

K041395

JUN - 9 2004

510(k) Summary  
EG-3630UR, Ultrasound Video Gastroscope  
for use with EUB-5500 and EUB-8500 Ultrasound Diagnostic Scanners

**Submitter Information:** Pentax Precision Instrument Corporation (PPIC)  
30 Ramland Road  
Orangeburg, NY, 10962  
Tel: (845)-365-0700

**Name of Device:**

Trade Name:	EG-3630UR, Ultrasound Video Gastroscope
Classification Name:	Diagnostic Ultrasound Transducer (74JOP) {892.1570}, Endoscope and Accessories (78KOG) {876.1500}

**Predicated Device(s) Information:**

Model, Description	Manufacturer	PMN#
FG-36UX, Fiber Ultrasound Gastroscope	PPIC	K010740
EUB-5500, Ultrasound Diagnostic Scanner	Hitachi America	K032503
EUB-8500, Ultrasound Diagnostic Scanner	Hitachi America	K013722

**Device Description:** The EG-3630UR, Ultrasound Video Gastroscope, must be used with a Pentax Video Processor (software controlled device) and must be used with Ultrasound Scanner (software controlled device). The endoscope has a Flexible Insertion Tube, a Control Body, PVE Umbilical Connector, and Scanner Umbilical Connector. The PVE Connector connects to the Video Processor and has connections for illumination, video signals, air/water and suction. The Scanner Connector is connected at the Ultrasound Scanner. The Control Body includes controls for up/ down/ left/ right angulation, air/water delivery, suction selection/ control, balloon insufflation, and an accessory inlet port. The device contains light carrying bundles to illuminate the body cavity, a charge couple device (CCD) to collect image data, and a radial array ultrasound transducer to collect ultrasonic image data. The instrument contains a working channel through which biopsy devices, or other devices, may be introduced (the instrument is supplied with two biopsy forceps). The Video Processor contains a lamp that provides white light that is filtered, via a Red, Green, and Blue color filter wheel, and is focused at the PVE Connector Lightguide Prong. The endoscope light carrying bundles present the color strobes to the body cavity and the CCD collects image data for each strobe of color. The Video Processor stores the CCD information until all three color strobes are completed and a full color image frame is compiled. Image data and other screen display information are formatted and presented to the video outputs of the Video Processor for display. The ultrasound transducer delivers ultrasonic pulses, reflections of the pulses are received and signals are passed to the Ultrasound Scanner for display. The instrument is immersable (with the use of supplied cleaning accessories) except for the Ultrasound Scanner Connector (as described in the Endoscope operator Manual cleaning instructions).

**Intended Use:** The EG-3630UR, Ultrasound Video Gastroscope, is intended to provide optical visualization of, ultrasonic visualization of, and therapeutic access to, the Upper Gastrointestinal Tract. The Upper Gastrointestinal Tract includes but is not restricted to, the organs; tissues; and subsystems: Esophagus, Stomach, Duodenum, Small Bowel, and underlying areas. The instrument is introduced per orally when indications consistent with the requirement for the procedure are observed in adult and pediatric patient populations.

**Comparison To Predicated Device(s):**

The submission for substantial equivalence included EG-3630UR literature including specifications, the identification of standard set components, and identification of optional accessories, comparison tables were provided to illustrate the comparisons to the predicated devices in summary. The submission for substantial equivalence was not based on an assessment of clinical performance data.

**Prepared by:** Paul Silva      **Signature:** Paul Silva      **Date:** 11-25-2003



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

JUN - 9 2004

PENTAX Precision Instrument Corporation  
% Mr. Matthias Heinze  
Division Manager, Medical Division  
TUV Rheinland of North America  
12 Commerce Road  
NEWTOWN CT 06470

Re: K041395

Trade Name: EUB-5500 and EUB 8500 Ultrasound Diagnostic Scanners  
Regulation Number: 21 CFR 892.1570  
Regulation Name: Diagnostic ultrasound transducer  
Regulation Number: 21 CFR 876.1500  
Regulation Name: Endoscope and accessories  
Regulatory Class: II  
Product Code: 90 ITX and 78 FDS  
Dated: May 21, 2004  
Received: May 26, 2004

Dear Mr. Heinze:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

This determination of substantial equivalence applies to the following transducers intended for use with the EUB-5500 and EUB 8500 Ultrasound Diagnostic Scanners, as described in your premarket notification:

Transducer Model Number

EG-3630UR

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This determination of substantial equivalence is granted on the condition that prior to shipping the first device, you submit a postclearance special report. This report should contain complete information, including acoustic output measurements based on production line devices, requested in Appendix G, (enclosed) of the Center's September 30, 1997 "Information for Manufacturers Seeking Marketing Clearance of Diagnostic Ultrasound Systems and Transducers." If the special report is incomplete or contains unacceptable values (e.g., acoustic output greater than approved levels), then the 510(k) clearance may not apply to the production units which as a result may be considered adulterated or misbranded.

