# $BX_{\rm V1.0}$ Portable Flat-panel Display

## Product Manual



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The portable display is just a display. Its function is actually quite different from that of ordinary display. Compared with the ordinary display, this portable display is smaller, lighter, and easier to carry. It is portable. Users can carry it with them, improve efficiency in the process of mobile office, and can also use it as an entertainment partner on the go. The BX156 portable display is very innovative, equipped with a 15.6-inch IPS panel, resolution 1920x1080, refresh rate 60HZ, 15.6-inch size and weighs only 820 grams Frequency 60HZ, weight only 625g). It is thin in the upper part (the thinnest part 6mm) and coparatively thick in the botom (the thikest 10.6mm). Despite its extremely thin and compact body, it is equipped with Mini HDMI interface and USB Type-C interface, allowing you easily turn your small phone into a large tablet. In addition, this product is also equipped with a magnetic folding leather case, which can better protect the screen from being damaged.



Before setting up this device, please read carefully all the documents attached to the product packaging.

Personal factors have been fully taken into account in the design of this device, but incorrect usage may lead to electrical shock and fire. In order not to damage the security components inside the display, please make sure to comply with the following precautions while installing, using and maintaining this device.

• To prevent fire or electrical shock hazards, do not expose this device to rain or moisture.

• Before using this device, make sure all cables are correctly connected and the power cable is not damaged. If there is any damage, please contact the distributor immediately.

• Avoid dust, humidity or extreme temperature. Do not place this device in any area where it may become wet. Please place the device on a stable surface.

• Do not insert any object or make any liquid splash into the opening of the cabinet of this device.

• Please use the power cable provided with the display. If another power cable not provided by the distributor is used, please confirm it meets relevant national standards. If the power cable is damaged, please contact the distributor immediately.

• Please use the power supply with a voltage of 5V and a current of 2A or above. Mobile phone chargers, power bank and USB 3.0 interfaces that meet the requirements of power supply can be used to power the display. Do not use the power supply with lower than 5V/2A to power the device. If you have questions related to the type of power supply, please contact the distributor.

• Do not try to open the rear cabinet of the display. There are no parts in the machine that users can repair. If the display malfunctions, please contact your distributor.

#### In order to avoid personal injury, please observe the following precautions:

• Do not place the display on an inclined table unless there are safety measures.

• Do not drop, click or throw objects/toys onto the screen, otherwise it will result in personal injury, product damage and screen damage.

#### In order to prevent fire and other injuries, please observe the following precautions:

• Please turn off the display when you leave the room for a long time.

• Do not allow children to drop or insert items into the display.

- Do not install accessories that are not specifically designed for the display.
- When the display is unattended for a long time, please disconnect the power cable.

•When there is thunder or lightning, please do not touch the power cable or signal line, which may lead to electrical shock.

- Do not let anything press or tangle the power cable.
- Do not place the display in a place where the power cable could be easily damaged.

#### In order to prevent the display from potential damages, the following situations should be avoided.

• Place the display in a place where it falls easily.

• Place the display near the radiators or other heat sources.

#### Other

• Since the power cable is the main power isolation device, it must be put in a place where it is easy to operate the display.

- Do not rub the screen panel with hard objects, or you will scratch or permanently damage the LCD.
- Do not press the LCD screen with your fingers for a long time, otherwise afterglow will occur and the screen will be seriously damaged.
- Bad dots of red, green and blue pixels may appear on the screen, but the display function is not affected.
- If possible, use the recommended image resolution for the best results. If any mode other than the recommended image resolution is used, an abnormal picture may occur. However, this is a characteristic of LCD panel with fixed image resolution.
- Still image staying on the screen for a long time may cause damage to the screen and produce afterimage. Please make sure to use the screen saver. The afterimage and related problems are not covered by the warranty.
- If you encounter any problem during your use, please contact the professional technical service personnel or distributor.



