

# SNOW 12

User Guide V1.2



ZOOMAX Technology Co., Limited

9F, Building D, Paradise Software Park, No.3 Xidoumen Road, Xihu District,  
Hangzhou, China 310012

Copyright© 2019 ZOOMAX Technology Co., Limited. All Rights Reserved.  
ZOOMAX® is a trademark of ZOOMAX Technology Co., Limited in the  
United States and other countries. Information in this document is  
subject to change without notice. No part of this publication may be  
reproduced or transmitted in any forms or by any means, electronic or  
mechanical, for any purpose, without the express written permission of  
ZOOMAX.

# CONTENT

<b>1. INTRODUCTION</b> .....	<b>1</b>
<b>2. SAFETY AND MAINTENANCE</b> .....	<b>1</b>
<b>3. GET TO KNOW THE SNOW 12</b> .....	<b>2</b>
<b>3.1 WHAT'S IN THE BOX</b> .....	<b>2</b>
<b>3.2 GENERAL DESCRIPTION</b> .....	<b>3</b>
<b>3.3 CHARGE THE BATTERY</b> .....	<b>4</b>
<b>4. BASIC OPERATION</b> .....	<b>5</b>
<b>4.1 INTRODUCTION</b> .....	<b>5</b>
<b>4.2 POWER ON/OFF</b> .....	<b>6</b>
<b>4.3 STANDBY MODE</b> .....	<b>6</b>
<b>4.4 NEAR/DISTANCE-VIEW</b> .....	<b>6</b>
<b>4.5 ZOOM CONTROL</b> .....	<b>7</b>
<b>4.6 MOVE IMAGE WITH ANALOG STICK</b> .....	<b>7</b>
<b>4.7 SELECT COLOR MODE</b> .....	<b>7</b>

4.8 FREEZE AND SAVE FUNCTION .....	7
5. ADVANCED OPERATION .....	9
5.1 MAIN MENU .....	9
5.2 TRANSFER FILES WITH COMPUTERS .....	19
5.3 CONNECT TO TV OR MONITOR .....	20
6.1 ENTER/EXIT TEXT-TO-SPEECH FUNCTION .....	21
6.2 GET STARTED .....	22
6.2.1 TEXT USER INTERFACE .....	23
6.2.2 IMAGE USER INTERFACE .....	25
7. FOLDABLE STAND .....	27
8. TROUBLESHOOTING .....	30
9. TECHNICAL SPECIFICATION .....	32
10. OTHER PRODUCTS FROM ZOOMAX.....	32

## **1. Introduction**

Please read this user's guide carefully. This guide will help you better understand the features of Snow 12.

We constantly seek to improve our products. Therefore, it is possible that this guide is not the latest version available. You can download the latest user's guide in the Support section at [www.zoomax.com](http://www.zoomax.com).

## **2. Safety and Maintenance**

To maintain Snow 12 in optimal condition:

- To avoid risk of fire, do not expose Snow 12 to excessive heat or direct sunlight.
- To avoid the risk of electrical damage, keep Snow 12 away from fluids and chemicals.

- To avoid the risk of electrical shock, do not attempt to disassemble the unit. Please refer service requests to Zoomax or an authorized repair facility.
- Always unplug the Snow 12 before cleaning. Use a cleaning cloth or a soft damp cloth to clean the exterior. Do not use cleaning agents or abrasive material, as they will damage your video magnifier.
- The use of a screen protector might influence the functioning of the touch screen.
- Use the Snow 12 in environments where the temperature is between 10°C and 40°C (50°F and 104°F).

### **3. Get to Know the Snow 12**

#### **3.1 What's in the Box**

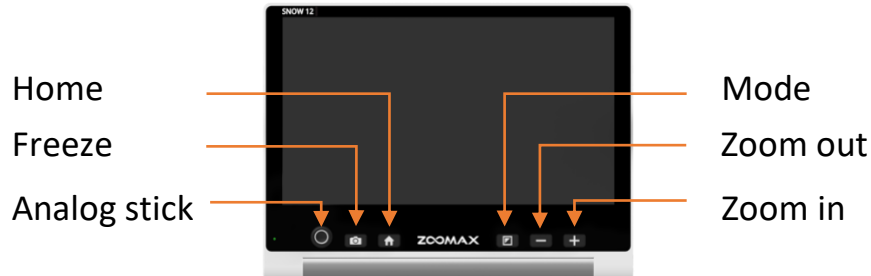
You will find the following items inside the Snow 12 package box:

- Snow 12
- Carrying case
- Quick guide card
- Power adapter

- Sleeve case bag
- Cleaning cloth
- Foldable Stand \*
- USB cable
- HDMI cable

\* Snow 12 has 2 packages: with or without the Foldable Stand. If your package includes the Foldable Stand, please refer to chapter 7 and learn how to use it.

