# HDW070\_002L

7.0-inch, 800\*480, 65K colors,

# **Resistive Touch, LVDS Multimedia Display**





# Display Parameters

Properties	Parameters	Description
Color	65K (65536) colors	16 bit color 5R6G5B
Active area (A.A.)	154.1 mm (W) *85.9 mm (H)	800*480 pixel
Resolution	800*480 pixel	
Backlight	LED	-
Brightness	900nit	When the brightness is adjusted to 1% to 30% of the maximum brightness, flickering may occur, and it is not recommended to use in this range
Note:You can use dynam time.	ic screen saver wallpapers to avo	oid afterimages caused by fixed page display for a long

### Voltage & Current

Item	Conditions	Conditions Min Typical Max		Unit	
Power voltage	-	3.6	5.0	6.0	V
Operating comment	VCC = +5V, