



# TotalExam<sup>®</sup>2 User Manual

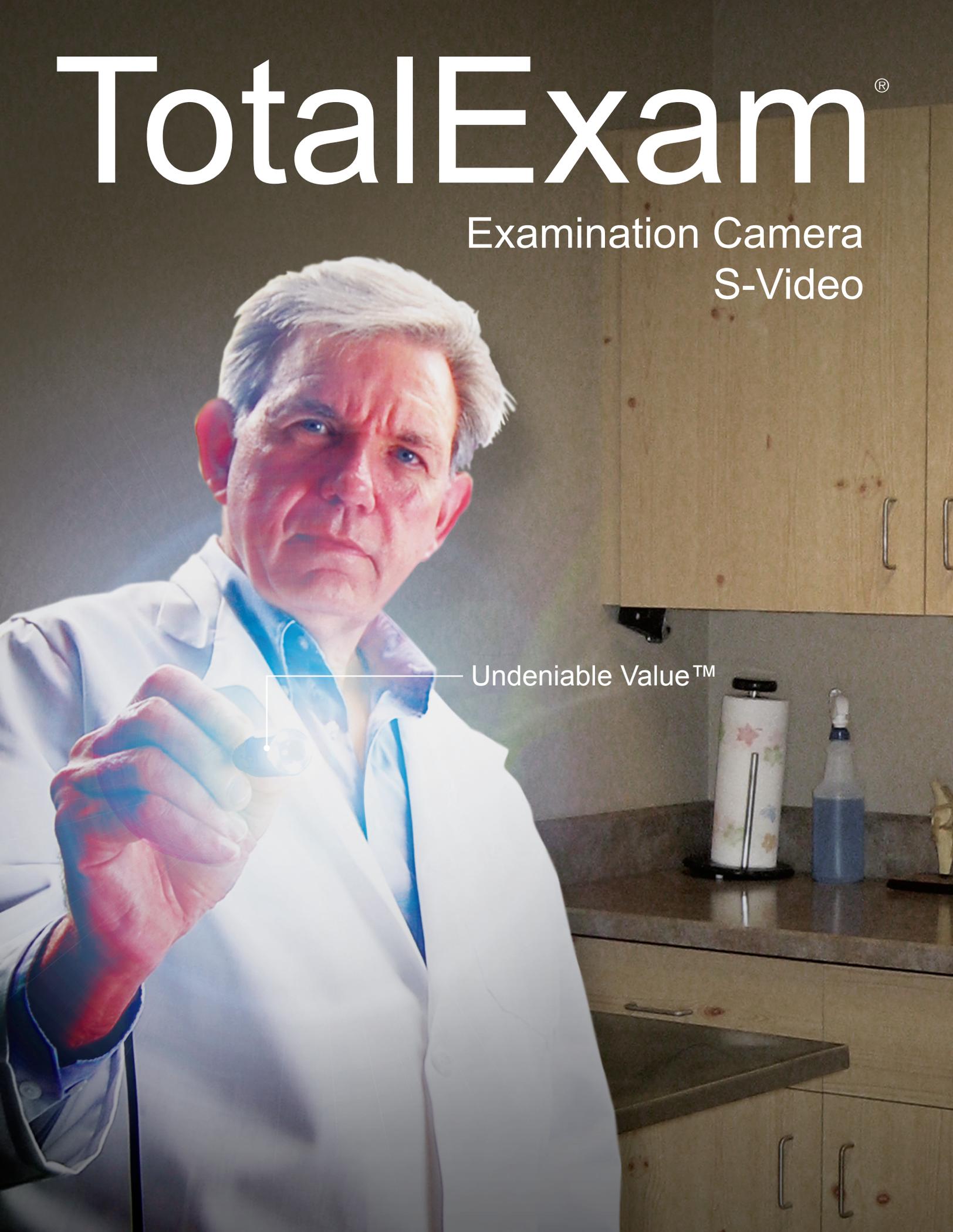
GMD5502W Examination Camera with S-Video