## 3.2 General Description






### 3.3 Charge the Battery

The battery **MUST** be fully charged before **FIRST** use with the supplied power adapter. The power indicator is **RED** while the device is charging.

When the battery is fully charged, the power indicator will turn green. It will take approximately 2 hours to fully charge the battery.



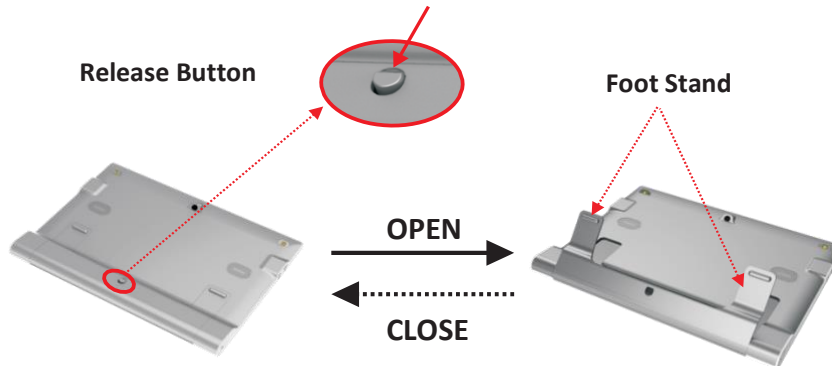
You can use the Snow 12 for 2.5 to 3 hours of continuous use. When the battery is low, the low battery icon  will show in the lower left corner. Please recharge the battery in case the device turns off unexpectedly.

## 4. Basic Operation

### 4.1 Introduction

#### How to Open/close the Foot Stand of Snow 12

Push the Release Button on the back cover lower to open the Foot Stand. Push both sides of the Foot Stand to close.



## **4.2 Power on/off**

Press the Power Button for 3 seconds to turn the Snow 12 on. You can turn the device off in the same way.

## **4.3 Standby Mode**

Standby Mode will switch the screen off yet keep the unit on. The device will enter Standby Mode when:

- Snow 12 is not used for 3 minutes.
- The Power Button is short pressed.

To exit Standby Mode, short press the Power Button again. In Standby Mode, the unit will shut down automatically after 30 minutes of inactivity.

## **4.4 Near/distance-view**

Open or close the Foot Stand to switch between Near-view and Distance-view Mode.

## **4.5 Zoom Control**

Press Zoom in Button to zoom in and press Zoom out Button to zoom out.

## **4.6 Move Image with Analog Stick**

Push analog stick up/down/left/right to move the real-time image in high magnification. Push it twice quickly to move the view to the display edge.

## **4.7 Select Color Mode**

The color modes contain full color and 5 high contrast color combinations: white/black, white/blue, yellow/black, green/black and yellow/blue.

You can choose your favorite color mode in Settings menu. Please refer to chapter 5.1, section “Intensity of Contrast”.

Press the Mode Button for 1 second in high contrast color mode to quickly switch to full color mode.





## **4.8 Freeze and Save Function**

By default, the camera is auto focus. You can also tap the screen to focus on the object you want to view.

## Freeze Image


Short press the Freeze Button to freeze a real-time image. Tap the onscreen button “◀” to unfold the button bar shown as below.



- Tap the Save icon  to save frozen image to gallery.
- Tap the Gallery icon  to enter gallery. Please refer to chapter 5.1 for more information.
- Tap the Fold icon  to fold the button bar.
- Tap the Return icon  or press Freeze Button to go back.

## **View Frozen Image**

The frozen image can be zoomed in/out and the color mode can be changed. When the image is magnified, you can move it around by panning on the touch screen or moving the analog stick.

