

# transformer **HD**

with Built-in Wi-Fi

enhanced  
vision



## User Manual

## **Transformer HD User Manual**

Congratulations on your purchase of Transformer HD with built-in Wi-Fi and optional OCR (Optical Character Recognition) from Enhanced Vision.

Transformer HD is a fully integrated and portable solution, offering the advantages of a CCTV (Closed Circuit Television Camera) and optional OCR combined into one system. Transformer HD's high definition camera and high contrast capabilities enable individuals with low vision to read, write, see objects in the distance and see yourself like a built-in mirror. Its unique portable design is perfect for school, work or home and can be used with a variety of platforms for maximum versatility.

Prior to using this system, please carefully review and follow the instructions provided within this booklet. Your Transformer HD is ready to use right out of the box. By reviewing all the Transformer HD features and controls before use and following the directions carefully, you'll be able to enjoy all the great benefits from your purchase. Enhanced Vision products are designed to give you the highest quality image, OCR accuracy, convenient easy-to-use features and years of reliable service. Thank you for choosing the Enhanced Vision Transformer HD.

**Product enhancements and revisions are an integral part of what we do here at Enhanced Vision. Please visit -**

**<https://www.enhancedvision.com/support/user-manuals.html>**

**and select your Enhanced Vision Product. You will find the most up-to-date version of your User Manual here.**

## FCC COMPLIANCE NOTICE

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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, you are 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 your authority to operate this equipment.

Transformer HD 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. Therefore it is encouraged to only use the cables provided with Transformer HD. It is your responsibility to use the interface cables supplied with the equipment.

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# TABLE OF CONTENTS

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Safety and Care. . . . . 5-7

System Requirements and Compatibility . . . . . 8

Transformer HD Packaging and Accessories . . . . . 9-10

Transformer HD on Board Controls . . . . . 11-12

Setting Up Transformer HD. . . . . 13-17

Transformer Device Status LEDS . . . . . 18-19

Software Installation on Transformer . . . . . 20-22

Transformer HD Keyboard Shortcuts and Gestures . . . . . 23-27

Transformer CCTV Camera Orientations . . . . . 28-33

Transformer HD System Menu Overview . . . . . 34-46

Transformer HD OCR/Text-To-Speech Mode . . . . . 47-49

Transformer HD Power States. . . . . 50

Tips & Tricks . . . . . 51-52

Troubleshooting. . . . . 53

Transformer HD Specifications . . . . . 54

Warranty Statement and Contact Information . . . . . 55

Other Enhanced Vision Products . . . . . 56-58

Notes . . . . . 59

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## SAFETY AND CARE

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To ensure your safety and obtain the most benefit from Transformer HD, please review these safety precautions carefully.

Transformer is designed to enlarge and enhance text and objects 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.

Transformer HD 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 Transformer HD for a patient's individual condition.

### **Precautions for Use**

- Follow all warnings, cautions, and instructions marked on the product.
- Use Transformer HD on a stable, level surface such as a solid desk or table, according to its intended design specifications.
- Avoid placing Transformer HD on an unstable table, cart or stand. It may fall causing serious damage to the unit or bodily injury.
- Use Transformer HD indoors only – it should NOT be exposed to extreme or rapid changes in temperature or humidity. Do not place Transformer HD near a radiator, heater or areas exposed to long hours of direct sunlight. These conditions may cause damage to the unit's electronics or optics.
- At least once per week, clean Transformer HD with a soft dry cloth or an electrostatic dusting cloth. DO NOT use liquid cleaners on its plastic surfaces. No additional methods of sterilization or cleaning are recommended or required.
- Do not use Transformer HD near flammable materials or liquids.

### **Additional Mechanical Safety Precautions**

Your Transformer HD features an adjustable Camera Arm. It has a variety of usable orientations. Please do not attempt to forcibly reposition or adjust the camera arm outside of the ranges demonstrated on Pages 13 & 28-33. It may cause damage to the device.

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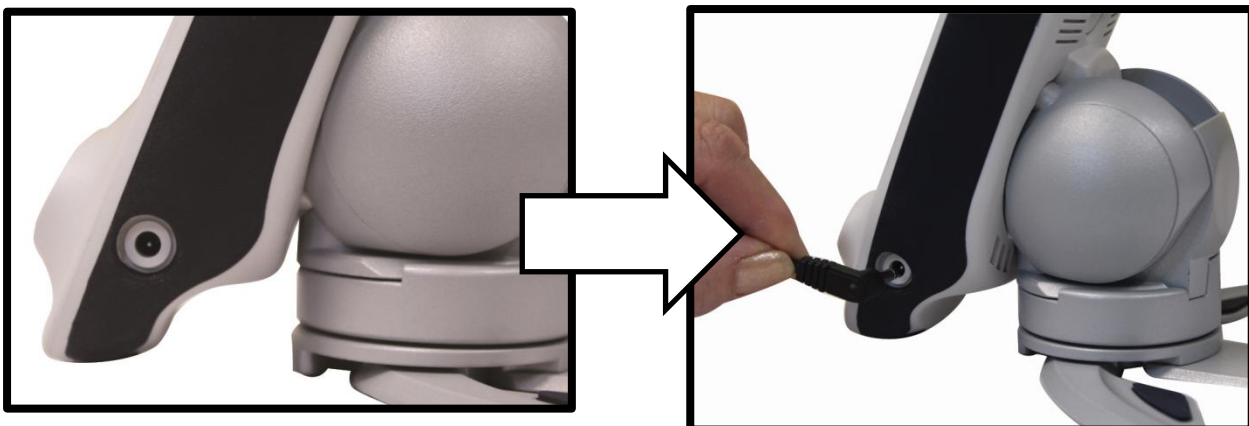
## Caring for Transformer HD

- Always turn the power OFF by pressing the green power button on the front of the device for five seconds when Transformer HD is not in use and not connected to External Power.
- Optionally you may also place the device into “Standby” state which is a power saving mode by pressing the green power button for less than 5 seconds or by disconnecting the HDMI or USB 3.0 cable from the Transformer.
- Ensure that your Transformer HD is completely OFF before cleaning.
- Clean Transformer HD with a soft dry cloth or an electrostatic dusting cloth. DO NOT use liquid cleaners on its plastic surfaces.
- To prolong the life of Transformer HD remove the battery from the device if it will not be in use for one week or more.
- The protective glass covering the camera can be cleaned as needed with the lens cloth provided within the packaging of Transformer HD. DO NOT use liquid cleaners on the plastic surfaces. No additional methods of sterilization or cleaning are recommended or required.

## Susceptibility to Interference:

There may be temporary degradation of the image when Transformer HD 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, disconnect the AC power from the electrical outlet, wait 30 seconds, and connect the AC power again.

- This product contains moving parts. Please use caution when moving the adjustable arm or when transporting the Transformer to avoid possible injury to hands and fingers.
- To avoid personal injury or damage to the Transformer, do not make any other type of power connections to the input ports besides those indicated in these photos.



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## Additional Electrical Safety Precautions

- The power supply cord is a disconnect device for electrical equipment. The socket-outlet should be installed near the equipment and be easily accessible.
- Do not use Transformer HD in, near or around water. Transformer HD is not designed to offer protection against contact with liquids of any kind.
- Use only the power supply provided with your Transformer HD. Using unauthorized power supplies may cause serious damage to Transformer HD's electronic components.
- Using any other power supply than the one provided by Enhanced Vision for Transformer HD will void the warranty.
- Always place the power cord away from traffic areas to avoid damage to the power supply.
- Prevent the risk of electrical shock by NOT attempting to disassemble the unit. Please refer all service to an authorized repair facility.
- Please ensure that you make all proper cable corrections illustrated in this manual.

## Transporting Transformer HD

- Transformer comes with a convenient carrying case for transport. To prevent the unit from being accidentally dropped and damaged, always return the transformer to the carrying case when not in use.
- Disconnect and secure all power and video cables before moving the unit.
- Carry the unit long distances by firmly grasping the Transformer HD Main Body when it is in the folded position. **Do not carry Transformer HD by the Camera Head since this may result in damage to your device.**

## Optional Transformer HD Suction Base Precautions and Use Instructions

- As an Optional Accessory Transformer HD can be equipped with a Suction Cup base stand which allows the user more desk space than the Standard Transformer HD Legs.
- In order for ideal contact the Suction Cup base should be attached to a smooth surface that is clean and free from debris.
- The suction cup base should be checked periodically to ensure that it is still secure if being used on the same surface for an extended period of time. **Failure to do so may result in the Transformer HD falling over unexpectedly from insufficient suction force. The fall could potentially result in damage to the unit.**
- Please refer to steps 1 and 2 of the Transformer HD Suction Base installation guide that is included when you purchase this accessory. It contains the details of attaching the suction base to the Transformer body.



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# System Requirements and Compatibility

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Transformer HD is intended to be used alongside an HDMI Monitor, Desktop/Laptop computer or Android/iOS Tablet. In order for you to get the best experience possible please ensure your system meets these minimum requirements for connectivity with Transformer HD.

## ***Supported Operating Systems:***

- Windows 7, 8.1, 10 (64-bit)
- Android OS 4.4 or higher (Wi-Fi Only)
- iOS 7 or higher (Wi-Fi Only)
- MacOS 10.12 (Sierra) & 10.13 (High Sierra)

## ***Monitor Requirements:***

- HDMI/DVI Input
- For 1080p camera viewing a Full HD (1920p x 1080p) compatible monitor is needed.
- For 720p camera viewing a HD (1280p x 720p) compatible monitor is needed.
- Screen Resolution (Minimum) 1366x768

## ***Processor Requirements:***

- AMD Desktop/Laptop Processor Requirements
  - AMD A10 Series APU with 2.5GHz or higher
  - FX-7600P Processor family with 2.7GHz or higher
- Intel Desktop/Laptop Processor Requirements
  - Core i3 with 2.4GHz or higher. (Windows)
  - Early 2013 model or later 1.3ghz CPU (Mac)
- Android Processor Requirements
  - Exynos 7 Octa 5433 Octa-core, 1900 MHz, ARM Cortex-A57 and ARM Cortex-A53, 64-bit or higher
- iOS Processor Requirements
  - Apple A7 Dual-core, 1300 MHz, Cyclone, 64-bit or higher