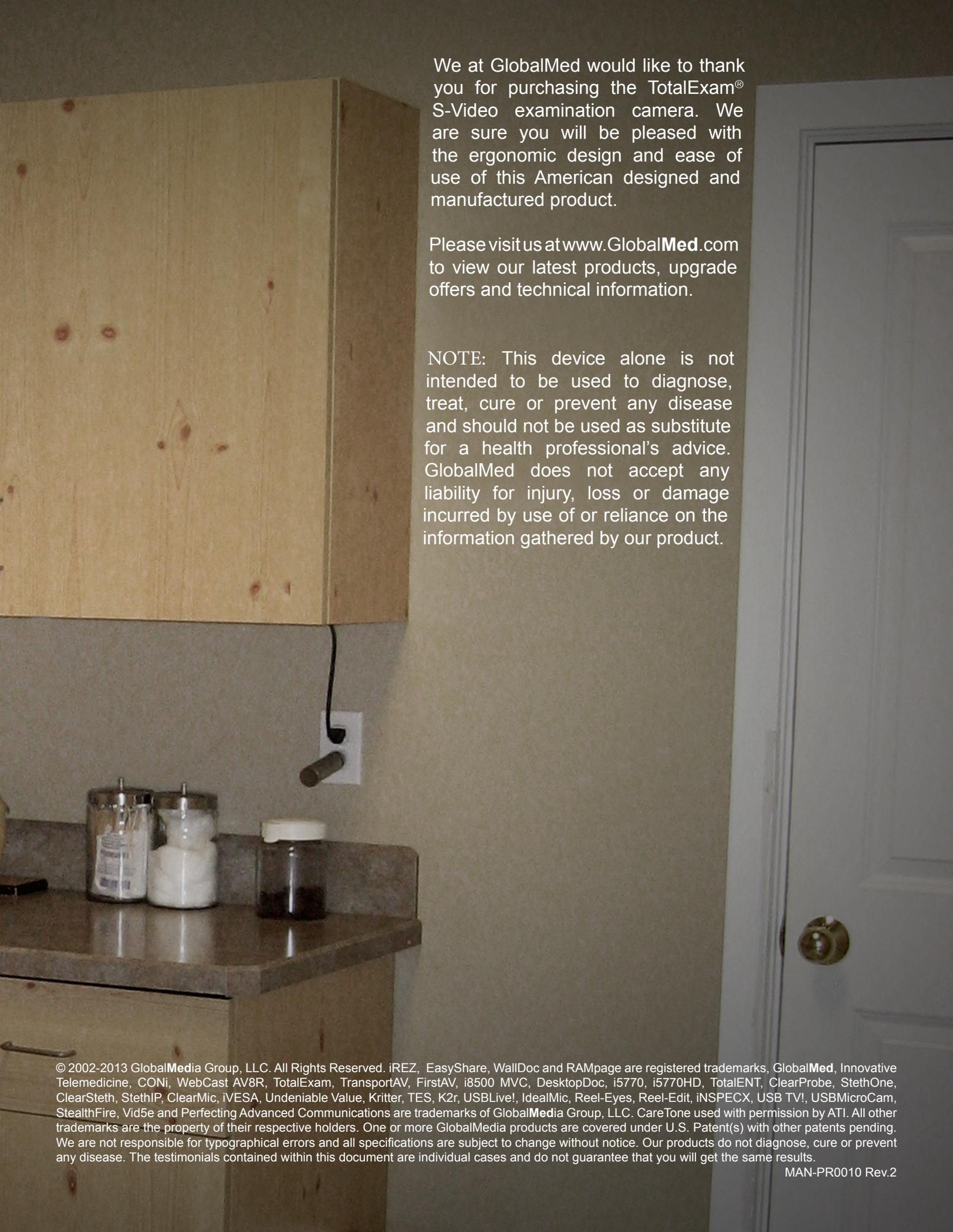


# TotalExam<sup>®</sup>

Examination Camera  
S-Video

Undeniable Value<sup>™</sup>

A man with grey hair, wearing a white lab coat over a blue shirt, is looking intently at a small, handheld camera he is holding in his right hand. The camera is emitting a bright blue light. The background shows a kitchen with wooden cabinets, a countertop with a paper towel holder and a spray bottle, and a sink.



We at GlobalMed would like to thank you for purchasing the TotalExam® S-Video examination camera. We are sure you will be pleased with the ergonomic design and ease of use of this American designed and manufactured product.

Please visit us at [www.GlobalMed.com](http://www.GlobalMed.com) to view our latest products, upgrade offers and technical information.

NOTE: This device alone is not intended to be used to diagnose, treat, cure or prevent any disease and should not be used as substitute for a health professional's advice. GlobalMed does not accept any liability for injury, loss or damage incurred by use of or reliance on the information gathered by our product.

