# acrebat HD ultra — with Portable Monitor Long Arm and Short Arm





### **Users Manual**

Congratulations on your purchase of the Acrobat HD Ultra. Enhanced Vision products are designed to give you the highest quality and convenience available.

The Acrobat HD Ultra w/Portable Monitor product can enable people with low vision to read, write and to see objects at any distance. The unique design of this product provides the ultimate in flexibility and offers a large range of magnification with multiple viewing options that make reading easier than ever. The Acrobat HD Ultra is available in either long or short arm versions, and is ideal for either desk-mount or table-top configurations.

Prior to using this system, please carefully read and follow the instructions provided within this booklet. A thorough understanding of the functionality will allow you to fully benefit from the flexibility and great features of this device.

If you have any questions, please contact the eye-care professional or the supplier from whom you have acquired the unit.

Product enhancements and revisions are an integral part of what we do here at Enhanced Vision. Please visit - <a href="http://www.enhancedvision.com/low-vision-product-line.html">http://www.enhancedvision.com/low-vision-product-line.html</a> and select your Enhanced Vision Product. You will find the most up-to-date version of the User Manual at the bottom of the page.

#### **FCC COMPLIANCE NOTICE**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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.

Unauthorized changes or modification to this system can void the user's authority to operate this equipment.

If your Low Vision device has an option to connect to a TV, it must be used with shielded interface cables in order to meet FCC emissions limits for Class B digital devices. It is the responsibility of the user to use the shielded interface cables supplied with the equipment.

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#### **Important Safety Precautions**

For your safety and to obtain the most benefit and life from the Acrobat HD Ultra please read these safety precautions very carefully.

The Acrobat HD Ultra is designed to enlarge and enhance images in order to improve the quality of life for people who are visually impaired. The extent to which this product can improve the ability to see images depends on a person's individual condition and level of visual impairment. The Acrobat HD Ultra is not designed to restore vision, correct eye conditions or halt degenerative vision loss. An eye care professional can determine the usefulness and suitability of the Acrobat HD Ultra for a patient's individual condition. Please follow these safety precautions:

- Use the Acrobat HD Ultra on a stable, level surface such as a solid desk or table, according to its intended design specifications.
- Avoid placing the Acrobat HD Ultra on an unstable table, cart or stand. It may fall causing serious damage to the unit or bodily injury to the user.
- ➤ Use the Acrobat HD Ultra indoors only it should NOT be exposed to extreme or rapid changes in temperature or humidity. Do not place the Acrobat HD Ultra near a radiator, heater or areas exposed to long hours of direct sunlight.
- Always place the power cord away from traffic areas to avoid damage of power supply.
- ➤ Prevent the risk of electrical shock by NOT attempting to disassemble the unit. Please refer all service to an authorized repair facility.

#### To Move the Acrobat HD Ultra to Another Location

➤ Use caution if you are repositioning the Acrobat HD Ultra a short distance across a desk or table. Make sure you do not pull on any power cords or connector cables.

#### **Caring for the Acrobat HD Ultra**

- ➤ Always turn the power OFF on the Acrobat HD Ultra when the system is not in use.
- Always turn the power OFF before cleaning the Acrobat HD Ultra.
- ➤ Clean the Acrobat HD Ultra with a soft dry cloth or an electrostatic dusting cloth. DO NOT use liquid cleaners on its plastic surfaces.
- ➤ Clean the lens glass as needed with the lens cloth provided within the Acrobat HD Ultra's packaging (See figure 1).



Figure 1

- ➤ Follow all warnings, cautions, and instructions marked on the product.
- ➤ The attached power cord is a disconnect device for electrical equipment. The socket-outlet should be installed near the equipment and be easily accessible.
- ➤ This product is equipped with a 3-wire grounding type plug as a safety feature. This plug has a third (grounding) pin and can only be plugged into a grounding-type power outlet. If necessary, contact an electrician to replace your power outlet with a grounding-type power outlet.
- ➤ Do not use the Acrobat HD Ultra in, near or around water. The Acrobat HD Ultra is not designed to offer protection against contact with liquids of any kind.
- Do not use the Acrobat HD Ultra near flammable liquids.
- ➤ At least once per week, clean the Acrobat HD Ultra with a soft dry cloth or an electrostatic dusting wipes. DO NOT use liquid cleaners on its plastic surfaces. No additional methods of sterilization or cleaning are recommended or required.

➤ This product contains moving parts. Please use caution when moving the adjustable arm or when transporting the Acrobat HD Ultra to avoid possible injury to hands and fingers.



To avoid personal injury or damage to the Acrobat HD Ultra, do not make any other type of connections to the camera input jacks other than those indicated in the photos below.





#### Susceptibility to Interference

➤ There may be temporary degradation of the image when the Acrobat HD Ultra is subjected to a strong radio frequency field, electro-static discharge or transient electrical noise. An electro-static discharge (caused by static electricity) may cause the screen to go blank. If this happens, switch the unit off and on again.

#### **Medical Compliance Warnings**

- ➤ Electromagnetic compatibility: The use of accessories and cables other than those specified by Enhanced Vision may result in increased emissions or decreased immunity of the Acrobat HD Ultra.
- Placement of equipment: The Acrobat HD Ultra should not be used adjacent to or stacked with other equipment.

# ACROBAT HD ULTRA w/PORTABLE MONITOR PACKAGE CONTENTS

All required accessories for operation are included in your Acrobat HD w/Portable Monitor package.

