

DaVinci Pro 

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User Manual

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Before You Start

DaVinci Pro is a fully integrated solution, offering the advantages of both CCTV and OCR (Optical Character Recognition). DaVinci Pro enables individuals with low vision to read by listening or by viewing the text in color or in enhanced high-contrast positive or negative modes. With easy-to-use buttons and dials, you can enlarge or reduce the text in seconds, and change viewing options for easier visibility.

Prior to using this system, please carefully review and follow the instructions provided within this booklet. Your DaVinci Pro is ready to use right out of the box. By reviewing all the DaVinci Pro features and controls before use and following the directions carefully, you will 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 DaVinci Pro.

About This Manual

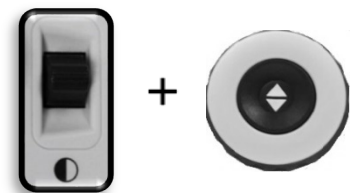
Reference the illustrations in this book as you follow the instructions. The next section provides an overview of everything included in your package. The buttons on the control console are explained in “[CCTV Mode](#)” on page 9 and “[OCR Mode](#)” on page 17.

Some features on DaVinci Pro are accessed by pressing a button or a combination of buttons. When steps refer to a button on the device or its control console, the button name is capitalized, such as the Color Mode button. When steps refer to text displayed on the DaVinci Pro screen, the text is bold. For example, the **Product Settings** menu is in boldface, as well as the **Extended Zoom** option on that menu.

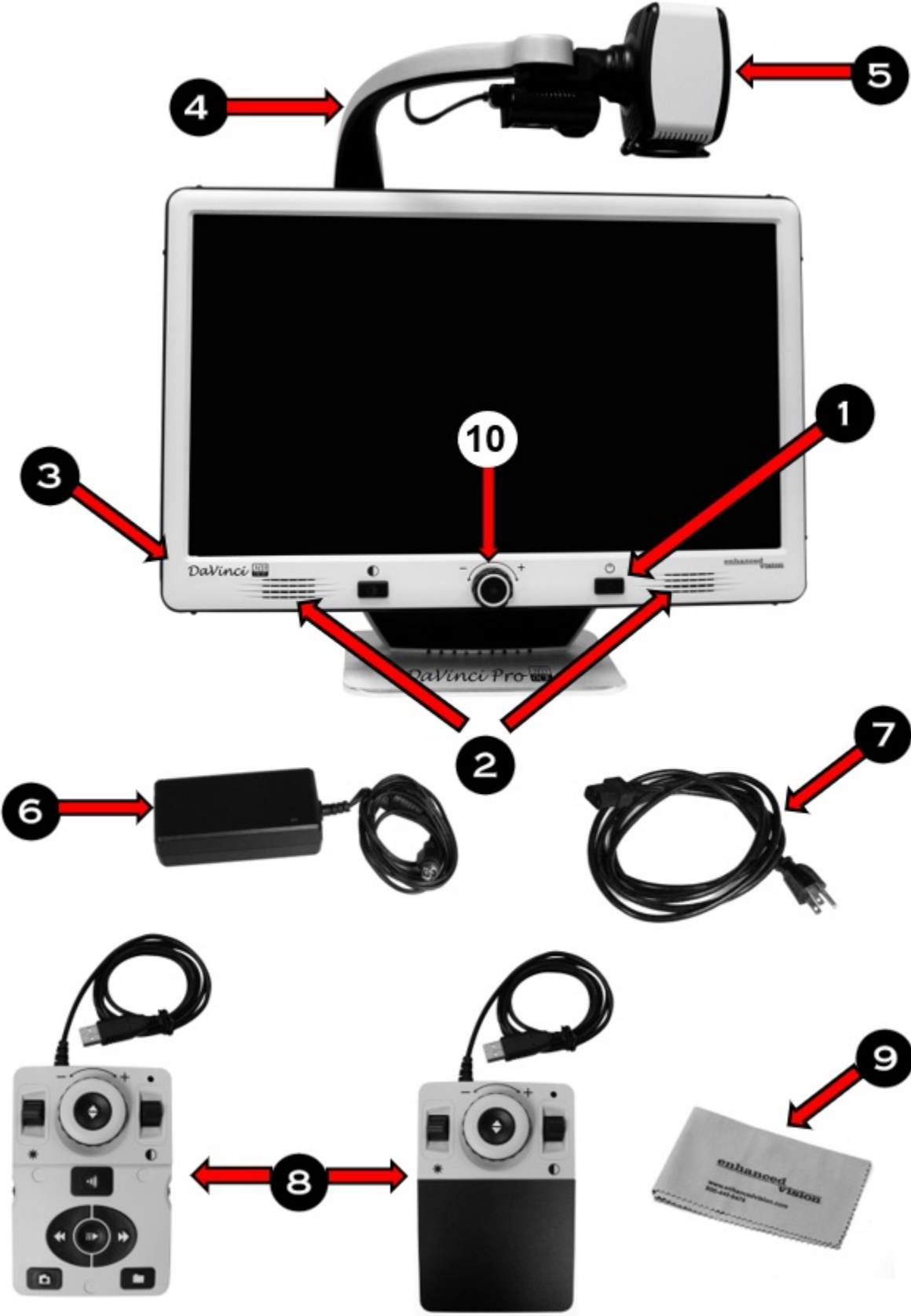
Instructions for going to a menu option are given using right angle brackets >. When you see **Settings > Audio > Volume**, for example, you use the Zoom wheel to highlight **Settings** and press the Find button, then do the same for **Audio**, then again for **Volume**.

To view a quick reference of the control console buttons, do the following:

1. Go to the main menu by pressing up on the Color Mode button and pressing the Find button on the control console.
2. Use the Zoom wheel (around the Find button) to highlight **Help**.
3. Press the Find button.



Enhanced Vision



DaVinci Pro Packaging and Accessories

Take a few moments to familiarize yourself with items included with the DaVinci Pro, which are illustrated on the previous page.

1. Power button
2. Speakers
3. Audio jack (3.5mm) for headphones
4. Camera arm
5. Camera arm LED button
6. 19V power supply
7. Power cord – Power cord style may vary based upon country.
8. Control console – Allows you to control DaVinci Pro functions. Can be used with the cover on for Basic mode or cover off for Advanced mode.

The control console must be plugged in to use DaVinci Pro and access menu items for OCR/text-to-speech.

9. Lens cloth – Permits cleaning of the LCD screen or lenses.
10. OCR/CCTV toggle button with CCTV Zoom wheel

Optional Accessories

Headphones and a microphone are not included but available to purchase separately. On the left side of DaVinci Pro, a 3.5mm input jack is provided for use of standard headphones. A microphone can be added to record a custom voice tag while saving files.

Note: Sound from DaVinci Pro speakers will not be available while the headphone jack is in use.

Setting Up DaVinci Pro

To set up DaVinci Pro, follow these steps:

1. Find a steady and level location, such as a table or desk, where you will be comfortable using DaVinci Pro.
2. Carry DaVinci Pro only by the recessed handle on the back of the unit for a secure grip. Gently place it on the table or desk.



Warning: Do not lift DaVinci Pro by the camera arm.

3. Connect the control console cord to either of the two USB ports on the back of your DaVinci Pro.



4. Connect the power cord to the power supply.



5. Connect the power cord to an available electrical outlet.
6. Connect the other end of the power supply to DaVinci Pro where it is labeled "19VDC" on the rear panel.

Note: To offer additional protection during an electrical storm, a surge protector is recommended.

7. Press the Power button to turn on the device. A DaVinci Pro Logo is displayed, followed by a message and a startup chime indicating that the device is initializing. When you enter live CCTV mode, an image is displayed.



Warning: To maximize the life of your product, complete the shutdown sequence before disconnecting DaVinci Pro. Press the Power button and hold it for five seconds to initiate shutdown, which lasts about 10 seconds. Wait until the status LED lights are no longer illuminated before disconnecting the device.

Control Console

The control console and its cover are required to use DaVinci Pro. Familiarizing yourself with the console will be helpful because how you configure the console will affect your user experience.

The control console for DaVinci Pro has an intelligent design that allows you to customize features on demand and switch between “Basic” and “Advanced” modes. When the cover is on the control console, you are in Basic mode. When the cover is off, you are in Advanced mode. If you add or remove the cover, DaVinci Pro immediately detects the change and modifies available features.



Basic Controls

Beginners may be more comfortable with the Basic control console, whether in CCTV or OCR mode. With the cover on the console, fewer features are available but the product is easier to use. You still have access to the essential features necessary to magnify an object or perform an OCR scan.

Advanced Controls

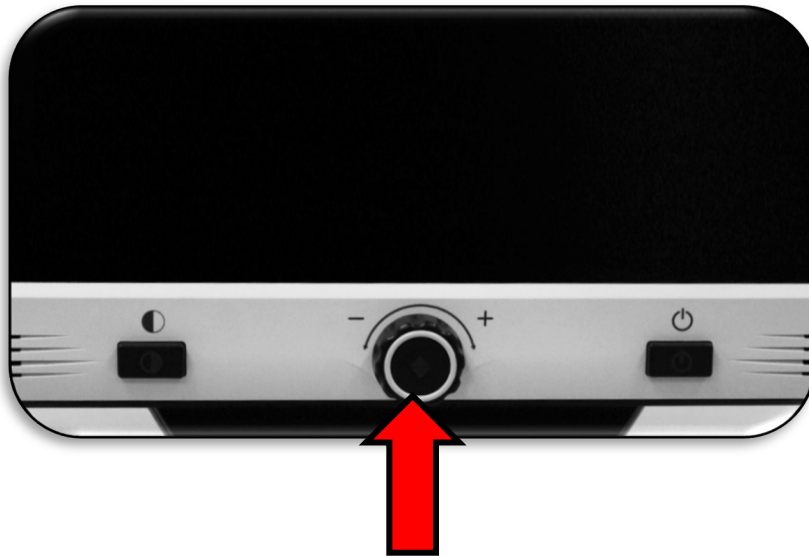
When you remove the control console cover, you are in Advanced mode. This enables features such as the **Library** option, which is otherwise grayed out in the menu, as well as saving, recall, OCR zone identifiers, and OCR line navigation.



Modes of Operation

DaVinci Pro is a CCTV and OCR product that can function in a variety of modes. The unit consists of the built-in monitor, cameras, and mechanical assembly. The OCR and CCTV cameras can be moved, and the CCTV camera can also be tilted depending on your target. Whichever mode you choose, you will have several ways to customize it to fit your unique needs and preferences. Familiarize yourself with these options to discover which settings are right for you.

DaVinci Pro has two main modes of operation—CCTV mode and OCR mode—that can be toggled by pressing the center button on the front panel under the LCD screen.



CCTV is the default mode that will display immediately after you power on the device. This high-quality full-screen live image is designed for real-time 1080p high definition viewing.



OCR mode is available to assist you with reading by automatically scanning documents for OCR, then reading the text using text to speech (TTS).

Turning Off the Device

You can either put your device into standby or shut it down. If you are going to be gone a short time, consider standby, but when you are done for the day, consider a shutdown.

Warning: *To maximize the life of your product, do not disconnect DaVinci Pro from power while in standby or during the shutdown sequence. Wait until the shutdown sequence has completed to disconnect your unit. A message will display during shutdown, which lasts about 10 seconds. When complete, the LED lights will no longer be illuminated.*

Standby

When your DaVinci Pro 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.

To place your device into standby, briefly press the Power button on the front. The LCD display dims and the front panel indicator lights blink several times before turning off.

To resume, press the Power button again. It takes approximately 15 seconds until the device ready to use after it has been in standby.