## About TotalExam S-Video Camera

# TotalExam® 2



TotalExam is designed to be easy-to-use and easy-to-hold enabling you to acquire clear digital video. The camera has multiple applications in the life science, education, manufacturing and mobile video fields. Lightweight, but durable, TotalExam is simple to operate.

The camera features automatic white balance, but may be operated in skin tone balance mode. TotalExam allows you to view high quality freeze-frame images as well as live video at 30fps. Freeze-framing images during an exam or teleconference is a one-step process. The camera has three different light temperature settings, allowing you to easily select among the varying levels of natural white.

## Software and Hardware Requirements

The TotalExam camera does not need a computer to function. The only requirement is an S-Video input on your display, VCR, or video CODEC. If you use the USBLive! 2.0 USB Digital Converter (included with TotalExam) or other similar device, please check the minimum requirement information provided with that specific capturing device. GlobalMed does not recommend the use of third party software with TotalExam and does not provide technical support for non-GlobalMed programs.

GlobalMed has carefully designed and developed TotalExam for video quality and optimal performance. The customer assumes responsibility for limited results due to improper use or operation outside the minimum specifications.

### Software and Minimum OS Requirements

There are no software or operating system requirements.  
(no changes in Minimum Hardware Requirements)

## Installation

Installation of TotalExam is simple. There are no drivers to install unless you are using the USBLive! 2.0 USB digital converter. Simply plug the S-Video cable from the camera into your preferred video display, VCR, video switch or video codec (such as Polycom, Tandberg, LifeSize®, Sony®, Aethra®) or video card.

### Prerequisites

USB Live! 2.0 (or similar video capture device), a hardware CODEC that will accept an S-Video plug, or a monitor which has an S-Video input.

TotalExam requires the use of the power adapter that is included with the camera.

If you would like to know how to bring TotalExam LIVE images into your PC or Mac, please visit our Web site, [www.GlobalMed.com](http://www.GlobalMed.com), or call 1-480-922-0044.

### Installation

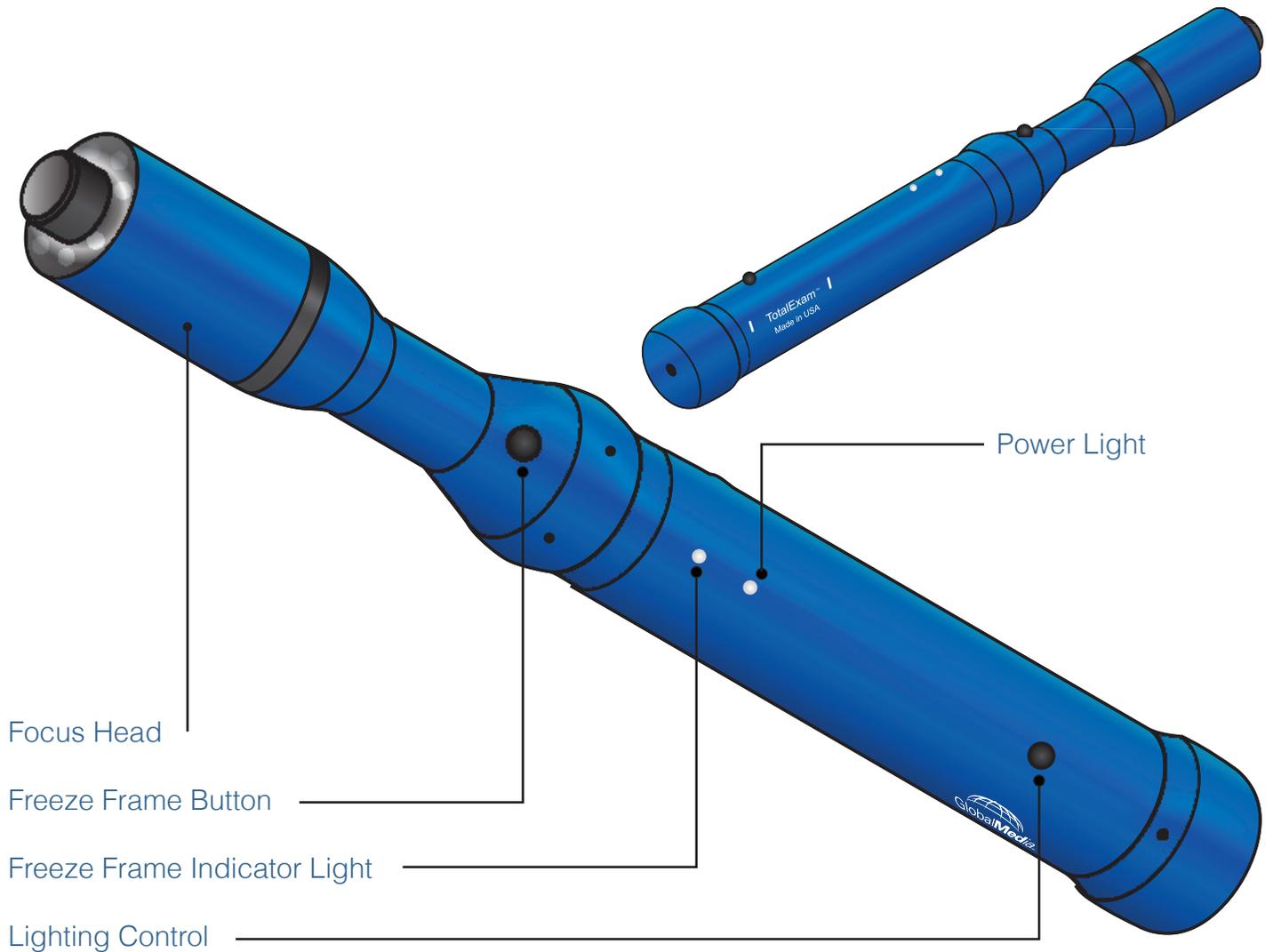
Plug the S-Video cable into an S-Video port input, or USB with use of USBLive! 2.0. Plug the AC Adapter into both the camera's cable and a power outlet. At this point, the camera is installed and ready to use.



