

Eview ME-15

WIRELESS INTRA ORAL CAMERA Featuring Zoom Focus & Video Image Freeze

User's Manual

Information to User

Federal Communications Commission (FCC) Statement

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

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Federal Communications Commission (FCC) Statement

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.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

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1. ME-15 Main Features

- **Wireless:** High quality UHF wireless transmission provides convenient unrestricted freedom of movement.
- **Super White LED lighting:** Four mini LED super white lamps provide intra oral LUX brightness to ensure natural image color balance and reproduction.
- **Sony 1/3 inch Super HAD Hi Resolution CCD sensor:** Sony 1/3 inch sensor provides 380,000 - 440,000 pixels (450 TV line) resolution.
- **Zoom / focus versatility:** From close up (zero mm) intra oral viewing, up to infinity focus, the ME -15 can focus in on any object with the simple press of a finger.
- **Wireless video image freeze:** On camera finger switch instantaneously freezes desired video images and confirms with an audible beep.
- **Multi mode video freeze display:** Mode 1 and 2 receiver functions allow any captured video image to be viewed either on a single TV or monitor screen, or side by side (50% of the screen) for image comparison.
- **Rechargeable built in batteries:** Internal rechargeable 6v / 500mah NI – MH batteries provide over 60 minutes of continuous operation.
- **Wired video output:** Accessory video cable connects the ME -15 to any multi system TV set or PC capture board for non – wireless applications.

- **Hygienic disposable cover slips.** Ultra thin disposable plastic cover slips, provide user friendly hygienic protection for intra oral viewing.
- **On / Off power switch:** On /off main power switch ensures safe shipping and transportation.
- **Multi language PC software:**

2. Components

Check your ME –15 system to see that all the following components are included:

- (1) **Wireless ME-15 Intra Oral camera**
- (1) **Wireless ME-15 Receiver**
- (1) **12 VDC 1.5mA adapter**
- (1) **Charge base and connected 7 VDC 500 mA adapter**
- (2) **AC plug in adapter cords**
- (1) **Video cable (RCA to 2.5mm pin)**
- (1) **BNC to RCA adapter**
- (1) **Multi Language PC software**
- (1) **Carrying case**
- (1) **Manual & user guide**
- (1) **Mini tool screwdriver**
- (1) **Disposable hygienic cover pack**

3. System Set up

ME-15 Camera

1. Remove the ME –15 Intra Oral camera, Me –15 Charge Base, and mini – tool from the carrying case.
2. Plug the plastic non bladed end of the provided AC power cords into the open slot on Charge base's AC adapter (either direction is fine), and the other bladed end into any AC outlet. **Note:** The adapters are special switching power adapters, so any outlet voltage between 110 – 240 AC is OK.
3. Using the provided mini tool, push the main power switch located at the base of the Intra oral camera to the “on” position.
4. Insert the camera firmly into the charge stand, until the green LED located at the base of the camera is illuminated. **Note:** *For first time initial use*, and to insure longer battery life and battery recharge cycles, it is important that the ME – 15 Intra oral camera be charged *for a full 15 hours*. Charging longer than 15 hours will not damage the ME-15's batteries.
5. The ME –15 can be charged with the main power switch in either the “On” or “Off” position. After the first initial charge, an over night charge of 8 hours or so will be sufficient to fully recharge a completely discharged ME – 15 camera.
6. When charging is complete, remove the camera from the Charge Base. **Note:** If the main power switch is in the “On” position, removing the camera from the Charge Base will automatically activate the camera.

Receiver

1. Remove the Receiver, the 12 VDC 1.5mA adapter, the AC power cord and the RCA to RCA video cable from the carrying case.
2. Plug the plastic non bladed end of the AC power chord into the 12 VDC adapter (either direction is fine) and the other bladed end into any AC wall outlet. **Note:** The adapters are special switching power adapters, so any outlet voltage between 110 – 240 AC is OK.

3. Switch the Receiver's On / Off switch (located at the back of the unit) to the "On" position. The power LED at the front of the unit will illuminate.
4. Test the Receiver's capture / freeze function by pressing the camera's trigger switch located on the focus slide.
5. *Video Monitor.* To display the video image on a video monitor, insert one end of the RCA to RCA cable into the "Video Out" jack located at the rear of the Receiver, and the other end into the "Video In" jack of the Monitor. (If the Monitor uses a BNC jack, then insert one end of the RCA cable into the provided B&C jack).
6. *Personal Computer (PC).* To display the video image on a PC, connect one end of the RCA to RCA cable to the "Video In" jack located at the rear of the unit, and the other end into the capture video's input. (Usually yellow).
7. The ME-15 can be connected to both a TV and PC simultaneously.

4. Connecting to a TV set:

The camera can be connected to a video monitor, and / or pc directly.

