating instructions before operating the product.
- Retain Instructions**
Retain the safety instructions and instruction manual for future reference.
- Warnings**
Comply with all warnings on the product and in the instruction manual.
- Follow Instructions**
Follow all operating and use instructions.
- Cleaning**
Disconnect this video product from the power supply before cleaning.
- Attachments**
Do not use attachments not recommended by the video product manufacturer as they may cause hazards.
- Accessories**
Do not place this video product on an unstable cart, stand, tripod, bracket or table. The video product may fall, causing serious injury to a person, or serious damage to the product. Use only with stand, tripod, bracket, or table recommended by the manufacturer, or sold with the video product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.
- Ventilation**
This video product should never be placed near or over a radiator or heat register. If this product is placed in a built in installation verify that there is proper ventilation so that the camera temperature operates within the recommended temperature range.
- Power Sources**
This video product should be operated only from the type of power source indicated on the information label. If you are not sure of the type of power supply at your location, consult your product dealer.
- Power-Cord Protection**
Power 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, screws and the point where they exit the product.
- Installation**
Install this video product on a secure part of the ceiling or wall. If installed on an unsecured location the camera could fall causing injury and damage.
- Lightning**
For additional protection on this video product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the power supply and cable system. This will prevent damage to the video product due to lightning and power-line surges. If lightning occurs, do not touch the unit or any connected cables in order to avoid electric shock.
- Overloading**
Do not overload the power supply or extension cords as this can result in a risk of fire or electric shock.
- Object and Liquid Entry**
Never push objects of any kind into this video product through openings as they may touch dangerous electrical points or short-out parts that could result in a fire or electrical shock. Never intentionally spill liquid of any kind on the video product.
- Servicing**
Do not attempt to service this video product yourself as opening or removing covers may expose you to dangerous electrical or other hazards. Refer all servicing to qualified service personnel.
- Damage Requiring service**
Disconnect this video product from the power supply 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 objects have fallen into the video product.
 c. If the video product does not operate normally by following the operating instructions in the instruction manual. Adjust only those controls that are covered by the instruction manual as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the video product to its normal operation.
 d. If the video product has been dropped or the cover has been damaged.
 e. When the video product exhibits a distinct change in performance which indicates a need for service.
- Replacement Parts**
When replacing parts be sure the service technician uses parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
- Safety Check**
Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks to determine that the video product is in proper operating condition.

CAUTION TO REDUCE THE RISK OF ELECTRIC SHOCK.
DO NOT REMOVE COVER. NO USER SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, 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.

WARNING:
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



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.

FIELD INSTALLATION MARKING:
WORDED: "THIS INSTALLATION SHOULD BE MADE BY A QUALIFIED SERVICE PERSON AND SHOULD CONFORM TO ALL LOCAL CODES."

FCC (USA)-INFORMATION

NOTE : This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful 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.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

USER-INSTALLER CAUTION : Your authority to operate this FCC verified equipment could be voided if you make changes or modifications not expressly approved by the party.

Disclaimer

Toshiba/TAIS disclaims any responsibility and shall be held harmless for any damages or losses incurred by the user in any of the following cases:

1. Fire, earthquake or any other act of God; acts by third parties; misuse by the user, whether intentional or accidental; use under extreme operating conditions.
2. Malfunction or non-function resulting in indirect, additional or consequential damages, including but not limited to loss of expected income and suspension of business activities.
3. Incorrect use not in compliance with instructions in this instruction manual.
4. Malfunctions resulting from misconnection to other equipment.
5. Repairs or modifications made by the user or caused to be made by the user and carried out by an unauthorized third party.
6. Notwithstanding the foregoing, Toshiba's liabilities shall not, in any circumstances, exceed the purchase price of the product.

Copyright and Right of Portrait

There may be a conflict with the Copyright Law and other laws when a customer uses, displays, distributes, or exhibits an image picked up by the camera without permission from the copyright holder. Please also note that transfer of an image or file covered by copyright is restricted to use within the scope permitted by the Copyright Law.

