Magic Wand™
Portable Scanner with Auto-Feed Dock

PDSDK-ST470-VP-BX2
User Manual
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Getting to know your PDSDK-ST470-VP-BX2 Scanner

1. Key Features
   - JPEG, PDF-A4 or PDF-Letter scan-format selection.
   - Color or Monochromatic (mono) scan selection.
   - 300 (LO)/600 (MI)/1050 (HI)/1200 (HI) DPI scan quality selection.
   - Directly save JPG (JPEG)/PDF files to the microSD/microSDHC card.
   - Support microSD/microSDHC memory card up to 32GB.
   - Color display to playback the scanned images
   - Compatible to Windows® XP, Windows® Vista™, Windows® 7, Windows® 8, and Mac OS® 10.5 or above (direct plug-in, driver installation not required)

2. Functional Parts
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| **1** | **SCAN** | Power On/ Off: Press and hold this key for 3 seconds to turn power on or off.  
In Power on mode:  
1) When using the scanner without the docking station, press this button to start scanning, press this button again to stop;  
2) When the scanner is on the docking station with PC connection, press this button to switch between Standby mode and USB mode.  
In Setup mode, press this button to confirm changes.  
In Playback mode, press this button to change the zoom between normal, 4x, and 8x. |
| **2** | **BACK** | Press this button to enter Playback mode.  
Press this button to return to the previous screen.  
In Setup mode: Press this button to exit Setup mode. |
| **3** | **Gear** | Press this button to enter Setup mode.  
In Playback mode: Press this button to enter the single file delete mode.  
When zooming in under Playback mode: press this button to shift the functions of and between UP/DOWN and LEFT/RIGHT. |
| **4** | LCD screen | Display scanning status, scanned image and scanner settings. |
| **5** | Paper guide tab | Adjust to scan documents of different sizes. |
| **6** | **JPG/PDF** | Press this button to select JPG (JPEG), PDF-A (PDF-A4) or PDF-L (PDF-Letter) file format. The icon of the selected mode will be displayed on the LCD screen.  
In Setup mode: Press this button to move up the selection bar.  
In Playback mode: Press this button to preview the previous image.  
When zooming in under Playback mode: press it to move to the upper/left portion of the image. |
| **7** | **DPI** | Press this button to select LO (300dpi), MI (600dpi), HI (1050dpi), or HI (1200dpi when docked) scan quality. The icon of the selected quality will be displayed on the LCD screen.  
In Setup mode: Press this button to move down the selection bar.  
In Playback mode: Press this button to preview the next image.  
When zooming in under Playback mode: press it to move to the lower/right portion of the image. |
| **8** | Docking latch | Slide in to secure the scanner, slide out to release the scanner |
| **9** | Reset | Press to reset the scanner (Hardware reset) |
| **10** | microSD card slot | The microSD/microSDHC card storage location. |
3. Explanation of the Status Icons

<table>
<thead>
<tr>
<th>Item</th>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scan Format</td>
<td>JPG/PDF-A/PDF-L</td>
</tr>
</tbody>
</table>
| 2    | Scan Resolution           | LO: 300 DPI  
MI: 600 DPI  
HI: 1050 DPI(without docking)/1200 DPI(with docking) |
| 3    | Battery Power Indicator   |  | Fully charged  
Low battery. Recharge needed |
| 4    | Scan Color                | COLOR/MONO                                                  |
| 5    | File Counter              | Shows the number of scanned files in the microSD card        |

4. Getting Started

4.1. Charging the Battery

Charge the built-in battery before using the scanner.
Charge time from empty to full is approx. 2.5 hours.

Two Charging Methods:
1. By connecting to an AC/DC power adapter with the included USB cable via the USB interface on the scanner or the docking station when the scanner is docked.
2. By connecting to a computer with the USB cable (supplied) via the USB interface on the scanner or the docking station when scanner is docked.
NOTE: Once the battery is fully charged while the scanner is off, battery indicator will briefly display on LCD screen and will turn off automatically.

4.2. Inserting a microSD/microSDHC Memory Card (not included)
To operate the scanner, you must insert a microSD/microSDHC card (not supplied) to record and store your pictures.

To insert the microSD/microSDHC memory card:
1. Turn OFF the scanner
2. Insert the microSD/microSDHC card into the microSD card slot (with metal side facing upwards). Gently press in until the card is latched and clicked into place.

4.3. Power ON/OFF the Scanner
Power on/off the scanner by pressing and holding for 3 seconds.

NOTE:
1. If the scanner is turned on for the first time, it will enter Date & Time/Language setup mode. Once Date & Time/Language setting is completed, scanner will enter into standby mode.
2. If Auto off is set at "3 Min" (refer to section 5), the scanner will turn off automatically if scanner action is not detected within 3 minutes.

