

TotalExam[®] 3 Manual







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TotalExam³



About GlobalMed

Scottsdale, Arizona-based GlobalMed, designs, manufactures, and markets telemedicine solutions and medical image automation systems that provide superior image quality, unmatched versatility, and unsurpassed simplicity for the healthcare industry. GlobalMed's camera, image management, store-and-forward, video conferencing and video-streaming technologies enable multiple specialists and other caregivers to be more effective in providing patient care, and more productive and efficient in managing patient information. Products include the TotalExam® Camera, the most versatile and easy-to-use exam camera on the market, CapSure® store-and-forward imaging and image management software with DICOM output, which provides automated workflow capabilities for seamless integration into a provider's network, and fully integrated mobile video cart systems for primary care applications.

Contact Info

GlobalMed Help Desk: www.globalmed.com/helpdesk

GlobalMed Help Desk: 1.800.886.3692





About TotalExam 3

The TotalExam® 3 can be viewed by a variety of computer and tablet options that have an available USB 3.0 port. It can also be connected directly to a PC or Mac computer for video and image display.

What's Included:

Manual Focus Kit

- TotalExam 3 Camera
- TotalExam Manual Focus Head b.
- DermHood C.
- d. Tongue Depressor Adaptor
- Tongue Depressors (Quantity 5) e.
- f. Touch Collars (Quantity 5)

Otoscope Kit

- TotalExam 3 Camera
- TotalExam Otoscope Head g.
- Welch Allyn Specula (Quantity 5) h.



















SPECIFICATIONS

Dimensions:	Camera Body Manual Focus Head Otoscope Head	155mm x 33mm 38mm x 33mm 60mm x 33mm		
Weight of Camera Body:		~8 ozs		
Focus Type:		Manual Focus		
Snapshot Size:		1 Megapixel		
Captured Video Resolution:		1280 x 720p		
Camera Frame Rate:		Up to 60 Frames Per Second		
Output:		USB 3.0		
Integrated Freeze Frame:		Push-button (selects the clearest frame of the last 16 frames)		
White Balanc	e:	Push-button		
9 - 9		Manual Focus Head 8 LEDs Otoscope Head 2 LEDs, 5100K		
Operating Te	mperature Range:	0° – 42° C (32°-107°F)		
Operating Humidity:		Less than 90%		
Power Usage	sage: Less than 4W			
Voltage Usage:		~ 0.800 mA @5 VDC using USB 3.0 only		
Aspect Ratio	:	16:9		
Lens (Apertu	re): Manual Focus Head Otoscope Head	f:3.0 M12 650nM IR filter f:18.0 FOV: r= 10mm DOF: 12mm – 14mm		



Features

- HD Video Stream over USB 3.0 output
- Up to 60 fps on USB 3.0, up to 15 fps on USB 2.0
- 720p Image Resolution & Clarity
- Powered by USB 3.0 ports (No External Power Supply Needed)
- Integrated Freeze-Frame (FF Button)
- White Balance (WB Button)
- LED Control (Multiple levels of intensity, depending on head)
- Pivoting Head (3-Position 0°, 37.5°, 75°)











Installation: TotalExam 3

Installation of the TotalExam 3 is simple. Plug the TotalExam 3 cable into any Windows® based computer that has an USB 3.0 high-speed connector. There are no drivers or software to install or download. The TotalExam 3 does not require the use of a power supply external from the device that contains the USB 3.0 connection.





TotalExam³



TotalExam 3 Controls:

Freeze-Frame Control (FF Button)

The FF button allows the user to freeze live video as well as allow for closer examination of an image. Freeze-Frame image optimization is aided by counting back eight frames and forward eight frames for analysis that automatically selects the clearest image among the sixteen buffered-frames.

To freeze the live video, press the FF button and release. The image will be frozen upon release of the button. The still image will remain on the screen until you press the FF button again to release the frozen image.

Unplugging the camera from the computer while still in Freeze-Frame mode will cause the camera to lose power and the frozen image will be lost.

White Balance Button (WB Button)

The WB button allows the user to adjust the way light affects the image and adjusts for poor contrast and color. There are two distinct white balancing methods from which the user selects to optimally white balance the TotalExam 3. The correct white balancing method is dependent on whether the user intends to capture the image from a distance of over 1 meter (Perspective Image) or within 1 meter (Micro Image).

Select the LED light level prior to selecting the WB option.

Manual Focus Head

PERSPECTIVE IMAGE:

For images that are taken at a distance of greater than 1 meter from the area of interest, hold a white sheet of paper in front of the subject and aim the camera at the paper. Press the WB button once the view is filled with as much of the paper as possible. If the area of interest is moved from the position where the initial white balancing took place, the user may need to repeat the white balancing procedure.

MICRO IMAGE:

For images that are taken at a distance of less than 1 meter, select the desired LED light level. Hold a white sheet of paper about 100mm (4 inches) away from the front of the camera and press the WB button. To further optimize the lighting, attach the DermHood and Touch Collar for close up examination of the area against which you want to color balance. When using the DermHood and Touch Collar attachments during the white balance procedure for micro images, hold it close enough so that the entire camera's field-of-view is filled with the paper and press the WB button.

Otoscope Head

Set the light to one of the two settings and point at a white sheet of paper while the otoscope head is about 1 cm away.





LED Light Control (LED Button)

The camera contains a light carousel for illuminating the viewing area. Pressing the LED button turns on the TotalExam 3 LED ring.