This product is designed and manufactured in Scottsdale, Arizona USA by GlobalMed.



## TotalExam Controls



### Freeze Frame Button

Press down this button and release when you are ready to freeze the image. When you release the button, the image will freeze for you. The image will remain in the camera's memory for viewing on screen until you press the button again, or you remove the power source.

### Lighting Control

Press this button to cycle through the lighting options: Natural lighting – low, medium, high, and then off.

### Freeze Frame Indicator Light

When this light is illuminated and flashing, the camera is in freeze frame mode. When the light is illuminated and solid, the camera is in streaming video mode.

## TotalExam Controls

### Focus Head

To focus on a subject, rotate the Focus Head (FH) accordingly, either clockwise or counter-clockwise. TotalExam has three focal starting points on the FH that line up with the “I” mark on the top of the camera body. Position I is the starting point for a disposable touch collar focus. You may need to adjust the FH slightly or hold the camera more tightly against the skin to get the desired fine focus. Position II on the FH is for use with the tongue depressor and its adapter. For fine focus of a throat, move the camera slightly in or out. Position III on the FH is for viewing a subject from 1.5 to 20 feet (.5 to 4 meters) or more.

Please remember these focus marks are just starting points for clear focus, and you may need to adjust the focus head slightly. You can also move the camera closer or farther away from the object on which you are focusing.



## Using TotalExam

### Automatic White Balance (AWB)

TotalExam has automatic white balance, meaning that the camera will adjust to various light levels and colors in the room, automatically. TotalExam does this by measuring the light temperature and making adjustments as the lighting changes.

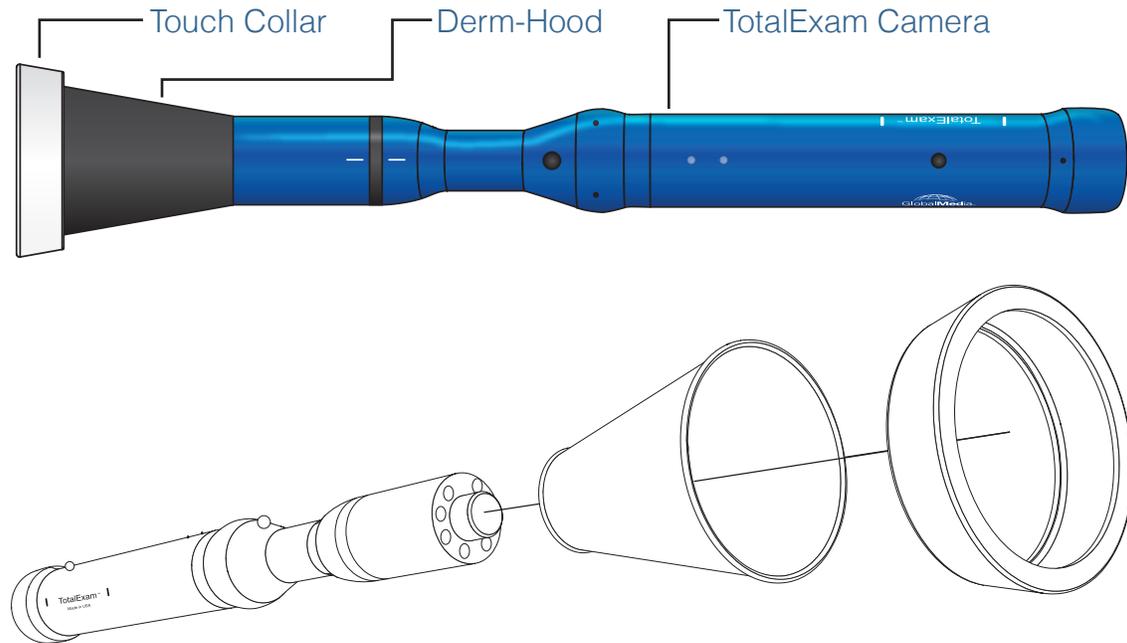
### Skin Tone Balance (STB)