Shutdown

When your DaVinci Pro is not in use, you may want to power it off. Placing your device into a full shutdown saves the most power but takes a little longer to start up when compared with standby. To perform a full shutdown, follow these steps:

1. Hold down the Power button on the front panel of the DaVinci Pro for five seconds to begin the shutdown sequence. A message indicates you are entering into the shutdown sequence and asks you to wait until the status LEDs are no longer illuminated and the message is no longer displayed before removing your DaVinci Pro from the power source.
2. Once the status LEDs are dark and the message is no longer displayed, remove the unit from the power source.

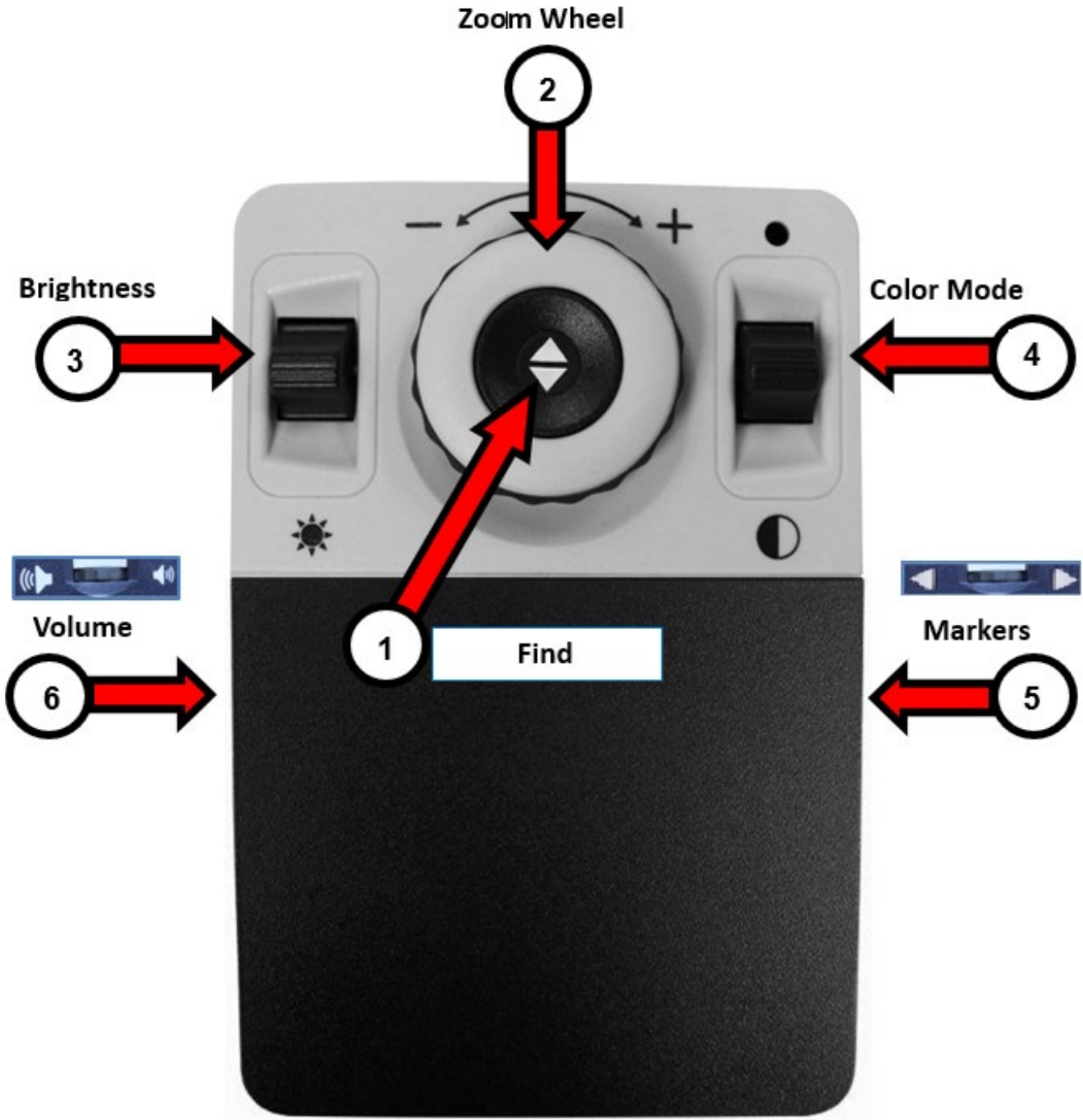
CCTV Mode

The DaVinci Pro camera is attached to a specifically designed arm that allows the camera to slide left to right or to pivot in multiple directions. In CCTV mode, the device is operated by moving this arm or camera assembly and pointing it at your target. The image can then be viewed on the LCD monitor.



DaVinci Pro is mounted on a bracket that allows you to tilt the screen to adjust for the best viewing position. Choose an angle or position that is most comfortable for you.

CCTV Basic Control Console



CCTV Basic Control Console

Basic mode is when the cover is on the control console. You do not have access to the Library button and other features, which are described in “Advanced Mode.”

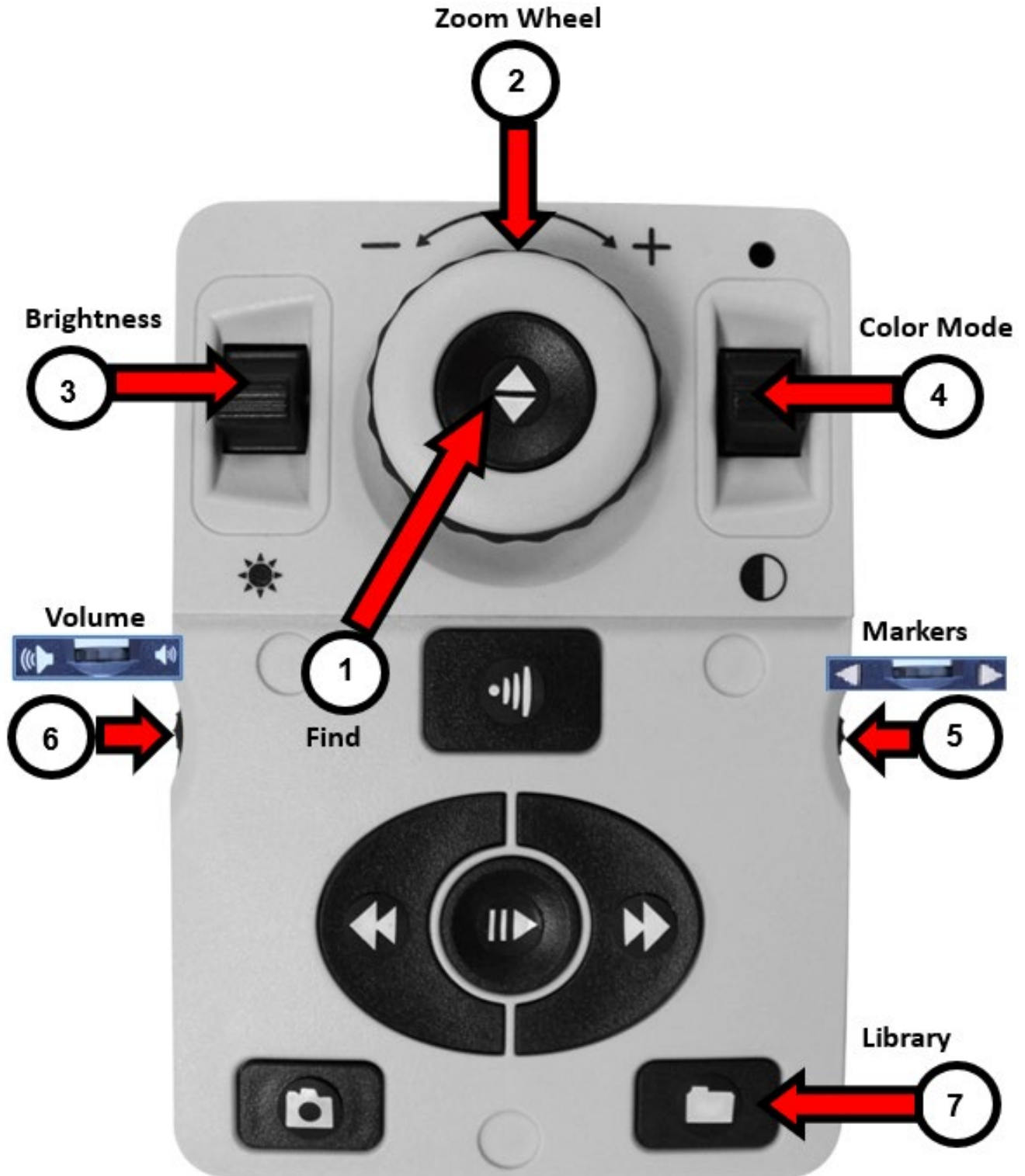
You can take the cover off or put it back on at any time. With the cover on, the OCR button configuration changes to a more basic format but still provides the essential features needed for a document scan.

Some features on DaVinci Pro are accessed through a combination of buttons on your control console, meaning that the buttons should be pressed at the same time. For example, you might be instructed to press up on the Color Mode button while pressing the Find button. If neither the front panel nor control console is specified, then the button is available on either one.

The Basic controls are shown on the previous page and described in the following table.

Label	Name	Description
1	Find	Press and hold to minimize your magnification level. When you release the button, it returns to your previous magnification level. <i>Note: You can use this feature to find your target easily, which can sometimes be challenging at higher magnification levels.</i>
2	Zoom Wheel	Turn clockwise or counterclockwise to increase or decrease the zoom level.
3	Brightness	Press up or down to increase or decrease the screen brightness.
4	Color Mode	Press up or down to toggle through color viewing modes.
5	Markers	Rotate to toggle through the line and window markers, which are dependent on your user settings.
6	Volume	Rotate to increase/decrease system volume.

CCTV Advanced Control Console



CCTV Advanced Control Console

Advanced mode is when the cover of the control console is off. You have access to additional buttons and features, such as saving, zone identifiers, and line navigation as detailed in “OCR Mode.” You can take the cover off or put it back on at any time.

In CCTV mode, the button functions are the same except for the addition of the Library button (#7) at the bottom of the console.

Label	Name	Description
1	Find	Press and hold to minimize your magnification level. When you release the button, it returns to your previous magnification level. <i>Note: You can use this feature to find your target easily, which can sometimes be challenging at higher magnification levels.</i>
2	Zoom Wheel	Turn clockwise or counterclockwise to increase or decrease the zoom level.
3	Brightness	Press up or down to increase or decrease the screen brightness.
4	Color Mode	Press up or down to toggle through color viewing modes.
5	Markers	Rotate to toggle through the line and window markers, which are dependent on your user settings.
6	Volume	Rotate to increase/decrease system volume.
7	Library	Press and hold for two seconds to enter the library. Rotate the Zoom wheel to navigate. Select Exit and press the Find button to return to live mode.

CCTV Camera Orientations

DaVinci Pro has three modes of orientation: desktop viewing, distance viewing, and self-viewing.

Desktop Viewing

The camera can be adjusted downward for reading, writing, and enjoying crafts or other hobbies. It is ideal for classroom use. When the camera is rotated downward, “Desktop” is announced. DaVinci Pro can slide freely, left or right, along the specially designed bracket mechanism.

For optimal viewing clarity, close the close-up lens and place objects 12 to 19 inches away from the camera.



Distance Viewing

The camera can rotate forward to magnify people, objects, and scenery at a distance. “Far” is announced when changing to this viewing angle.



Open the close-up lens for optimal focus at all zoom levels for distance viewing. Although the camera can view objects at an infinite distance, the recommended distance from camera to the object is approximately 5 to 30 feet.