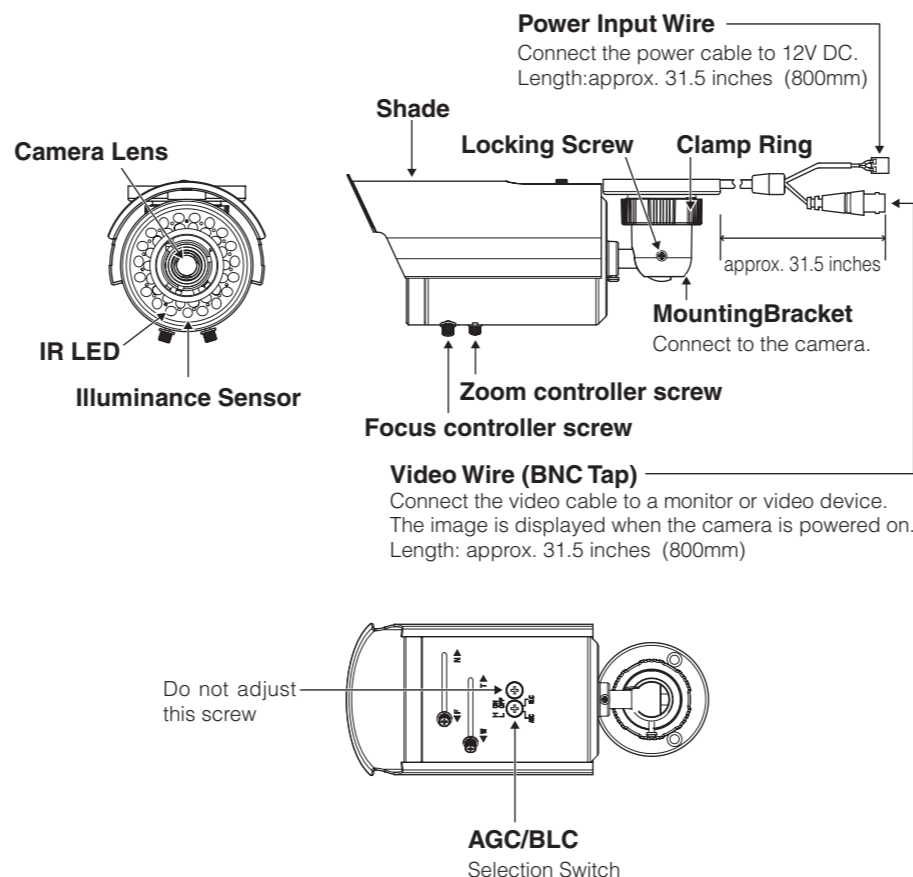
Protection of Personal Information

Images taken by the camera that reveal the likeness of an individual person may be considered personal information. To disclose, exhibit or transmit those images over the internet or otherwise, consent of the person may be required.

Usage Limitation

The product is not designed for any "critical applications." "Critical applications" means life support systems, exhaust or smoke extraction applications, medical applications, commercial aviation, mass transit applications, military applications, homeland security applications, nuclear facilities or systems or any other applications where product failure could lead to injury to persons or loss of life or catastrophic property damage. Accordingly, [Toshiba/TAIS] disclaims any and all liability arising out of the use of the product in any critical applications.

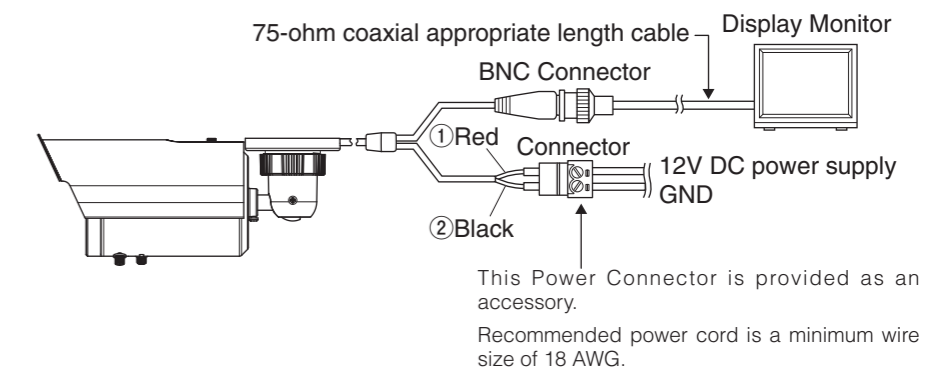
1. PART NAMES AND FUNCTIONS



2. CONNECTIONS

Notes on connecting

- Power plugs of connected equipment must be disconnected before camera installation.
- A75-ohm appropriate length coaxial cable with connector (3C-2V: max. 656 feet (200 m), 5C-2V: max. 820 feet (250 m)) is required for standard connection.
- For details of wiring and operation of equipment to be connected, refer to their operation manuals.
- A power supply with cable, connectors and coaxial cable are not supplied with the camera.
- Connecting the video and power cable outdoors, use a waterproof junction box. For details, refer to the manual.