TotalExam can also operate in Skin Tone Balance mode. To switch to STB, focus TotalExam on a person’s skin (perhaps a patient’s face), then press and hold the freeze frame button for approximately seven seconds until the freeze frame indicator light flashes seven times. While in STB mode, the camera will not adjust for any lighting or color variations. If the power to TotalExam is turned off, the camera returns to AWB mode when power is restored.

**Note:** When TotalExam is disconnected from its power source, the camera will default back to the auto white balance mode.

## TotalExam Peripherals

TotalExam comes with two attachments that make it easy to achieve the proper focus.



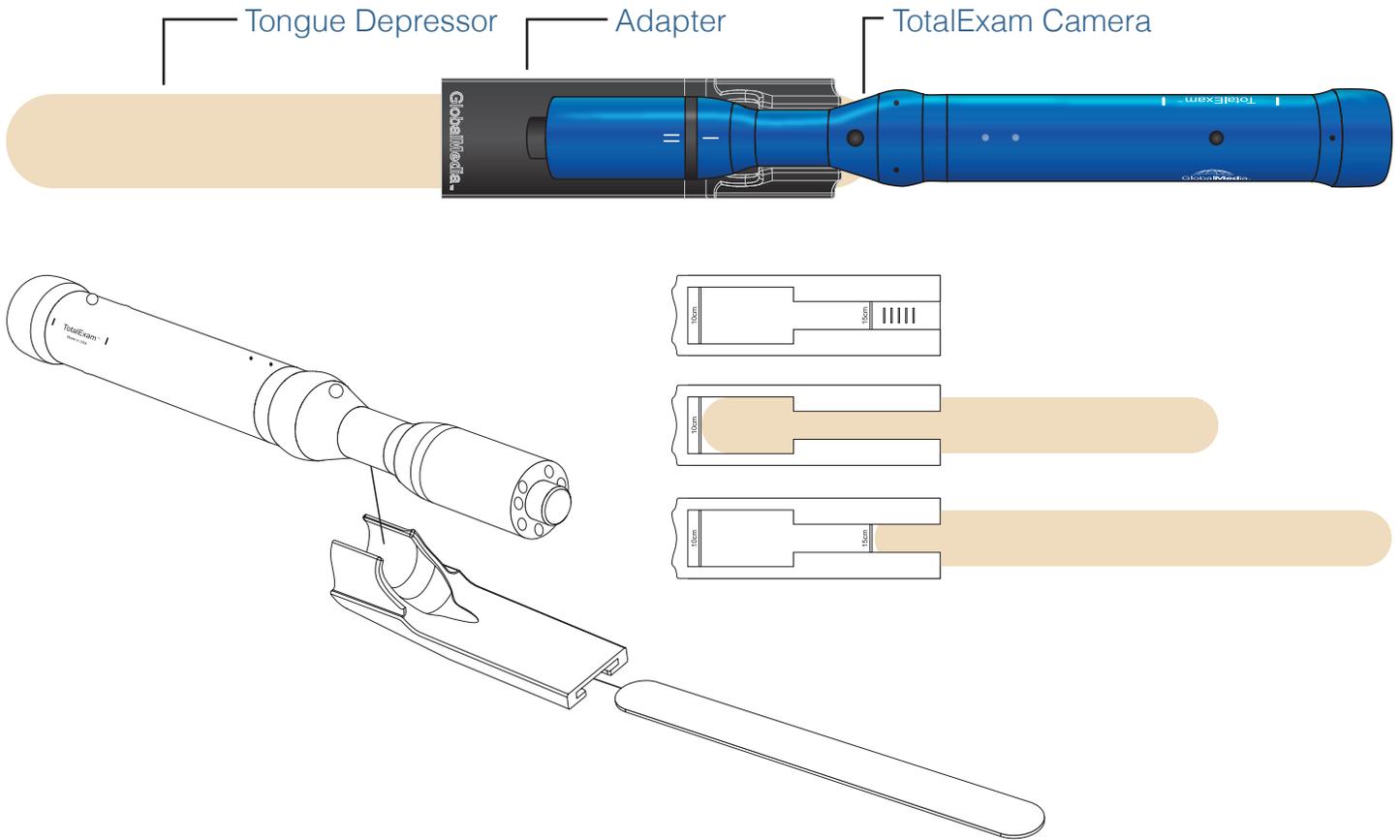
### Derm-Hood and Focus Adjustment I

A derm-hood slides over the focus ring on the front of the camera. A disposable touch collar mounts over the rim of the derm-hood. The collar is in proper position and attached to the derm-hood when you hear a click.