Self-Viewing

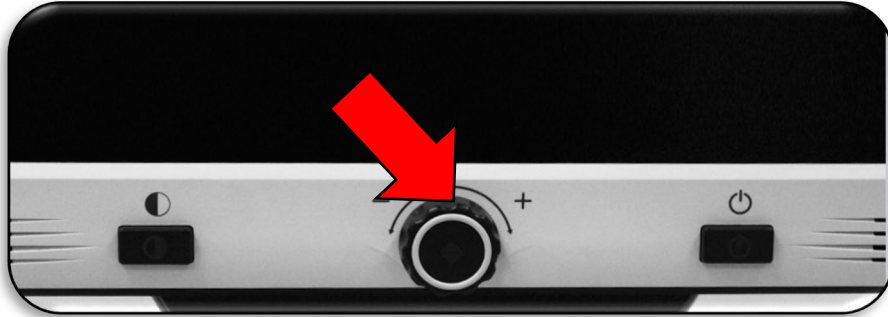
The camera can be rotated backwards to provide you with the equivalent of a digital mirror. “Self” is announced by the device when changing to this position. You can use DaVinci Pro to help you put on make-up, shave, or perform other personal hygiene.

For optimum clarity, use the close-up lens and position yourself between 7.5 to 22 inches away from the camera.



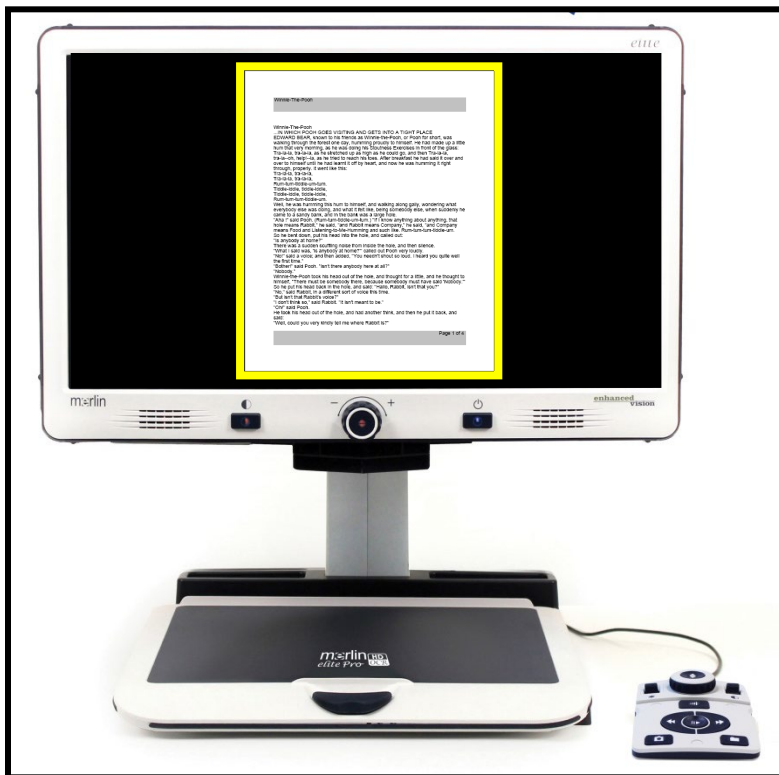
OCR Mode

To switch to OCR mode, press the center button on the front panel. Place your document in the guide frame that is displayed, which is the area that will be read.

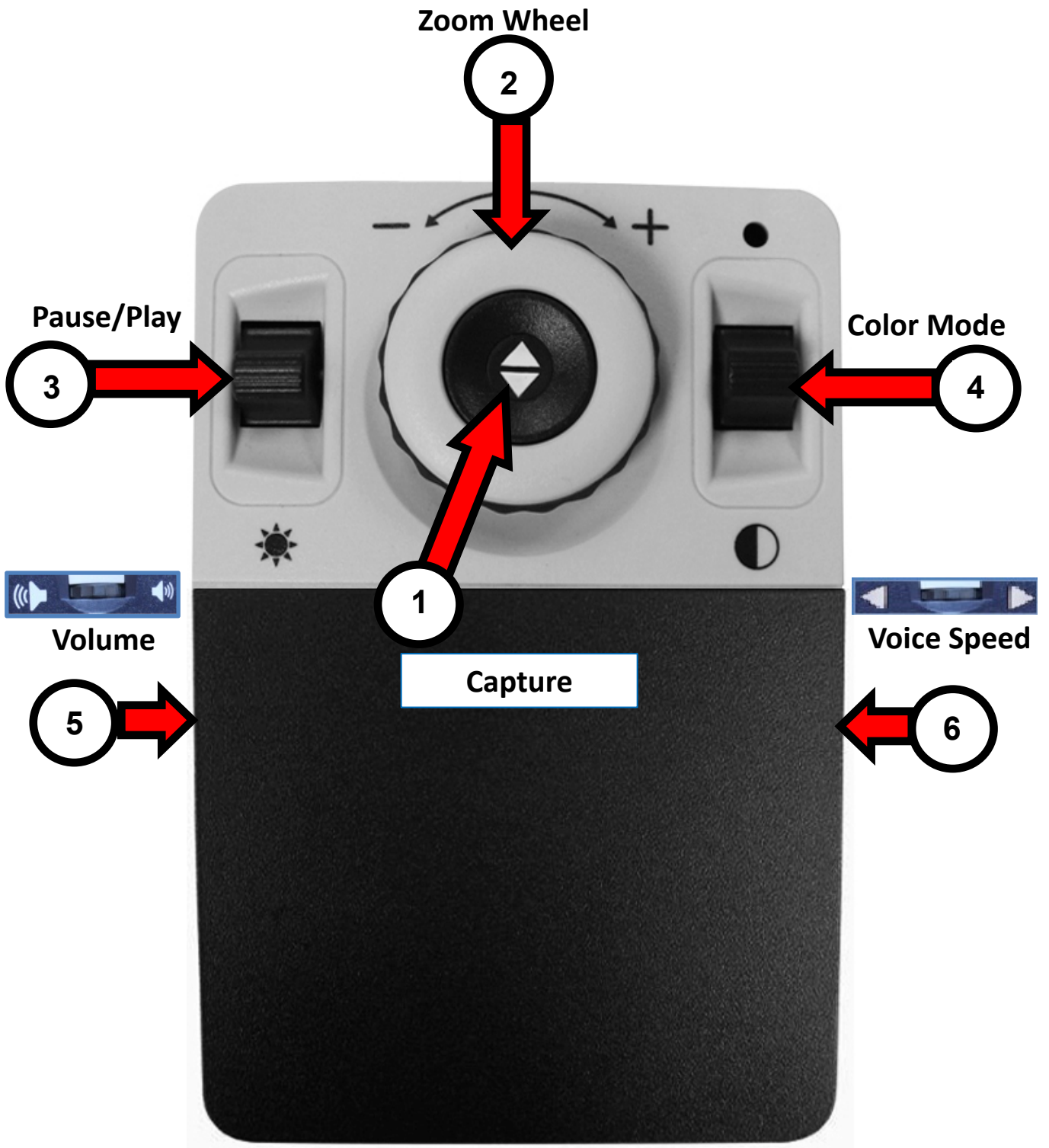


In Basic mode, reading (text to speech or TTS) begins immediately after a scan is completed. In Advanced mode, you control where reading starts by selecting a zone, so reading does not start automatically.

Note: After five minutes of inactivity in OCR mode, your device reverts to live CCTV mode.



OCR Basic Control Console



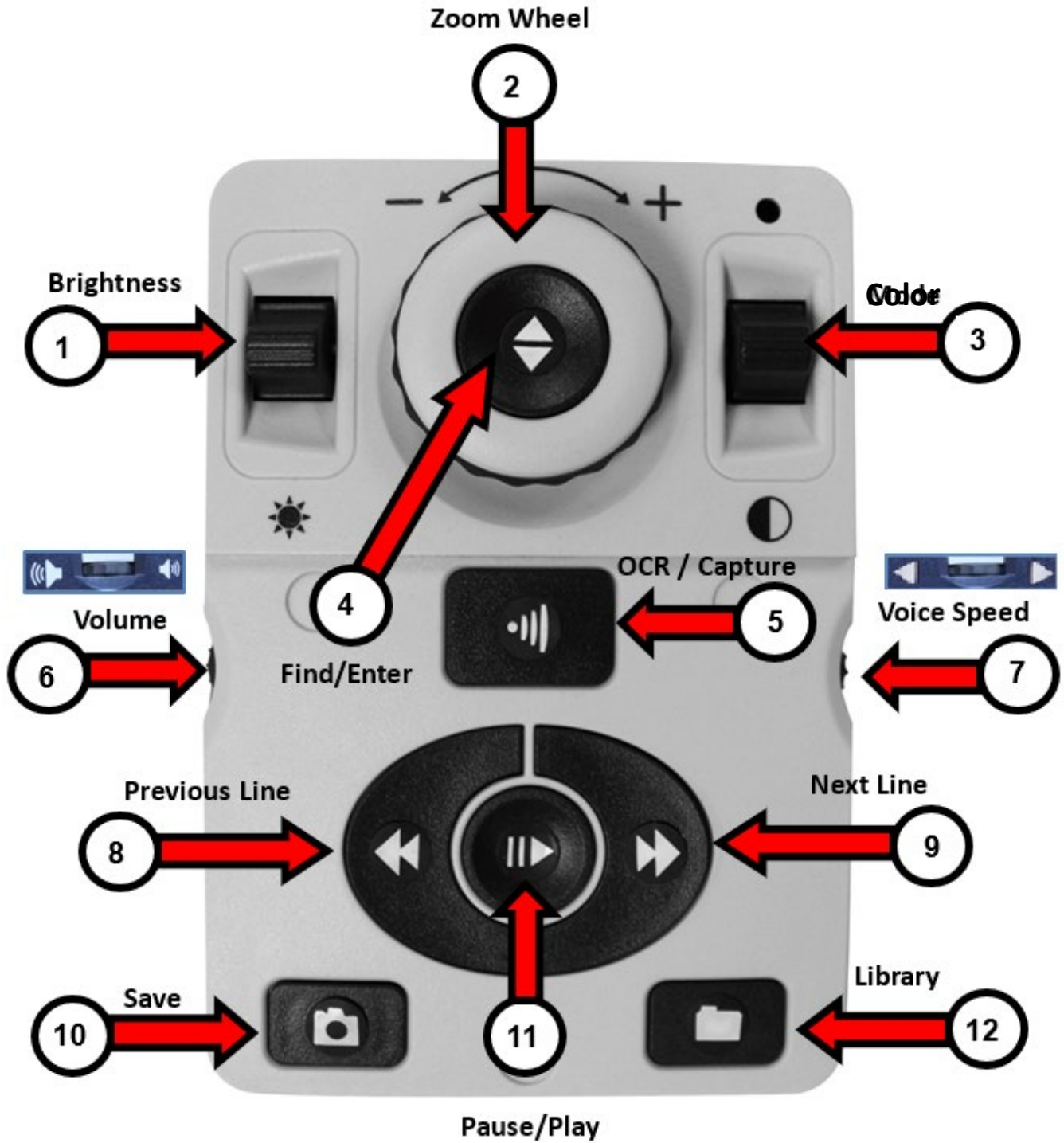
OCR Basic Control Console

Basic mode is when the cover is on the control console. You do not have access to the many OCR features, which are described in [“OCR Advanced Control Console”](#) on page 13.

The following buttons are active while you are in OCR Basic mode.

Label	Name	Description
1	Capture	Press this button to capture an image for OCR. Device will begin reading back to you. Press again to exit OCR and go back to the OCR guide frame.
2	Zoom Wheel	Turn clockwise or counterclockwise to increase or decrease the zoom level.
3	Pause/Play	After performing an OCR capture, press up or down to pause or resume OCR reading.
4	Color Mode	Press up or down to toggle through color viewing modes.
5	Volume	Rotate to increase/decrease system volume.
6	Voice Speed	Rotate to increase/decrease OCR playback speed.

OCR Advanced Control Console



OCR Advanced Control Console

Advanced mode is when the cover is off the control console, giving you access to many additional OCR features. The following buttons are active while you are in OCR mode using the Advanced control console.