Press the Freeze Button or tap Return icon  to return to real-time view.

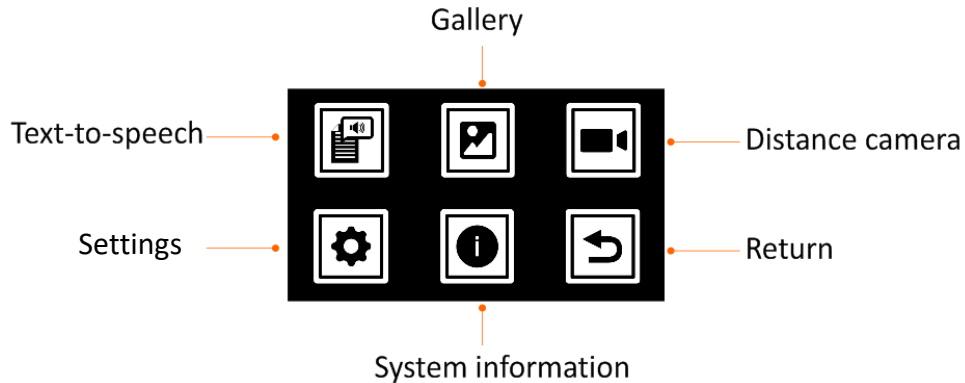
## **5. Advanced Operation**

### **5.1 Main Menu**

#### **➤ Enter/exit Main Menu**

In the real-time view, short press Home Button to activate the Main Menu. Press the Home Button or Freeze Button, or tap Return icon to go back.

There are six options in the Main Menu: Text-to-speech, Gallery, Distance camera, Settings, System information, and Return.



## How to Select an Option in the Menu


Within the menus, there are two ways for selecting the options.

- Touch function deactivated: move the analog stick up/down/left/right to cycle through the icons. Press the Mode Button to select, the Freeze Button to go back, or the Home Button to exit.
- Touch function activated: besides the method above, just tap the icon you want.

## **Text-to-speech**

Please refer to chapter 6.

## **Gallery**

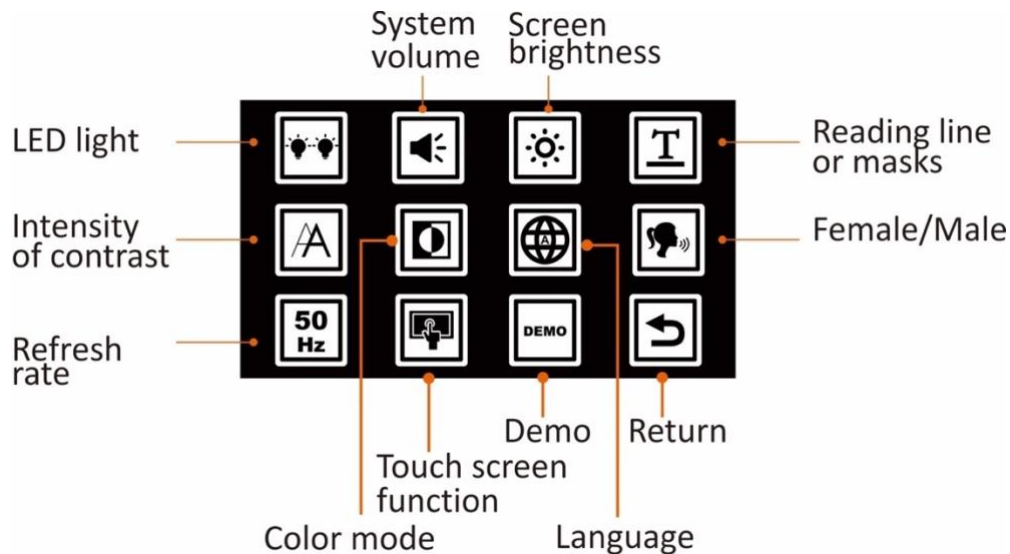
After choosing Gallery icon , select Photo or PDF icon to enter the gallery. There will be a third icon TXT/RTF if you enter the gallery in Text-to-speech mode.

## **Distance Camera**

Snow 12 can be connected to distance camera through the HDMI-in port. Please contact your distributor or Zoomax for more information.

## **Settings Menu**

The Settings menu can be accessed via the Main Menu.