There are multiple levels of LED light intensity that can be accessed and controlled via the LED button. When the button is initially pressed, the LED lights are activated and the light intensity level will be low. Upon each sequential press of the LED button, the light intensity will increase until it reaches the highest level. Pressing the LED button again after the highest intensity level has been reached will deactivate the ring and shut down the LED lights.



TotalExam **3** Heads and Attachments

Manual Focus Head

The manual focus head will enable the user to manually adjust the focus of the camera in order to acquire optimally clear images. The broad range of focus, ~50mm - 10 meters, permits user directed concentration on the area of interest from a variety of perspectives. The Manual Focus Head has multiple associated attachments that promote a diverse set of functionalities intrinsic to the physician-patient encounter.



These attachments include:

DermHood

The DermHood is designed to fit onto the head of the TotalExam 3 camera and is utilized for up close examinations. The purpose of the DermHood is to focus the light from the camera's LEDs down onto the surface area being examined. The DermHood is used in conjunction with the Touch Collar for up close examinations of the skin's surface.



Touch Collar

The GlobalMed Touch Collar is a single use, disposable device that fits onto the end of the DermHood. In the course of an examination, the Touch Collar acts as a barrier to protect the DermHood and camera from becoming contaminated by contact with mucous membranes or broken skin. Exposure may present a biological hazard for the user and thus precautions, such as protective gloves, are recommended. After use, the Touch Collar should be disposed of as medical/biohazard waste.





Tongue Depressor Adaptor

The Tongue Depressor Adaptor clips on to the TotalExam 3 at the narrow neck of the camera. To use the Tongue Depressor Adaptor, the head of the TotalExam 3 must be in the upright position, not pivoted. The adaptor attaches on the bottom of the camera heads (*opposite side of TotalExam 3 buttons*) and holds a standard tongue depressor blade for examinations of the throat, mouth, or for stabilization during up-close examinations.



Otoscope Head

The otoscope head will enable the user to examine the external auditory canal, the tunnel that leads from the outer ear (pinna) to the eardrum, with the capability of adding HD video. Inspection of the eardrum in HD can also provide a lot of information about what's happening within the middle ear. The TotalExam 3 otoscope head works at 12mm -14mm from the eardrum and is fixed focus design.



These attachments include:

Specula

The TotalExam 3 Otoscope Head is compatible with the single use, disposable Welch Allyn Specula (Adult). After each use, the Specula should be disposed of as medical/biohazard waste.



Variable Polarizing Hood (purchased seperately)

The Variable Polarizing Hood is an instrument that eliminates unwanted glare from surfaces that are being examined. It attaches to the end of the TotalExam 3 Manual Focus Head and allows the user to control the amount of light reflecting off the area of interest.







Cleaning Procedure

The TotalExam 3 Camera is an FDA registered Class I non-sterile medical device. The camera is used in conjunction with three accessories: the Tongue Depressor Adaptor, DermHood and the disposable Touch Collar.

The Manual Focus Head, DermHood and the Tongue Depressor Adaptor are not intended to be patient contact components and as such are designed to be cleaned and reused multiple times. The Touch Collar on the other hand is intended for patient contact and is a single use component.

COMPONENT	PROCEDURE	FREQUENCY
TotalExam 3 Camera and Cord	Gently wipe all parts of the outer surfaces of the equipment and cord with a disinfecting wipe and/or soft cloth moistened with a facility or CDC approved cleaning solution.	At least weekly or when contaminated.
TotalExam 3 Manual Focus Head	ONLY use a lens cloth or soft cotton swab with a CDC approved lens cleaning solution.	At least weekly or when contaminated.
TotalExam 3 DermHood and Tongue Depressor Adaptor	DermHood and the Tongue Depressor Adaptor can be gently wiped down or soaked in a facility or CDC approved cleaning solution.	After each use.
TotalExam 3 Touch Collars and Specula	N/A	Dispose after each use.
TotalExam 3 Otoscope Head	Gently wipe downwith cotton swabs and Isopropyl alcohol (90% or higher).	Clean after every exam of the ear or nose.
TotalExam 3 Camera Body ONLY	Use a lens cloth or soft cotton swab with a CDC approved lens cleaning solution.	Clean at least weekly or when contaminated.



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 will void the warranty and could damage the device or cause electrical shock. If it is necessary to clean the camera refer to the cleaning procedures sections for instructions on how to maintain cleanliness and thereby prevent contamination. 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 by use of or reliance on the information gathered by our product.

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 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.







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 (scratched, 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 non-defective merchandise after the above stated return periods are subject to additional charges.



Limited Liability Agreement

No claim made by the buyer shall be for an amount greater than the purchase price of the goods in respect of which the claim was made, regardless of whether the claim pertains to damage incurred in shipping, failure to ship, or inherent defects. GMG will in no way be liable for incidental or consequential charges. In all events, GMG reserves the option of repair or replacement at its discretion. GMG takes no responsibility for incorrect, outdated, or otherwise inaccurate information, including pricing and product specifications. GMG is not responsible for typographical errors or omissions and shall not be liable for any incidental or consequential damages caused directly or indirectly from any GMG product. In addition, GMG reserves the right to change prices, specifications or discontinue products at any time without prior notice while reserving the right to refuse or conduct a cancellation on its transaction activities due to price inconsistency from its suppliers. REV. 09.20.2012





Notes:			

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Notes:



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