Label	Name	Description
1	Brightness	When the guide frame is displayed, press up/down to increase/decrease brightness.
2	Zoom Wheel	When in OCR readback only, turn clockwise or counterclockwise to increase or decrease the zoom level.
3	Color Mode	Press up or down to toggle through the color viewing modes.
4	Find/Enter	Press to choose a menu or menu option, including the library and main menu. For example, you would press the Find button to select the Audio option on the Settings menu.
5	OCR/Capture	Press to capture an image for OCR. Press again to exit OCR and return to the OCR guide frame.
6	Volume	Rotate to increase/decrease the volume during readback.
7	Voice Speed	When in OCR mode, rotate clockwise/counterclockwise to increase/decrease OCR playback speed.
8	Previous Line	Press to move to the previous line while reading or to move to the previous zone while in Zone Overview.
9	Next Line	Press to move to the next line while reading or to move to the next zone while in Zone Overview.
10	Save	After performing an OCR scan (either during OCR playback or while paused), press and hold for two seconds to save the current OCR file. Perform the same operation while viewing the OCR guide frame to save the image as a picture.
11	Pause/Play	Press to toggle between pause and resume play during OCR playback.

Label	Name	Description
12	Library	Press and hold for two seconds to enter and exit the library. Rotate the Zoom wheel to navigate. Press the Library button briefly to return one level. Press the Find button to select your target.

Scanning a Document

The control console is required for OCR and text to speech (TTS). To scan a document and have it read aloud (TTS or text to speech), follow these steps:

1. Press the center button on the front panel to go from CCTV mode to OCR mode.

Note: Display enhancements, such as zoom or contrast, are not available in the OCR camera preview. However, they can be applied to the text/document after the OCR scan is complete.

2. Place the document under the camera and position the text within the guide frame.

Note: DaVinci Pro supports multiple orientations for documents when they are scanned assuming they are viewable under the camera chassis.

3. To capture the image for Optical Character Recognition (OCR), press the Capture (Basic) or OCR/Capture (Advanced) button. A camera shutter sound indicates that the system has taken a snapshot of the document, then OCR processing begins.



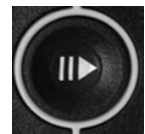
Basic

4. When OCR processing has completed, the document is immediately read aloud in Basic mode. If you are in Advanced mode with Full Page Picture, you must select the zone using the Next Line or Previous Line buttons and then press the Pause/Play button.



Advanced

5. Adjust the volume of the readback voice using the Volume button on the left side of the console. You can also change the colors by pressing the



Pause/Play

Color Mode button and how quickly the text is read by turning the wheel on the right edge of the console.

6. To exit OCR mode, press the Capture (Basic) or OCR/Capture (Advanced) button. You are now ready to scan another document.

Note: To return to CCTV mode, press the OCR/CCTV toggle button on the front panel.

Setting the OCR Mode

OCR modes control the way the text is captured and presented to you, and each mode provides different results in Basic or Advanced mode. You can use only one mode at a time. To select a mode, go to **Settings > OCR Text Recognition > OCR Mode**.

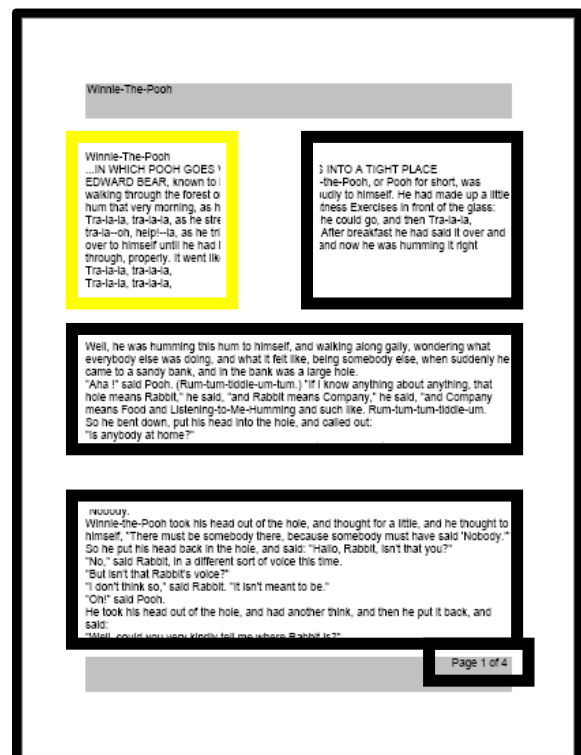
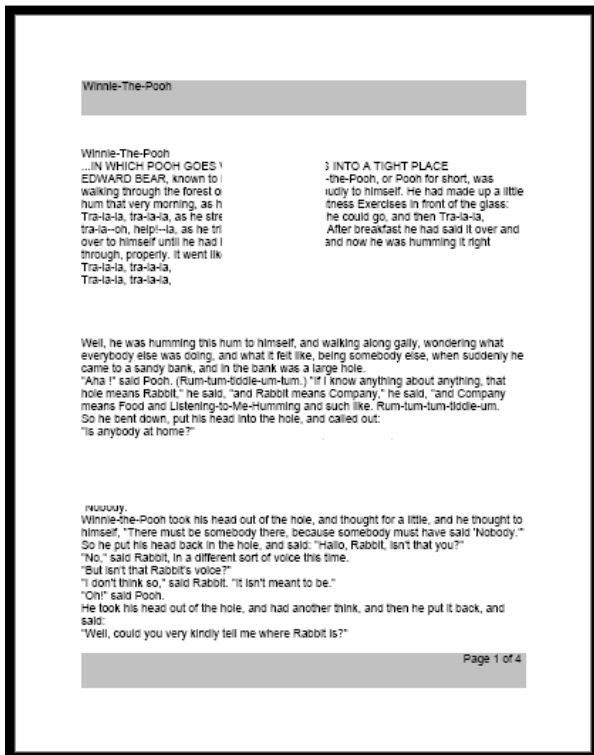
The text is read first horizontally, then vertically, in any mode.

Note: Table mode is not on the OCR Mode menu. It is available only by using the shortcut provided in this section.

Full Page Picture Mode

In this mode, a photo of your target OCR scan is displayed and organized into zones. The current word is highlighted as it is read. Magnification is available for the document using the Zoom wheel.

Basic: Using the Basic console, the page is displayed as it appears in the guide frame during OCR readback. Words are highlighted as they are read to show you the current reading position. To return to the OCR guide frame, press the Capture button.



Example of Full-Page Picture OCR in Basic (left) and Advanced (right) modes

Advanced: Using the Advanced console, a picture of the image in the guide frame is displayed with zones to divide the target material. By default, boxes are used to indicate

zones, or blocks of text, which you can highlight and navigate. OCR readback will not engage automatically in this mode since you are given the option of choosing where to start reading. When you have highlighted the desired area, press the Pause/Play button. At any time, pressing OCR/Capture returns you to the OCR guide frame.

Full Page Text Mode

This default viewing mode gives a crisp and clear representation of the text, which is displayed digitally in a word-wrapped columnar format. Magnification changes will dynamically adjust your material to ensure that it always extends the entire width of the screen.

Basic: Using the Basic console, the page is displayed as a full page of text during OCR readback. Words are highlighted as they are read to show you the current reading position. To return to the OCR guide frame, press the Capture button.

Advanced: Using the Advanced console, you can save and quickly navigate. The text is organized into lines that can be navigated one at a time by pressing the Next/Previous Line buttons. To move quickly through the lines, you can hold down the Next/Previous Line buttons. The appearance of the word highlighting is based on your selected color mode.

Specific terminology is used to describe flowers and their parts. Many flower parts are fused together; fused parts originating from the same whorl are connate, while fused parts originating from different whorls are adnate; parts that are not fused are free. When petals are fused into a tube or ring that falls away as a single unit, they are sympetalous (also called gamopetalous). Connate petals may have distinctive regions: the cylindrical base is the tube, the expanding region is the throat and the flaring outer region is the limb. A sympetalous flower. with

Single Line Text Mode

This mode displays the target text digitally one line at a time in the center of the screen to make the text as large as possible. Each word is highlighted as it is read, and the text scrolls so that the highlighted word is always in the middle of the screen.



Basic: Using the Basic console, the page is displayed one line of text at a time during OCR readback. The current reading position is shown by highlighting the word being spoken. To return to the OCR guide frame, press the Capture button.

Advanced: Using the Advanced console, press the Pause/Play button to begin reading or use the Next/Previous Line buttons to move through the text one word at a time. The word being spoken is highlighted, and the highlight color is based on your selected color mode. To return to the OCR guide frame, press the OCR/Capture button.

Table Mode

This is a special mode designed to accurately read documents with many tables, such as bank statements or receipts. The text is read strictly left to right, top to bottom, regardless of format

To use this mode, press and hold the Capture button for more than five seconds.

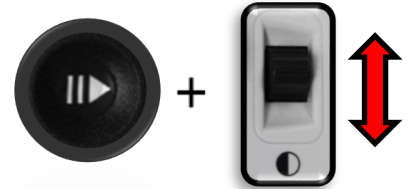
Table mode is activated for a single OCR scan and is available only in Full Page Text mode. After the scan is complete and you exit, you are returned to the previous OCR mode.

Quick Language Swap

You can quickly change the language while you are in the OCR preview screen. This feature is particularly useful if you are multi-lingual and want to switch between several languages but do not want to use the Auto-Language option. To cycle through the language list, press the Play button and then press the Color Mode button.

Language Quick Swap Next/Previous Language

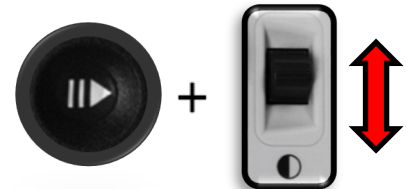
Press and hold the Play button and then press the Color Mode button up or down to cycle through the language list.



Depending on your location, you can also change your language either from American English to German (Western language set) or from British English to Cantonese (Eastern language set). Press and hold Play, then press Color Mode up or down for five seconds.

Switch Between English and German or Cantonese

Press and hold the Play button and then press and hold the Color Mode button for five seconds to swap between English and German (or Cantonese).



Western

Color Mode Up—English-US

Color Mode Down—German

Eastern



Color Mode Up—English-UK

Color Mode Down—Chinese-Cantonese

Adjusting User Settings

You can customize the DaVinci Pro by adjusting user settings. For example, you can change the magnification, adjust the volume, and change the brightness of the display. This section provides instructions for features commonly customized by users. To review all available user settings, see "[Menus](#)" on page 34.

To adjust settings, you need to navigate the **Settings** menu by using the tips in the following table.

Action	Tip
Display the main menu	Press up on the Color Mode button while pressing the Find button.
Highlight an option	Scroll using the Zoom wheel until the option that you want to select is selected. You can go left or right and up or down using the Zoom wheel.
Display a menu	After selecting a menu name, such as Settings , press the Find button.
Move around menus 	To move down in a menu, scroll until the line with the upside-down triangle is selected and press the Find button. To move up, scroll until you reach the triangle is selected and press the Find button. To leave a menu, select EXIT and press the Find button.
Enable a setting 	Some settings have black/white squares to indicate whether they are enabled. A black square indicates that the feature is enabled while a white square indicates that it is disabled. To enable/disable a setting, select it using the Zoom wheel and press the Find button.
Change a setting	Some settings have a number that represents a level, such as Brightness . To change the number, select the option and press the Find button to select it. Next, rotate the Zoom wheel to change the number up (right) or down (left). Press the Find button again to set the new value.