## LED Lights on/off

Choose this option to switch LED lights on and off. By default, both LED lights are turned on in Near-view Mode and turned off in Distance-view Mode and the Text-to-speech function.



## **System Volume**

Choose this option to adjust the volume. Push the analog stick left or right or press Zoom in/out Buttons to change the volume. You can also tap the rectangle box to set the volume.

Then press the Mode Button or tap the Tick icon to confirm. Tap “↩” or press the Freeze Button to exit.

## **Screen Brightness**

Choose this option to adjust the screen brightness. Push the analog stick left or right or press Zoom in/out Buttons to change the screen brightness. You can also tap the rectangle box to set the screen brightness.

Then press the Mode Button or tap the Tick icon to confirm. Tap “↩” or press the Freeze Button to exit.

## **Reading Line or Masks**

Adjustment of the reading line position or the width of reading masks can be made within the Reading Line or Masks option.

- Enter Reading Line or Masks.

- Push the analog stick right or left to move through the available options for reading line and masks.
- Push the analog stick up or down to adjust the position of reading line or the width between reading masks.
- You can also adjust the position of the line or the masks by touching the screen.
- Tap the Tick icon or press the Mode Button to confirm. Tap “↶” or press the Freeze Button to exit.

It’s possible to toggle through the various options by simultaneously pressing Zoom in and Zoom out Buttons.

### **Intensity of Contrast**

Choose this option to adjust the intensity of contrast. Push the analog stick left or right or press Zoom in/out Buttons to change the intensity. You can also tap the rectangle box to set the intensity.

Then press the Mode Button or tap the Tick icon to confirm. Tap “↶” or press the Freeze Button to exit.

It's possible to adjust the intensity up or down by pressing and holding the Mode Button, along with Zoom in or Zoom out Button in real-time view.

### **Color Mode**

You can hide the high contrast color combinations you do not like or need. Push the analog stick right/left/up/down to move between the colors. Press the Mode Button to select or deselect a specific color mode. You can also do it by tapping the color mode icons.

A line through an icon means it is hidden.

Tap the Tick icon or press the Mode Button to confirm. Tap “” or press the Freeze Button to exit.

### **Language**

The default language is Auto. This means system prompts and messages are spoken in English. In Text-to-speech Mode, the language of written text will be automatically detected. If you select another language, all system prompts, messages and Text-to-speech will be spoken in that language.

To change the language, push the analog stick up and down and confirm your choice by pressing Mode Button. Alternatively, just swipe up and down with your finger and tap the language you want when you hear it.

### **Female/male**

For most languages you can choose between a Female or Male voice. To make the change, either tap the Female/Male icon or press the Mode Button to toggle. The default voice is female.

### **Refresh Rate**

To change the refresh rate, highlight the Hz Button (it will display either 50 Hz or 60 Hz) and press Mode Button or tap it to toggle between the options. The default value is 60 Hz.

### **Touch Screen Function**

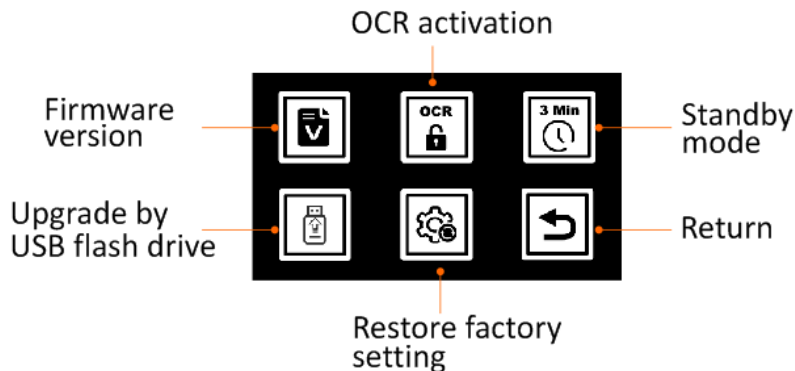
The Touch Screen function is on by default. To switch it off, tap the Touch Screen function icon or press the Mode Button. To switch it on again, press the Mode Button.

## Demo Mode

This function is designed for distributor use in an exhibition. When Demo mode is activated, a video will demonstrate the main functions of Snow 12.