Do not overload power supply

The recommended power supply for this camera is 9 watts minimum at 12V DC.

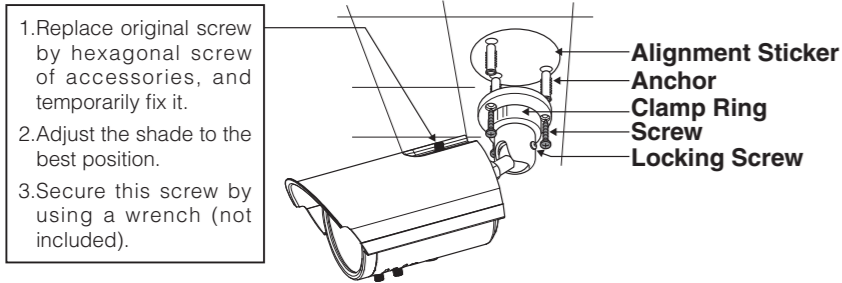
3. INSTALLATION

Notes:

- The attached screws and anchors are used to install the camera to a solid surface. (e.g. concrete) If installing to loose or thin material surfaces, use the appropriate anchors (not included) with the screws.
- Install the camera tightly.

3-1 Mounting the camera to a solid surface

- Attach the Alignment Sticker to the surface.
- Drill three pilot holes (Ø0.28inch×1.57inches(D))(Ø7mm×40mm(D)) through the three circles on the sticker.
- Hammer the supplied plastic anchors into the holes.
- Drill a hole (Ø0.63inch(Ø15mm)) in the center of the sticker, and lead the video and power cables in this hole.
- Align the three holes of the Mounting Bracket with the three plastic anchors; insert the supplied screws with camera to corresponding holes.



3-2 Adjusting the view angle and lens

- The camera direction can be adjusted horizontally (pan: max. 360 deg.) and vertically (tilt: max. 90 deg.).
- To adjust pan and tilt rotate the Clamp Ring counterclockwise, and loosen the two Locking Screws using a screwdriver.

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- Turn the camera to the desired position, rotate the Clamp Ring clockwise to secure the camera.
- To adjust zoom and focus, loosen two controller screws, and move them to the desired position.
- Tighten zoom and focus controller screws. To secure these screws tightly, be sure to tighten them using a screwdriver.
- To secure the camera tightly, be sure to tighten the two Locking Screws using a screwdriver.

Note:

- Adjust the shade position after replacing original screw by hexagonal screw of accessories.
- Be sure to securely tighten the Clamp Ring.

3-3 Adjusting the BLC and AGC

AGC and BLC selecting switches are internally-located. To adjust these switches, rotate the cap counterclockwise. After adjusting, rotate the cap clockwise. Make sure that the cap has been tightly secured to the camera using a screwdriver.

(1) Backlight Compensation (BLC)

The exposure is automatically adjusted so that the best picture is obtained at a monitor zone of about 50% in the horizontal and about 50% in the vertical directions. The factory setting is "ON".

(2) Auto Gain Control (AGC)

Camera maximum gain can be selected High (30dB) or Low (24dB). The factory setting is "High". If the image is noisy in low-light, change this switch to "Low".

3-4 Day / Night Function

This camera is equipped with near-infrared LEDs (IR LED) of 850nm. The LEDs turn on automatically when it becomes dark. (The human eye cannot clearly see the light of the LEDs.)

This camera is able to clearly produce monochrome images at a range of less than 82 feet.

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6. SPECIFICATIONS

1. Image System	
Image Device	1/3 inch CCD image sensor
Pixel Elements	768 (H) x 494 (V)
2. Electrical	
TV System	NTSC
	2:1 Interlace, 15.734 kHz horizontal, 59.94 Hz vertical
Horizontal Resolution	480 TV lines (typical)
S/N Ratio	48 dB
Minimum Illumination	0 lux (LED is ON)
Gain Control	AGC:High (30dB), Low(24dB)
White Balance	Auto
White Balance Range	2,500 K to 9,500 K
Auto Electronic Shutter	1/60 s to 1/100,000 s
Backlight Compensation (BLC)	ON / OFF
Video Output Signal	VBS (1.0 Vp-p, 75 ohms unbalanced, BNC)
Synchronization System	Internal
IR LED	36 LEDs, 850nm
IR Distance	82 feet (25m)
3. Mechanical	
Weight	1.4 lbs (630 g) camera only
Dimension	3.2(W) x 3.1(H) x 5.4(D) inches (81.5mm(W) x 79.5mm(H) x 137.5mm(D) (excluding protrusion and mounting bracket))
Ingress Protection Rating	IP66
4. Optical	
Built-in Lens	f = 3.7-10 mm, F 1.6
View Angle of Lens	27-77°(H), 21-57°(V)
5. Power	
Input Voltage	12V DC ±10 %
Current Consumption	0.4A (MAX.)