4.4. Setting Date & Time/Language
1. Press to jump to next setting option: YEAR → MONTH → DATE → HOUR → MINUTE.

When setting up the value for MINUTE, press to return to the previous setting option until it reaches the YEAR option.
2. Press or to set the number corresponding to each setting.
3. Press to confirm and move to next setting.
4. After completing the setting for MINUTE, it will enter language setup screen.
5. Press or to select the desired language.
6. Press to confirm and enter standby status.

4.5. Calibrating the Scanner (OPTIONAL. ONLY WHEN NEEDED)
NOTE: If scanned images are too dark or too bright, you may need to adjust the white balance by calibrating the scanner.
1. Take the scanner out from the docking station.
2. Wipe off any dirt on the surface of the scanning lens with the clean dry cloth provided.
3. Place the scanner on the white portion of the calibration paper provided. Press and hold the
button for 3 seconds to turn on the scanner.

4. Press and hold then press . Release both buttons afterwards to enter into auto-calibration mode. The message “1. Calibration starts. Do not move the device!” will display on LCD screen.

5. Do not move the scanner until the second message “2. Scan the calibration sheet!” appears on the LCD screen. Start scanning the white portion of the calibration paper by sliding the scanner across the paper (slide the scanner backwards if necessary).

6. “3. Calibration completed!” message will appear on the LCD screen when calibration is completed. Press any button to power off the scanner.

5. Setup Menu

1. Press to enter Setup menu

2. Press or to exit Setup menu.

Follow the below three steps to enter setup screen for each Menu item:

1. Press to enter setup mode.

2. Press or to select the Menu item you want to set.

3. Press to enter the setup screen.

<table>
<thead>
<tr>
<th>Menu items</th>
<th>Description</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPG/PDF</td>
<td>Scan Format</td>
<td>• JPG                      • PDF - A (A4)                      • PDF - L (Letter)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• LO-300 DPI               • MI-600 DPI               • HI -1050 DPI(without docking)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• HI -1200 DPI(with docking)</td>
</tr>
<tr>
<td>Quality</td>
<td>Scan Quality (DPI)</td>
<td>• Color                    • Mono</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• English                  • Spanish                      • French</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• German                   • Italian                     • Dutch</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Russian                  • Japanese                    • Traditional Chinese</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Simplified Chinese</td>
</tr>
</tbody>
</table>
### 6. Using the Portable Scanner

#### 6.1. Using the hand-held scanner to scan

**NOTE:** To scan, make sure your scanner is not connected to the computer.

1. Power on your scanner by pressing and holding [ ] for 3 seconds.
2. Hold the document firmly with one hand on a flat surface.
3. Place the scanner on the edge of the paper approximately 5/8 to 3/4 of an inch onto the edge of the paper to ensure the whole document can be scanned. Make sure to keep the scanning area within the scanning width indicators marked on the side of the scanner.

4. Hold the scanner flat against the material and then press [ ] once to start the scanning process.
5. Slide the scanner across the document slowly, keeping your hand stable to get the best picture quality.

6. Press \[\text{OK}\] again to stop scanning when the scanner has reached to the end of the document.

NOTE:
1. If the scan is done too quickly or when there is any abnormal operation, “Scan Error” icon will display on the LCD screen. The image will still be saved after the scanning stops.

2. If Instant Preview feature is set to “on”, scan result will shortly be displayed on the LCD screen before the scanner returns to standby mode.

3. When the memory card is full, the scanner is unable to scan more images. If you press the scan button under such situation, “Full” will flash rapidly on the File Counter of the LCD screen for 2 seconds.

6.2. Viewing scanned files after scanning
Connect the scanner to the computer via USB cable provided for power. Refer to Section 8.2 for more information.
7. Using the Docking Station

7.1. Attaching the scanner to the Docking Station to scan

1. Slide the docking latch from Lock to Release
2. Place the scanner on the Docking Station inserting the right side of the scanner first. Make sure the scanner is securely locked to the Docking Station with a microSD card properly inserted to the portable scanner.

3. Connect the Docking Station to an outlet with the adapter or plug directly to the computer via USB cable for power.
4. Press and hold the SCAN button to turn on the scanner.
5. Adjust the paper guide tab to the size of the original.

6. Smooth the edges of the original before scanning.
7. Always align the original against the right side of the slot.
8. The Docking Station will automatically pass the original through. During the scan, scanning status icon will be displayed on the LCD screen to indicate scanning is in progress. Scan complete.