## ***Graphics Requirements:***

- ATI Radeon™ R6 Graphics or higher
- Intel HD graphics 4600 or higher

## ***RAM Requirements:***

- Desktop/Laptop- 4GB RAM
- Android System- 3GB RAM
- iOS System- 1GB RAM

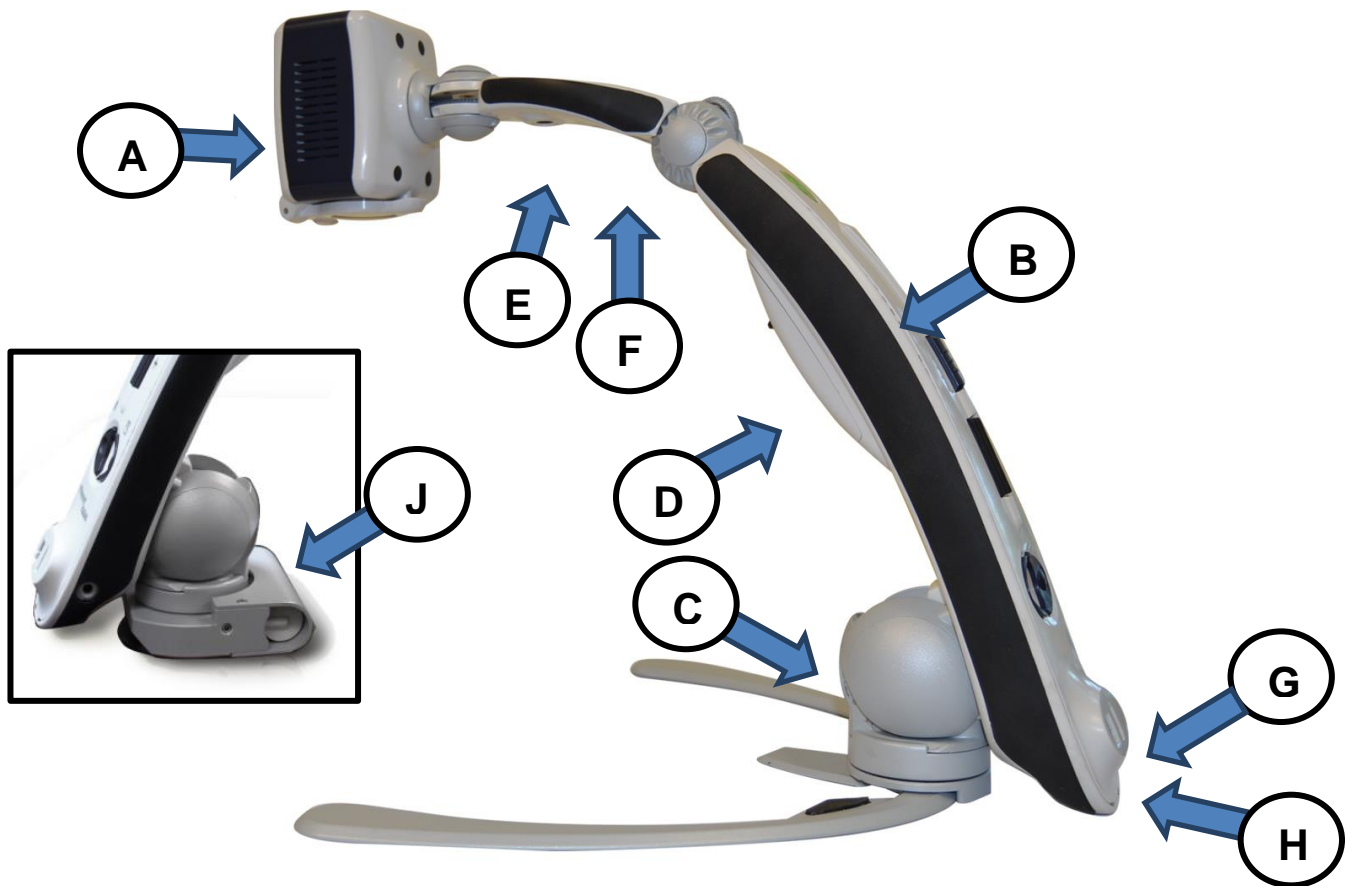
## ***Wi-Fi Requirements:***

- 802.11n 2.4GHz wireless adaptor

## ***USB Requirements:***

- USB 3.0





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## ***Transformer HD Packaging & Accessories***

Take a few moments to familiarize yourself with Transformer HD and the included accessories:

- A. Camera Head – Rotates 350°
- B. Transformer Main Body
- C. Foldable Base Stand
- D. Battery Port & Battery Cover
- E. OCR Camera (Optional – Depending on Model Purchased)
- F. LED Light
- G. HDMI Type A Port
- H. USB 3.0 Type B Port
- I. Power Jack
- J. Transformer HD Suction Cup Base (Optional Accessory – Interchangeable with standard Transformer HD Legs)

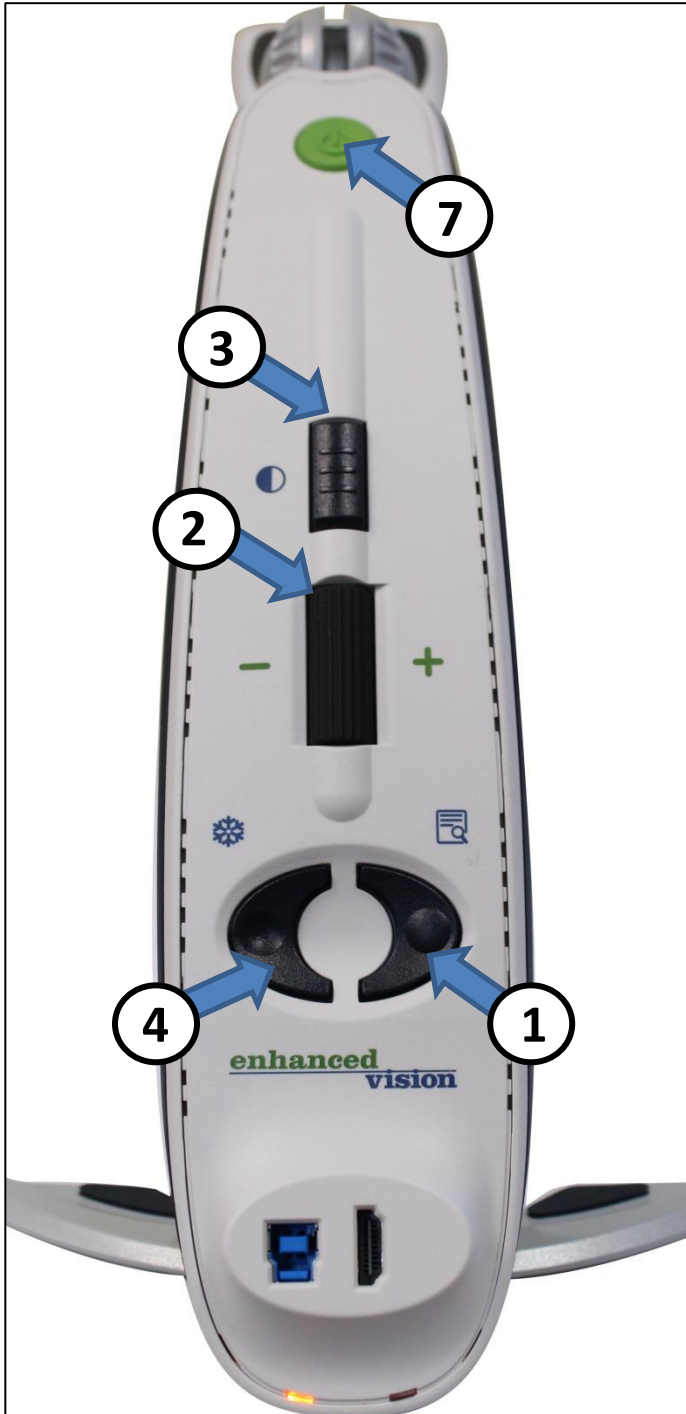
### **Accessories included:**

- 1. (2) Transformer HD Batteries
- 2. HDMI Cable - 6ft or 1.8m HDMI Type A to HDMI Type A cable
- 3. USB 3.0 Cable - 3ft or 1m USB 3.0 Type B to USB 3.0 Type A cable
- 4. DVI-D Single Link Male to HDMI Female adapter
- 5. USB Flash Drive w/Transformer HD Software Installer
- 6. Power Supply - 9volt 2.6 amp
- 7. Lens Cloth
- 8. Carrying Case

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## Transformer HD on Board Controls

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*See the following Page for these Controls in detail*

- 
1. **Find** – Press and Hold to activate the “Find” feature which will minimize your magnification level. When you release the button it will return to your previous magnification level.

*You use this feature to “Find” your target easily which can sometimes be challenging at higher magnification levels.*

*Additionally you can press Find simultaneously with Freeze to turn the LED light on and off.*

2. **Zoom Wheel** – Turn clockwise/counter-clockwise to increase/decrease the zoom level.

The Zoom Wheel is also used to navigate items in the menu.

3. **Viewing Mode** – Press this button to toggle through different color viewing modes.

Press and Hold Viewing Mode for more than 5 seconds to switch to your Secondary Full page OCR camera or back to CCTV Camera. (OCR Units Only)

Viewing mode is also used to confirm selections in the Transformer CCTV Menu.

4. **Freeze**-Press button to capture image.

Press and hold the Freeze Button to engage the menu when in CCTV Mode and connected via HDMI Television or Monitor.

*Additionally you can press Find simultaneously with Freeze to turn the LED light on and off.*

5. **Rotate**- Press this button to rotate the image
6. **Reset**- Shuts off the power to the Transformer HD when on wall power. Restarts the Transformer HD when on battery.
7. **Power**- Press this button briefly to Power on your device or place your device into standby if it was already on.

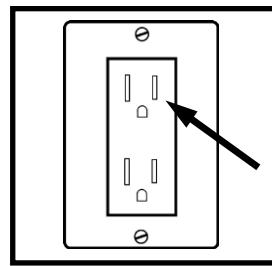
Press this button for more than 5 seconds to fully power your device Off. *Make sure your device is not connected to DC power when trying to fully power off.*

# Setting Up Transformer HD

1. Find a steady and level location, such as a table or desk, where you will be comfortable using Transformer HD. Remove the device from the convenient carrying case and place it there. Hold the legs of transformer firmly and then carefully unfold the Camera Arm so that the arm is in an upright position. Then spread the legs evenly to your desired width. The wider the legs, the more balanced when pivoting or rotating the Transformer HD Camera Head.



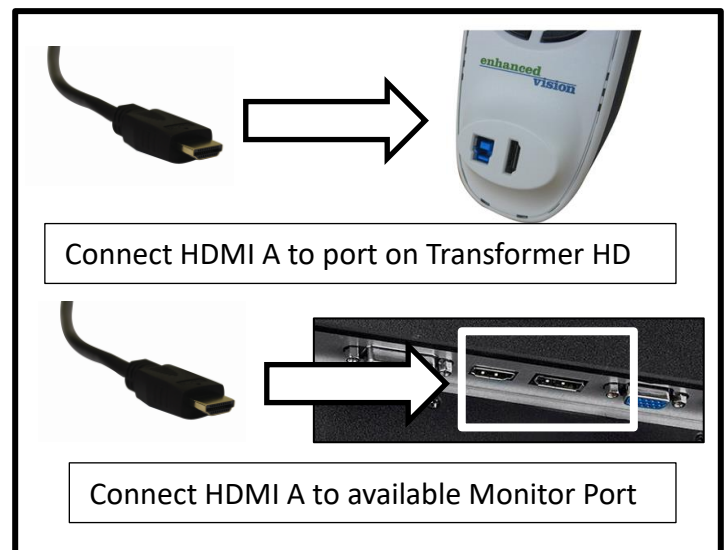
2. If this is your first time using Transformer HD or you need to charge the battery, please connect the AC Power Supply provided to an available wall outlet and then attach the connector located to the Transformer HD.



3. Transformer HD is highly configurable and there are 4 types of connections you can make with Transformer HD. Please review each of their unique configuration details and startup steps.

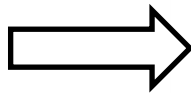
- HDMI- This mode is viewable on a simple Television or Monitor. Simply connect the provided HDMI Cable to your Transformer HD and an HDMI Compatible Display such as a TV or Computer Monitor. Press the Power Button on the Transformer HD to start the device. Only the Transformer “On Board” controls will be available in this Mode.

*\*Please note that performing OCR is not possible in HDMI Mode even if you have purchased an OCR Enabled Model.*

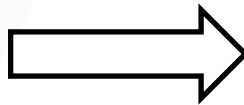


- **USB 3.0:** This mode is a Computer to Transformer HD Connection that displays on your Computer Screen via a Wired USB Connection. As a pre-requisite to using USB 3.0 mode you must install the Transformer HD application on your computer. As a convenience the included USB Flash Drive also has all the software available to get started. Next connect the provided USB 3.0 Cable to your Transformer HD and an available USB 3.0 port on your PC. Then press the Power Button on the Transformer HD and launch the Transformer HD App to start.

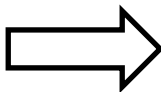
*\*Please note: USB 3.0 ports and cables can be easily identified via their blue color coding or Via the USB Super Speed Logo.*



Install Transformer HD Application to Computer



Connect USB 3.0 B Male Connector To Transformer HD

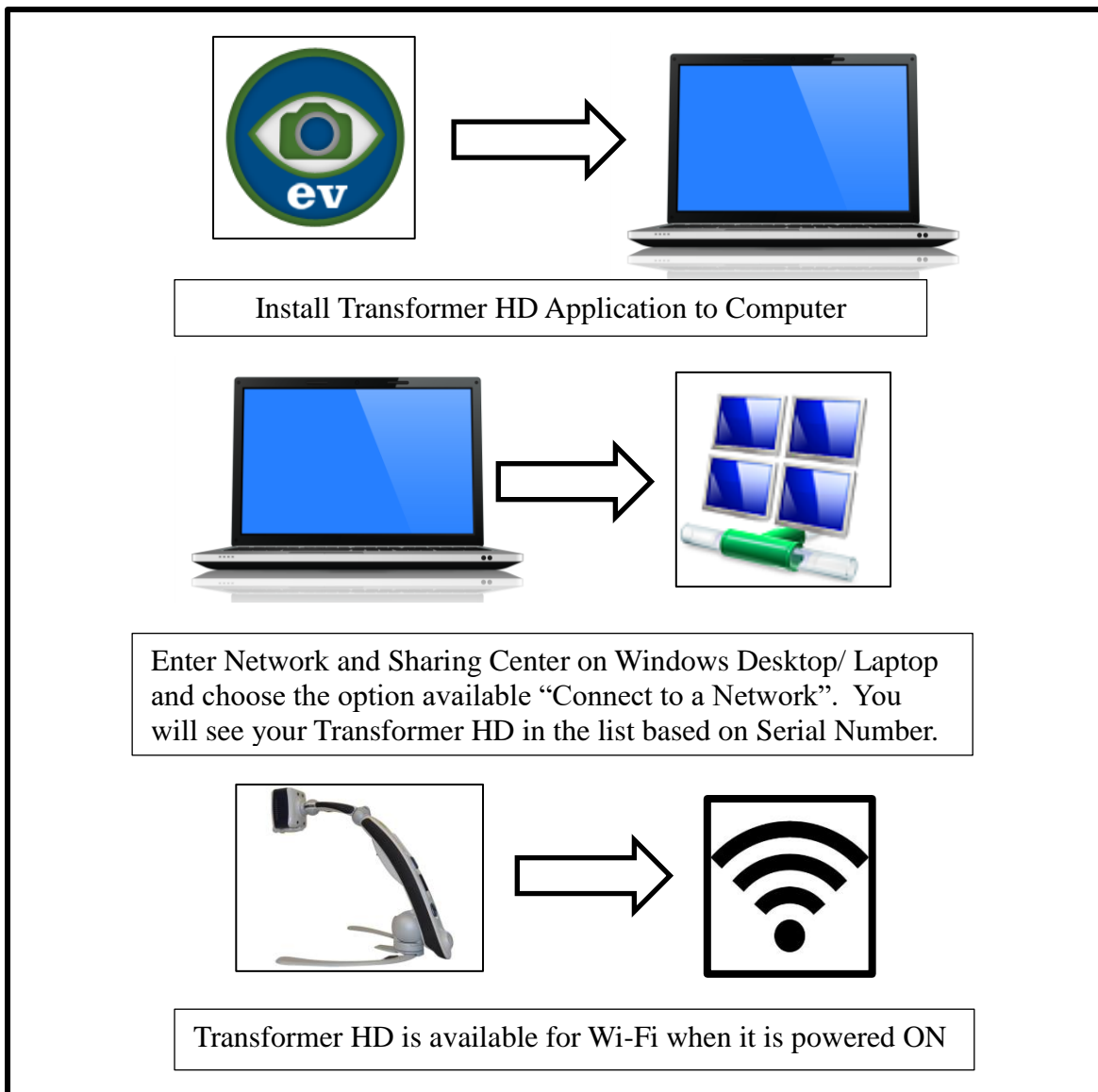


Connect USB 3.0 A Male Connector to Blue USB 3.0 on PC



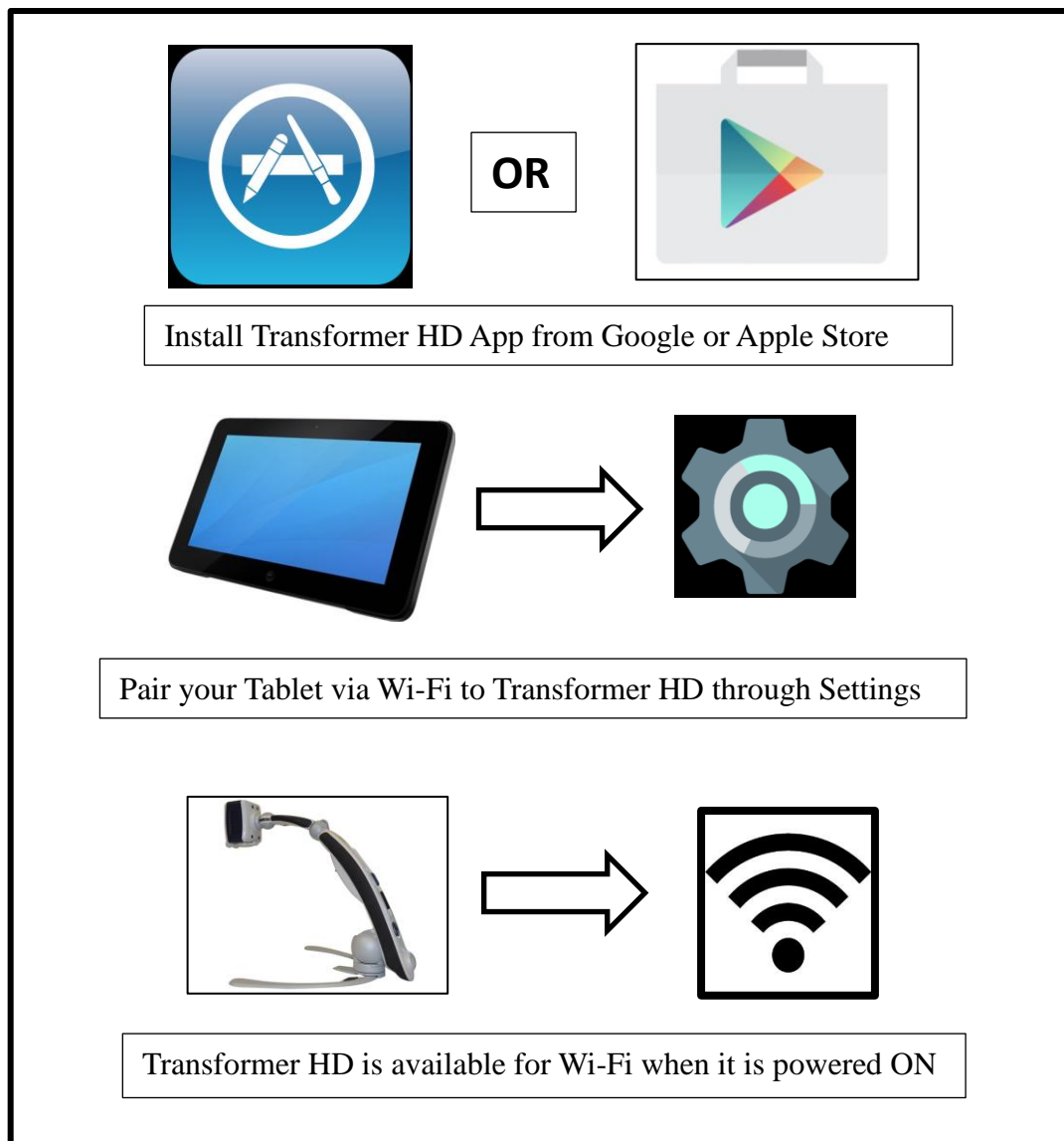
- Computer or Laptop Wi-Fi: This mode is a wireless Computer to Transformer HD connection. Before you can start using Transformer HD Wi-Fi you must install the Transformer HD application on your computer or laptop. As a convenience the included USB Flash Drive also has all the software available to get started. To connect your Transformer Wirelessly make sure that your Wi-Fi adaptor is turned on, review the Wi-Fi Configuration Steps in the following sections for more information regarding pairing your Transformer HD. When you attempt to connect please input the default password “EV\_TransformerHD”. When the two devices are connected properly launch the Transformer HD Application and press the Power Button on Transformer HD.

*\*Please note: Transformer HD Utilizes the same Wi-Fi Network adaptor that many users connect to their wireless routers and the internet. In this case when you are connected to Transformer HD Wirelessly you will not have internet connectivity. To remedy this circumstance it is suggested that when you are using Transformer HD you utilize a wired network connection or use a second Wi-Fi adaptor if available.*



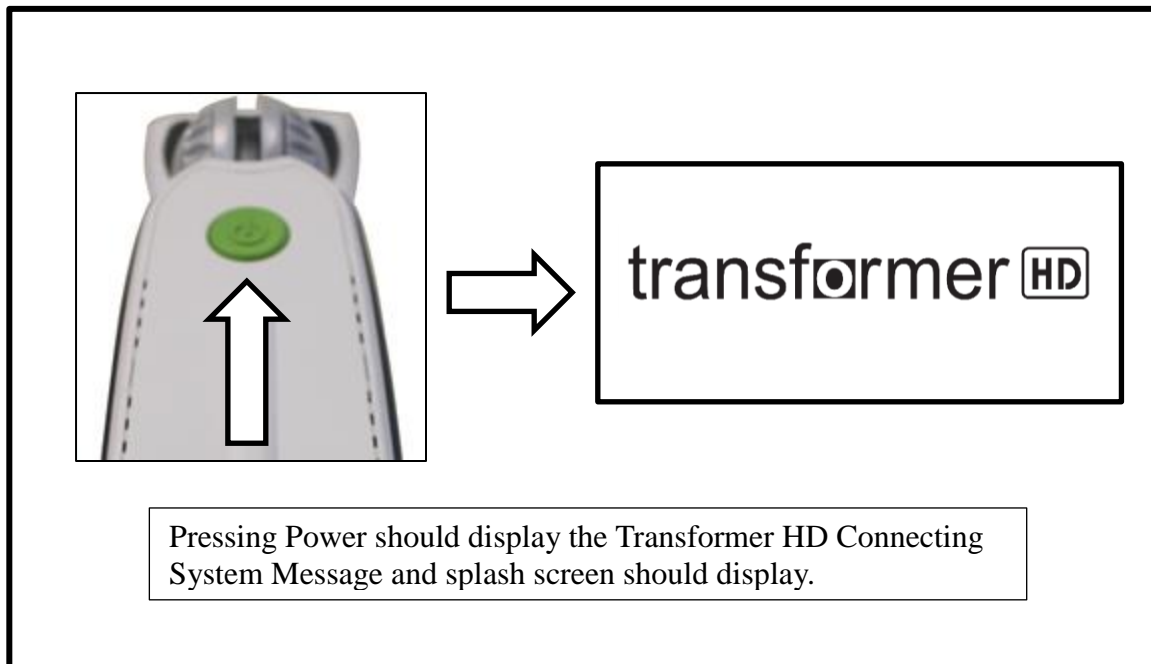
- Tablet Wi-Fi: Transformer HD is compatible with iOS and Android Tablets. A connection is possible with your Transformer HD via Wi-Fi. As a pre-requisite to using Transformer HD via Wi-Fi and Tablet you must install the Transformer HD App from either the Google Play or Apple App Store. Ensure that your Wi-Fi connection is enabled/turned on in your tablet settings menu. Review the Wi-Fi Configuration Steps in the following sections for more info. When you connect please input the default password “EV\_TransformerHD”. When the two devices are connected properly launch the Transformer HD App to Start and press the Power button on Transformer HD. If you have a camera enabled the video stream will display your Tablets default Camera video stream while it waits to connect.