Set the camera's focus adjustment at the position marked "1" for focusing on objects 2.5 centimeters away. Turn on TotalExam's LED lights to the desired intensity. With the derm-hood and collar in position, place the collar against the skin or in position over the eye.

TotalExam can be fine-focused by slightly turning the camera clockwise or counter-clockwise.



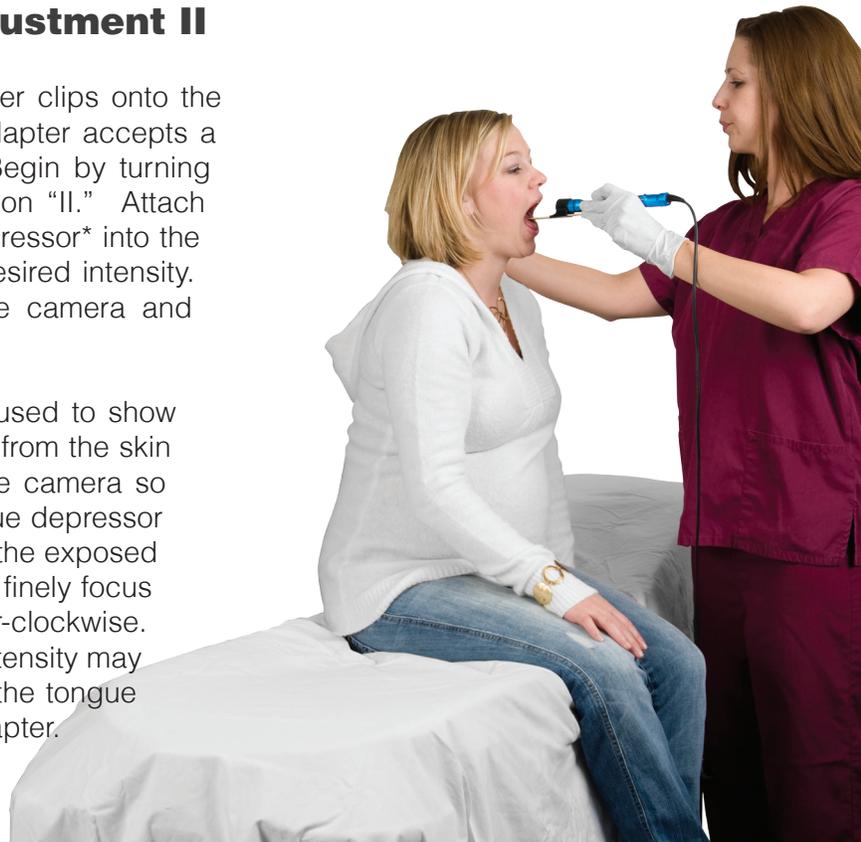


## Tongue Depressor and Focus Adjustment II

For examining throats, a tongue depressor adapter clips onto the narrowest part of the TotalExam. A slot in the adapter accepts a standard-sized disposable tongue depressor. Begin by turning TotalExam's focus adjustment to the preset position "II." Attach the adapter to TotalExam, then slide a tongue depressor\* into the adapter. Turn on TotalExam's LED lights to the desired intensity. The camera can be fine-focused by moving the camera and tongue depressor slightly in or out.