- Select a standard color TV set. (A 14 inch screen is fine).
- Best to select a TV set that has a good color image and resolution of at least 375 lines.
- The TV system can be installed on the wall opposite to the dental work unit.
- Before installing the TV set, first confirm that the TV image can be seen clearly by both patient and dentist.
- **Note:** The TV set must be the same video format (NTSC , PAL, Secam) as that designated on the Intro Oral camera. (Many TV sets are 'multi system' and automatically recognize and adjust to the inputted video format
- Using the provided RCA to RCA cable, connect the ME -15 Receiver to the TV's RCA video input jack (typically yellow).

- Press the "AV" button on your TV or TV remote control. **Note:** Some TV sets have more than one AV input. In that case, look for the proper AV input by pressing again the AV button on your TV remote control.
- Pressing the TV remote button more than once should return the system back to regular TV programs.
- For improved color performance, most TV's have color, hue, contrast and sharpness adjustments either on the TV cabinet, or are activated by the remote control.

5. Connecting to a PC:

Minimal requirements for connecting the ME-15 camera to a PC:

- Pentium 2 or higher is needed.
- Minimum RAM memory 64 MB. 128 MB recommended.
- Big hard disk recommended. 5 GB is enough space to start with.
- Note: For better image performance, a video card with min 32 MB memory is recommended.
- Windows 95 or higher. Windows 98 tends to do better than Windows 95.
- Frame grabber PC card. The less expensive frame grabbers are TV cards. Choose one, which is multi system. Ask a PC technician to install it onto the PC including drivers and installation.
- After the camera has been connected to the input video jack of the TV card (frame grabber), the video image can then be seen on the PC screen. To save a video image on the PC (i.e. to capture images for later use), the provided PC software must be installed onto your PC.

6. PC software:

The provided PC software allows dentists to file, store and retrieve images easily and quickly from any imaging source. After a video image has been captured and stored, it can be printed out and used to make measurements, write notes, used to study coloring, etc.

The software is versatile and user friendly. When used with a PC in the dental clinic, it adds immeasurably to the dentist's patient / image management activities.

For more details, refer to the software user guide .

PC Software Key Features:

- Integration of X-ray & intra oral photographs according to treated tooth
 - Print out any photograph on your printer
 - Markings on photographs
 - On-going digital follow up on photographs
 - Optimal format for length measurement
 - Zoom-in, magnification capability of specific areas of the photograph
 - Importing external photographs, including panoramic x-ray photos
 - Computerized processing capability of photos
- Zoom in and zoom out capability without compromising quality.
 - Patient's personal detail.
 - Diagnosis / treatments / treatment program.
 - Integrated Patient Education Tools:
- Hundreds of multi language and multi understanding level issues
- Detailed explanations of various dentistry related Information such as:
 - Care and prevention
 - The reasons for root canal treatments
 - Gum diseases: causes and treatment
 - Root canal treatments, Implants, and more...
 - Animation and filmed clips for patient's training and demonstration.
 - Why it is advisable and necessary to treat a missing tooth
 - Proper teeth brushing training
 - Fascinating clips simulating implants and post implant rehabilitation
 - Stages of filling / root canal treatments
 - The use of dental floss-
- Visual encyclopedia for illustrating various treatments.
 - Photographs of various treatments
- Illustrative animation of toothed jaws for demonstrating the mouth.

7. Camera Trouble shooting:

Problem: No power indication:

Try to: check if the main switch button turned on.

In case of no change:

Problem: Led white lamps does not lighting:

Try to: The battery may not be recharged enough.

Please recharge battery for 10 to 15 hour, before first use.

After using, recharge again for several hours.

Try to: check if the cable properly connected to the camera and the monitor?

Please re-connect the camera and the monitor properly.

Try to: Turn on the switch button of the camera.

In case of no change: The camera or charging stand may be malfunctioning.

Problem: no picture on screen.

Try to: Connect the AC adapter to the antenna box and plug in.

Try to: Check if the TV set is on AV.

Try to: Connect the camera to the monitor with the video cable directly.

In case of no change: The camera or cable or receiver may be malfunctioning.

Problem: The antenna box does not light on.

Try to: Is the cable properly connected to the adapter and the monitor?

In case of no change: The Ac adapter may be malfunctioning.

The receiver - antenna may be malfunctioning.

Problem: Blurring and distortions

Try to:

In case of no change:

8. Warning / Warranty

- Use only the adapters included in the unit.
- Never hold adapter with wet hand.
- Grasp the plug body when disconnecting it.
- Do not bend the cord or place objects on the cord.
- Do not use the cord when it is damaged.

- Do not wet or spill liquid, or place any foreign objects on the unit
- Place the unit on a stable area
- Do not subject the unit to excessive dust, moist, vibration, or shock.
- Do not use or place the unit in an excessively hot or cold area.
- Do not use any moist or wet cloth to clean the camera head.
- Do not use alcohol to disinfect caps. Use the included covers.
- Never use any type of abrasive pad, scouring powder or solvent.

NOTICE: THE CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

Important Note: To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device is permitted. Any change to the antenna or the device

could result in the device exceeding the RF exposure requirements and void user's authority to operate this device.