*\*Please note: Transformer HD Utilizes the same Wi-Fi Network adaptor that many users connect to their wireless routers and the internet. For most tablets this means that when you are connected to Transformer HD your internet connection will not be available.*





4. Regardless of which display combination you are using the Transformer must be turned ON in order to use it. A message will display saying “Connecting Transformer” you should then press the Power Button once and only once. A Transformer HD Logo should appear. Afterwards an image should appear on your Display and you will enter into “Live CCTV View”. The device indicates its connections status via on-board LED’s. The table describing these states in detail is located in the following section. Please be patient as the unit starts up and establishes connection.



### Wi-Fi Configuration Steps:

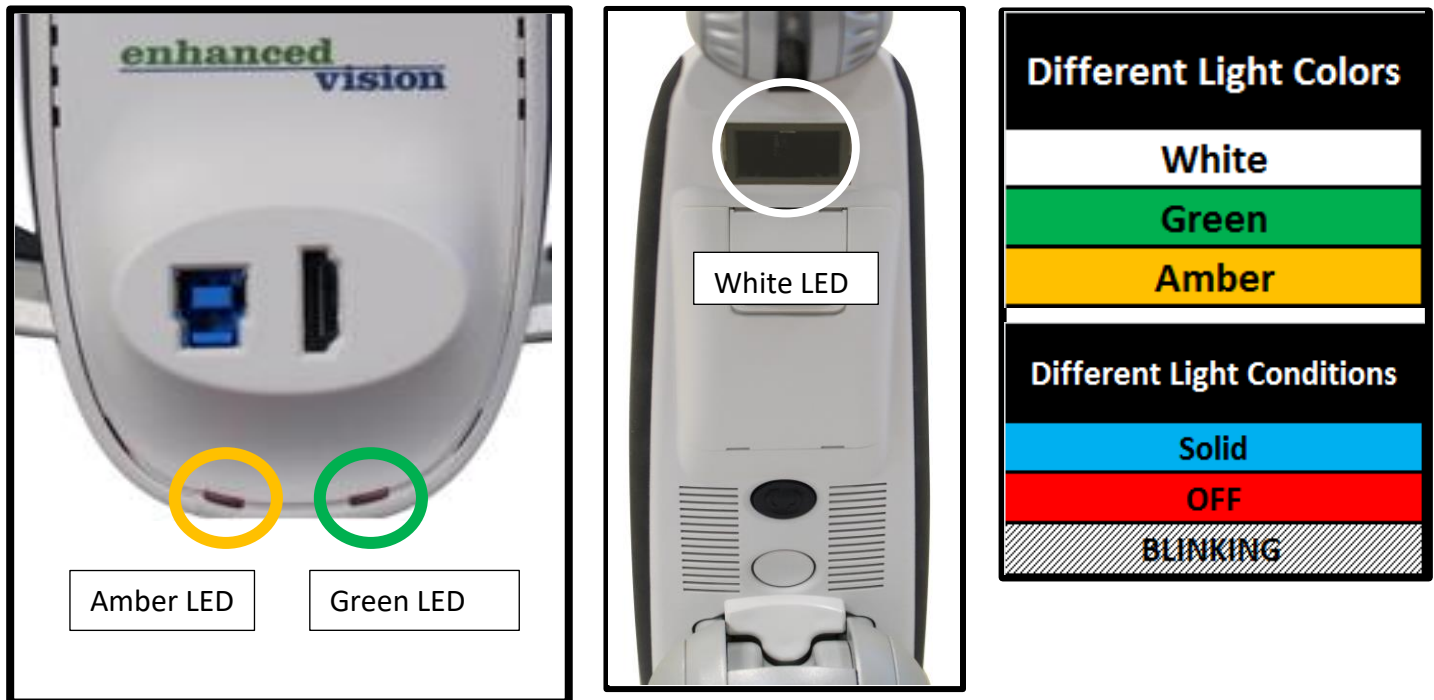
If you intend to utilize your Transformer HD via Wi-Fi use these steps to pair your Computer or Tablet to the Transformer so you can use it wirelessly.

- Step #1: Enter into your Computer Network Settings Tablet Wi-Fi Settings (Make sure your Wi-Fi Adapter is turned ON)
- Step #2: Scan for nearby Wi-Fi networks and identify the Transformer HD by its Serial Number which should be clearly labeled on your Transformer HD.
- Step #3: Choose to connect to this device
- Step #4: You should receive a prompt for a network password which is set by default to be “EV\_TransformerHD”
- Your Wi-Fi Password and SSID can be changed in the settings menu on the PC Viewer application
- Step #5: If you have multiple networks configured always check your Network list to ensure that your Transformer HD is selected prior to use.



## Transformer Device Status LEDs

The Transformer HD has three LED lights on the device (White, Amber and Green). There are three different conditions these lights can be set to which are On, Off or Blinking in 1 second intervals. Please refer to the tables below for more information on the functions they serve and what the various illuminations and combinations mean. The Power Source Field refers to whether or not you have the device connected to DC wall power or if you are operating off Battery power.



**Power State Indicators and Battery Charging Status Table**

Power Source	Unit State	Green LED	Amber LED	Description
DC	ON	SOLID	BLINKING	Battery Charging
DC	ON	SOLID	SOLID	Battery Full
DC	Standby	BLINKING	BLINKING	Standby/Charging
DC	Standby	BLINKING	SOLID	Standby/Battery Full
Battery	ON	OFF	SOLID	Battery Full/Good
Battery	ON	OFF	BLINKING	Battery Low
Battery	Standby	BLINKING	SOLID	Standby
Battery	OFF	OFF	OFF	Full OFF

For more information on power states please see "Transformer HD Power States" on page 50.

## Display and Connection Readiness Table

Unit State	White LED	Description
ON	BLINKING ON and OFF	Device is not currently connected to any display interface but the device is on and ready to establish connection to HDMI, USB 3.0 or Wi-Fi. <i>*Please note that if you wish to power off the device and turn the blinking lights off simply hold the green power button down for five seconds.</i>
ON	Default ON (User defined)	Device is connected via Wi-Fi/USB/HDMI <i>*Please note that you can toggle the Light On and Off via application or On-Board Controls.</i>
Standby	OFF	This is a power saving mode and User must hit the Green Power button to power the device On to make it ready for use.
OFF	OFF	Device is Off (unless turned off by User) and is not ready for connection. <i>*Please note that the device is powered on by a brief power button press.</i>

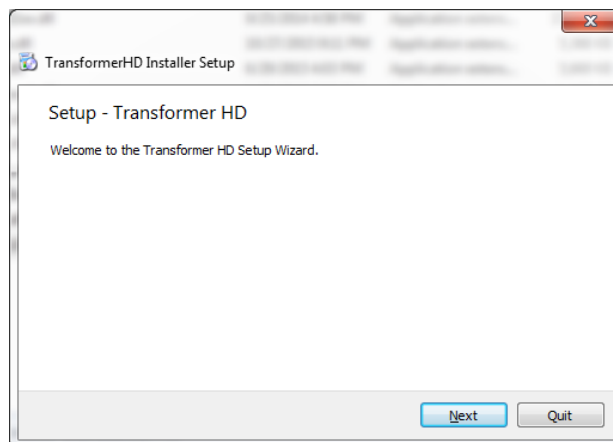
This table indicates whether or not your device is on and ready to Pair. Please pay special attention to the fact that the White LED can be turned on or off by the user when device is already in operation for illumination and is not exclusively used for device status. In this circumstance please also reference the status LED's underneath the HDMI and USB 3.0 ports on the back of the Transformer HD.

# Software Installation on Transformer HD

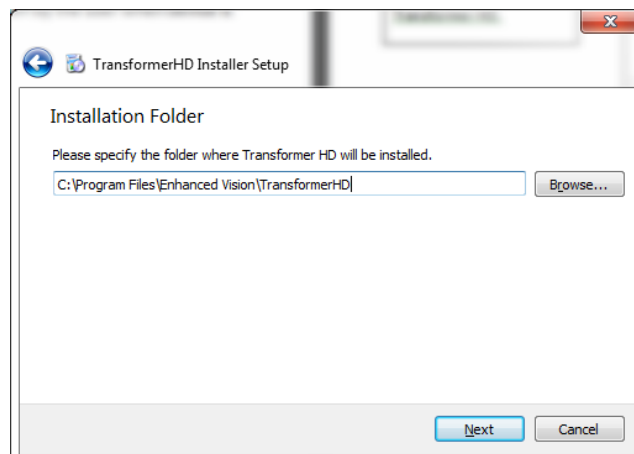
Transformer HD is the name of the software that interfaces with Transformer HD and allows you to display the CCTV Video when connected to a PC or Tablet. There is a unique software package that must be installed on PC, Android or iOS. It should be included on the USB thumb drive provided with your purchase. Future software upgrades will be available from our website at [www.enhancedvision.com](http://www.enhancedvision.com) as a download. If you are using a Tablet the Enhanced Vision App will be available on the Google Play store or Apple Store Depending on your device. The PC Installation method is shown here as an example however the Mac Installation screen is similar with a few cosmetic differences.

Step #1 is to begin the Transformer HD Installer Program. This is located on the USB Flash Drive in the "TRHD Windows for Windows Installation or MacOS Installer" folder . This flash drive was included with your purchase of Transformer HD.

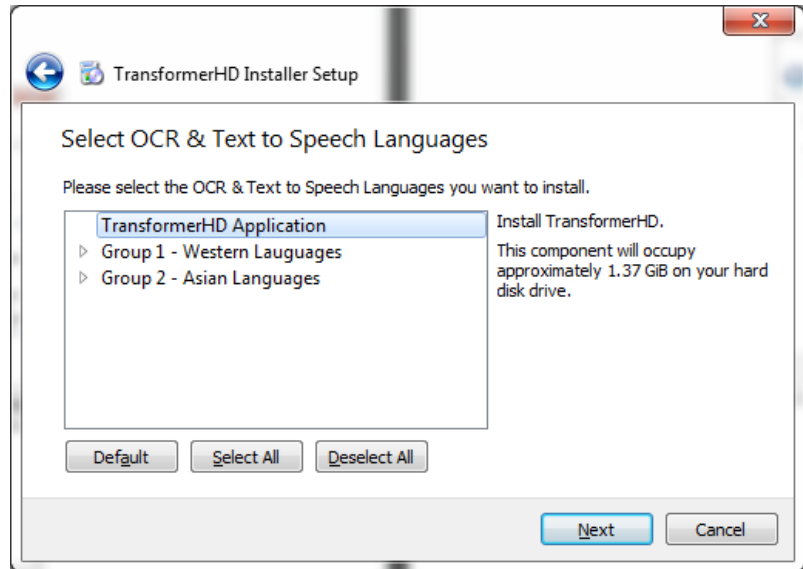
TRHD-MacOS Installer  
TRHD-Windows Installer  
repository



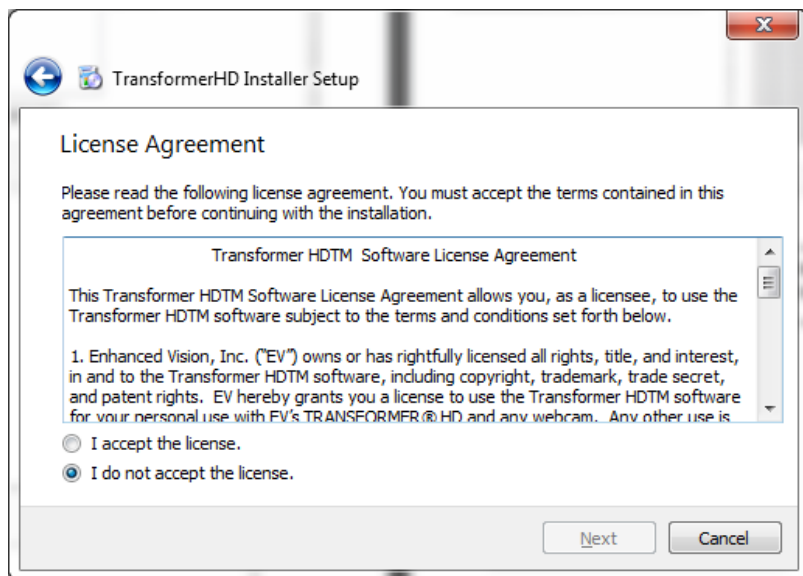
Step #2 is to choose the Installation Folder path.