Lights

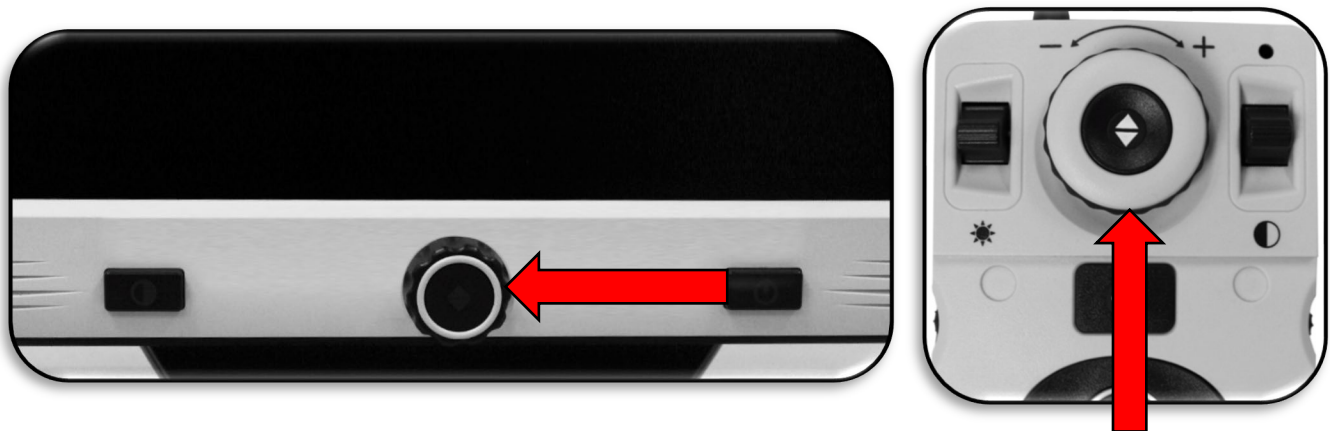
Lights on the DaVinci Pro can be turned on or off by simultaneously pressing the middle of both the Volume and Markers/Voice Speed wheels.



Magnification

DaVinci Pro offers a large range of magnification capabilities. The following directions can be used with the DaVinci Pro front panel controls or the control console.

To adjust the magnification, turn the Zoom wheel until you reach the desired magnification. Turning the wheel clockwise will increase magnification, and turning the wheel counterclockwise will decrease magnification.



Zoom Wheels on the front panel and control console

When you are increasing or decreasing magnification in desktop mode, the zoom level is displayed in the upper-left corner of your screen. An indicator shows when you reach the maximum or minimum magnification. The upper magnification limit can be extended using the **Extended Zoom Levels** option in the **Settings** menu. Follow these steps:

1. On the control console, press up on the Color Mode button while pressing the Find button. The main menu is displayed.
2. Use the Zoom wheel to scroll right and select the **Settings** menu, then press the Find button.
3. Scroll down to select **Extended Zoom Levels**. A black square indicates that the color combination is enabled while a white square indicates that it is disabled.
4. Enable **Extended Zoom Levels** by pressing the Find button.

Volume

On the control console, turn the Volume wheel on the left edge to increase or decrease the volume during OCR readback. You can also adjust the volume by going to **Settings > Audio > Volume**.



To change the volume using the menu, follow these steps:

1. On the control console, press up on the Color Mode button while pressing the Find button. The main menu is displayed.
2. Use the Zoom wheel to scroll right and select the **Settings** menu, then press the Find button.
3. Scroll down to select **Audio** and press the Find button.
4. Scroll down to select **Volume** and press the Find button. A square appears around the number, which is the volume level.
5. Use the Zoom wheel to scroll left for a lower volume or right for a higher volume.
6. Press the Find button to set the new volume level. The square around the number disappears.

Brightness

In either CCTV or OCR mode, press the Brightness toggle switch on the left side of the control console to adjust the brightness of the display. You can also adjust the brightness by going to **Settings > Display > Brightness**.



To change the brightness level using the menu, follow these steps:

1. On the control console, press up on the Color Mode button while pressing the Find button. The main menu is displayed.
2. Use the Zoom wheel to scroll right and select the **Settings** menu, then press the Find button.
3. Scroll down to select **Display** and press the Find button.
4. Scroll down to select **Brightness** and press the Find button. The current level is shown inside a square.
5. Rotate the Zoom wheel left for a lower level or right for a higher level.
6. Press the Find button to set the new value. The square around the number disappears.

Colors

DaVinci Pro offers a range of choices in both text and background colors to provide optimum viewing for people with certain visual conditions. Press the Color Mode button on the front panel or the control console to cycle between full color and six color combinations. You can choose from 31 color combinations by going to **Settings > Display > Preferred Color Modes**.

Changing Color Combinations

To change the color combinations included in the rotation of choices when you press the Color Mode button, follow these steps:

1. On the control console, press up on the Color Mode button while pressing the Find button. The main menu is displayed.
2. Use the Zoom wheel to scroll right and select the **Settings** menu, then press the Find button.
3. Scroll down to select **Display** and press the Find button.
4. Scroll down to select **Preferred Color Modes** and press the Find button. A black square indicates that the color combination is enabled while a white square indicates that it is disabled.
5. Disable one of the defaults by selecting it and pressing the Find button.
6. Enable a new color combination by selecting it and pressing the Find button. When enabled, the color combination is included in the rotation of choices when you press the Color Mode button. You can choose up to six color combinations.

Factory Defaults

Factory defaults, which provide commonly used color combinations, are described in the following table. Color will always be available, but you can change the other defaults.

Name	Description
Color	Gives a true color representation of the image being magnified.
Black on white	Provides an enhanced positive representation of the image being magnified, providing a white background with black text. It increases the contrast to offer crisp text images for reading.

Name	Description
White on black	Provides an enhanced negative representation of the image being magnified, providing a black background with white text. It increases the contrast to offer crisp text images for reading.
Green on black	Provides a black background with green text.
Yellow on black	Provides a black background with yellow text.
Yellow on blue	Provides a blue background with yellow text.
Black and white	Gives a black and white representation of the image being magnified.

Line and Window Markers

Line and window markers make your target easier to read by either framing it with lines or by covering up peripheral viewing space. You can enable or disable line and window markers based on your preference. You must enable markers before you can cycle between them or adjust them.

Enabling Line and Window Markers

Markers can be toggled on or off only in CCTV mode. To make line and/or window markers available:

1. On the control console, press up on the Color Mode button while pressing the Find button.
2. Use the Zoom wheel to scroll right to **Settings** and press the Find button.
3. Scroll down to **Display** and press the Find button.
4. Scroll down to either **Line Markers** or **Window Markers** and press the Find button.
5. Scroll down to either **Horizontal** or **Vertical** and press the Find button to select it. A black square indicates that the feature is enabled while a white square indicates that it is disabled. When enabled, the option is displayed when you rotate the Markers wheel on the right side of the control console.
6. To exit each menu, scroll to **EXIT** and press the Find button.

Cycling Between Line and Window Markers

In CCTV mode, you can rotate the Markers wheel on the right side of the control console to toggle through the marker options. These options are dependent on the settings you selected in the previous section, “[Enabling Line and Window Markers](#)” on page 31.



Adjusting Position of Marker

In CCTV mode, adjust the position of a marker by following these steps:

1. Use the Markers wheel on the right side of the console to scroll to your desired marker.
2. Press and hold the Markers wheel while pushing the Brightness button up or down to adjust the line or window position.

Control Console Shortcut to Adjust Marker/Window Position

Press and hold the Markers wheel and press Brightness up/down.



Adjusting Size Between Markers

In CCTV mode, adjust the size of a marker by following these steps:

1. Use the Markers wheel on the right side of the console to scroll to your desired marker.
2. Press and hold the Markers wheel while turning the Zoom wheel clockwise or counterclockwise to adjust the line or window size.

Control Console Shortcut to Adjust Marker/Window Size

Press and hold the Markers wheel and scroll Zoom wheel left or right.



HDMI/VGA Toggle

You can save desk space by using the DaVinci Pro LCD as a computer monitor. DaVinci Pro has both an HDMI port on the rear panel and a VGA port on the back of the monitor, allowing you to attach a computer or tablet (additional peripherals may be required).

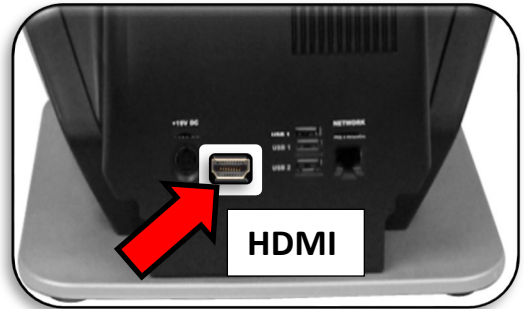
Using the DaVinci Pro LCD as a computer monitor is like attaching a typical computer monitor to your computer or connecting a secondary display to your laptop. Refer to your computer or laptop user manual on how to connect a display. The DaVinci Pro LCD supports resolutions up to 1920 x 1080.

To toggle between the camera image and the computer image, press and hold Pause/Play while pressing Find/Enter on the control console.

When toggling back to the camera image, keep pressing Pause/Play and Find/Enter until you see the desired display. Three video channels are available:

- CCTV
- PC Input 1-VGA
- PC Input 2-HDMI

Note: When using the DaVinci Pro display as a computer monitor, the controls for the camera (such as Zoom, Color Mode, and Markers) will not work for the computer image.



Control Console Shortcut for HDMI/VGA Toggle

Press and hold the Pause/Play button and press the Find/Enter button.



Focus Lock

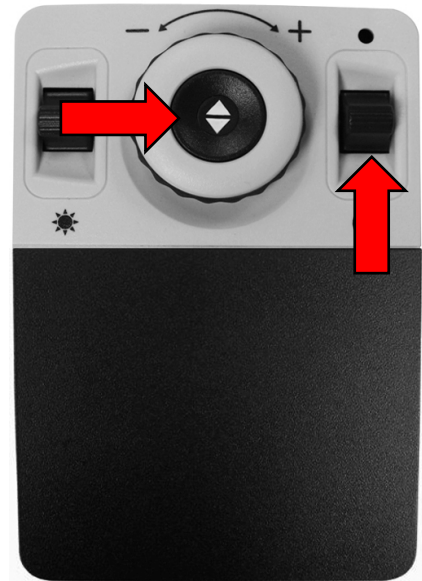
Focus lock maintains a steady focus when you want to keep the focus on one item, such as a paper, while something else enters the field of view, such as a hand to sign the paper. This feature is toggled on and off by pressing the middle of the Volume wheel and Markers/Voice Speed wheel simultaneously. For details, see [“Focus Locked”](#) on page 48.

Menus

You can personalize your DaVinci Pro settings using the menus. This section provides a description of each menu and its options in the order in which they appear on the screen.

To access the menus, follow these steps while in CCTV mode:

1. On the control console, press up on the Color Mode button while pressing the Find button.
2. Turn the Zoom wheel to scroll to a menu or menu option.
3. Press the Find button to open a menu.
4. Enable/disable an option by selecting it and pressing the Find button. Black is enabled, while white is disabled.
5. When an option is defined by a numerical value, select the option and press Find to display a box around the number. Rotate the Zoom wheel to increase/decrease the number, then press the Find button to set it.
6. To exit menus, either press up and hold the Color Mode button while pressing the Find button or return to CCTV mode by pressing the center button on the front panel.



Introduction

An introduction video has been included with your DaVinci Pro to provide an overview of its features. Use your control console to pause, play, or exit the video playback.

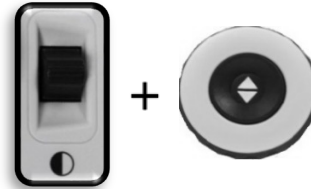
To play the video from the Main Menu, select it using the Zoom wheel and press the Find button. Use the Advanced console to pause, play, and exit the video.

Note: The introduction video can be replaced if you choose. Contact your Enhanced Vision representative for more information.