### **Technical specifications**

Product parameter description		
ID Renderings		
Product number	BX156	BX133
Brand LOGO	NO	NO
screen size	15.6" LED panel	13.3" LED panel
screen ratio	16:9	16:9
Screen level	A grade( A+) IPS-ADS	A grade( A+) IPS-ADS
Dot pitch (mm)	0. 17925x0. 17925mm	0. 17925x0. 17925mm
Display size	344.16X193.59mm	293.76×165.24mm

Brightness (cd / m2) (typical value)	$220 \text{cd/m}^2$	$220 \text{cd/m}^2$
Contrast (typical value)	800: 1	800:1
Color gamut	45%	45%
Viewing angle (typical value) (CR ≥10)	85/85/85/85 (Typ.)(CR≥10) (Left / right / up / down)	85/85/85/85 (Typ.)(CR≥10) (Left / right / up / down
Vertical refresh rate (Hz)	60Hz	60Hz
Response time (typical value)	30ms (Tr+Tf)	30ms (Tr+Tf)
Maximum resolution	1920x1080	1920x1080
Display color	16.7M	16.7M
Power consumption	8W(working mode) ; ≪0.5W(Shutdown mode)	7W(working mode) ; ≪0.5W(Shutdown mode)
Energy efficiency rating	1	1
OSD language	Simplified Chinese, Traditional Chinese, Japanese, English, French, Spanish, Portuguese, German, Italian, Dutch, Swedish, Finnish, Polish, Czech, Russian, Korean	Simplified Chinese, Traditional Chinese, Japanese, English, French, Spanish, Portuguese, German, Italian, Dutch, Swedish, Finnish, Polish, Czech, Russian, Korean
Horn	8Ω1W*2	8Ω1W*2
Shell color	black	black

Connectable devices		
Support phone model	Support computer model	
Huawei:	Huawei:	
P30; P30 Pro; Mate 30; Mata 30 Pro;	Mate book X; Mate book X Pro;	
P20; P20 Pro; P20 Rs; Mata 20;	Mate book E; Mate book D;	
Mate 20 X; Mate 20 Pro; Mate RS;	Mate book 13; Honor MagicBook	
Mate 10; Mate 10 Pro; Honor V20;		
Honor Note 10		

Compung	oppla
Samsung:	apple:
Galaxy S8; Galaxy S8+;	MacBook 12; MacBook 2015;
Galaxy S9; Galaxy S9+;	MacBook 2016; MacBook 2017 Pro;
Galaxy S10; Galaxy S10+;	MacBook Air 2018;
Galaxy Note 8; Galaxy Note 9;	ipad Pro 2018
Galaxy Note 10; Galaxy Note 10+	
hammer:	Google:
Nut R1; Nut Pro 2s; Nut Pro 3	Pixel Book
ASUS:	Xiaomi:
ROG gaming phone;	Air 12.5; Air 13.3; Pro 15.6;
ROG gaming phone 2	Xiaomi game book
SONY:	Lenovo:
Xperia 1(J9110); Xperia 5;	Savior Y7000; Y700P; Y900K;
Xperia XZ3	Yoga 6 Pro; Thinkpad X1 Carbon;
	Yoga; Miix720
LG:	Microsoft:
G5	Surfacebook 2; SurfaceGo
HTC:	ASUS:
U Ultra	Lingyao 3; Lingyao 3 Pro;
	Lingyao X series; U4100; U4100UN;
	AU5100UQ
Razer:	Razer:
Razer Phone; Razer Phone 2	Blade Stealth; Spirit Blade;
	Spirit Blade Stealth Edition
One plus:	HP:
OnePlus7; OnePlus7 Pro; OnePlus7T	HP Spectre13; Euvy13;
	Shadow Wizard 4 Pro;EliteBook 1050
	G1; EliteBook Folio G1
OPPO:	Dell:
R17 Pro	XPS 13; XPS 15; Latitude 5285;
	G3/G5/G7 series; Lingyue 5000;
	Lingyue 7000
ZTE:	Graphics card:
AXON 9 Pro	Geforce RTX 2080Ti; Geforce RTX 2080
	Geforce RTX 2070
NOKIA:	
Nokia 9 PureView	

Port function description		
HDCP function	YES	
Signal input	TYPE-C, HDMI	

Signal interface	TYPE-C (USB3.1), HDMI (2.0)
USB interface	Mini USB
Power input	Support 5 $^{\sim}$ 20V PD power supply
External adapter	NO
Plug and play	VESA DDC 2B™
Adjustment control	MENU, -, +, Power/EXIT

Environmental application range		
range of working temperature	10° C~+40° C	
Storage temperature range	-20° C~+45 ° <sup>c</sup>	
Operating humidity	10%-90%	
Storage humidity	5%-95%	
Operating height	Altitude below 2000m	
Storage height	15000ft	

Package		
Packing list	Portable Monitor *1, User Manual *1, USB Type-c cable *1 , Micro USB to USB 2.0 *1,	Micro USB cable *1
Lid and tray	YES	
Stacking limit (large box)	4th floor	
Net weight (kg)	BX156: 0.82kg	BX133: 0.63kg
Single gross weight (kg)	Bx156: 1.85kg	BX133: 1.49kg











### Introduction to buttons

• The function button adopts the design of **dial wheel** and is provided with an independent **power button/return button**.