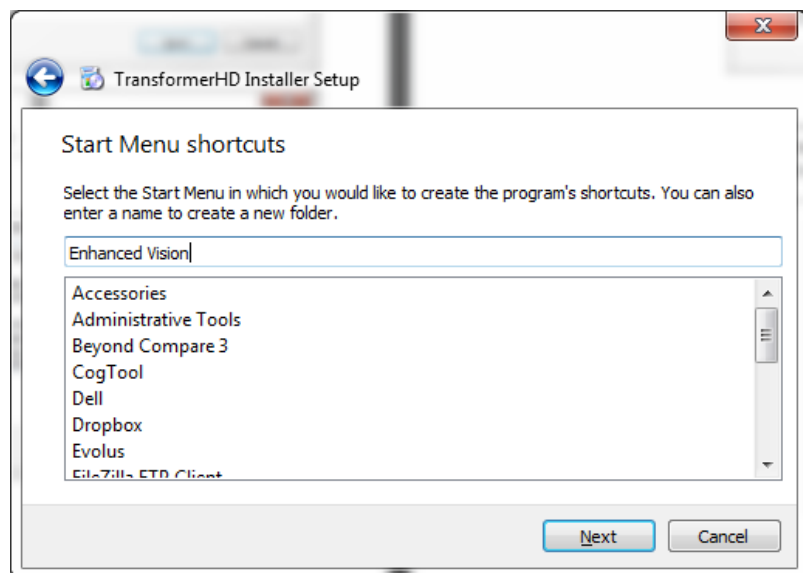
Step #3 is to select your desired language(s). You can select more than one which will be utilized on optional OCR units to perform Text-To-Speech. Click on the Drop Down arrow to see the full language list.



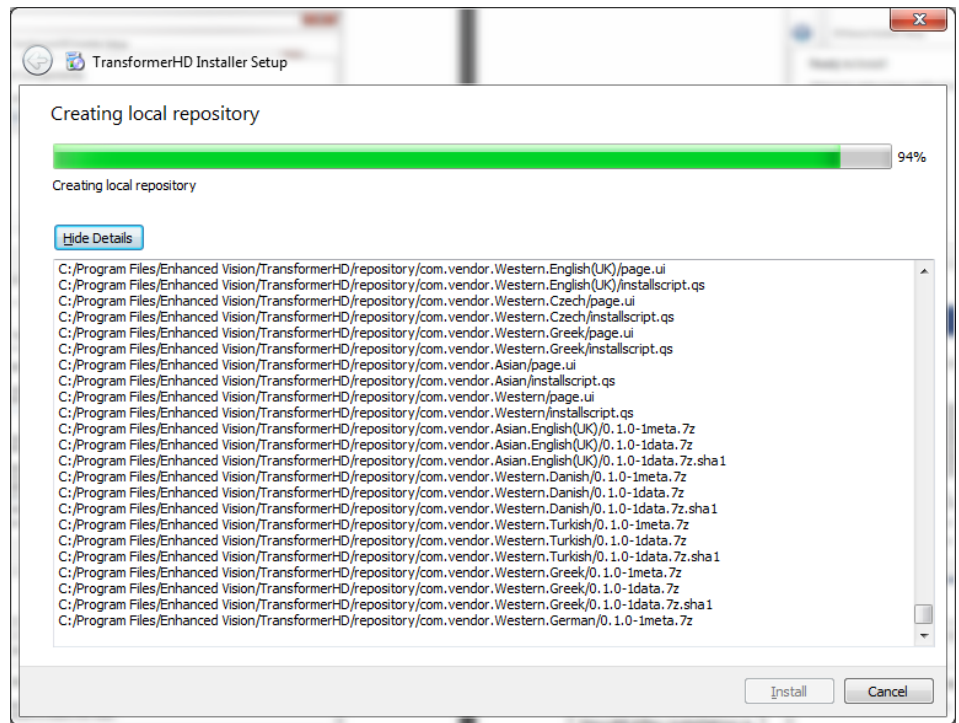
Step #4 is to accept the Transformer HD License Agreement.



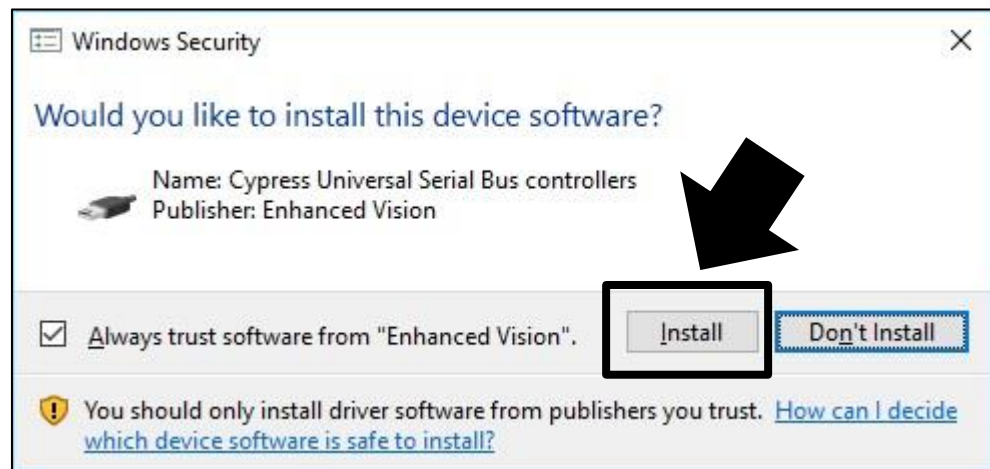
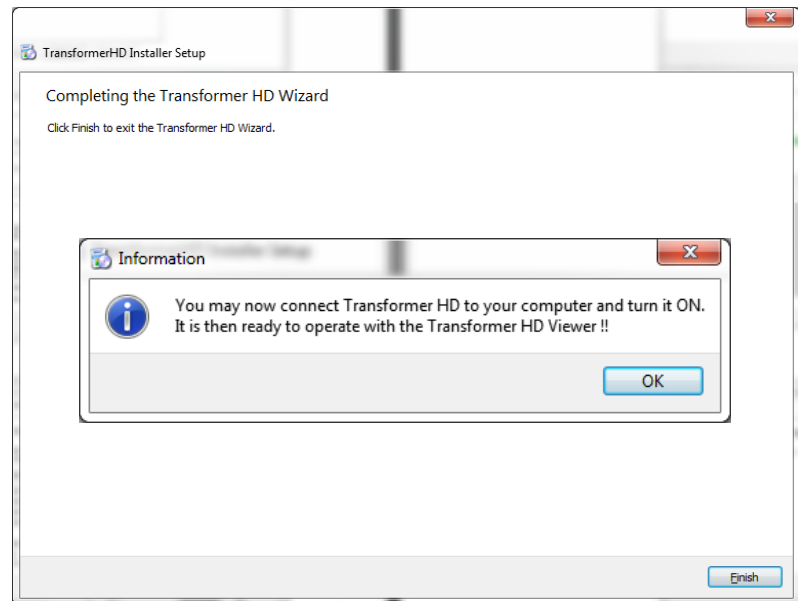
Step #5 is to confirm the Start Menu Shortcuts Location (The Folder name where you will launch the Transformer HD app from) and your readiness to install.



Step #6 Please be patient while the installation process completes.



Step #7 (Note this step only occurs on Windows based PC's. At this step you will be prompted to accept the driver installation vital to the function of your Transformer HD (**THIS IS ESSENTIAL to using Transformer HD**). You will also be prompted to connect your Transformer. After installation is complete the Transformer HD App will be available to launch.



# Transformer HD Keyboard Shortcuts and Gestures

The Transformer HD Application has a number of keyboard shortcuts available so you can quickly access certain features without having to navigate through the menus.

## Shortcut Button Combinations

Some Features on Transformer HD are accessed through a combination of buttons on your keyboard. In this User Manual there will be references to these 'button combinations' (e.g. Press "CTRL" + "S"). This indicates that the buttons should be pressed together simultaneously.

## Key Combination Shortcuts:

### Command Key Quick Reference

↑ , ↓ , ← and → are the arrow keys.

If two or three distinct keys are mentioned such as "CTRL S" it indicates that the user should press those keys down simultaneously. Windows Shortcuts (Left Side) & Mac Shortcuts (Right Side).



<b>FILE</b>	Windows	Mac
<b>Save Image</b>	<b>CTRL S</b>	<b>⌘ S</b>
<b>Open Image or Video</b>	<b>CTRL O</b>	<b>⌘ O</b>

<b>DISPLAY</b>	Windows	Mac
<b>Light On/Off</b>	<b>L</b>	<b>L</b>
<b>Next Preferred Color Mode</b>	<b>C</b>	<b>C</b>



<b>GENERAL HELP</b>		
	Windows	Mac
Help	F1	F1
Bring TransformerHD Window in Focus	CTRL ALT G	⌘ ⌥ G
Battery Level	CTRL B	⌘ B
Help Menu	CTRL /	F1
Restore Factory Settings	CTRL R	⌘ R
Product Information	F2	F2
Quit	ALT F4	⌘ Q

<b>MARKERS</b>		
	Windows	Mac
Horizontal Marker	H	H
Vertical Marker	V	V
Marker Thickness	M	M
Marker Position	CTRL +/-	⌘ +/-
Marker Spacing	+/-	+/-
Cycle through Markers	CTRL G	⌘ G



<b>CAMERA</b>		
	Windows	Mac
Switching Camera	CTRL C	⌘ C
Freeze	Space bar	Space Bar
Image Capture	CTRL E	⌘ E
Start- Stop Recording	CTRL P	⌘ P
Zoom In	↑	↑
Zoom Out	↓	↓
Find Location	F	F
Auto Focus	CTRL A	⌘ A
Rotate Image	R	R

<b>WINDOW</b>	Windows	Mac
Minimize Window Size	CTRL M	⌘ M
Close OCR Window	CTRL W	⌘ W
Enable Full Screen	F7	F7
Change Window Position	F8	F8
Place Window in Bottom half of screen	CTRL ↓	⌘ ↓
Place Window in Top half of screen	CTRL ↑	⌘ ↑
Place Window in Left half of screen	CTRL ←	⌘ ←
Place Window in Right half of screen	CTRL →	⌘ →
Increase or Decrease Horizontal Window Size	SHIFT →/←	⇧ →/←
Increase or Decrease Vertical Window Size	SHIFT ↓/↑	⇧ ↓/↑

---

The Trackpad Pinch to Zoom commands are invoked when you are using a touchscreen enabled computer or tablet. Scroll commands are utilized via the mouse wheel and Drag to move commands can be utilized with mouse or touchscreen.