The tongue depressor and adapter can also be used to show an area at 10 centimeters or 15 centimeters away from the skin surface. For the 10 centimeter distance, hold the camera so that the adapter slide is on top and slide the tongue depressor in all the way to the "10cm" mark. Place the tip of the exposed end of the tongue depressor against the skin, and finely focus TotalExam by slightly twisting it clockwise or counter-clockwise. Turning on TotalExam's LED lights to the desired intensity may be helpful. For the 15 centimeter distance, slide the tongue depressor only as far as the "15cm" line on the adapter.

\* customer provided



[Code of Federal Regulations]  
[Title 21, Volume 8]  
[Revised as of April 1, 2010]  
[CITE: 21CFR880.6320]

TITLE 21 -- FOOD AND DRUGS  
CHAPTER I -- FOOD AND DRUG ADMINISTRATION  
DEPARTMENT OF HEALTH AND HUMAN SERVICES  
SUBCHAPTER H -- MEDICAL DEVICES

PART 880 -- GENERAL HOSPITAL AND PERSONAL USE DEVICES  
Subpart G -- General Hospital and Personal Use Miscellaneous Devices

Sec. 880.6320 AC-powered medical examination light.

(a) *Identification.* An AC-powered medical examination light is an AC-powered device intended for medical purposes that is used to illuminate body surfaces and cavities during a medical examination.

(b) *Classification.* Class I (general controls). The device is exempt from the premarket notification procedures in subpart E of part 807 of this chapter, subject to the limitations in 880.9.

[45 FR 69682-69737, Oct. 21, 1980, as amended at 61 FR 1123, Jan. 16, 1996; 66 FR 38806, July 25, 2001]

Proprietary Name: Multiple names and models; TotalExam S-Video Camera  
Classification Name: DEVICE, MEDICAL EXAMINATION, AC POWERED  
Product Code: KZF  
Device Class: 1  
Regulation Number: 880.6320  
Medical Specialty: General Hospital  
Registered Establishment Name: GlobalMedia Group LLC  
Registered Establishment Number: 3004009431  
Owner/Operator: GlobalMedia Group LLC  
Owner/Operator Number: 10033888  
Establishment Operations: Manufacturer