#### **Acrobat HD Ultra "Short Arm" version includes:**

- 1. Short Arm: rotating arm to which the camera is mounted
- 2. Weighted Base: supports the short arm for use on a desk or table

#### **Acrobat HD Ultra "Long Arm" version includes:**

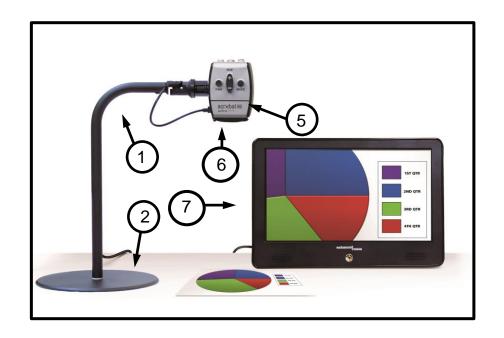
- 3. Long Arm: 28" adjustable arm to which the camera is mounted
- 4. Table Clamp: allows the long arm to be securely mounted to a table

#### Acrobat HD Ultra w/Portable Monitor is comprised of the following items:

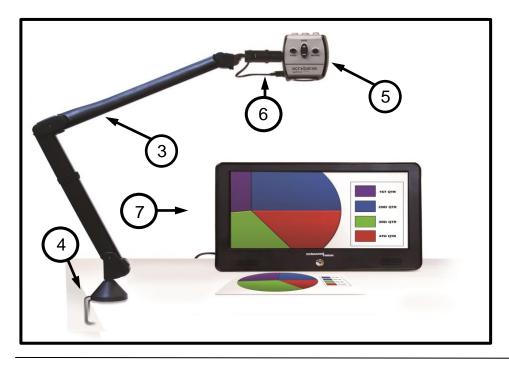
- 5. HD Camera: rotates 340 degrees to capture and enlarge the image
- 6. Reading Lens: used for up close high magnification (zoom)
- 7. Portable Monitor: 13.3" TFT Monitor
- **8. Remote Control:** (batteries included): allows the user to control the Camera functions from a distance
- 9. Power Supply: converts the AC mains signal to 19V DC
- 10. Power Cord: connects from the Wall Outlet to Power Supply
- 11. Bonnet: used to protect 13.3" Portable Monitor
- **12. Carrying Case:** convenient carrying case for transporting your Acrobat HD Ultra w/Portable Monitor
- 13. Lens Cloth: permits cleaning of the LCD monitor and lenses

#### **Accessory NOT included:**

**14. Mini XY Table (optional)**: continuously adjustable surface makes reading even easier.

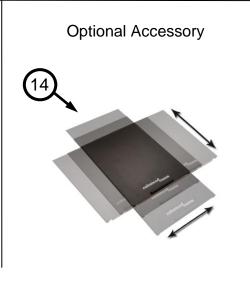


# Acrobat HD Ultra w/Portable Monitor – Short Arm



# Acrobat HD Ultra w/Portable Monitor – Long Arm





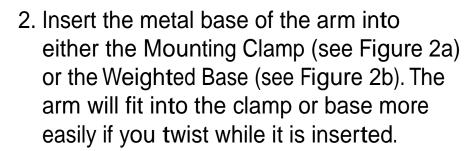
#### ACROBAT HD ULTRA SETUP

#### **Installing the Mounting Clamp or Weighted Base**

1. For Acrobat HD Ultra Long Arm: Attach the Mounting Clamp to a sturdy desk or table (see Figure 1a).

#### For Acrobat HD Ultra Short Arm:

Place the Weighted Base on top of a sturdy desk or table (see Figure 1b).



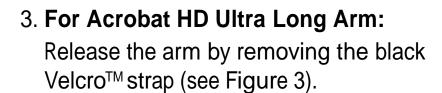






Figure 1a

Figure 1b





Figure 2a

Figure 2b



Figure 3

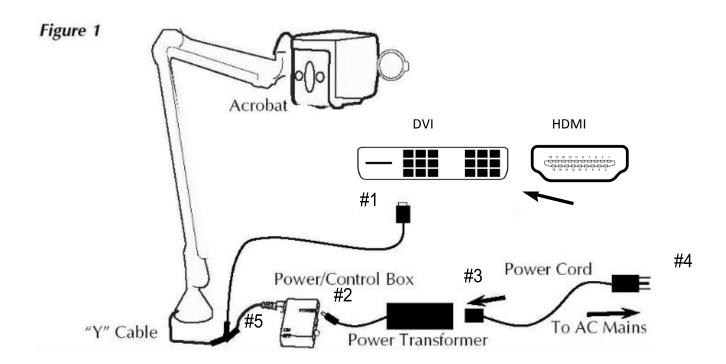
Please see the next page for making the remaining connections to your DVI compatible monitor or display and to connect power.

#### **Basic DVI/ HDMI & Power Connection (Refer to Figure 1)**

Your Acrobat HD Ultra uses a specially-designed, integrated "Y" cable for making both DVI/ HDMI and power connections. One end of the "Y" cable is already connected to the Power/Control Box. The other end of the "Y" cable connects to your external DVI/ HDMI compatible monitor/display.

Use the following procedure to make the appropriate connections:

- Connect the end of the DVI/HDMI output cable to the DVI/ HDMI input on the rear of your external monitor or display.
- 2. Connect the tip of the Power Transformer to the power input on the Power/Control Box.
- 3. Connect the Power cord to the Power Transformer input.
- Connect the remaining end of the Power cord to an available AC mains outlet.
- 5. Use the rocker switch on the side of the Control Box to power ON/OFF the Acrobat HD Ultra.



Once the Acrobat HD Ultra has been powered on you can then use the Red "Power" button located in the upper right corner of the Acrobat HD Ultra Remote to power the Acrobat HD Ultra on/off.

# USING THE ACROBAT HD ULTRA w/PORTABLE MONITOR

The Acrobat HD Ultra w/Portable Monitor can be used with the power supply connected - or - using its own internal battery. The system is shipped from the factory with the battery disabled. Prior to first use the 'Battery Off/On' Switch needs to be placed into the 'ON' position (See Figure 1). The switch is located on the back of the portable monitor. We strongly recommend that this switch be placed into the 'OFF' position when you transport the unit.

The internal battery of the Portable Monitor is partially charged when the unit is shipped from the factory. We recommend that you fully charge the internal battery prior to the first use. Please follow the instructions below.

#### Connecting the Power Supply & Charging the Battery

Connect the Power Supply & Power Supply Cord together (See Figure 2).

Connect the Power Cord to an outlet and the other end of the Power Supply to the back of the Portable Monitor where it says "DC 19V In" (See Figures 3 & 4).

Once the Power Supply is connected to both the wall and the system, the Portable Monitor will start charging automatically. You can use the Acrobat HD Ultra w/Portable Monitor while charging is in process. The battery will charge while in use as long as the system is plugged into an outlet. You cannot overcharge the battery. However, the more charge cycles, the shorter the battery life. Approximate charge time is 4+ hours (powered off), 5.5+ hours (while in-use).







Figure 1

Figure 2

Figure 3

Figure 4

#### **Turning the Monitor On/Off**

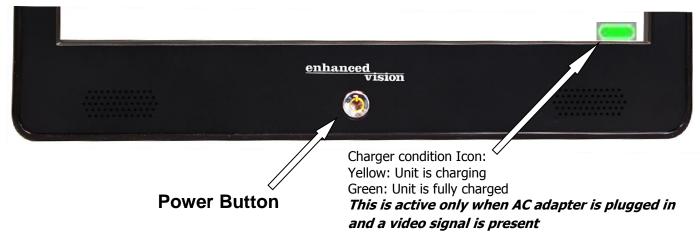
Button on the front of the Portable Monitor – the power symbol on the power button will illuminate 'Blue'. If no video signal is present, the power button will illuminate 'Yellow' (Standby Mode). To turn the Portable Monitor and Camera off, simply press and release the Power Button — the power button illumination will turn off.

#### Using the Remote to Turn the Camera On/Off

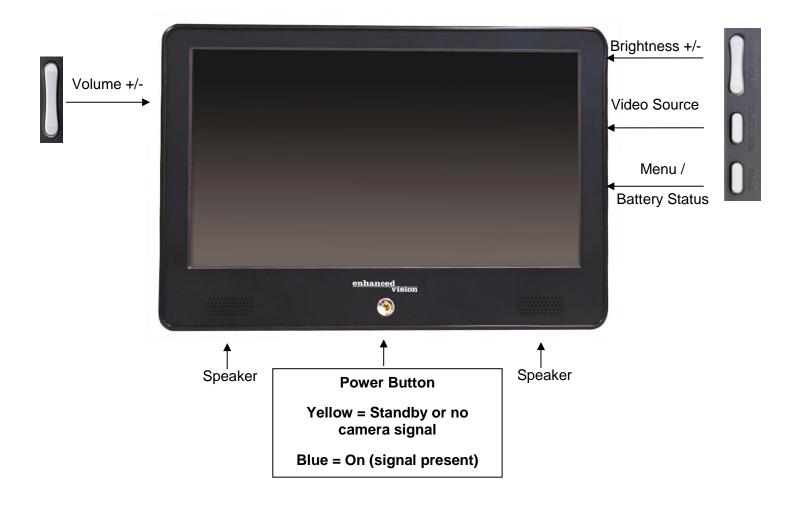
The "camera only" can be powered on, and off, using the Green "Power" button located in the upper right corner of the Acrobat HD Ultra Remote – this will put the Portable Monitor into 'Standby Mode'. The battery will drain over time if you leave the Portable Monitor in 'Standby Mode'. We recommend shutting off the Portable Monitor if you are not using it for an extended period of time to conserve battery life.

#### **Charging Condition Icon**

When the Portable Monitor is connected to wall power and turned on with a video signal present - The 'Charging Condition Icon' appears in the lower right corner of the LCD. If the 'charging condition icon' is *GREEN* then the battery is fully charged. If the 'charging condition icon' is *YELLOW* then the battery is being charged.



#### **Portable Monitor Controls**



#### Checking the Battery Level\*\*

To check the battery level, press the *MENU* button on the right side of the Portable Monitor (See below).

\*\* The Portable Monitor must be powered on, and a video signal must be present, to check the battery level

When the battery has less than 1 hour of charge left the 'Critical' Battery Icon (See below) will appear, and flash 3 times, every 10 minutes until the Panel shuts down. It is *STRONGLY* recommended that you connect the Power Supply provided with the Portable Monitor to recharge the battery as soon as possible when this begins to occur.



#### **USING THE ACROBAT HD ULTRA**

#### **Adjusting the Viewing Angle**

The Acrobat HD Ultra Camera rotates 340 degrees, providing unsurpassed flexibility for the visually impaired. Do NOT force the camera beyond its 340-degree angular range as this may damage the unit.

The Acrobat HD Ultra may be used to see objects in the distance, viewing oneself and reading or writing. To change the viewing mode, simply turn the position of the Camera by rotating it on the arm.

#### **Distance Viewing Mode**

The camera can rotate forward to capture people, objects and scenery. "Distance Viewing" is displayed in the upper-left corner of the screen when changing to this viewing angle. Be sure to open the Reading Lens for Distance Viewing (See Figure 1).

This Distance mode enables up to 25X magnification for objects 3 feet away. In this mode, although the camera can view objects at an infinite distance, the recommended distance from camera to the distant object is within 3-30 feet to achieve maximum magnification benefit (See Figure 2).





Figure 1 Figure 2

#### **Self-Viewing Mode**

The Camera can be rotated backwards to provide you with the equivalent of a full-length mirror. "Self-Viewing" is displayed in the upper-left corner of the screen when changing to this viewing angle. In this position, you can use the Acrobat HD Ultra to help you put on makeup, shave or perform other personal hygiene (See Figure 1).

For optimum clarity, use the Zoom Lens and position yourself between 7.5"-22" away from the Camera.



Figure 1

#### **Reading and Writing Mode**

The Acrobat HD Ultra Long Arm camera can be adjusted downward for reading, writing and enjoying crafts or other hobbies (See Figure 1). This also makes it ideal for classroom use. When the camera is rotated downward, "Reading-Mode" is displayed in the upper-left corner of the screen.

When using the Acrobat HD Ultra Long Arm, it is best to close the Zoom Lens when objects are placed 12" – 19" away from the Camera for optimal viewing clarity.

When using the Acrobat HD Ultra Short Arm, it is best to close the Zoom Lens when objects are placed 4" – 11.75" away from the Camera for optimal viewing clarity (See Figure 2).

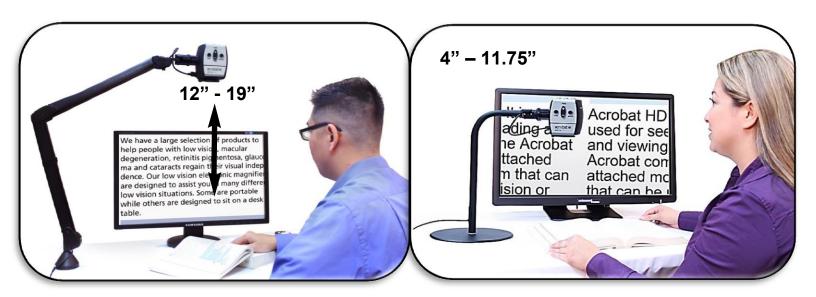


Figure 1 Figure 2

#### **Adjusting Magnification**

The Acrobat HD Ultra offers a large range of magnification capabilities. The following directions can be used with the Remote or Camera (See Figure 1 & 2).

- 1. To adjust the magnification press and hold the + or buttons located on the Remote or Camera until you reach your desired magnification.
- 2. "ZOOM IN" will appear in the upper left corner of your monitor when you are increasing magnification. "MAX ZOOM," will appear at the maximum magnification.
- 3. "ZOOM OUT" will appear in the upper left corner of your monitor when you are decreasing magnification. "MIN ZOOM," will appear at the minimum magnification.

NOTE: The extent of the magnification is dependent upon the distance of the Camera to the object.

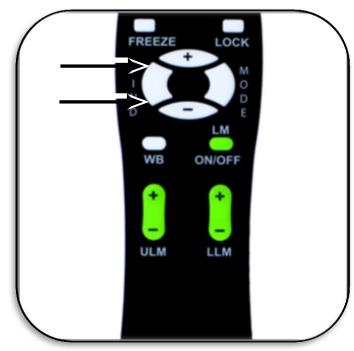




Figure 1 Figure 2

#### **Changing the Viewing Mode**

The Acrobat HD Ultra was designed to provide optimum viewing for people with certain visual conditions by offering a range of choices in both text and background colors. Use the Mode key (See Figure 1 & 2) to toggle between full color viewing, Black and White, enhanced positive, enhanced negative, and your 5 favorite color select modes. The 5 favorite color select modes can be modified to any of the 28 color select options by following the instructions provided on page 24. The following directions can be used with the Remote or Camera.

#### **Adjusting Viewing Modes**

- 1. You can choose a viewing mode by pressing the "Mode" button on the Remote or Camera (See figure 1 & 2).
- Each push will allow you to cycle through all seven viewing modes (See next page).

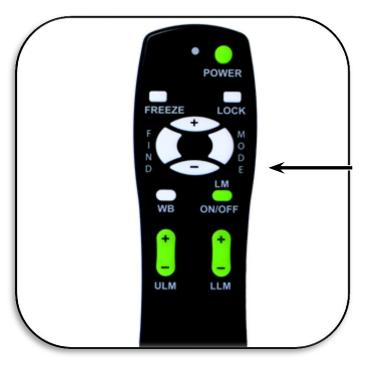




Figure 1 Figure 2

#### **Viewing Modes**

#### > Full Color Image

This mode gives a true color representation of the image being magnified.

#### Black-and-White Image

This mode gives a black and white representation of the image being magnified.

#### > Enhanced-Positive Image

This mode provides a white background with black text. It increases the contrast to offer crisp text images for reading.

Crisp, Clear Text
Images!

#### > Enhanced-Negative Image

This mode provides a black background with white text. It increases the contrast to offer crisp text images for reading.

Crisp, Clear Text Images!

#### Color Select 1

In factory default this mode provides a blue background with yellow text. This is one of the most commonly used color combinations. To change this mode to any of the 28 available follow the instructions on page 22.

#### **≻** Color Select 2

In factory default this mode provides a black background with green text. To change this mode to any of the 28 available follow the instructions on page 22.

#### > Color Select 3

In factory default this mode provides a black background with yellow text. To change this mode to any of the 28 available follow the instructions on page 22.

#### Color Select 4

In factory default this mode is turned off. Follow the instructions on page 22 to turn this color mode on.

#### > Color Select 5

In factory default this mode is turned off. Follow the instructions on page 22 to turn this color mode on.

#### **Changing Favorite Color Modes**

The Acrobat HD Ultra provides 28 selectable color modes, and allows selecting up to 5 favorites for use, as described on page 21. The following directions can be used to change the favorite color modes on your Acrobat:

- Press and hold the "Mode" button for at least 3 seconds to begin the "Entering Setup" Menu.
- 2. Scroll with the [+] to "6. Color Select"
- 3. Press the "Mode" button.
- 4. Choose with [+] or [-] which color select mode favorite you would like to change 1, 2, 3, 4 or 5.
- 5. Press the "Mode" button.
- Choose if you would like this favorite "On" or "Off" by pressing the [+] or [-].
- 7. Press the "Mode" button.
- 8. Press the [+] or [-] button to preview each of the 28 available color modes.
- 9. Press the "Mode" button to select and save the desired favorite color mode.

ENTERING SETUP

6. COLOR SELECT

Using the procedure outlined on Page 22, the following 28 Color Select combinations can be programmed into any of the 5 color select programs, based on your personal preferences.

Color	Background	Text	Notes
Mode	Color	Color	
# 1	BLACK	GREEN	
#2	BLACK	YELLOW	*Default Color Select 3
# 3	BLACK	RED	
# 4	BLACK	BLUE	
# 5	BLACK	PURPLE	
# 6	BLACK	ORANGE	
#7	WHITE	GREEN	
# 8	WHITE	RED	
# 9	WHITE	PURPLE	
# 10	WHITE	BLUE	
# 11	WHITE	ORANGE	
# 12	YELLOW	RED	
# 13	GREEN	YELLOW	
# 14	YELLOW	BLUE	
# 15	GREEN	BLACK	
# 16	YELLOW	BLACK	*Default Color Select 2
# 17	RED	BLACK	
# 18	BLUE	BLACK	
# 19	PURPLE	BLACK	
# 20	ORANGE	BLACK	
# 21	GREEN	WHITE	
# 22	RED	WHITE	
# 23	PURPLE	WHITE	
# 24	BLUE	WHITE	
# 25	ORANGE	WHITE	
# 26	RED	YELLOW	
# 27	YELLOW	GREEN	
# 28	BLUE	YELLOW	*Default Color Select 1

#### **Adjusting Brightness (Color Mode Only)**

The following directions can be used if you would like adjust the brightness of the screen when in Color Mode:

- 1. Press and hold the "Mode" button for at least 3 seconds to begin the "Entering Setup" Menu.
- 2. Scroll with the [+] to "4. Brightness Color"
- 3. Press the "Mode" button.
- 4. Press the [+] or [-] button to increase or decrease screen brightness.
- 5. Press the "Mode" button to set and save the screen brightness.

#### **Adjusting Brightness (Color Select Mode)**

The following directions can be used if you would like adjust the brightness of the screen in Color Select Mode:

- 1. Press and hold the "Mode" button for at least 3 seconds to begin the "Entering Setup" Menu.
- 2. Scroll with the [+]" to "5. Brightness C. Sel"
- 3. Press the "Mode" button.
- 4. Press the [+] or [-] button to increase or decrease screen brightness.
- 5. Press the "Mode" button to set and save the color select screen brightness.



4. BRIGHTNESS COLOR

ENTERING SETUP

5. BRIGHTNESS

SELECT

#### **Adjusting the White Balance with the Remote Control**

The color white is often affected by the lighting used in a room. The Acrobat HD Ultra White Balance control allows you to achieve optimum clarity.

The following directions can be used to adjust the White Balance with the Remote:

- 1. Press the White Balance "WB" button (See figure 1) on the Remote, and wait a few seconds for the key to become active.
- 2. Repeat Step 1 to scroll through all four settings.
  - ✓ W.B. Auto automatically adjusts to the lighting in the room.
  - ✓ W.B. Warm casts a red tone
  - ✓ W.B. Normal casts a balanced tone
  - √ W.B. Cool casts a blue tone



Figure 1

#### Adjusting the White Balance with the Camera

The following directions can be used to adjust the White Balance from the Camera:

- 1. Press and hold the Mode button for 3 seconds to "Entering Setup" Menu.
- 2. Press the [+] to scroll to "2. White Balance".
- 3. Press the Mode button to initiate the White Balance feature.
- 4. Press the [+/-] to scroll through the four settings.
- 5. Press the Mode button to exit this feature.

ENTERING SETUP

2. WHITE BALANCE

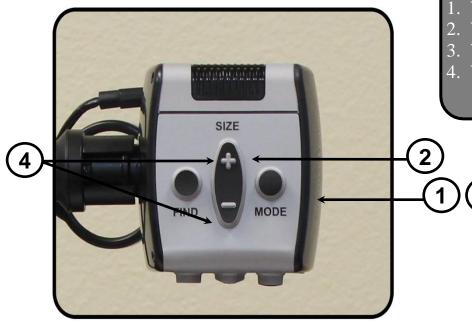


Figure 1

- 1. WHT BAL AUTO
- 2. WHT BAL WARM
- 3. WHT BAL NORMAI
- 4. WHT BAL COOL

#### **Using Line Markers with the Remote control**

Line Markers are used to frame an image between two horizontal lines. These lines may be used as a reading guide for long passages of text, as a guide to help keep your place as you move from one side of the page to the other, or just to make writing easier.

The following directions can be used to add/remove Line Markers with the Remote:

- 1. Press and hold the LINE MARKERS ON/OFF ("LM ON/OFF") button for at least 1 second.
- 2. To move the Upper Line Marker press the "ULM [+]/[-]" buttons.
- 3. To move the Lower Line Marker press the "LLM [+]/[-]" buttons.
- 4. To remove Line Markers press and hold the "LM ON/OFF" button for at least 1 second.

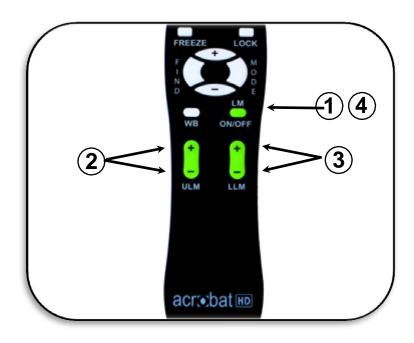


Figure 1

#### **Using Line Markers with the Camera**

The following directions can be used to add/remove

Line Markers from the Camera:

- Press and hold the "Mode" button for at least 3 seconds to begin the "Entering Setup" Menu.
- 2. The menu will automatically indicate "1. Line Markers"
- 3. Press the "Mode" button.
- 4. The menu will indicate "1. Line Makers Off"
- 5. Press the [-] button to activate "Line Markers On."
- 6. Press the "Mode" button to set line marker.
- 7. Next the menu indicates "1. Upper Line ADJ"
- 8. Press the [+/-] buttons to raise or lower the Upper Line Marker.
- 9. Press the "Mode" button to set the Upper Line Marker.
- 10. The menu will now indicate "2. Lower Line Marker"
- 11. Press the [+/-] buttons to raise or Lower the Lower Line Marker.
- 12. Press the Mode button to set the Lower Line Marker.
- 13. To remove Line Markers repeats steps 1-4.
- 14. Press the [+] button to return to the "1. Line Markers Off" Menu.
- 15. Press the Mode button to Exit.

**ENTERING SETUP** 

1. LINE MARKERS

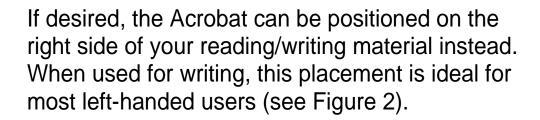
- 1. UPPER LINE ADJ
- 2. LOWER LINE MARKER



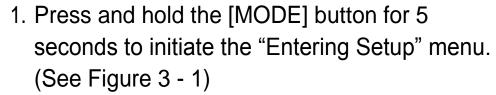
Figure 1

#### **Setting the Left or Right Hand Mode**

From the factory default settings, the Acrobat is designed to be positioned on the left side of your reading/writing material. When used for writing, this placement is ideal for most right-handed users (see Figure 1).



In order to maintain the correct image orientation when positioning the Acrobat on the right-hand side of your reading/writing material, please use the following procedure to change the Left-Hand Mode setting:



- 2. Press the [+] button to scroll to "3. Left Hand Mode" (See Figure 3 2).
- 3. Press the [MODE] button to engage the Left Hand Mode On/Off feature.
- 4. Press the [+] button to select "Left Hand Mode On" or "Left Hand Mode Off" as desired.
- 5. Press the [MODE] button to exit and return to normal operation.



Figure 1



Figure 2

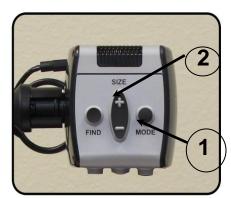


Figure 3

The last used Right/Left hand On/Off mode setting will be retained in memory even after the power has been turned off.

#### **Using the Object Locator**

The Acrobat HD Ultra Object Locator feature can help you quickly locate something you're looking for on a page, or a specific part of an object you want to view more closely.

The following directions can be used to locate a desired object with the Remote and Camera:

 Press and hold down the "Find" button on Remote (See Figure 1) or Camera (See Figure 2.)

The Acrobat HD Ultra will automatically zoom out to the widest field of view, and a "target" (as shown in Figure 3) will appear in the center of the monitor screen.

2. Move your work or reading material until you have located the desired item within the "target" area.

3. Release the "Find" button, and it will magnify the item you located within the targeted area.

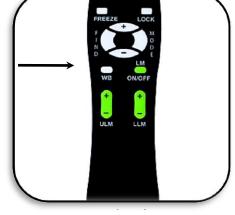


Figure 1



Figure 2

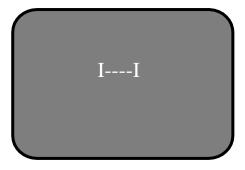


Figure 3

#### **Using Intelligent Focus Lock with the Remote Control**

When The Acrobat HD Ultra is turned on, it is automatically set on auto focus. This is the most convenient setting for everyday activities, such as reading from a single page to a book, reading a prescription bottle or working with arts and crafts.

Focus Lock allows you to maintain focus on a specific object at a fixed distance, such as writing. The Acrobat HD Ultra Mini Intelligent Focus Lock feature will automatically refocus on the object you are viewing after changing the magnification size. The Acrobat HD Ultra will keep your writing in focus, rather than your hand when it comes into the Camera's frame.

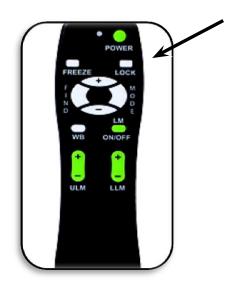


Figure 1

The following directions can be used to apply the Focus Lock feature using the Remote:

- 1. Place your notepaper, stationery, checkbook or other writing material on the table.
- 2. Press the "Lock" button on the Remote (See Figure 1).
- 3. The word "Focus Lock" will appear and remain in the upper left corner of the monitor (See Figure 2).
- 4. To Return to Auto-Focus, press the "Lock" button on the Remote (See Figure 1).

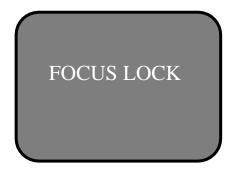


Figure 2

#### **Using Intelligent Focus Lock with the Camera**

The following directions can be used to apply the Focus Lock feature using the Camera:

- Place your notepaper, stationery, checkbook or other writing material on the table.
- 2. To initiate the Focus Lock feature simultaneously press the "Find" and "Mode" buttons for at least 1 second on the Camera (See Figure 1).
- 3. The word "Focus Lock" will appear and remain in the upper left corner of the monitor (See Figure 2).
- 4. To Return to Auto-Focus, simultaneously press the "Find" and "Mode" buttons for at least 1 second on the Camera (See Figure 1).



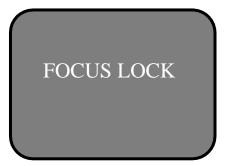


Figure 2

Figure 1

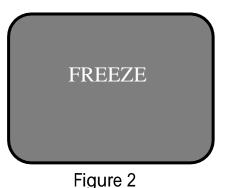
#### **Using the Freeze Function**

FREEZE allows you to take a snap shot of what the Acrobat HD Ultra is magnifying in order for you to have extended time to view the image. This is particularly helpful when taking notes in a classroom.

The following directions can be used to apply the Freeze mode using the Remote control only:

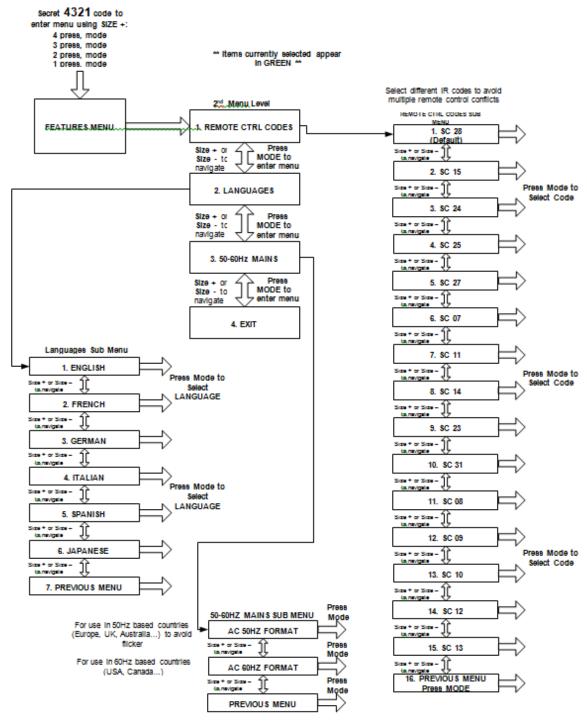
- 1. Press and hold the "Freeze" key for at least 2 seconds (See Figure 1).
- 2. The picture or video will freeze and in the upper left corner of the screen will indicate "Freeze" (See Figure 2).
- 3. To release the FREEZE mode, press any key or change the viewing angle.





#### ADVANCED PROGRAMING

The Acrobat HD Ultra has advanced capabilities for modifying the programming of the included remote control as well as changing the default language used within the setup menus. These settings are completely optional and should not be changed under normal circumstances. The chart listed below is for reference purposes only. Please see your Enhanced Vision representative or call our toll-free technical support should it be necessary for you to modify these settings.



#### **Advanced Programming Options**

The Acrobat HD Ultra Mini has advanced capabilities for modifying the programming of the included remote control (when using multiple units) as well as changing the default language used within the setup menus. These settings are completely optional and should not be changed under normal circumstances. The information listed on the following pages are for technical reference purposes only. Please see your Enhanced Vision representative or call our toll-free technical support should it be necessary for you to modify these settings.

#### **Remote Codes**

By default, a single remote control (and corresponding remote control code) is factory programmed and used for all Acrobat camera functions. While acceptable for most single-use applications, when 2 or more Acrobats are used within close proximity to each other (lab setting), exclusive remote control over each unit may be desired. Therefore, it is possible to modify the sending/receiving codes of the remote control and Acrobat head for exclusive use, if desired. Up to 15 unique codes can be assigned. For proper communication, both the Remote control (transmit) and camera head (receive) must be set to matching ID codes. Please refer to the chart on the right for more information.

#### **Remote Control (Transmit) Code Change:**

- #28 (default/factory reset):
   Push MODE and FIND for 3 secs.
- #15: Push MODE and LLM- for 3 secs.
- #24: Push MODE and ULM- for 3 secs.
- #25: Push MODE and LLM+ for 3 secs.
- #27: Push MODE and ULM+ for 3 secs.
- #07: Push + and FIND for 3 secs.
- #11: Push + and LLM- for 3 secs.
- #14: Push + and ULM- for 3 secs.
- #23: Push + and LLM+ for 3 secs.
- #31: Push + and ULM+ for 3 secs.
- #08: Push and FIND for 3 secs.
- #09: Push and LLM- for 3 secs.
- #10: Push and ULM- for 3 secs.
- #12: Push and LLM+ for 3 secs.
- #13: Push and ULM+ for 3 secs.

#### **Language Select**

The default language used for the on-screen-display (OSD) may be changed by accessing the Advanced Programming Features menu on the Acrobat. This is accomplished using a special key combination sequence (4321), accessed by pressing the [+] and [MODE] buttons on the Acrobat camera head. Language selection can be adjusted within the second menu level. Please refer to the chart on the following page for detailed reference.

#### TROUBLESHOOTING

### Q. How often should I clean the Acrobat HD Ultra w/Portable Monitor?

A. At least once per week, clean the Acrobat HD Ultra w/Portable Monitor with a soft dry cloth or an electrostatic dusting cloth. DO NOT use liquid cleaners on any of the plastic surfaces.

#### Q. The Remote Control is not functioning properly. What should I do?

A. After ensuring you have fresh batteries installed in the remote control, please reset the remote control back to factory settings. Simply press and hold the [FIND] and [MODE] buttons on the remote control for at least 3 seconds, or until the LED indicator begins to flash. Then, attempt normal operation of the remote control functions.

#### Q. Can I use the Acrobat HD Ultra with a computer?

A. Although the Acrobat will not magnify computer images, it is possible to share your external HDMI compatible monitor with either the Acrobat HD Ultra camera or a computer, without the need to detach any cables. This permits a single LCD display to be used for either purpose. An optional HDMI toggle box is specifically designed for this application. Please contact your local Enhanced Vision dealer for more details.

# ACROBAT HD ULTRA CAMERA & ARM SPECIFICATIONS

#### **Product:**

Dimensions: 32" H x 4"W x 3"D (HD Long Arm, extended)

14" H x 9"W x 12"D (HD Short Arm, with base)

Weight: 3.5 lbs. / 1.6 kg (HD Long Arm, with camera and

clamp); 5.1 lbs. / 2.3 kg (HD Short Arm, with camera and

weighted base)

Operating temperature range: 10-40°C / 50-104°F

Storage/transport temperature range: 0-60°C / 32-140°F

#### Magnification with Long Arm range: .8X to 48.6X

Field of View (Near Mode): 13.75" (min); .25" (max)

Working Distance (Near Mode): 12 - 19 inches

Working Distance (Far Mode): 36 inches minimum

#### Magnification with Short Arm range: 1.57X to 73X

Field of View (Near Mode): 7.3" (min); 1/6" (max)

Working Distance (Near Mode): 12 inches

Working Distance (Far Mode): 36 inches minimum

#### **Viewing Modes:**

Color, Black & White, High Contrast

Positive/Negative, Digital Color Select (5 modes)

#### **Equipment Classification (IEC 601-):**

Type of Protection: Class 1

Degree of Protection: Type B Mode of

Operation: Continuous

Warranty: 2 years

#### PORTABLE MONITOR SPECIFICATIONS

#### Features:

- Lightweight, portable design
- Built in 2x 1.5W Speakers
- Front Bezel power on/off button with integrated LED's
- · Integrated battery charger
- · Ergonomic ID with foldable kickstand
- Multiple video inputs: VGA, CVBS, and HDMI with audio

#### Display:

Type: 13.3" TFT active-matrix with LED-backlight

• Resolution: 1366 X 768 pixels (16:9)

Contrast Ratio: 500:1 typ.Brightness: 250 cd/m2 typ.

#### **Physical Dimensions:**

~ 9.5"L x 13.5"W x 1.75" H (with stand closed)

Weight: ~ 3.5 lbs.

#### **Environment:**

• Operating Temperature: 32° – 122°F (0° – 50°C)

• Storage temperature: -4° – 140°F (-20° – 60°C)

#### **Battery:**

· Integrated Li-Ion rechargeable battery

#### **Estimated Charge times:**

~up to 6 hours

#### **Estimated Usage Times with fully charged battery:**

Up to 6 hours battery life when used with Acrobat ~ 500 + charge life cycles

#### Wall adapter:

UL/CE rated

• Input: 100-240VAC 47/63Hz

• Output: 19VDC, 3.16A max load

#### **Output from panel:**

**12 VDC** 

In the interest of continuous product improvement, specifications and/or minimum system requirements are subject to change without prior notice.