• Press the **power button/return button** for 3 seconds to turn on/off the display.

• Press the **dial wheel** to open the OSD(On-Screen Display)menu of the display. In the menu, move the **dial wheel** upwards and downwards to control the cursor. Press the dial wheel to confirm, and press the power button/return button to return.

• Move the **dial wheel** upwards to open the brightness shortcut adjustment menu and move upwards and downwards to control the brightness.

• Move downwards the **dial wheel** to open the volume shortcut adjustment menu and move upwards and downwards to control the volume.

**USB Type-C2 full-function interface:** is responsible for power supply of display, audio and video signal transmission, touch signal transmission, and support for insertion function from both sides.

**USB Type-C1 power supply interface:** provides support for external power supply and reverse charging function, is compatible with PD2.0 power supply protocol, and supports 5V-20V protocol power supply (5V/3A is recommended).

Mini HDMI port: is responsible for audio and video signal transmission **3.5mm headphone jack:** refers to headphone/speaker extension connector



#### 1. Connect the computer with full-function Type-C interface



The display supports connecting full-function USB3.1 Type-C interface with standard wires for extended display or duplicated display. The touch version ZB156 can perform touch operation on the display (system support is required. Some systems are optimized for touch control and can be used in Windows 10. Please consult the distributor for details.)

#### 2. Connect the mobile phone with TV-out function



The display supports connecting the mobile phone with standard Type- C to Type-C cable, and outputting the screen content of the mobile phone or customizing the UI interface according to system settings.

\* When there is no external power supply, the mobile phone battery can be used to supply power to the display (the energy-saving mode is started. The brightness is automatically adjusted to 30%, and the user can adjust the brightness and volume of display according to the output power of the mobile phone. When the output power of the mobile phone caused by adjusting the brightness or volume increase is less than the power required by the device, the device will automatically shut down and restart.)

\* When the external power supply is used, the display can charges the mobile phone reversely through the external power supply (in order to ensure that both the display and the mobile phone can get enough working current, please use charger or power bank with at least 18W or above as the external power supply; higher voltage charger can quickly charge your mobile phone).

#### 3. Connect Nintendo Switch



**When external power supply is connected**, the display supports connecting the Switch host with standard Type- C to Type-C cable and switching on the Switch TV mode;

When external 5V power supply is connected, the external power supply supplies power to the display. The Switch uses its internal battery to run the program and the display output is 720P. When external 15V PD protocol power supply is connected, the external power supply supplies power to both the display and the Switch. The battery of the Switch body is in a charging state, and the display output is 1080P.

#### 4. Connect the computer with HDMI interface



The display has a Mini HDMI interface and is compatible with most HDMI devices. The device can be powered on by using computer's USB 3.0 power supply (Note: power output by some computers' USB interfaces may be insufficient) and external 5V/2A power supply to power the computer. (For touch screen model, please use an USB A to C cable to connect the device and the computer.Users may need to equip USB type A to type C cable by themselves.)

#### 5. Connect multiple HDMI devices



#### Remarks:

•The Type-C1 interface is a full-featured USB3.1 interface with power supply function. The Type-C2 interface is an auxiliary power supply interface. In general, please use the Type C1 interface to power the device.

• When connecting HDMI cable externally, please connect power supply first, then connect HDMI

to ensure normal signal transmission.

• When single wire is connected to Type-C2 interface, the energy-saving function of the display will be

activated, and the brightness will be automatically adjusted to 30% to ensure power supply and save device

power. Users can adjust the brightness according to actual usage.



Q: The display's light does not work, and the power indicator light also does not work.A: Press the power button to check whether the display is in the start-up state; Check that the USB cable is properly connected to the display and power supply interface.