## System Information

Most of the functions in the System Information menu are for use by a Zoomax distributor or service technician.



## Firmware Version

This option confirms the software version of Snow 12.


## Activate OCR and Text-to-speech Function

If you purchase a Snow 12 without Optical Character Recognition (OCR) and Text-to-speech function and want to upgrade it to the OCR version, please contact your distributor or Zoomax.

Note for distributor:

You will first need to obtain a QR activation code from website: <http://zoomaxupgrade.com>. Once received, choose the Activate OCR function icon on Snow 12 to scan it.

## Standby Mode on/off

To toggle the Standby Mode on/off, either tap the  icon or press the Mode Button.

When the Standby Mode is off, Snow 12 will never enter Standby Mode unless you short press the Power Button.

## Firmware Upgrade via USB Flash Drive

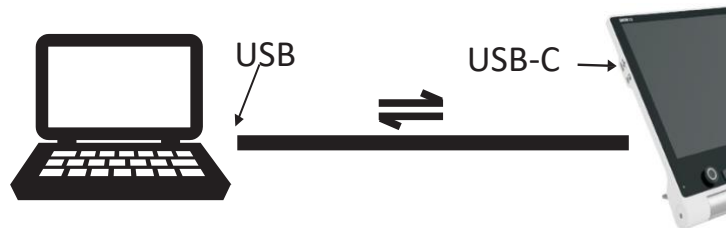
For distributor use only.

## Restore Factory Setting

When selected, Snow 12 will be restored to factory setting.

## 5.2 Transfer Files with Computers

Files stored in Snow 12 can be transferred to Windows® computer through the supplied USB cable. Files on the computer can also be transferred to Snow 12.



- Make sure your Snow 12 and the computer are turned on. Connect the computer and Snow 12 with the supplied USB cable.

➤ To transfer files:

Several subfolders are in the folder “Snow 12” (the folder path is: Computer > UltraOcta A80 OptimusBoard > Snow 12 > DCIM). Open folder “DCIM”, and you will see 4 folders: Photo, PDF, TXT/RTF, and Photo (OCR). Select the corresponding folder, and then select the file to transfer.

**NOTE:**

- Images stored in Photo folder can only be viewed when not in Text-to-Speech Mode.
- Images stored in Photo (OCR) and TXT/RTF folder can be viewed only in OCR and Text-to-Speech Mode.
- Please do not modify the folder name, otherwise Snow 12 cannot find images transferred from computer or the images stored before.

### **5.3 Connect to TV or Monitor**

To view images on a larger screen, use the supplied HDMI cable to connect Snow 12 to an HDMI TV or monitor. For most TVs, it will be necessary to




change the input source to view the image from Snow 12. Once connected, the image from Snow 12 will be shown on both your TV or monitor, and on Snow 12. After 30-second of inactivity, the screen of Snow 12 will turn off because of Standby Mode. Tap the Snow 12 screen to switch it back on.

## **6. OCR and Text-to-speech Function**

If you purchase Snow 12 without Text-to-speech function, you will have a free access to the Text-to-speech functionality for 30 times. If you like what you see and wish to upgrade, please contact your Zoomax distributor.

### **6.1 Enter/exit Text-to-speech Function**

You can enter and exit the Text-to-speech Mode with a long press (3-second) of the Freeze Button.

You can also enter Text-to-speech from the Main Menu, and exit it by tapping the  icon in the lower right corner of the screen.

## Zoom Control in Text-to-speech Function

- In Text-to-speech Mode, the magnification and color mode cannot be changed until OCR is activated.
- Full-page OCR can be achieved when Snow 12 is used on the Foldable Stand.

## 6.2 Get Started

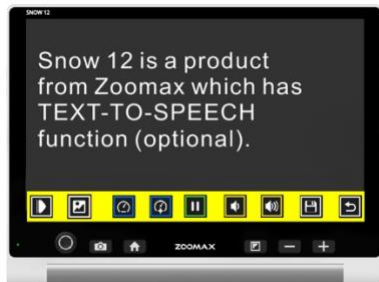
While in Text-to-speech Mode:

1. Place the document flat underneath the Snow 12.
2. Tap the screen to focus, if necessary.
3. Short press the Freeze Button to capture the document.
4. Recognition of text will begin.
5. A few seconds later, Snow 12 will start to read scanned text as words are highlighted.