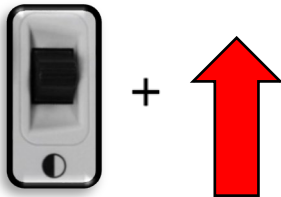
Exit from Introduction Video and Return to Menu

To exit, press up and hold the Color Mode button while pressing the Find button.



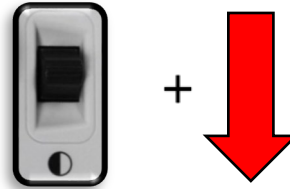
Pause the Video

Press up on the Color Mode button to pause video playback



Resume the Video

Press down on the Color Mode button to resume video playback



Games

All games require a mouse, which you connect using the second USB port on the back of your DaVinci Pro. You are prompted to connect a computer mouse before starting any game if you have not done so.



- Move through the games using the Zoom wheel on the control console.
- To select a game, press the Find button.
- To confirm a choice, press the Find button.
- To exit, press up and hold the Color Mode button while pressing the Find button.

Game	Description
Sudoku	A popular logic-based number puzzle
Solitaire	The classic card game
Free Cell	A solitaire game with variant rules
Reversi	Strategy game played against a computer opponent on an 8x8 grid
Tic-Tac-Toe	Played against a computer opponent, be the first to put 3 x's or o's in a row to win
Simon Memory	Test your memory skills by remembering colors and tones in an expanding sequence

Settings

The Settings Menu contains configurable options to fine tune your user experience.

- To navigate through the menus, rotate the Zoom wheel.
- To select an option, press the Find button. A black box means the option is enabled, while white is disabled.
- To move to the next/previous page, select the triangle at the bottom/top of the menu and press the Find button.
- To leave each menu, you must select **EXIT** and press the Find button.

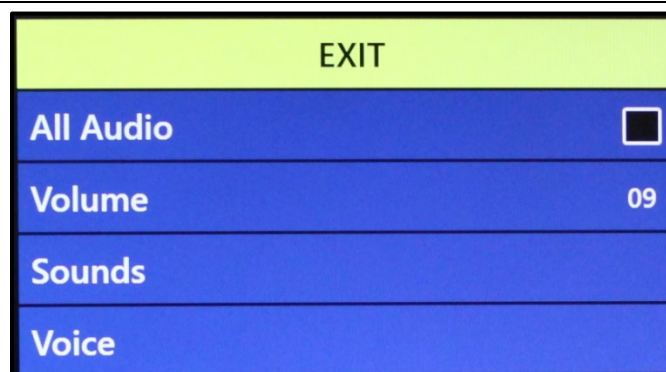


Menu Option	Action
Audio	Set your hardware sounds, mechanical sounds, and voices.
Display	Control all graphical user interfaces, icons, and visuals.
Time & Date	Set the system time and date, which can be displayed as your screen saver.
OCR Text Recognition	Determine optical character recognition (OCR) characteristics, such as colors, zones, and highlighting.
Set System to 50/60hz	Configure the light frequency for your locale and the environment.
Extended Zoom Levels	Select extended magnification levels.
Working Distance	Elevate the optimal focal distance to allow several additional inches of height on a target material.
Languages	Set the primary language.
Language Group	Set the language set to Asian or non-Asian for the screens and OCR.
Auto-Language	Set multiple languages for DaVinci Pro text and prompts.


Menu Option	Action
White Balance	Configures the image temperature and affects the viewing characteristics of the CCTV image.
Screen Saver	Adjust the time it takes for the screen saver to engage.
Focus Locked	Maintain focus on a specific object, so that object remains in focus after changing the magnification or moving items into the field of view.

Audio

The Audio menu allows you to set your sounds and voices. Sounds include hardware and mechanical sounds, such as button clicks and chimes. The **Audio** menu has four options, which are explained in the following table.



Menu Option	Action
All Audio	<p>Enable or disable all audible sounds and voices.</p> <ul style="list-style-type: none"> • On – All the default voices and sounds are available. • Off – All sounds are turned off and the other menu options are unavailable.
Volume	<p>Set the default volume level for all audio (1 is lowest and to 10 is highest). See “Volume” on page 28 for instructions on changing the volume level.</p> <p>Note: You can use Volume wheel on the console to further increase or decrease the volume. Press the center of the Volume wheel to reset the volume to the default value.</p>

Menu Option	Action
Sounds	<p>Toggle these options on or off by selecting the option and pressing the Find button:</p> <ul style="list-style-type: none"> • All Sounds – Enables or disables button clicks and chime sounds. • Button Clicks – Enables or disables the button click sounds only. • Chime Sound – Enables or disables the chime sound only. 
Voice	<p>Select from the following options:</p> <ul style="list-style-type: none"> • All Voices – Enables or disables all voice prompts on the system. • Menu Voice – Enables or disables voice prompts for system menus. • Message Voice – Enables or disables voice prompts for on-screen messages. • Time & Date Voice – When enabled, the system announces the current date and time the first time you display a menu in a session. The announcement is only made once after you restart the device from standby or shutdown. <p style="text-align: right;">Continued</p>

Menu Option	Action														
Voice (continued)	<ul style="list-style-type: none"> • Alerts and Warnings – Enables or disables voice prompts for messages that warn of system conditions, such as “No files found” or “Document saved.” Also includes OCR messages, such as “Please align your document inside the frame.” • Voice Gender – Specifies the gender of the announcing voice. If only one selection is shown, then the voice is available in only one gender in the selected language. • Voice Speed – Specifies the speed that the voice reads. During OCR readback, press the center of the Markers wheel to reset the speed to the default value. To set the speed: <ol style="list-style-type: none"> 1. In the Voice menu, select Voice Speed and press the Find button. A black box appears around the value. 2. Rotate the Zoom wheel left to slow the voice speed and right to speed up the voice speed. 3. Press the Find button to set the new value. <div data-bbox="500 1050 1218 1663" style="border: 1px solid black; background-color: #2c5e8c; color: white; padding: 5px;"> <p style="text-align: center; margin: 0;">EXIT</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px 5px;">All Voices</td> <td style="text-align: right; padding: 2px 5px;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="padding: 2px 5px;">Menu Voice</td> <td style="text-align: right; padding: 2px 5px;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="padding: 2px 5px;">Message Voice</td> <td style="text-align: right; padding: 2px 5px;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="padding: 2px 5px;">Time & Date Voice</td> <td style="text-align: right; padding: 2px 5px;"><input type="checkbox"/></td> </tr> <tr> <td style="padding: 2px 5px;">Alerts & Warnings</td> <td style="text-align: right; padding: 2px 5px;"><input checked="" type="checkbox"/></td> </tr> <tr style="background-color: yellow;"> <td colspan="2" style="padding: 2px 5px;">Voice Gender</td> </tr> <tr> <td style="padding: 2px 5px;">Voice Speed</td> <td style="text-align: right; padding: 2px 5px;">03</td> </tr> </table> </div>	All Voices	<input checked="" type="checkbox"/>	Menu Voice	<input checked="" type="checkbox"/>	Message Voice	<input checked="" type="checkbox"/>	Time & Date Voice	<input type="checkbox"/>	Alerts & Warnings	<input checked="" type="checkbox"/>	Voice Gender		Voice Speed	03
All Voices	<input checked="" type="checkbox"/>														
Menu Voice	<input checked="" type="checkbox"/>														
Message Voice	<input checked="" type="checkbox"/>														
Time & Date Voice	<input type="checkbox"/>														
Alerts & Warnings	<input checked="" type="checkbox"/>														
Voice Gender															
Voice Speed	03														

Display

Display settings control all graphical user interfaces, icons, and other visuals on DaVinci Pro, as described in the following table.

Menu Option	Action
Screen Messages	Specify whether you want messages to display, including system and software notifications, warnings, and alert messages. When lights are turned on, for example, a “Lights on” message would display. Other examples are “Saving,” “Export complete,” and “Factory settings restored.”
Brightness	Select the brightness level (1-10) for the LCD display and user interface. See “Brightness” on page 29 for instructions.
Icons & Visuals	Enable or disable the icons for lights and panning, such as lights on/off or icons indicating preview, live, or freeze mode.
Line Marker	Enables or disables vertical or horizontal line markers, which help you focus on segments of text while in CCTV mode.
Window Marker	Enables or disables vertical or horizontal window markers, which help you focus on segments of text while in CCTV mode.
Preferred Color Modes	Select the color combinations included in the rotation of choices when you press the Color Mode button on either the control console or the front panel. The device comes pre-loaded with several color defaults but these can be changed. See “Colors” on page 30.

Time & Date

DaVinci Pro remembers the current time and date once it is set. To set the current time/date, follow these steps:

1. In the **Time & Date** menu, select **Set Time & Date** and press the Find button.
2. Rotate the Zoom wheel until the value you want is displayed, then press the Find button.
3. Repeat the previous step for each part of the time and date.

Note: At any time, press up on the Color Mode button to finish setting the clock and return to the **Time & Date** menu.

4. Press up on the Color Mode button.

The **Time & Date** menu has three options, which are described in the following table:



Menu Option	Action
24 Hour Format	Enable this option to use military time, where a 24-hour clock is used rather than a.m. and p.m. For example, 2 p.m. would be 14:00.
Date Format	Enable one of these options to determine how the date is displayed, where D is day, M is month, and Y is year: <ul style="list-style-type: none"> • DD.MM.YYYY • MM.DD.YYYY • YYYY.MM.DD
Set Time & Date	Set the current time and date.

Note: To have DaVinci Pro announce the current time when you start up, enable the **Time & Date Voice** option at **Settings > Audio > Voice > Time & Date Voice**. To display the current time like a digital clock when your system is idle, enable the **Clock** option at **Settings > Screen Saver > Clock**.

OCR Text Recognition

Specify how you want to capture text using the options in the following table.

Menu Option	Action
Guide Frame	Set the color of the boundary while in OCR mode. The frame helps you position your text before an OCR scan.
Zone Identifier	Determine whether zones are identified by rectangular boxes or numbers. Scanned text is broken up into blocks called zones to help you organize the content.
Zone Boundary Color	Specify the color of the zone identifier (box or number) that organizes scanned text into blocks.
Reading Highlight	Specify the color of the box around the word currently being read in OCR readback mode.
OCR Tune	Determine the type of processing sound that occurs after an OCR scan. Choose from three sounds or turn off the sound.
OCR Attributes	<p>Choose between a faster processing times or higher OCR accuracy.</p> <ul style="list-style-type: none"> • High Performance uses a processing method designed to provide a good OCR result relatively quickly. If your target document is using common fonts and is not very complex, then this method will suit your needs. • High Precision is designed to achieve more accurate results but will do so more slowly when compared with High Performance Mode. If you are concerned with the overall accuracy of your OCR scan results or have a complex document with smaller fonts, it is recommended that you use High Precision.

Menu Option	Action
OCR Modes	<p>Select how OCR text is displayed:</p> <ul style="list-style-type: none"> • Full Page Picture Mode displays a picture of your OCR scan and organizes it into zones. • Full Page Text Mode displays a digital text version of your OCR scan. It fully covers the screen in a column format. This is the default setting. • Single Line Text Mode displays a digital text version of your OCR scan. It covers a single line on the screen and features the largest text magnification level. <p>For more information, see “Setting the OCR Mode” on page 23.</p>

Set System to 50/60 Hz

This configures the light frequency for the environment where you are using DaVinci Pro to enable light flicker compensation. If you notice any visible flicker in the live image, you may need to adjust to 50 or 60 Hz AC. To change the frequency, follow these steps:

1. Select **Set System to 50/60 Hz** and press the Find button. A square appears around the number, which is the frequency.
2. Use the Zoom wheel to scroll left for **50** or right for **60**.
3. Press the Find button to set the new frequency. The square around the number disappears.

Extended Zoom Levels

Enable this option to extend the magnification range to 77.0x.