## **TRACKPAD**

**The TransformerHD viewer app supports a number of trackpad gestures and other user interface behaviours to make it easier to use.**

## **PINCH TO ZOOM**

**The Pinch gesture (two fingers closing or spreading on the trackpad) zooms the Transformer's camera.**

## **SCROLL TO ADJUST MARKER SPACING**

**Perform scroll using mouse to increase or decrease the spacing between Line and Window markers on the screen**

## **DRAG TO MOVE MARKERS**

**You can change the markers position by clicking and dragging between the two markers.  
You can change the markers width by clicking and dragging on each marker**

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# Transformer CCTV Camera Orientations

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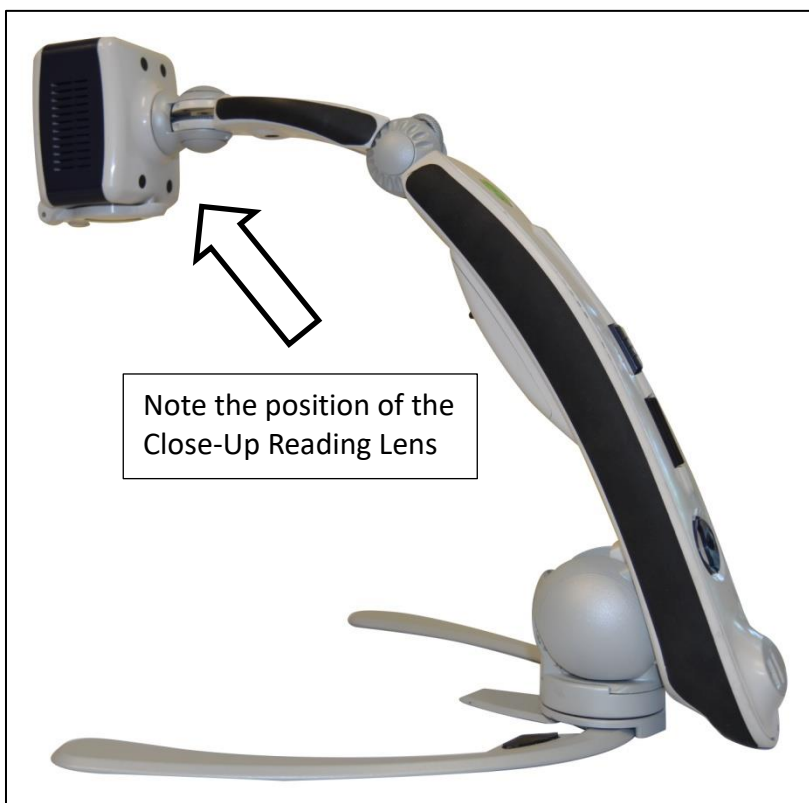
## Transformer Camera Positions

Transformer HD has four modes of orientation. Each mode retains your zoom level and color mode selections and other settings you have configured. It automatically detects when you have changed the camera position and returns them to your previously used preferences. Simply turn the camera head towards the target you would like to view and Transformer HD does the rest.

- Reading
- Distance
- Self
- Arm Upright

## Reading Mode

The Camera can be adjusted downward for reading, writing and enjoying crafts or other hobbies. This makes it ideal for classroom use. When the camera is rotated downward, “Reading” is displayed. Transformer HD can be repositioned to the left or right and slightly up or down. It is best to close the Close-up Lens when objects are placed directly underneath the Camera for optimal viewing clarity.



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## Distance Mode

The camera can rotate forward to capture people, objects and scenery. “Distance” is displayed when changing to this viewing angle. Be sure to open the Close-up Lens for Distance Viewing

This Distance mode enables magnification for objects when viewing at a distance. In this mode, although the camera can view objects at an infinite distance, the recommended distance from camera to the distant object is approximately 5-30 feet. Remember to open the close-up lens to achieve maximum magnification benefit.



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## Self-View

The Self View mode is activated when the camera head is facing towards you and is designed to function as a digital mirror. “Self” is displayed on the device when the orientation is changed. In this position, you can use Transformer HD to help you put on make-up, shave or perform other personal hygiene. For optimum clarity, be sure to open the Close-Up Lens to improve focus for Self-View.



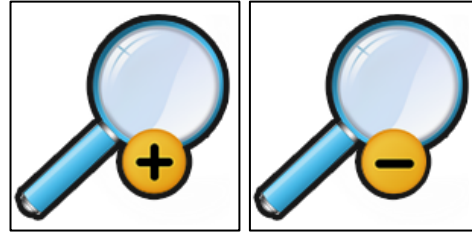
## Arm Upright View

The upright mode is activated when the camera head is aligned vertically and is designed to increase the available height and improves camera panning range. This allows the user a lot of versatility in wide angle viewing and requires fewer position changes of the camera arm when viewing targets such as a black board. It is ideal for targets 5-30 feet away.

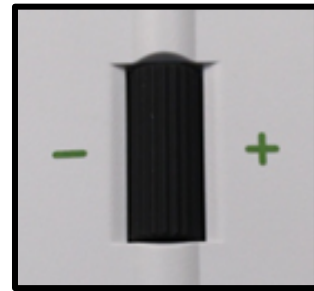


## Adjusting Magnification

Transformer HD offers a large range of magnification capabilities. They can be adjusted via the zoom switch on the unit itself, Computer Keyboard, Touch Screen Gestures or with the menu controls via Transformer HD App.



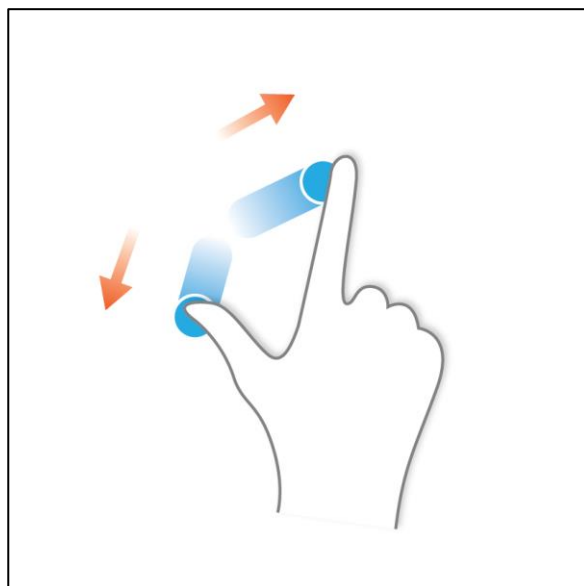
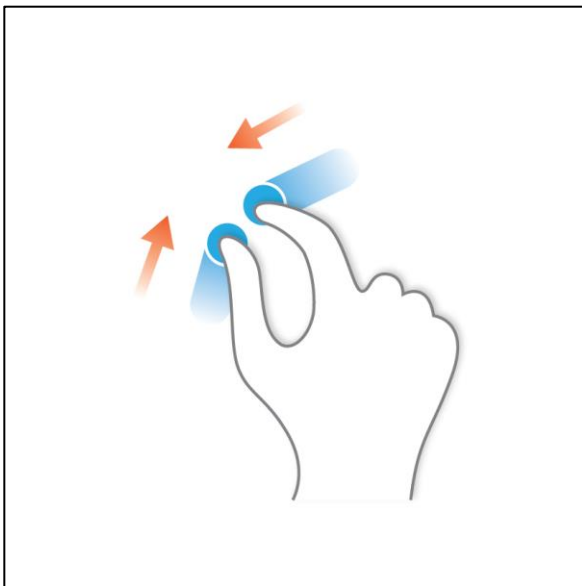
To adjust the magnification turn the zoom switch located on the back of the Transformer HD, or App, until you reach the desired magnification. Turning the switch towards the “+” will increase magnification, and turning the switch towards the “-” will decrease magnification.



The Zoom Level will appear in the upper left corner of your monitor when you are increasing or decreasing magnification.

If you are using a computer with a keyboard you can utilize the Up and Down Arrow Keys to increase or decrease magnification.

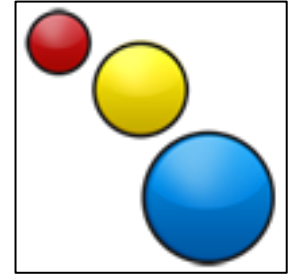
If you are using a tablet you can utilize the Pinch Gesture to increase magnification or Un-Pinch Gesture to decrease magnification.



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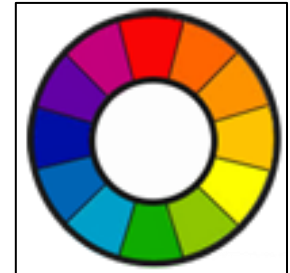
## Changing the Viewing Mode

Transformer HD was designed to provide optimum viewing for people with certain visual conditions by offering a range of choices in both text and background colors. Press the Color Mode button located on the back of the unit, or the Color Mode Controls in the Transformer HD, to cycle between Full Color, Black and White, Enhanced Positive, Enhanced Negative, and up to 5 of your favorite color select modes. The 5 favorite color select modes can be modified to any of the additional 28 color select options by changing your preferred color modes as mentioned in system preferences.



## Adjusting Viewing Modes

You can choose a viewing mode by pressing the Color Mode button located on the back of the unit or the Color Mode Controls in the Transformer HD App.



Each push will allow you to cycle through all of the selected viewing modes.

## Viewing Modes

Available viewing modes can be adjusted via the settings menu option. In Color Mode Selection you will find a list of all the available color combinations with a selectable box. When an option is chosen it will appear in the Changing Viewing Mode section and Adjusting Viewing mode Sections. Scroll down through the entire menu to view the full range of choices.

### Full Color Image

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

### Factory Default Enhanced-Positive Image

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

### Factory Default Enhanced-Negative Image

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

### Factory Default Color 1

In factory default this mode provides a black background with green text.



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## Factory Default Color 2

In factory default this mode provides a black background with yellow text.

## Factory Default Color 3

In factory default this mode provides a yellow background with blue text.

## User Defined Color 4

In factory default this mode is turned off.

## User Defined Color 5

In factory default this mode is turned off.

## Using the Find



The Transformer Find feature can help you quickly identify where you are currently magnified on a page, or can easily locate a specific part of an object you want to view more closely.

While magnified, press and hold down the Find button on the Transformer HD Body.

- The Transformer will automatically zoom out to the widest field of view, and a "target" will appear in the center of the monitor screen.
- Move your work or reading material until you have located the desired item within the "target" area.
- Release the Find button, and it will magnify the item you located within the targeted area.
- Keyboard Shortcut "F"

## Using the Freeze Function



Freeze allows you to take a snap shot of what the Transformer 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 Transformer only:
- Press the Freeze button to activate Freeze mode
- To release the Freeze mode, press the Freeze Button again or change the viewing angle/Camera Position.
- Keyboard Shortcut "Space"

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# Transformer HD System Menu Overview

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## System Tool Bar

Once Transformer HD has been set up and turned on, you will notice a toolbar along the top of the Transformer HD Application Window. While in Full Screen Mode on PC you can hover your mouse over the top left hand corner of the screen to list a “Menu” pop up. Left clicking on this menu option will cause the tool bar to appear. This bar contains all of the accessible features that you will interact with when using Transformer HD when connected to a PC or Tablet. They are listed below.

### Transformer HD Tool Bar


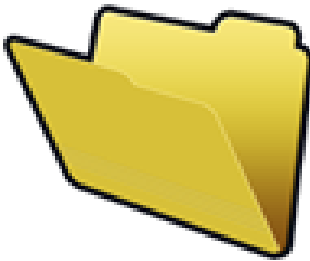
**File Camera Display Markers Window Settings Help**

1. **File** - Open and Close Files, Images & OCR Text with the Transformer HD Application.
2. **Camera** – Switch between OCR and CCTV Camera; Freeze an Image, Record a Video, Adjust Zoom Level, Engage Find Function, Turn on Auto Focus Rotate the Image.
3. **Display** – Turn LED Light On and Off, Adjust Viewer Brightness, Change Color Mode and Adjust Color Mode Preferences.
4. **Markers** – Turns Line and Window Markers On and Off, Adjusts Line Marker Thickness.
5. **Window** – Minimizes Transformer HD App, Enables or Disables Auto-Full Screen Settings Choose Viewing Window Position.
6. **Settings** – Reset Factory Defaults, Set User Preferences, Adjust Language, change resolution, configure Wi-Fi Name and Password, View your Software and firmware information, change between Left Handed and Right Handed Modes or configure device Information.
7. **Help** – Lists Shortcut information and quick reference.

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## File Tab





The file tab includes two features that allow you to organize and access your saved files. These features can be accessed in both CCTV and OCR Modes.

	<p><b>Feature: Save</b></p> <p><b>Shortcut: “CTRL” + “S”</b></p> <p>The Save Feature is used to save an image from the CCTV or OCR Camera (Where Applicable). Once an OCR Scan has been performed, it can also be used to save an OCR Text File.</p>
	<p><b>Feature: Open</b></p> <p><b>Shortcut: “CTRL” + “O”</b></p> <p>The Open Feature is used to open any type of file that you had previously saved with Transformer HD. This includes .jpeg (Saved Image), .txt (Saved OCR where applicable on enabled device) or .avi (Saved Video).</p>

## Camera Tab

The camera tab contains all the features associated with your Transformer HD Camera. The full details are listed below as well as the necessary shortcut to activate those features.

	<p><b>Feature: Live CCTV Camera</b></p> <p><b>Shortcut: “CTRL” + “C”</b></p> <p>This swaps to the CCTV mode camera (If you were in OCR Mode) which is attached to the swiveling camera head allowing you full range of view.</p>
	<p><b>Feature: OCR Camera</b></p> <p><b>Shortcut: “CTRL” + “C”</b></p> <p>This swaps to the OCR mode camera (If you were in CCTV Mode) which is always facing down in the reading position. This camera is best suited for performing OCR</p>
	<p><b>Feature: Freeze</b></p> <p><b>Shortcut: “Space”</b></p> <p>The freeze function takes a still image temporarily to allow you to view it at length. This is useful for saving information on a blackboard and to finish taking notes for example.</p>
	<p><b>Feature: OCR</b></p> <p><b>Shortcut: “Ctrl” + “E”</b></p> <p>This function is used to immediately perform an OCR Scan and begin readback instantly after processing is completed. This skips the preview window when utilized from the Camera Tab. This feature is only available on OCR Enabled units while in the OCR Camera mode.</p>

	<p><b>Feature: Record</b></p> <p><b>Shortcut: “CTRL” + “P”</b></p> <p>The record function is used to save a video with your Transformer HD. Hit the Record button a second time to stop the recording and save your video. Your video will automatically begin playback for review.</p>
	<p><b>Feature: Zoom In</b></p> <p><b>Shortcut: ↑</b></p> <p>The Zoom In feature is used to increase your magnification level step by step.</p>
	<p><b>Feature: Zoom Out</b></p> <p><b>Shortcut: ↓</b></p> <p>The Zoom Out feature is used to decrease your magnification level step by step</p>
	<p><b>Feature: Find Location</b></p> <p><b>Shortcut: “F”</b></p> <p>The Find Location feature is used to quickly get your bearings by zooming to the minimum level to increase your field of view. Hitting the Find Location feature a second time returns to your previous Zoom Level. A target viewing graphic will also appear to give you an indication of where your view will return.</p>



**Feature: Auto Focus**

**Shortcut: "CTRL" + "A"**

**This enables or disables the computer assisted camera focus. When viewing targets at various distances you may wish to disable this feature to maintain a steady focus. Turning it back on automatically readjusts for best focus again.**




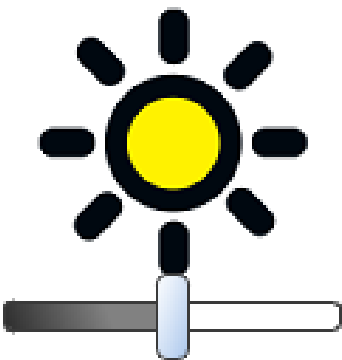
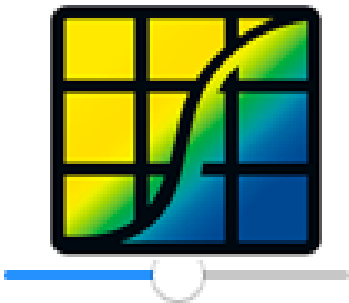

**Feature: Rotate**


**Shortcut: "R"**

**The rotate feature will adjust the camera image and digitally rotate your image so you do not have to physically adjust the camera head to get your desired view.**

## Display Tab



The camera tab contains all the features associated with your Transformer HD Camera. The full details are listed below as well as the necessary shortcut to activate those features.

	<p><b>Feature: LED</b></p> <p><b>Shortcut: “L”</b></p> <p><b>This button turns the LED Lamp on Transformer HD On and Off.</b></p>
	<p><b>Feature: Brightness Slider</b></p> <p><b>Shortcut: N/A</b></p> <p><b>This slider adjusts the total brightness for the Transformer HD App. You can adjust this slider with your mouse or touchpad.</b></p>
	<p><b>Feature: Color Modes Contrast</b></p> <p><b>Shortcut: N/A</b></p> <p><b>This effects the color modes saturation level, if you are having difficulty viewing in a color mode try adjusting the level of your contrast.</b></p>
	<p><b>Feature: Next Preferred Color Mode</b></p> <p><b>Shortcut: “C”</b></p> <p><b>This cycles through your preferred color modes one increment at a time.</b></p>

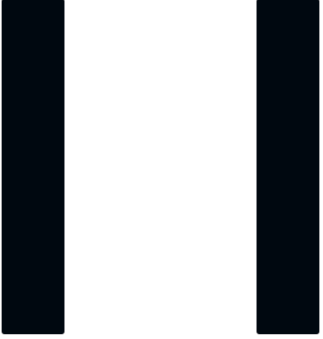


	<p><b>Feature: List of Preferred Color Modes</b></p> <p><b>Shortcut: N/A</b></p> <p><b>This feature allows you to select any of your preferred color modes from a quick list.</b></p>
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## Markers Tab

The markers tab is used with our Windowing and Marker Features. These features are designed to make your target easier to read by either framing it with lines or by covering up peripheral viewing space. You can adjust the position of both Lines and Window Markers by tapping it with your mouse or finger touchpad and dragging it to the desired location on your screen.

	<p><b>Feature: Horizontal Line Marker</b></p> <p><b>Shortcut: “H”</b></p> <p><b>This feature toggles Horizontal Line Markers on and off.</b></p>
	<p><b>Feature: Horizontal Window Markers</b></p> <p><b>Shortcut: “H”</b></p> <p><b>This feature toggles Horizontal Window Markers on and off.</b></p>










	<p><b>Feature: Vertical Line Marker</b></p> <p><b>Shortcut: “V”</b></p> <p><b>This feature toggles Vertical Line Markers on and off.</b></p>
	<p><b>Feature: Vertical Window Markers</b></p> <p><b>Shortcut: “V”</b></p> <p><b>This feature toggles Vertical Window Markers on and off.</b></p>
	<p><b>Feature: Marker Thickness</b></p> <p><b>Shortcut: “M”</b></p> <p><b>This feature is used to adjust the thickness of both Vertical and Horizontal line markers.</b></p>




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## Window Tab

The window tab controls the positioning and size of the Transformer HD window. This can be adjusted or changed to quickly move the window to your desired location as well as control the Auto-Full screen feature.

	<p><b>Feature: Minimize Window</b></p> <p><b>Shortcut: “CTRL” + “M”</b></p> <p><b>Minimizes the window and removes the Transformer HD app out of focus.</b></p>
	<p><b>Feature: Enable Auto Full Screen</b></p> <p><b>Shortcut: “F7”</b></p> <p><b>Enabling Auto-Full Screen automatically allows the Transformer HD and Transformer HD App to take up your displays entire viewable area and automatically hides Menus and Toolbars when they are not being accessed.</b></p>
	<p><b>Feature: Place window in Upper Right corner</b></p> <p><b>Shortcut: “F8”</b></p>

	<p><b>Feature: Place window in Lower Right corner</b></p> <p><b>Shortcut: “F8”</b></p>
	<p><b>Feature: Place window in Upper Left corner</b></p> <p><b>Shortcut: “F8”</b></p>
	<p><b>Feature: Place window in Lower Left corner</b></p> <p><b>Shortcut: “F8”</b></p>
	<p><b>Feature: Place window in Right Half of screen</b></p> <p><b>Shortcut: “CTRL” + “→” OR “F8”</b></p>

	<p><b>Feature: Place window in Left Half of screen</b></p> <p><b>Shortcut: “CTRL” + “←” OR “F8”</b></p>
	<p><b>Feature: Place window in Top Half of screen</b></p> <p><b>Shortcut: “CTRL” + “↑” OR “F8”</b></p>
	<p><b>Feature: Place window in Bottom Half of screen</b></p> <p><b>Shortcut: “CTRL” + “↓” OR “F8”</b></p>

## Settings Tab

This tab allows you to adjust several important Transformer Specific settings such as Color, White Balance, System Frequency and Language.

<b>Color Mode Selection</b>		The Color Mode Selection Tab is where you can change your color presets. (For a total of 7)
CCTV Camera: 1080p30	<input checked="" type="checkbox"/>	Your Camera Resolution can be adjusted between 1080 @ 30 frames per second or 720 @ 60 frames per second.
CCTV Camera: 720p60	<input type="checkbox"/>	
Color: Auto	<input checked="" type="checkbox"/>	These options adjust your video white balance. Auto- Automatically adjusts based on the environment, Normal- Sets it to a natural color, Warm- Has a red hue, Cool- Has a blue hue.
Color: Normal	<input type="checkbox"/>	
Color: Warm	<input type="checkbox"/>	
Color: Cool	<input type="checkbox"/>	
System Frequency 50 Hz	<input type="checkbox"/>	System Frequency can be changed for International Markets.
Left Handed Mode	<input type="checkbox"/>	Left Handed Mode Swaps the orientation for Self and Distance Viewing.
Keyboard Shortcuts	<input checked="" type="checkbox"/>	Keyboard Shortcuts allow you to use the abbreviated command instead of the Icon.
Audio Input		Audio Input Displays your Primary Audio Device
Language		Language allows you to change your Primary Display, OCR and TTS Language.
Product Information		Product Information displays your device Serial Number, Software and Firmware Revision.
Wi-Fi Configuration		Wi-Fi Configuration allows you to change your Transformer Name and Password.
Factory Reset		Factory Reset is used to return your device to a "Factory Fresh" condition and clears user presets.


## HDMI Settings Tab

This tab allows you to adjust several important Transformer Specific settings such as Color, White Balance, System Frequency and Language.

Color Mode Selection	
Line Marker	<input type="checkbox"/>
Window Marker	<input type="checkbox"/>
Marker Position	<input type="checkbox"/>
Marker Spacing	<input type="checkbox"/>
Horizontal Marker	<input checked="" type="checkbox"/>
Vertical Marker	<input type="checkbox"/>
Color : Auto	<input checked="" type="checkbox"/>
Color : Neutral	<input type="checkbox"/>
Color : Warm	<input type="checkbox"/>
Color : Cool	<input type="checkbox"/>
Frequency Configuration 50 Hz	<input type="checkbox"/>
Left Handed Mode	<input type="checkbox"/>
Language	
Product Information	

## Help Tab

This is where you can come for information about your Transformer board Shortcuts. This is the same information as listed in the “Keyboard Shortcuts and Gestures Section of this manual”

	<p><b>Feature: Viewer Help</b></p> <p><b>Shortcut: “F1”</b></p> <p><b>The viewer itself comes with a built in reference program to display and remind you all Transformer Hot Keys.</b></p>
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## Transformer HD OCR/Text-To-Speech Mode

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### Using the OCR Mode

Some units come equipped with an optional OCR module enabled. OCR stands for Optical Character Recognition. If your Transformer HD unit is OCR Enabled your Transformer can take a photograph of a book, business card, letter, etc. and translate that image into easily readable text that can be directly read aloud to you. In order to utilize this feature ensure you must ensure that the Full Screen OCR Camera is Engaged which can be toggled via the Orange Camera icon.