9. If the scanner is connected to the computer via the USB interface, press once to enter into USB mode to view scanned files on your computer. Refer to Section 8.1 for more information.

NOTE:
1. If the docking station does not detect the document paper within 4-5 seconds, remove the document, realign, and try scanning again.
2. When docked, the scanner is unable to scan black or transparent documents.
3. When scanning relatively thick documents such as credit card or ID card, it is suggested to insert it vertically into the slot for a better scan.

4. The scanner will enter charging mode if no scanning action is detected within 1 minute of each scan.
5. If “Scan Error” icon display on the LCD screen, you need to replace the original memory card with a higher class microSD/microSDHC card. (Class 6 or above is recommended). The error will still save the image after the scan completes.

6. If instant preview is set to "on", no matter if the scan result is normal or abnormal, the scanned image will be displayed shortly on the LCD screen before the scanner returns to standby mode.

7. When the memory card is full, the scanner is unable to scan more images. If you press the scan button under such situations, “Full” will flash rapidly on the File Counter of the LCD screen for 2 seconds.

7.2. Releasing the scanner from the Docking Station
1. Slide the docking latch from Lock to Release.
2. Take the scanner out from the docking station by lifting the left side first.

WARNING: Do not press the Eject Button inside the Docking Station

8. Connecting to a Computer

8.1. Scanner with Docking Station → Computer

Connect your scanner with Docking Station to your computer to view pictures on the computer monitor.

1. Lock your scanner to the Docking Station and connect to your computer and then turn on your scanner.

2. Press the button once to switch into USB mode. Your computer will recognize the scanner as a “Removable Disk”, “USB” symbol will display on status LCD screen. Click “Open folder to view files” to view, import, copy, move or delete scanned files.
3. Press the \( \text{SCAN} \) button again to switch back to scanning mode.

**NOTE:** If the Removable Device Window does not launch automatically, go to your “My Computer” and find the device under Removable Storage.

8.2. **Scanner only \( \rightarrow \) Computer**

Connect your scanner to your computer to view pictures on the computer monitor.

1. Connect your scanner to your computer and then turn on your scanner.
2. Your computer will recognize the scanner as a “Removable Disk”. “USB” symbol will display on status LCD. Click “Open folder to view files” to view, import, copy, move or delete scanned files.

**NOTE:** If the Removable Device Window does not launch automatically, go to your “My Computer” and find the device under Removable Storage.
9. Image Preview

1. Press to enter Playback mode. The last scanned image will be displayed.

2. Press or to select your desired image. Press to zoom into the image.

3. The and indicators will appear on the screen when pressing in step 2, press to view the upper portion of the image, press to view the lower portion of the image.

4. Press to change the magnification between 4x, 8x and normal zoom options.

5. The and indicators will appear on the screen when is pressed again. The functions of and will be shifted to LEFT and RIGHT and you can press or button to view the left or right portion of the image.

NOTE:
When zooming in under Playback mode (4x, 8x), you may choose to view upper/lower or left/right portion of the image by pressing to shift the functions of and between UP/DOWN and LEFT/RIGHT according to your needs.
6. Press \( 	ext{BACK} \) to return to the previous Playback screen, press it again to return to standby mode.

**NOTE:**
When scanning one relatively long document or scanning several documents in a row, the scanned image cannot be magnified if the file size exceeds 9 MB.

### 10. Deleting Single File

1. Press \( 	ext{BACK} \) to enter Playback mode.
2. Press \( 	ext{JPG/PDF} \) or \( 	ext{DPI} \) to select the file you want to delete.
3. Press \( 	ext{SCAN} \) to enter Delete File mode.
4. Press \( 	ext{JPG/PDF} \) or \( 	ext{DPI} \) to select Yes or No
   - Select "Yes" to delete the current file in the memory card
   - Select "No" to return to the Playback screen.
5. Press \( 	ext{SCAN} \) to confirm your selection and return to the previous Playback screen.

### 11. Specifications

<table>
<thead>
<tr>
<th>Image sensor</th>
<th>A4 Color Contact Image Sensor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>High resolution</td>
<td>1200x1200 dpi (when docked)</td>
</tr>
<tr>
<td>Medium resolution</td>
<td>1050x1050 dpi</td>
</tr>
<tr>
<td>Low resolution</td>
<td>600x600 dpi</td>
</tr>
<tr>
<td>Minimum scanning speed for Letter size document</td>
<td>Scanner with Dock:</td>
</tr>
<tr>
<td>Color High resolution</td>
<td>12 Seconds</td>
</tr>
<tr>
<td>Mono High resolution</td>
<td>12 Seconds</td>
</tr>
<tr>
<td>Color Medium resolution</td>
<td>12 Seconds</td>
</tr>
<tr>
<td>Color Low resolution</td>
<td>12 Seconds</td>
</tr>
<tr>
<td>Mono Low resolution</td>
<td>8 Seconds</td>
</tr>
</tbody>
</table>
### Scanner without dock:

<table>
<thead>
<tr>
<th>Resolution</th>
<th>Time (Seconds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color High resolution</td>
<td>12</td>
</tr>
<tr>
<td>Mono High resolution</td>
<td>10</td>
</tr>
<tr>
<td>Color Medium resolution</td>
<td>8</td>
</tr>
<tr>
<td>Color Low resolution</td>
<td>6</td>
</tr>
<tr>
<td>Mono Low resolution</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

### Capacity (Based on 1GB microSD card. Scan Letter size file, the quantity of scans varies depending on the content complexity)

<table>
<thead>
<tr>
<th>Resolution</th>
<th>Minimum Scans (Min.) (when docked)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color High resolution</td>
<td>150</td>
</tr>
<tr>
<td>Mono High resolution</td>
<td>140</td>
</tr>
<tr>
<td>Color Medium resolution</td>
<td>150</td>
</tr>
<tr>
<td>Mono Medium resolution</td>
<td>150</td>
</tr>
<tr>
<td>Color Low resolution</td>
<td>550</td>
</tr>
<tr>
<td>Mono Low resolution</td>
<td>600</td>
</tr>
<tr>
<td></td>
<td>1580</td>
</tr>
<tr>
<td></td>
<td>1600</td>
</tr>
</tbody>
</table>

### Scanner document size

- A4、A5、5R、4R、3R and below

### Scan settings

- **Scan width**: 8.5"  
- **Scan length**: 300DPI:125" (max); 600DPI:60" (max); 1050DPI:50" (max)/1200DPI:45" (max)

### File format

- JPEG/PDF

### LCD

- approx. 1.5" Class\* Color LCD

### Dimensions (L x H x W)

- 10.5” x 1.1” x 1.5”

### Auto power off

- 3 Minutes

### USB port

- USB 2.0 high speed

### External memory

- microSD/microSDHC Card

### Standard battery

- Built-in 700mAH Lithium-Polymer

### 12. Computer System Minimum Requirements

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Windows® XP, Windows® Vista™, Windows® 7, Windows® 8 and Mac OS® 10.5 or above (direct plug-in, driver installation not required)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU</td>
<td>Pentium III or above</td>
</tr>
<tr>
<td>RAM</td>
<td>At least 256MB</td>
</tr>
<tr>
<td>Interface</td>
<td>USB port</td>
</tr>
</tbody>
</table>
## 13. Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannot power on the scanner</td>
<td>Low battery</td>
<td>Recharge the battery</td>
</tr>
</tbody>
</table>
| Pictures cannot be saved when scanning       | 1. The microSD/microSDHC card has not been installed  
2. Memory is full  
3. The microSD/microSDHC card has not been formatted properly | 1. Insert a microSD/microSDHC card  
2. Transfer the pictures from the scanner to the computer to create storage space in the memory card  
3. Please refer to section 5 |
| “Scan Error" icon pops up on the LCD screen while scanning | Scanning speed is too quick                                         | Rescan the document at a slower pace                                    |
| “Scan Error" icon pops up on the LCD screen while scanning with the docking station | microSD/microSDHC class speed is low                                 | Replace the original memory card with another higher class  
microSD/microSDHC card (Class 6 or above is recommended) |
| Computer does not recognize the scanner when connected (cannot find your device under removable disk) | Connection failure                                                  | 1. Make sure all cable connections are secure  
2. Restart the computer if necessary |
| Black & white stripes occur at the top or bottom of scanned document | Original skewed or inserted crookedly into the docking station | Align and rescan the document                                           |
| Blurry images                                 | 1. The lens of scanner is dirty  
2. Contact Image Sensor aged                                         | 1. Clean the lens with a soft and dry cloth  
2. Recalibrate the scanner. Refer to section 4.5 |
| Black Images/Black or white vertical lines   | 1. Scanner sensor's protective glass is dirty  
2. Calibration data is off-set                                        | 1. Clean the sensor’s protective glass with clean and soft dry cloth.  
2. Recalibrate the scanner. Refer to section 4.5 |

**NOTE:** Model Number and Serial Number (S/N) is located on the packaging, instruction manual, or on the product. Please have this information ready before contacting customer support.
FCC (Federal Communications Commission)

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.

*Measured diagonally. Actual size is 1.48"; viewable area is 1.44"

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