Working Distance

Select this option to allow several more inches of height on a target. This feature is particularly useful when viewing an object that is very close to the camera, such as a pill bottle or your hands while performing arts and crafts. It is also helpful for viewing a large book, such as an encyclopedia or product box, that does not lay flat against the X/Y table.

Languages

This menu sets the default primary language for DaVinci Pro. The factory default is English-US. All the text and prompts are displayed in the selected language. To change your language preference, follow these steps.

1. Select **Languages** and press the Find button.
2. Rotate the Zoom wheel until your desired language is selected.

Note: To see more languages, select the triangle at the bottom of the menu and press the Find button.

3. Press the Find button. A black box next to that option indicates that the language is enabled. After a moment, the system screen changes to the language you selected.



Language Group

Select either **Language Group (Non-Asian)** and **Language Group (Asian)** to set the languages that are available for displaying DaVinci Pro screens and performing OCR and TTS.

To change your language group, follow these steps.

1. Select **Language Group** and press the Find button.
2. Rotate the Zoom wheel until your desired language group is selected.
3. Press the Find button. A black box next to that option indicates that the language group is enabled.



4. The DaVinci Pro device restarts automatically to enable the new language group.

Note: The restart does not occur until you stop browsing the menu and you have selected a different language group.

Auto-Language

With Auto-Language enabled, multiple languages are automatically detected and read during OCR without having to reset the language. Language-specific characters are detected in each portion of text, and once processing is complete, text-to-speech begins reading in the correct language.

The Auto-Language feature is recommended for those who read multi-lingual materials or swap between a variety of languages frequently. If you only tend to read in a single language, it is recommended that you leave this feature disabled.

To enable this feature, select the **Auto-Language** option and press the Find button. Once this feature is active, a box appears next to each language in the list. Select each language that you need.

See "[Quick Language Swap](#)" on page 21 for more information on changing languages during OCR preview.



White Balance

The color white is often affected by the lighting in a room. To compensate for the current lighting and improve the clarity of the CCTV image, you can change the image temperature. Options are described in the following table:

Menu Option	Action
Auto	Automatically adjusts image for your environment.
Normal	Sets the image for vibrant true color.
Warm	Sets the image for warmer tones, deeper red, yellow, etc.
Cool	Sets the image for cooler tones, darker blue, purple, etc.

To change your white balance:

1. In the Settings menu, select White Balance.
2. Press the Find button.
3. Select one of the options and press the Find button. The square beside the option turns from white to black, showing it is enabled.

Screen Saver

You can adjust the overall time it takes for the screen saver to engage and select the screen saver you want to view. The screen saver is activated after a certain time interval where the device is not in use and the camera does not detect any motion under the camera. Options are described in the following table:

Menu Option	Action
Set Screen Saver Time	Specifies how long the device must remain idle before it enters screensaver mode. Options are 5, 10, 20, and 30 minutes.
OFF	Enables or disables the screensaver feature. When you make this selection, no other screen saver options are available.
Company Logo	Uses the Enhanced Vision animated logo as a screensaver.
Pictures	Cycles through your saved pictures as a screensaver.
Default	Cycles through a gallery of high-quality images as a screensaver.
Clock	Displays the current time and date like a digital clock as a screensaver.

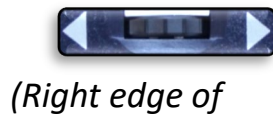
Focus Locked

You can lock the focus at a specific distance for optimal viewing at a fixed location. This feature is turned on and off using this menu option or by pressing the middle of the Markers/Voice Speed wheel and Volume wheel simultaneously. When active, the focal distance remains locked. If you reposition material in the field of view, it may not automatically be in optimal focus.

One auto focus operation is performed after zooming even when Focus Lock is engaged.

Control Console Shortcut for Auto Focus/Focus Lock

Simultaneously press the middle of both the Markers/Voice Speed wheel and the Volume wheel.



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Help

The Help Menu provides available shortcuts and key presses to access DaVinci Pro features. In addition, quick start information maps the functions of buttons on both the basic and advanced consoles. This information is handy to reference when you are getting to know the device.

To exit this menu immediately, press the CCTV/OCR toggle button in the center of the front panel. To exit using the control console, press up and hold the Color Mode button while pressing the Find button.



Exiting from the Help Menu

Press up and hold the Color Mode button while pressing Find/Enter on the control console



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Library

The Library is used to store your pictures, pages, and books.

Saving Files

You can save an image as a picture, page, or book:

- **Picture** – While you are in OCR mode, press and hold the Save button.
- **Page** – While in OCR readback mode, press and hold the Save button. When prompted, choose **Page**.
- **Book** – While in OCR readback mode, press and hold the Save button. When prompted, choose **Book**. You are prompted to either select a green checkmark to add pages or select a red X when you are done. To create a book, you save multiple document scans as one file name.



Entering the Library

To enter the library while in CCTV mode or OCR mode, press and hold the Library button on the Advanced control console. You then choose **Pictures** or **Documents** by using the Zoom wheel to select the icon, and then pressing the Find button.

When you choose **Pictures**, an image of each saved picture file is displayed.



When you choose **Documents**, you must make another choice of **Page** (single-page) or **Book** (multiple pages). A preview of your file is displayed.



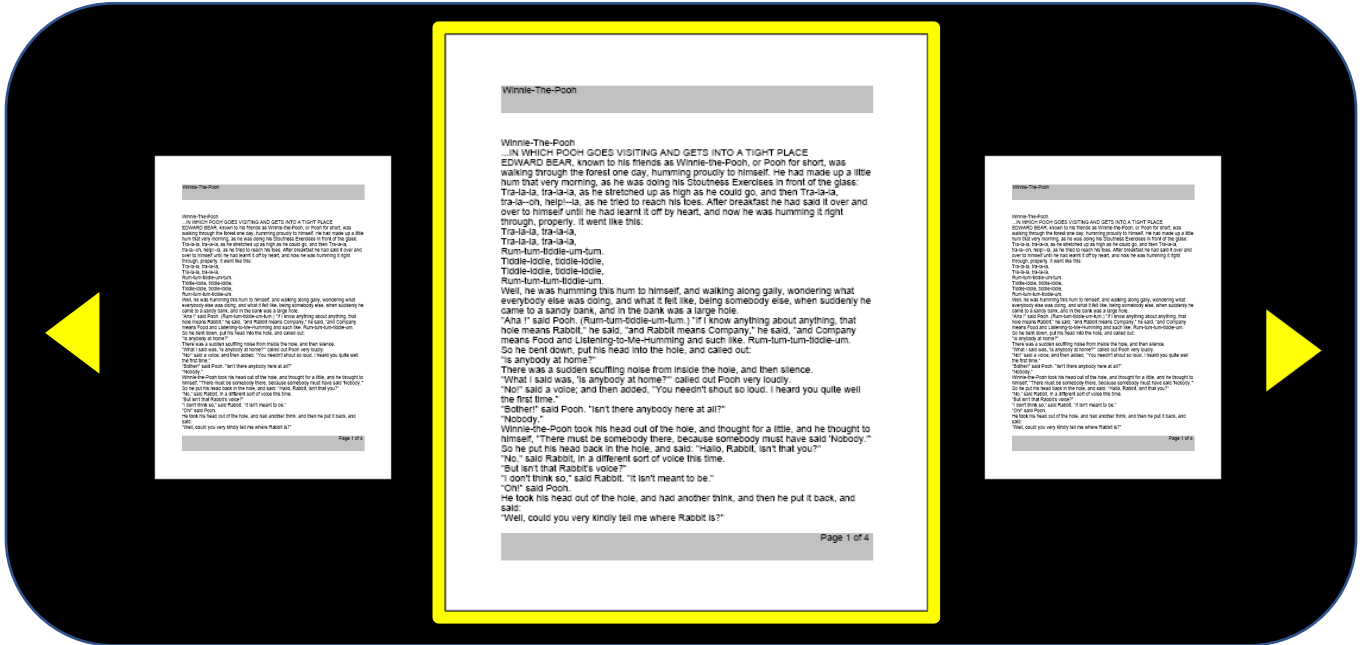
Displaying Library Menu Options

Library menu options are displayed when you choose **Library** from the main menu. You use these options to view, import, and export files that you have saved as pictures or documents.



Viewing Your Saved Files

Use the Zoom wheel to cycle through your saved files. Previews for the next and previous lines will change as you navigate. Press the Find button to select a file and either preview pictures or begin OCR readback for documents.






Paging Through a Book (Next and Previous)

To look through a book, you must simulate turning pages by using shortcuts for next page and previous page. To go forward, press and hold the Play button while pressing the Next button. To go back a page, press and hold the Play button while pressing the Previous button.

Next and Previous Page Shortcuts

Press and hold the Play button while pressing the Next or Previous button.


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or


Viewing Pictures

The same color selections and magnification options are available when you view pictures. In addition, panning allows you to adjust the field of view (FOV) for your saved image. Use the side wheels on your control console. Move the left Volume wheel to move the FOV left and right. Move the right Markers wheel to move the FOV up and down.




Downloading Files to a USB Drive

To export your files and documents to a USB flash drive, you must connect the two-port USB hub (included in your package) and insert a USB flash drive in the available USB port. Instructions are provided for exporting files three ways: one file at a time (**Export Files** option), all pictures (**Export All Pictures** option), or all documents (**Export All Documents** option).

Export Files

To export one file at a time, follow these steps:

1. Go to **System Menu > Library > Export Files**.
2. Select the type of file (.txt, .rtf, .jpg, .pdf or .doc) that will be exported and press the Find button.
3. Select **Export** and press the Find button.
4. Select either the **Pictures** icon or the **Documents** icon, and press the Find button.
5. Select the image of the file that you want export.
6. Press and hold the Save button for at least two seconds. 
7. Once exported, the Save icon is displayed to indicate that the image has been saved to the USB drive.

EXIT	EXIT
View Pictures	.TXT <input checked="" type="checkbox"/>
View Documents	.RTF <input type="checkbox"/>
Import Files	.JPG <input type="checkbox"/>
Export Files	.PDF <input type="checkbox"/>
Export all Pictures	.DOC <input type="checkbox"/>
Export all Documents	Export
Delete All Pictures	
Delete All Documents	

Export All Pictures

To automatically export all your saved images, follow these steps:

1. Go to **System Menu > Library > Export All Pictures**.
2. Upon activation, the Save Icon is displayed to indicate that you are downloading the images.
3. When complete, a chime indicates that it is safe to remove the drive.



Export All Documents

To automatically export all your saved documents (pages and books), follow these steps:

1. Go to **System Menu > Library > Export All Documents**.
2. Upon activation, the Save Icon is displayed to indicate that you are downloading the images.
3. When complete, a chime indicates that it is safe to remove the drive.

Deleting an Image

While viewing a saved image, briefly press the Marker wheel on the right side of the console to delete it. A garbage pail icon is displayed to indicate that the image has been deleted.

Control Console Shortcut to Delete an Image

While viewing an image, press the Marker wheel on the right side of the console to delete it.



Right edge of console

Deleting All Pictures

To delete all saved images, follow these steps:

1. Go to **System Menu > Library > Delete All Pictures**.
2. Upon activation, the Delete icon is displayed to indicate that you are deleting all the images.
3. When complete, a chime indicates that the images have been deleted.



Deleting All Documents

To automatically delete all saved documents (both pages and books), follow these steps:

1. Go to **System Menu > Library > Delete All Documents**.
2. Upon activation, the Delete icon is displayed to indicate that you are deleting all the documents.
3. When complete, a chime indicates that the documents have been deleted.

Import Files

To import your files from a USB flash drive, you must connect the two-port USB hub (included in your package) and insert a USB flash drive in the available USB port. Supported file formats are .TXT, .RTF, .JPG, .PDF, and .DOC.

1. Go to **System Menu > Library > Import Files**.
2. Select the file formats you are importing (.TXT, .RTF, .JPG, .PDF, and .DOC).
3. Select **IMPORT** and press the Find button. When complete, the **Save** icon is displayed.