#### Step #1

Switch your transformer to the OCR Mode if you were in CCTV Mode by hitting the Orange OCR Camera Button in the camera settings menu or “CTRL” + “C”.

#### Step #2

Position your target material directly under the camera so that the text is visible to the camera.

#### Step #3

Use the Capture Button or “CTRL” + “E”

#### Step #4

After a brief processing period you will be brought to the “OCR-TTS” Screen.

#### Step #5

When you are ready press the “Speech On and Off Button”

#### Step #6

You can click on any given segment of the text with your mouse cursor on Computers/Laptops or utilize your finger with enabled touch screen.










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## OCR Features

These buttons and features only exist on OCR Enabled units. They will be displayed across the OCR Window

	<p><b>Feature: Voice Gender</b></p> <p><b>Shortcut: N/A</b></p> <p><b>This changes the OCR Readback Text to Speech voice between male and female variants where available.</b></p>
	<p><b>Feature: Decrease TTS Speed</b></p> <p><b>Shortcut: N/A</b></p> <p><b>This features slows down the OCR Readback after you have scanned a document.</b></p>
	<p><b>Feature: Increase TTS Speed</b></p> <p><b>Shortcut: N/A</b></p> <p><b>This features speeds up the OCR Readback after you have scanned a document.</b></p>

	<p><b>Feature: Speech Playback</b></p> <p><b>Shortcut: N/A</b></p> <p>This feature starts and stops OCR Readback after an OCR Scan has been performed.</p>
	<p><b>Feature: OCR Scan</b></p> <p><b>Shortcut: N/A</b></p> <p>This feature performs an OCR Scan on the selected target material and prepares it for Readback. Please be patient as your material is processed. A progress bar will display while this operation is in action.</p>



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# Transformer HD Power States

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## Standby

When your Transformer HD is not in use you may want to place it into Standby. Placing your device into standby mode saves power and allows a quicker return to normal operation than compared to a full shutdown. You should follow the instructions below to place your device into Standby.

1. Locate the Green Power Button (Located on Transformer HD).
2. Press this button once for less than 5 seconds.
3. To resume simply press the Power button again.
4. If your device is connected to power even when you reset it the power state will be "Standby"

## Shut Down

When your Transformer HD is not in use you may want to Power it OFF. Placing your device into a full shutdown preserves your battery level but takes a little longer to start up when compared with Standby. To do a full shutdown you should follow the instructions below.

1. Locate the Green Power Button.
2. Ensure that device is not connected to External Power and is not charging.
3. Press this button and hold for 5 seconds to begin the Shutdown Sequence.
4. All the LED Status Indicators will turn off when the process is complete.

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## Tips & Tricks

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### System Restart

-In the event that your system exhibits any odd behavior you can quickly reset and power cycle the device by pressing the Reset Button and then Pressing the Power Button again. This should immediately power down the system and restart the device.

-You should also fully close and restart the Transformer HD Application on your Computer or Tablet

- If this is not working to recover your device you can also fully remove the device from power and remove the battery.

### User Menus

-Transformer HD is a feature rich system that comes with a lot of configurable options. You can customize your User Interface, System Sounds or System Display items to suit your preference. Once you are familiar with the system try changing or configuring these options to develop the perfect user experience customized to fit you!

-The user interface is slightly different depending on whether or not you are using the device on a Computer, Stand-alone Monitor or Tablet.

-You can always reset your preferences and settings to a Factory Fresh condition by utilizing the keyboard shortcut “Ctrl” + “R” or through the Transformer HD “Settings Menu”. This will return all your default settings

### Wi-Fi Connectivity

-In the event you encounter difficulties with your Wi-Fi try pressing the Reset Switch on your Transformer HD and Restarting the Transformer HD Application on your Tablet or Computer. Then press the Power Switch to turn the Transformer HD Back on. Make sure you fully close the application prior to relaunching. You should see the ‘Connecting Transformer’ message along with the Transformer HD Logo. The device is ready to pair wirelessly when the LED Lamp onboard is blinking and not connected to USB 3.0 or HDMI. Remember to power the device by ON pressing the Green Power button.

-You can change your Wi-Fi SSID and Password through the User Settings menu via USB 3.0. If you’ve forgotten a custom password this is an easy workaround to recover your device in case you forget.

### Improving OCR Accuracy

-To improve the accuracy of your Transformer HD ensure that whenever you begin a document capture the lighting in the room is evenly distributed over your target document. (Avoid Visible Hotspots)

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-Flatten out books (especially if it has a large spine) or other materials with an observable curvature.

-For optimal OCR Read back please position your material within the field of view in its entirety. You can rotate your target material in any orientation to ensure that it fits completely within these boundaries.

-Turning ON or Off the LED can sometimes improve your accuracy on some materials this is achieved by turning the LED lamp on or off in the Transformer HD Toolbar.

-For small OCR Targets such as a business card or letter try placing a clean white sheet of Paper in the background to eliminate any distracting patterns that may exist in the background.

### **Multiple Orientations**

-Did you know that your Transformer HD supports all available viewing angles (Portrait and Landscape)? If your target document is too large or unusually shaped you can reposition it at another angle this enables you to get the perfect fit within the guide frame.

-Try turning the toolbar off or setting the device to Auto-Full Screen to get the best possible Field of View on your target material.

### **Window Display**

-You can quickly dock your Transformer HD App to any side of your screen utilizing the “CTRL” button plus any arrow key.

-You can enable Auto-Full Screen mode which will automatically fill your entire viewing space with the Transformer HD Camera feed. The hotkey to enable or disable this feature is “F7”.

### **Close-Up Lens**

-For Reading Mode especially at higher zoom levels the Close-Up Lens is a must. If you are using Distance or Self View modes check to make sure the lens is flipped into the off position to give the best visual clarity.

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# Troubleshooting

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## **Transformer HD will not power on**

- Make sure the power supply from Transformer HD is securely connected to a working outlet. Confirm the condition of the Transformer HD Battery
- Make sure the power supply and cord are securely connected.
- Check your USB 3.0 cables to make sure they are the correct type and securely connected to both your Transformer HD and Desktop or Laptop.
- Try hitting the reset button on Transformer HD (located on the underside of the device), relaunching your Transformer HD application and powering device back on.
- Check the power strip/surge protectors ON/OFF switch and circuit breaker if *Transformer HD* is plugged into one.
- It is recommended that you do a full reset cycle when swapping between different connection types on your Transformer HD (Such as Wi-Fi to USB 3.0 and vice-a-versa).

## **The images seem to be out of focus and/or my OCR result is poor.**

- Clean polarizing filter on the underside of the OCR camera with the nonabrasive lens cleaning cloth provided with your *Transformer HD* (avoid using cleaning solutions).
- Make sure the target material is steady and flat. It might take a few moments for the camera to achieve focus after motion has stopped.
- Alternate Transformer HD LED Camera Lamp ON or Off. Making sure there is even ambient lighting which will assist in creating a better image.

## **Transformer HD is taking a long time to process the document for Text-to-speech.**

- Cycle the Power On & Off by pressing the Power button.
- If the device is not responding to these button presses you can Press and Hold the power button for more than 5 seconds to force a shutdown. Do not physically remove from power during this period of time.

## **Firmware Update**

To keep your *Transformer HD* up to date visit our software support page at:

<http://www.enhancedvision.com/support/software.html>

If you have any questions or require technical assistance with your product, please call (800) 440-9476 extension x3, Monday – Friday, from 7 a.m. to 5 p.m. PST.

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# Transformer HD Specifications

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## Product Measurements

- Opened in Reading Configuration
  - Length: 15.4 inches (39.1 cm)
  - Width: 16.0 inches (40.6 cm)
  - Height: 13.5 inches (34.3 cm)
- Fully Closed Configuration
  - Length: 13.5 inches (34.3 cm)
  - Width: 4.8 inches (12.2 cm)
  - Height: 4.9 inches (12.4 cm)

## Camera

- CCTV Camera & OCR Camera (On Enabled Units)

## Product Weight:

- 3.45 lbs = 1.56 kgs

## Magnification Range

- On 24" LCD (1.7x-30.6x)

## Power Supply

- Power supply is 100-240V~, 50-60Hz, 9VDC, 2.6A

## Battery Life

- More than 2 hours of continuous operation.

## Equipment Classification (IEC 601-1):

- Type of Protection: Class 1
- Degree of Protection: Type B
- Mode of Operation: Continuous
- Operating temperature range: 0-40°C / 32-104°F
- Storage/transport temperature range: 0-60°C / 32-140°F

## Warranty: 2 Years

\*Product specifications subject to change without notice.



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# WARRANTY STATEMENT & CONTACT INFORMATION

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## Warranty Statement

### Enhanced Vision *Transformer HD* Warranty Policy

Enhanced Vision products are designed to give you the highest quality image, convenient features, ease of use and reliable service. **Transformer HD has been inspected and tested prior to shipping.** Enhanced Vision warrants Transformer HD 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 Transformer HD 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 extension x3 Monday through Friday, between 7 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.**

## OTHER ENHANCED VISION PRODUCTS

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### DaVinci Pro



DaVinci Pro is a high performance desktop video magnifier (CCTV), featuring a Sony Full HD 3-in-1 camera & Full Page text-to-speech (OCR). With Full 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 Full Page text-to-speech feature. DaVinci Pro will read any printed text aloud with the push of a button.

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

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### 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

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### 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



## OTHER ENHANCED VISION PRODUCTS

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### Merlin elite

#### See and hear the difference!



Merlin elite is a high performance desktop video magnifier (CCTV), featuring Full 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



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### Merlin Ultra HD



Merlin ultra's Full HD 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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### Acrobat HD-mini ultra



Acrobat HD-mini ultra is a portable battery operated full HD CCTV. Full HD gives you a beautiful crystal clear picture and vibrant display. A generous 13.3" display offers a large field of view, allowing you to see more on the screen.

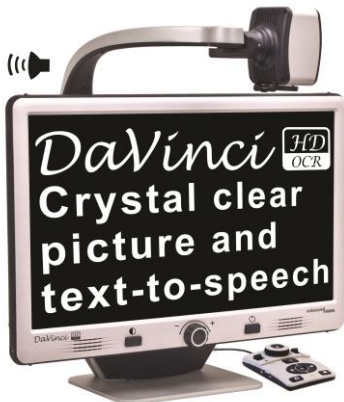
Magnification: 1.3X to 65X



## OTHER ENHANCED VISION PRODUCTS

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### 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.)



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### Acrobat HD Ultra



Acrobat ultra HD LCD is a complete system featuring a 3-in-1 Sony Full HD camera with a 22", 24", or 27" high resolution HD LCD producing maximum picture detail for clear, vivid color display. The adjustable arm, tilting screen, and rotating capability allows the camera to be positioned at any angle for optimal viewing. A built in handle allows for easy transport.

Magnification: 1.8X to 70.9X



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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)



## Notes

# **enhanced vision**

Transformer HD is a high definition desktop CCTV with Wi-Fi  
– optionally featuring Full Page text to speech (OCR).

*Transformer HD* will magnify and display any target or  
optionally can read any printed text aloud with just the push  
of a button. For more information,  
Please visit [www.enhancedvision.com](http://www.enhancedvision.com).

**[www.enhancedvision.com](http://www.enhancedvision.com)**  
**(800) 440-9476 (US Office, toll free)**  
**(714) 465-3400 (US Office)**  
**+44 (0) 115 9442317 (UK Office)**  
**Fax + 49 (0) 6078 96982733 (DE Office)**  
**Tel. + 49 (0) 6078 9698270 (DE Office)**

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Product specifications subject to change without prior notice.