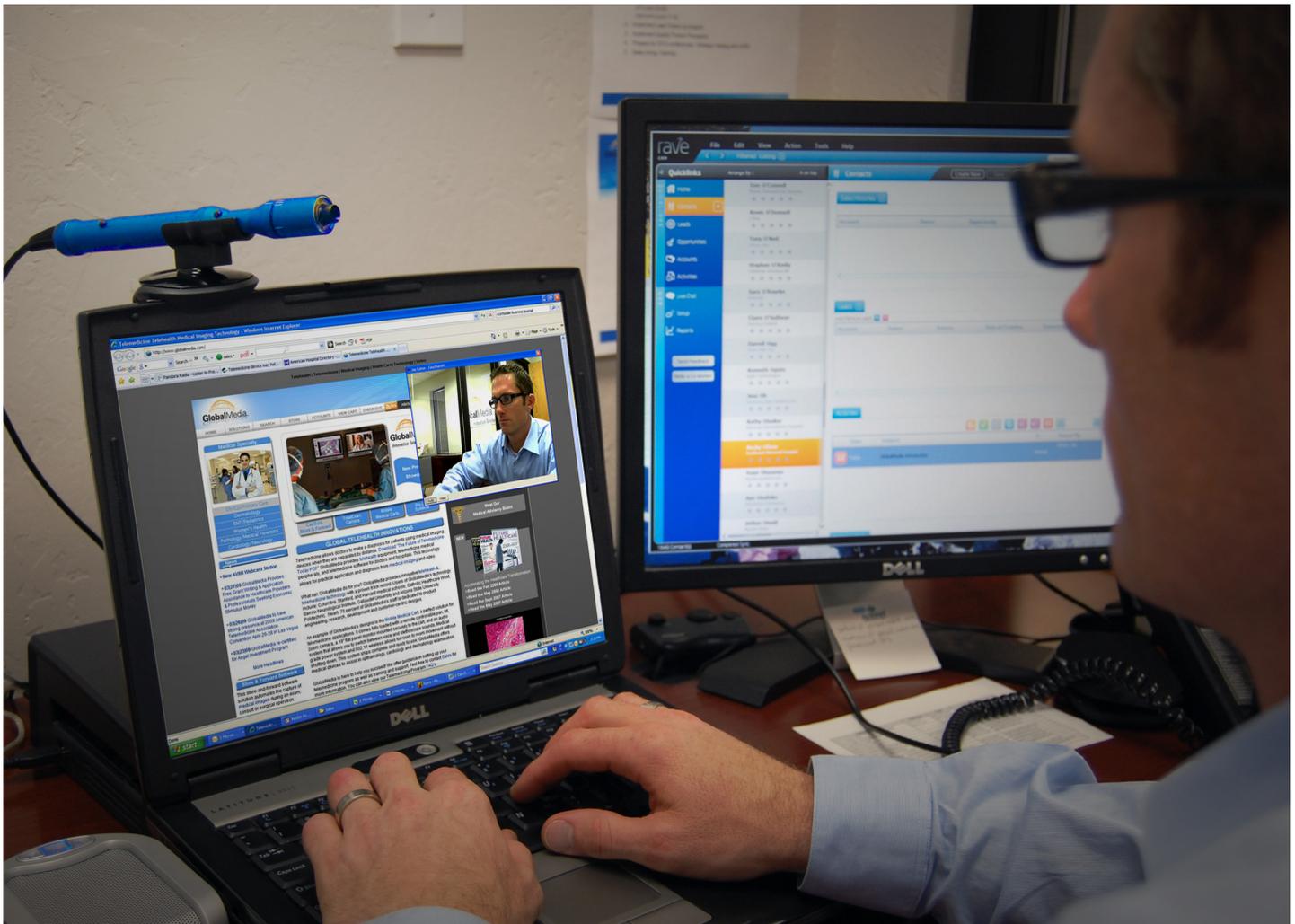
## Warnings

This camera is an electrical device; do not attempt to submerge into any kind of liquid. Doing so could result in electrical shock or other hazardous results.

Any dismantling of the camera device will void the warranty and could damage the device or cause electrical shock. If it is necessary to clean the camera, a cloth dampened with rubbing alcohol or a 10% bleach-to-water mixture, or a disinfecting wipe may be used.

Do not drop or throw TotalExam camera, as damage may occur. Use caution to avoid tripping over the cable, leading from the camera to the computer, or the power source cable to the outlet. To guard against this, GlobalMed has developed a system of retractable cable reels to store the cables safely and properly. Please use the same care while using TotalExam as you would with any high-end electrical device. Doing so will ensure your camera will work properly each time you use it.

**NOTE:** This device alone is not intended to be used to diagnose, treat, cure or prevent any disease and should not be used as substitute for a health professional's advice. GlobalMed does not accept any liability for injury, loss or damage incurred by use of or reliance on the information gathered by our product.



## Warranty and Return Policy

All GlobalMedia Group, LLC (GMG) products are warranted under the following terms:

Products that become defective during the first year after the order is shipped will be repaired or replaced by GMG free of charge. This limited warranty is contingent upon proper use of the product and does not cover products that have been damaged (scratches, bent metal, broken components) misused, modified, or subject to unusual physical or electrical stress. All returns for any other reason must be made within the first 30 days from time of shipment and will be subject to a 25% restocking charge. Buyer must include all original components, literature, and packaging in the same salable condition received to avoid any additional charges.

All returned materials must have a GMG return materials authorization (RMA) number. Authorized returns must be shipped freight prepaid to GMG. GMG reserves the right to refuse any return that is sent COD or without an RMA number visible on the exterior of the package. Unauthorized returns, refused shipments, and authorized returns of nondefective merchandise after the above stated return periods are subject to additional charges.

## Limited Liability Agreement

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This product is designed and manufactured  
in Scottsdale, Arizona, USA by GlobalMedia.



Priory Analysts Ltd  
The Pinnacle  
160 Midsummer Blvd.  
Milton Keynes  
MK9 1FF  
United Kingdom



This equipment also has a FCC  
classification of: "Class A Digital  
Device." The FCC Rules contained in Title  
47 of the CFR, Part 15  
Subpart B and ICES-003



The equipment has a CSA classification  
of: "Type BF Applied Part"



IEC60601-1-2 Section 6.2.1.10: 2007



15020 North 74th Street  
Scottsdale, Arizona 85260 USA

+1 (480) 922-0044 phone

+1 (480) 922-1090 fax

telem@GlobalMed.com

www.GlobalMed.com



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GMD5502W Rev 2