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4. NOTES ON USE AND INSTALLATION

- Do not aim the camera at the sun**
Never aim the camera at the sun even with the camera power off.
- Do not shoot intense light**
Intense light such as a spotlight may cause a 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 to intense vibration.
- Never touch internal parts**
Do not touch the internal parts of the camera other than the parts specified.
- Do not submerge in water**
Install the camera where the camera can be used indoors or outdoors according to IP66 code. If the camera was dropped in the water, turn off the power and contact your dealer.
- Keep the camera installation away from video noise**
If cables are wired near electric lighting wires or a TV set, noise may appear in images. In this event relocate cables or reinstall equipment.
- Check the ambient temperature and humidity**
Avoid using the camera where the temperature is hotter or colder than the specified operating range. Doing so could affect the internal parts or cause the image quality to deteriorate. Special care 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 get worse and an unpredictable problem may occur.

5. IN CASE OF PROBLEMS

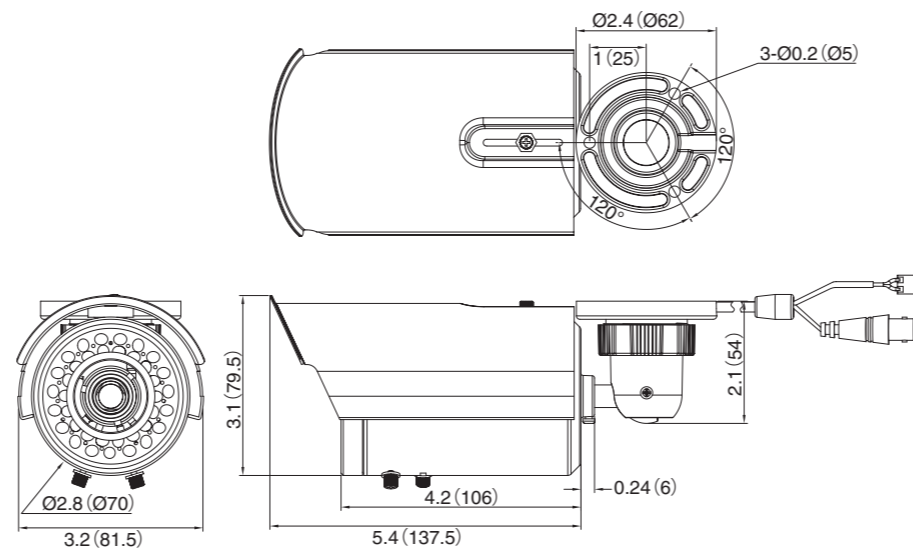
Condition	Check Points
No image	<ul style="list-style-type: none"> Are the camera and connected equipment turned on? Are wires connected correctly?
Unnatural color	<ul style="list-style-type: none"> Is the display monitor adjusted correctly? Is the lighting too dim?
Flicker noise	<ul style="list-style-type: none"> Under the fluorescent lamp of 60Hz, flicker noise rarely occurs.
Defocusing at night	<ul style="list-style-type: none"> Readjust the focus at night-mode that turned on the IR LED.

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6. Environmental	
Operating Temperature and humidity	14°F to 122°F (-10°C to +50°C) 20 % to 90 % RH
Storage Temperature and humidity	-4°F to 140 °F (-20°C to 60°C) 90 % RH

Design and specifications are subject to change without notice.

7. EXTERIOR VIEW



Dimensions: Inch (mm)

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LIMITED WARRANTY CCD SECURITY CAMERA IK-7200A

The Imaging System Division ("ISD") of Toshiba America Information Systems, Inc. makes the following limited warranties with regard to this CCD Camera Model IK-7200A ("Product"). These limited warranties extend to the Original End-User ("You [r]").