The special report should reference the manufacturer's 510(k) number. It should be clearly and prominently marked "ADD-TO-FILE" and should be submitted in duplicate to:

Food and Drug Administration  
Center for Devices and Radiological Health  
Document Mail Center (HFZ-401)  
9200 Corporate Boulevard  
Rockville, Maryland 20850

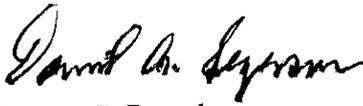
This letter will allow you to begin marketing your device as described in your premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus permits your device to proceed to market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801, please contact the Office of Compliance at (301) 594-4591. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or at (301) 443-6597 or at its Internet address "<http://www.fda.gov/cdrh/dsmamain.html>".

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If you have any questions regarding the content of this letter, please contact Rodrigo C. Perez at (301) 594-1212.

Sincerely yours,

  
*for*

Nancy C. Brogdon  
Director, Division of Reproductive,  
Abdominal and Radiological Devices  
Office of Device Evaluation  
Center for Devices and Radiological Health

Enclosure(s)

510(k) Number (if known): \_\_\_\_\_

Device Name: \_\_\_\_\_

Ultrasound Video Gastroscope EG-3630UR

**Endoscope Intended Use Statement:**

The EG-3630UR, Ultrasound Video Gastroscope, is intended to provide optical visualization of, ultrasonic visualization of, and therapeutic access to, the Upper Gastrointestinal Tract. The Upper Gastrointestinal Tract includes but is not restricted to, the organs; tissues; and subsystems: Esophagus, Stomach, Duodenum, Small Bowel, and underlying areas. The instrument is introduced per orally when indications consistent with the requirement for the procedure are observed in Adult and Pediatric patient populations.

**Diagnostic Ultrasound Indications For Use Statement**

System: EUB-5500

Probe: EG-3630UR

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows

Clinical Application		Mode of Operation					
General (Track I only)	Specific (Track I & III)	B	M	PWD	CWD	Color Doppler	Amplitude Doppler
Ophthalmic							
Fetal Imaging & Other	Fetal						
	Abdominal						
	Intra-operative (Spec.)						
	Intra-operative (Neuro.)						
	Laparoscopic						
	Pediatric						
	Small Organ						
	Neonatal Cephalic						
	Adult Cephalic						
	Trans-rectal						
	Trans-vagina						
	Trans-urethral						
	Trans-esoph. (non-Card.)						
	Musculo-skel. (Convent.)						
	Musculo-skel. (Superfic.)						
Intra-luminal							
Endoscopy		N	N	N		N	N
Cardiac	Cardiac Adult						
	Cardiac Pediatric						
	Trans-esophageal (card.)						
	Other (spec.)						
Peripheral Vessel	Peripheral vessel						
	Other (Spec.)						

N = new application; P = previously cleared by FDA; E = added under Appendix E  
 (Please do not write below this line – continue on another page if needed)

Concurrence of CDRH, Office of Device Evaluation (ODE)

*David A. [Signature]*

(Division Sign-Off)

Division of Reproductive, Abdominal, and Radiological Devices

510(k) Number: \_\_\_\_\_

K041395

Prescription Use (Per 21 CFR 801.109)

510(k) Number (if known): \_\_\_\_\_

Device Name: \_\_\_\_\_

Ultrasound Video Gastroscope EG-3630UR

**Endoscope Intended Use Statement:**

The EG-3630UR, Ultrasound Video Gastroscope, is intended to provide optical visualization of, ultrasonic visualization of, and therapeutic access to, the Upper Gastrointestinal Tract. The Upper Gastrointestinal Tract includes but is not restricted to, the organs; tissues; and subsystems: Esophagus, Stomach, Duodenum, Small Bowel, and underlying areas. The instrument is introduced per orally when indications consistent with the requirement for the procedure are observed in Adult and Pediatric patient populations.

**Diagnostic Ultrasound Indications For Use Statement**

System: EUB-8500

Probe: EG-3630UR

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows

Clinical Application		Mode of Operation					
General (Track I only)	Specific (Track I & III)	B	M	PWD	CWD	Color Doppler	Amplitude Doppler
Ophthalmic							
Fetal Imaging & Other	Fetal						
	Abdominal						
	Intra-operative (Spec.)						
	Intra-operative (Neuro.)						
	Laposcopic						
	Pediatric						
	Small Organ						
	Neonatal Cephalic						
	Adult Cephalic						
	Trans-rectal						
	Trans-vagina						
	Trans-urethral						
	Trans-esoph. (non-Card.)						
	Musculo-skel. (Convent.)						
	Musculo-skel. (Superfic.)						
Intra-luminal							
Endoscopy		N	N	N		N	N
Cardiac	Cardiac Adult						
	Cardiac Pediatric						
	Trans-esophageal (card.)						
	Other (spec.)						
Peripheral Vessel	Peripheral vessel						
	Other (Spec.)						

N = new application; P = previously cleared by FDA; E = added under Appendix E

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Concurrence of CDRH, Office of Device Evaluation (ODE)

*David A. Legson*

(Division Sign-Off)

Division of Reproductive, Abdominal, and Radiological Devices

510(k) Number

K041395

Prescription Use (Per 21 CFR 801.109)