#### Q: The display's light does not work, but the power indicator light is red.

A: Check whether the display and the connected device are in the start-up state; ensure that the USB cable is correctly connected between the display and the connected device; Check the signal line to ensure that no pins are bent. Try to connect other device and eliminate the fault of device; if the fault still exists, please contact the distributor or after-sales service staff to resolve the issues.

#### Q: No signal is displayed on the screen.

A: Check whether the signal line is correctly connected to the interface of the connected device; Try to unplug and plug the cables again. The order of line connection should be to connect the power supply first and then the signal line.

#### Q: Image jumping or ripple-like pattern on the display.

A: Ensure that the cable is correctly connected between the display and the connected device; Remove any electronic device that may cause electronic interference.

#### Q: The color of the screen image looks incorrect (color block, color deviation, etc.)

A: Check the connected cables to ensure that no pins are bent.

#### Q: The screen flickers when displaying content

A: If the screen flickers, we need to consider firstly whether the power supply is adequate. It is recommended that the power adapter of 18W or above should be used for power supply of the display. If the power supply is normal, but the screen flicker issues persist, it is recommended to contact the distributor or after-sales center.



• Turn off the display and unplug the power cable. Clean the display surface with a non-linen, nonabrasive cloth. Wet the cloth in a neutral detergent and removes the stubborn stains.

• Do not use detergents containing alcohol or acetone. Use special cleaner used for liquid crystal screen. Do not spray the detergent directly on the screen, otherwise the detergent may permeate into the display and cause electric shock.

#### The following phenomena are normal for displays:

• You may find that the brightness on the screen is slightly uneven, which is related to the desktop pattern you are using.

• After the same image is displayed for several hours, the image displayed on the previous screen may remain when switching images. The screen will slowly recover, or you can turn off the display for several hours.

• Please contact your distributor or service center for repairs when the screen turns black or

flickers. Do not try to repair the screen yourself!

#### Repacking

• Do not throw away the used EPE (Expandable Polyethylene) and carton box. When there is a need to send back the product for replace or repair, please repack the display back to its original state.

#### Treatment

• The fluorescent lamp of the display contains trace amounts of mercury.

• Do not dispose the product as ordinary household waste.

• The disposal of products must be handled in accordance with local regulations.



Products are warranted for one full year.

• Within 7 days from the date of purchase, the consumer may choose to return, replace or repair the goods in case of any of the faults listed in the Performance Failure Table for Commodity of Microcomputers.

• Within 15 days from the date of purchase, the consumer may choose to replace or repair the

goods in case of any failure listed in the Performance Failure Table for Commodity of Microcomputers

• Within one year from the date of purchase, the consumer can choose to repair the goods in case of any faults listed in the Performance Failure Table for Commodity of Microcomputers

# The following circumstances are not covered by "Three Guarantees" (for repair, replacement or compensation of faulty products):

• The valid period of "Three Guarantees" is exceeded.

• Failed to provide valid voucher and invoice of "Three Guarantees".

• The contents of the invoice are altered or inconsistent with the actual identification of the product.

• There are 3 or less bad spots, 3 or less bright spots, and the total number of 5 or less bad and light spots on the screen.

• There is damage caused by failure to use, maintain and repair the product in accordance with the requirements of the product instruction manual (man-made damage)) or damage caused by removal by non-professional repairman (unauthorized removal and repair).

• Goods that are sold outside of mainland China (excluding Hong Kong, Macao and Taiwan)

\* In order to protect your legitimate rights and interests and avoid unnecessary losses, please select the paid services to remedy the failure or damage of the display caused by the following reasons, but not covered under the warranty.

• The warranty period is exceeded.

• There are scratches, bumps, deformations, sags on the liquid crystal panel.

• The product has been removed or repaired by any unauthorized service center or personnel.

• Damage caused by accidental or human factors and external forces (including

misoperation, handling, collision, input of inappropriate voltage, etc)

• Damage caused by use of non-standard or unpublished software or non-standard related computer components (e.g. Graphics card).

• Damage caused by force majeure such as natural disasters (e.g. earthquake, fire, flood, etc.)

For services beyond the scope of the free warranty, A fee may be applied.

(Calculated fee = Technical Service Fee + Fee of Replacement Parts).

The company reserves the right to interpret and/or amend all the above provisions without prior notice. In case of disputes, the "Provisions on the Responsibility of Repair, Replacement and Refund of Commodity of Microcomputers" shall prevail.