Three (3) Year Limited Warranty of Labor and Parts ISD warrants that this Product will perform in accordance with specifications for a period of three (3) years from the date of purchase by the Original End-User. During this three (3) year period, ISD will repair or replace the Product, if it does not perform as warranted. In order to take advantage of this Limited Warranty, You must: (a) call (877) 855-1349 to receive a RMA number; and (b) pay all transportation and insurance charges for shipment of the Product to the ASP or Toshiba Exchange Center. ISD reserves the right to substitute factory refurbished parts in place of those in need of repair.

Instruction Manual (Owner's Manual): You should read the Instruction Manual (Owner's Manual) thoroughly before operating this Product. Before seeking warranty service, you should check the troubleshooting guide in the Instruction Manual (Owner's Manual) and follow the instructions to correct the problem.

How to Obtain Warranty Service Step-by-step Procedures: To obtain warranty service, You should:

- Contact Toshiba America Information Systems, Inc. at (877) 855-1349 to first verify operation or installation assistance. (877) 855-1FIX
- If technical support determines that the unit is defective, an RMA will be issued with return instructions for repair.
- Securely pack the Product in the original carton and external shipping pack, include a letter explaining the problem with a copy of the bill of sale or proof of purchase.
- Prepay all transportation and insurance costs.

Your Responsibilities: This Limited Warranty is subject to the following conditions:

- You must provide the bill of sale or proof of purchase at the time that warranty service is required.
- You must notify Toshiba America Information Systems, Inc. at (877) 855-1349 within (30) days after you discover that the product does not perform in accordance with specifications during the Limited Warranty period.
- You must pack the Product in its original carton using the original packing material. Then insert the original carton containing the Product into another carton with additional packing material before shipping the Product to an ASP or Toshiba Exchange Center.

DISCLAIMERS: ALL OTHER EXPRESS OR IMPLIED WARRANTIES ON THIS PRODUCT, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED. SOME STATES DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

IF THIS PRODUCT IS NOT IN GOOD WORKING ORDER AS WARRANTED ABOVE, YOUR SOLE AND EXCLUSIVE REMEDY SHALL BE THE REPAIR OR REPLACEMENT OF THE PRODUCT. IN NO EVENT WILL ISD OR ITS PARENT COMPANY OR ANY ASP BE LIABLE TO YOU OR ANY THIRD PARTY FOR ANY DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT. THIS LIMITATION APPLIES TO DAMAGES OF ANY KIND, INCLUDING ANY DIRECT OR INDIRECT DAMAGES, LOST PROFITS, LOST SAVINGS OR OTHER SPECIAL, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES, WHETHER FOR BREACH OF CONTRACT, TORT OR OTHERWISE, OR WHETHER ARISING OUT OF THE USE OF OR INABILITY TO USE SUCH PRODUCT, EVEN IF TAIS, ITS PARENT COMPANY, OR AN ASP HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR OF ANY CLAIM BY ANY OTHER PARTY. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR SOME PRODUCTS, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.

THIS LIMITED WARRANTY SHALL BE VOID IF THE PRODUCT OR PARTS HAVE BEEN SUBJECTED TO MISUSE, ABUSE, ACCIDENT, IMPROPER INSTALLATION, IMPROPER MAINTENANCE, OR USE IN VIOLATION OF ISD'S WRITTEN INSTRUCTIONS, OR WHERE THE PRODUCT HAS BEEN ALTERED OR MODIFIED WITHOUT ISD'S PRIOR AUTHORIZATION, OR UPON THE REMOVAL OR ALTERATION OF ISD'S FACTORY SERIAL NUMBER, LABOR SERVICE CHARGES FOR PRODUCT INSTALLATION, SET UP AND ADJUSTMENT OF CONTROLS ARE NOT COVERED BY THIS LIMITED WARRANTY.

No person, agent, distributor, dealer, authorized service provider, or company is authorized to change, modify, or extend the terms of this Limited Warranty in any manner whatsoever. The time within which an action must be commenced to enforce any obligation of ISD arising under this Limited Warranty or under any statute, or law of the United States or any state thereof, is hereby limited to one (1) year from the date You discovered or should have discovered the problem. This limitation does not apply to implied warranties arising under state law. Some states do not permit limitation of the time within which You may bring an action beyond the limits provided by state law, so the above provision may not apply to You. This Limited Warranty gives You specific legal rights and You may also have other rights which vary from state to state.

TOSHIBA AMERICA INFORMATION SYSTEMS, INC.
Imaging Systems Division

TOSHIBA

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