<sup>\*</sup>To prevent condensation, do not use the unit for 1 hour after transporting the unit from extreme cold to room temperature.

<sup>\*\*</sup>All times listed are approximate. Actual Charging and Usage times may vary

#### WARRANTY STATEMENT

#### Enhanced Vision Acrobat HD Ultra Video Magnifier Warranty Policy

Enhanced Vision products are designed to give you the highest quality image, convenient features, ease of use and reliable service. The Acrobat HD Ultra has been inspected and tested prior to shipping. Enhanced Vision warrants the Acrobat HD Ultra against defects in material and workmanship under normal use for two years from the date of original purchase. Enhanced Vision, at its option, will at no charge either repair the product or replace it during the warranty period. There are no other expressed or implied warranties accompanying this product.

This warranty does not cover: a) Defects or damage from misuse, use in other than normal and customary manner, accident or neglect; b) Defects or damage from improper operation, maintenance, installation, adjustment, alterations or modification; c) Defects or damage from spills of food or liquid; d) All plastic surfaces and all other externally exposed parts that are scratched or damaged due to normal use; e) Damage due to operation of the Acrobat HD Ultra with equipment not supplied by Enhanced Vision.

- > You must provide proof of purchase, bearing the date of purchase, in order to receive warranty service.
- > Anyone using this product does so knowingly assuming certain risks, due to the need to utilize vision enhancement devices.
- ➤ A 2-year extended warranty option is available within 12 months from the date of purchase. Please contact Enhanced Vision for detailed information.

#### **Service Process**

In the event that technical support or repair service is needed, please contact your local Enhanced Vision representative or the Enhanced Vision warranty service center. If warranty service is required, please contact Enhanced Vision at (800)440-9476 Monday through Friday, between 8 a.m. and 5 p.m. Pacific Standard Time (PST) to request a return authorization number. Warranty repairs will not be accepted without a valid return authorization number.

You may wish to keep the original product packaging in case warranty service is required. The manufacturer cannot provide packaging for warranty repairs.

NOTE: Please completely fill out and send in the enclosed warranty registration card.

#### OTHER ENHANCED VISION PRODUCTS



#### **DaVinci**

DaVinci is a high performance desktop video magnifier (CCTV), featuring HD, text-to-speech (OCR) and a 3-in-1 camera. With HD you will experience high definition color and contrast giving you a beautiful, crystal clear picture and vibrant colors. Experience the joy of reading with our new text- to-speech feature. DaVinci will read any printed text aloud with the push of a button.

Magnification: 24" LCD: 2X (min.) - to 80X (max.)





#### Pebble-mini

Pebble-mini's ultra-compact design makes it the ideal hand-held magnifier whether you're home or on the go. Easily read prescriptions, mail, labels, price tags, menus and so much more. 3.0"LCD screen. Freeze frame and image capture.

28 available viewing modes.

Magnification: 2X to 10X





#### Pebble HD

Pebble HD boasts a new HD camera providing a crisp, clear, colorful, high definition picture. A new ergonomic lightweight compact design makes it the perfect companion whether at home or on the go. Carry Pebble HD in your purse, pocket, or clip it on your belt with the included carrying case.

Magnification: 1.25X – 13.5X





#### **Transformer**

Transformer is the most flexible and portable solution for reading, writing and viewing magnified images at any distance. Compatible with popular magnification software and the latest Windows operating systems as well as Mac OS X. The Transformer's unique design is perfect for work, home or school. Weighing less than 3 pounds. Battery operated up to 4 hours. 28 custom color select modes.

Magnification 2.4X to 30X (based on 17"screen)





## Merlin elite See and hear the difference!

Merlin elite is a high performance desktop video magnifier (CCTV), featuring HD and text-to-speech (OCR). High definition color and contrast provides a beautiful, crystal clear picture and vibrant colors. Merlin elite's unique design allows for a wide field of view, displaying more text on the screen.

Magnification: 2.4x - 70x





#### Merlin ultra HD

Merlin ultra HD's camera technology produces an even truer, more natural image. Easily read books and magazines, read and write letters, manage your financial records, view color photos, do crossword puzzles, and even pursue a favorite hobby.

Magnification:

20" LCD: 1.9x (min) to 51.2x (max) 22" LCD: 2.1x (min) to 55.9x (max) 24" LCD: 2.3x (min) to 61.2x (max)

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#### **Amigo HD**

Amigo HD is a truly portable desktop magnifier. Optimal viewing is achieved with a tilting 7 inch viewing screen. Amigo HD provides 1.4x to 14x digital magnification and the lightest weight in its class. Amigo HD has an integrated battery and can be taken anywhere.

Magnification: 1.4x – 14x (With extended zoom up to 25x)

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#### **Accessories**

#### **DVI Toggle Box**

Allows you to toggle between either the Acrobat HD Ultra or your computer display (DVI connection).

#### **Carrying Cases**

Convenient cases for storage and transport of all Enhanced Vision products.

#### **Contact information:**

(UK Office) Phone: +44 (0)115 9442317 Fax: +44 (0)115 9440720

(DE Office) Phone: +49 (0) 6078 969827-0 Fax: +49 (0) 6078 969827-33

www.enhancedvision.com

#### **Technical Support:**

Main Toll Free (800) 440-9476 ext. 3 Local Phone: (714) 465-3400 ext. 3

E-mail: evsupport@enhancedvision.com

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# enhanced vision

The Acrobat HD Ultra video magnifier is designed to enlarge and enhance images to improve the lives of people who have low vision. The extent to which the Acrobat HD Ultra can improve the ability to see images and text depends on a person's individual condition and level of visual impairment. The Acrobat HD Ultra is not designed to restore vision, correct eye conditions or halt degenerative vision loss. An eye-care professional can best determine the suitability of the Acrobat HD Ultra for a patient's specific condition. For more information, please visit www.enhancedvision.com.

www.enhancedvision.com (800) 440-9476 (US Office, toll free) (714) 465-3400 (US Office) +44 (0) 115 9442317 (UK Office) Tel. +49 (0) 6078 969827-0 (DE Office) Fax +49 (0) 6078 969827-33 (DE Office)



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