### NOTE:

By default, automatic language detection is enabled except these four languages: Limba română / Magyar / 日本語 / 中文. For these four languages, please preset the language in the settings menu before starting the Text-to-speech reading. More information is available in chapter 6.4.

## 6.2.1 Text User Interface



### Zoom Control in Text View

During reading, press the Zoom in or Zoom out Buttons to change the magnification level.

### Tap the Word to Read from It

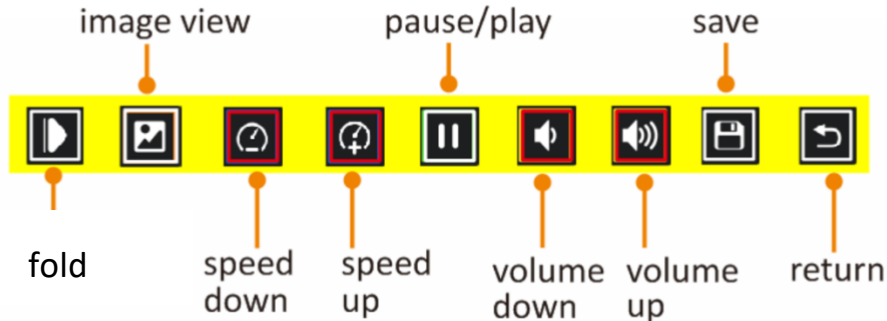
Tap any word and Snow 12 will start reading from that position.










### Text Color



During reading, you can press the Mode Button to change high contrast color mode. There are 4 color modes: white on black, black on white, yellow on black, and black on yellow. By default, the contrast color mode is white text on black background mode.

## The Button Bar

The button bar is a series of on-screen buttons that let you switch from Text to Image view, adjust reading speed and volume, start/stop reading, and save the image.





- Tap   to adjust the reading speed. Tap   to adjust the volume of speech.
- Tap  to pause speech. Tap  to play the speech.
- Tap  to fold button bar and this icon will switch to . Tap  to unfold the button bar.

- Tap  to switch to image user interface.
- Tap  to save the photo.

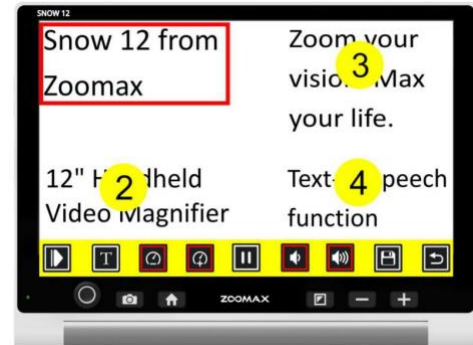
## 6.2.2 Image User Interface

### The Button Bar

The button bar is the same as button bar in text user interface except the icon . It changes to  in text user interface.

### Read Saved Documents in Gallery

- To access previously saved documents to read in Text-to-speech Mode, press Home Button to enter Main Menu, select the Gallery icon, and choose from three icons: Photo, PDF and TXT/RTF.



- Swipe on the screen to browse through the documents index if the Touch Screen function is on. Otherwise move the analog stick to browse.
- Tap the document on the screen or press the Mode Button to confirm. A play icon will appear in the center of the screen. Tap it to make Snow 12 read any available text.

### **Delete Saved Documents**

To delete a saved document, tap the Delete icon on the button bar.

**NOTE:**

- OCR is best suited to reading normal sized print in a single column.
- Text that is extremely small or page layouts that are complex or feature tables and charts may produce undesirable results.

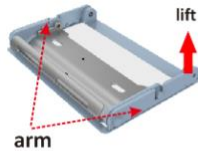
**NOTE:**

- PDF files can be read as text in 4 high contrast color modes installed in Text-to-Speech function.
- PDF files can be zoomed in and out.
- PDF files may contain more than 1 page of content. There will be an icon in the upper-right corner indicating the current page and the total page. For example, 1/7 means you are viewing the first page of a PDF file with 7 pages in total.
- To turn the pages, flip on the screen with one finger when the file is not zoomed in.