Factory Settings

This menu is used to check the status and revision numbers of your device or to return the device to its original configuration.

Product Information

This option contains important system information, such as the software version, language group, and product number.

Restore Factory Settings

Selecting this option returns your system to its default conditions at the time it left the Enhanced Vision Factory. It resets any custom settings or changes you have made as a user.

Note: *Using this option will not delete your saved images, pages, or books.*

EXIT

To exit any menu, select **EXIT** and press the Find button on the control console. You also can press up and hold the Color Mode button while pressing the Find button to return to CCTV mode.



Tips and Tricks

Improving OCR Accuracy

To improve the accuracy of OCR, follow these tips:

- Before you begin a document capture, ensure that the lighting in the room is evenly distributed over your target document. Avoid hotspots.
- Flatten out books, especially ones with a large spine or with an observable curvature.
- For optimal OCR readback, position your material within the guide frame in its entirety. You can rotate target material in any orientation to ensure that it fits completely within these boundaries.
- Turning the LED on or off can improve accuracy on some materials. To toggle the LED, either press the button on the CCTV camera head or simultaneously squeeze the Volume and Markers wheels on the control console.
- Try changing from High Performance to High Precision mode. Go to **Settings > OCR Text Recognition > OCR Attributes**. The High Precision mode is tuned to make the fewest errors during OCR processing so you should notice a big improvement with problematic documents.
- For small OCR targets, such as a business card or letter, place a clean white sheet of paper behind it to eliminate any distracting patterns in the background.

Using Multiple Orientations

DaVinci Pro supports all available viewing angles, both portrait and landscape. If your target document is too large or unusually shaped, you can reposition it at another angle to fit it within the guide frame.

Restarting Your System

If your system exhibits any odd behavior, perform a full [shutdown](#) (see page 8) and power it back on. If the unit is completely unresponsive, reset it by simultaneously pressing the Find/Enter button on the control console and the Power button on the front panel. This should immediately power down the system. Do not reset it unless absolutely necessary.

Configuring Your System

You can use the **Settings** menu to configure your user interface, system sounds, and system display to suit your preferences. Once you are familiar with the system, try changing these options to develop the perfect user experience customized to fit you.

Control Console Shortcuts

Many actions can be performed by pressing a combination of buttons on the control console. The following table provides some of the shortcuts.

Change	Shortcut
Marker position	Markers wheel + Brightness up
Window position	Markers wheel + Brightness
Marker size	Markers wheel + Zoom wheel
Window size	Markers wheel + Zoom wheel
HDMI/VGA	Pause/Play button + Find
Menus	Color Mode + Find
Image type	Find + Play
Focus lock	Volume wheel (middle) + Markers/Voice Speed wheel (middle)

Troubleshooting

If you are experiencing problems with your DaVinci Pro, review this section for troubleshooting advice.

Device Will Not Power On

Try these steps:

1. Ensure the power supply from DaVinci Pro is securely connected to a working outlet.
2. Make sure the two parts of the power supply cord are securely connected.
3. Ensure the power supply cord is completely plugged into the DC 19V jack on the back of the viewing stand base.
4. If you are using a power strip or surge protector, be sure it is switched on.
5. Check the circuit breaker and reset it if needed.
6. Push the Power button on the front panel. A blue light near the Power button and a blue light on the control console are illuminated when the power is turned on.

OCR Results Poor

The following tips will help with OCR:

- Clean polarizing filter on the underside of the OCR camera with the nonabrasive lens cleaning cloth provided with your DaVinci Pro. 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.
- Toggle the LED camera lamp on or off to try to achieve even ambient lighting, which helps create a better image.

Slow Text-to-Speech

If text-to-speech seems to be taking too long, try the following:

- Cycle the power on and off by pressing the Power button.
- If the device is not responding to button presses, then press and hold the Power button for more than five seconds to force a shutdown. Do not physically remove the device from its power source while it is shutting down.

Replacement LED lamps

Your DaVinci Pro has an LED lamp designed to provide years of trouble-free service. In the unlikely event that a replacement LED is needed, contact your place of purchase or Enhanced Vision at 800-440-9476 extension 2 (international +001 714-465-3400 extension 2) Monday through Friday, from 8 a.m. to 5 p.m. Pacific Standard Time (UTC-8).

Firmware Update

To keep your device up-to-date, visit our software support page at <https://www.enhancedvision.com/support/software/davinci-pro.html>.

Technical Assistance

If you have any questions or require technical assistance with your product, contact Enhanced Vision at 800-440-9476 extension 2 (international +001 714-465-3400 extension 2) Monday through Friday, from 8 a.m. to 5 p.m. Pacific Standard Time (UTC-8).

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 some instances. 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 to a wall 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 modifications to this system can void your 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 your responsibility to use the shielded interface cables supplied with the equipment.

Safety and Care

To ensure your safety and obtain the most benefit from DaVinci Pro, review these safety precautions carefully.

DaVinci Pro enlarges and enhances 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.

DaVinci Pro 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 DaVinci Pro for a patient's individual condition.

Precautions for Use

- Follow all warnings, cautions, and instructions marked on the product.
- Use DaVinci Pro on a stable, level surface such as a solid desk or table, according to its intended design specifications.
- Avoid placing DaVinci Pro on an unstable table, cart, or stand. It may fall, causing serious damage to the device or bodily injury.
- Use DaVinci Pro indoors only—it should NOT be exposed to extreme or rapid changes in temperature or humidity. Do not place DaVinci Pro near a radiator, heater, or areas exposed to long hours of direct sunlight. These conditions may cause damage to the device's electronics or optics.
- At least once per week, clean DaVinci Pro 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 DaVinci Pro near flammable materials or liquids.

Additional Electrical Safety Precautions

Be familiar with these 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.
- 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 DaVinci Pro in, near or around water. DaVinci Pro is not designed to offer protection against contact with liquids of any kind.
- Use only the power supply provided with your DaVinci Pro. Using unauthorized power supplies may cause serious damage to DaVinci Pro's electronic components.
- Using any other power supply than the one provided by Enhanced Vision for DaVinci Pro will void the warranty.
- 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. Refer all service to an authorized repair facility.
- Ensure that your connections match those shown in the setup instructions.

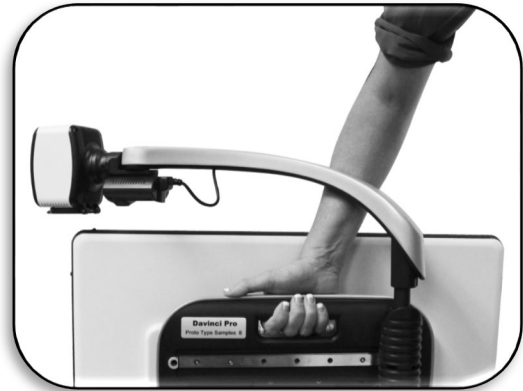
Additional Mechanical Safety Precautions

Your DaVinci Pro features an adjustable camera arm. It has a variety of usable orientations. Do not attempt to forcibly reposition or adjust the camera arm outside of the ranges demonstrated in this manual (see "[CCTV Mode](#)" on page 9). It may cause damage to the device.

Transporting DaVinci Pro

Before moving the device, disconnect and secure all power and video cables. If you are moving DaVinci Pro across a desk or table, be cautious and do not pull on any power cords or connector cables.

Carry the unit only by the recessed handles located on the back of the device.



Warning: Do not carry DaVinci Pro by the camera arm.

Caring for DaVinci Pro

Before cleaning, ensure that your DaVinci Pro is completely off by pressing the Power button on the front of the device for five seconds. Do not try to shut down the device by disconnecting the power cord while the device is in operation.

When you are not using the device, either place it in standby or shut it down. To put it into standby, which saves power, press the Power button for less than five seconds. For cleaning, however, turn it off completely.

Clean DaVinci Pro with a soft dry cloth or an electrostatic dusting cloth. Do not use liquid cleaners on its plastic surfaces. The protective glass covering the camera can be cleaned as needed with the lens cloth provided with the DaVinci Pro.

Susceptibility to Interference

There may be temporary degradation of the image when DaVinci Pro is subjected to a strong radio frequency field, electrostatic discharge, or transient electrical noise. An electrostatic 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.



DaVinci Pro Specifications

Product Measurements

24" LCD: 22.25" H x 22.75" W x 19.75" D (65.1cm H X 57.8cm W x 50.2cm D)

Camera

High Definition 1080p full HD camera

Product Weight

21.4 lbs (9.7 kg)

Magnification Range

Normal range: 2.0x – 36.6x

Extended range: 2.0x – 77.0x

Power Supply

Input voltage/current: 120-240 VAC / 0.3-0.5A (nominal)

Output voltage: 19 VDC

Frequency: 50 or 60 Hz

Power usage: on, 30W; standby, less than 5W; off, less than 1W

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

OCR Storage Capacity

The file size of an OCR scan varies based on text density. Minimally, 1,000 full page scans can be stored on DaVinci Pro.

Warranty: 2 Years

Note: Product specifications subject to change without notice.

Warranty Statement & Contact Information

Enhanced Vision DaVinci Pro Warranty Policy

Enhanced Vision products are designed to give you the highest quality image, convenient features, ease of use, and reliable service. **DaVinci Pro has been inspected and tested prior to shipping.** Enhanced Vision warrants DaVinci Pro against defects in material and workmanship under normal use for **two years** from the date of original purchase. Enhanced Vision, at its option, will either repair the product or replace it during the warranty period at no charge. 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 DaVinci Pro 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 two-year extended warranty option is available within 12 months from the date of purchase. Please contact Enhanced Vision for detailed information.

Service Process

If technical support or repair service is needed, 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 2 (international +001 714-465-3400 extension 2) Monday through Friday, from 8 a.m. to 5 p.m. Pacific Standard Time (UTC-8) 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



Merlin elite Pro

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

Magnification: 2.4x (min) – 73x (max)



Jordy

Jordy is a battery-operated, full-color portable system that can be worn like a pair of glasses to see near, far and everything in between. Jordy becomes a fully functioning HD desktop video magnifier when placed on its optional 24-inch monitor docking stand.



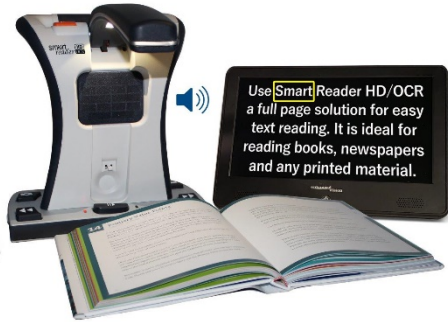
Transformer HD

Transformer HD with built-in Wi-Fi is a high-performance portable video magnifier (CCTV), featuring a full HD 1080p 3-in-1 camera for reading, writing, and viewing magnified images at any distance. Wi-Fi capability and optional full-page text-to-speech (OCR) makes it a perfect solution for school, work, or home.



OTHER ENHANCED VISION PRODUCTS

Smart Reader HD



The Smart Reader HD is a lightweight, portable reader/scanner with large built-in user-friendly tactile control buttons. Featuring a built-in HD camera and OCR (optical character recognition), Smart Reader HD enables individuals with low vision to retain the pleasure of reading by listening along or by attaching a monitor to view and adjust magnified text in full color and contrast.



Merlin HD ultra



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-inch LCD: 1.9x (min) – 51.2x (max)

22-inch LCD: 2.1x (min) – 55.9x (max)

24-inch LCD: 2.3x (min) – 61.2x (max)



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 – 65x



OTHER ENHANCED VISION PRODUCTS



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



Acrobat HD ultra

Acrobat HD ultra is a complete system featuring a 3-in-1 full HD camera with a 22-inch, 24-inch, or 27-inch 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 handle is built in for easy transport.

Magnification: 1.8x – 70.9x



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

Extended zoom: Up to 25x



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