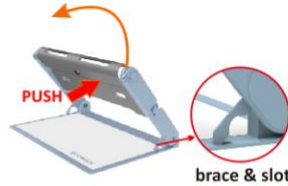
## 7. Foldable Stand

The Foldable Stand is an accessory for Snow 12. Snow 12 can be used alone or on Foldable Stand for a bigger writing space.

## Open the Foldable Stand



①



②



③



④

### STEP 1

Lift the arm up to get the braces into the slot.

### STEP 2

Push and rotate the tray upward.

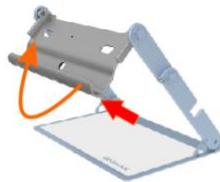
### STEP 3

Push and rotate the tray upward again.

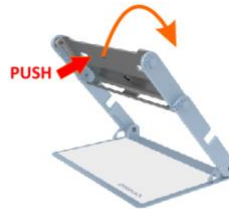


## Close the Foldable Stand

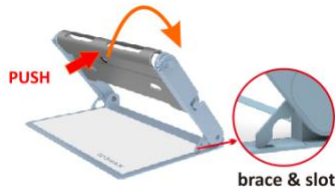
Please remove Snow 12 from the Foldable Stand before closing the Stand.



①



②



③



④

### STEP 1

Push and rotate the tray back until it stops between the arms.

### STEP 2

Push and rotate the tray back again until both ends of the arm go into the slots in the middle of the arms.

### STEP 3

Lift the braces up out of slots.

### STEP 4

Put the folded stand flat.

## 8. Troubleshooting

### ➤ **Problem 1: Black screen.**

Solutions:

- Ensure that the power is on and not in Standby Mode.
- Charge the battery.
- Decrease the magnification level.

### ➤ **Problem 2: The image on the screen is dark or distorted.**

Solutions:

- Ensure the unit is placed flat on the viewed material.
- Ensure the LED lights are on.
- Check screen brightness level.

### ➤ **Problem 3: Smudges or blemishes on the screen.**

Solution: Clean camera and screen with soft cloth.

### ➤ **Problem 4: The unit is connected to a TV, but no image appears on the TV screen.**

Solutions:

- Ensure the TV is on.
- Ensure that Input Source on TV is set correctly.
- Make sure the HDMI cable is connected correctly to TV.

➤ **Problem 5: Failure with Text-to-speech, or “Not found” appears on the screen.**

Solution: Don't move the unit or reading material during the document scanning.

➤ **Problem 6: Wrong language setting.**

Solution: Ensure the language setting of Text-to- Speech is the same as the language on the reading material.

➤ **Problem 7: Any other problem not mentioned in this guide.**

Solutions:

- Press Power Button and Zoom in Button simultaneously to force system restart.
- If all else fails, please contact your local Zoomax distributor or Zoomax support for assistance.

## 9. Technical Specification

- **Magnification:**
  - 2.7X - 19X (near-view)
  - 2.5X - 19X (on Foldable Stand)
- **Color modes:** Full color and 10 high contrast color modes
- **Screen:** 12-inch touch screen; screen resolution: 1920\*1080p
- **Camera:** Auto focus/tap to focus; 13M pixels
- **Weight:** Snow 12: 960g (2.1lbs) ; Foldable Stand: 1230g (2.7lbs)
- **Dimensions:**
  - Snow 12: 29\*22\*2.4 cm (12\*9\*1 in)
  - Foldable Stand folded: 35\*23\*4 cm (14\*9\*1.6 in)
- **Battery life:** Approximately 2.5 to 3 hours continuous use
- **Charging time:** 2 hours
- **Power adapter:** Input: 100-240V; Output: 15V/4A
- **Storage capacity:** Approximately 1.5GB

## 10. Other Products from ZOOMAX

Check out our full line of handheld magnifiers, desktop magnifiers, and wearable devices, please visit [www.zoomax.com](http://www.zoomax.com).

**ZOOMAX TECHNOLOGY CO., LIMITED**

9F, Building D, Paradise Software Park,  
No.3 Xidoumen Road, Xihu District, Hangzhou,  
Zhejiang Province, 310012, China

Tel: +86-571-87006308

Fax: +86-571-87397220

Email: [support@zoomax.com](mailto:support@zoomax.com)

Visit us at: [www.zoomax.com](http://www.zoomax.com)



Zoom Your Vision, Max Your Life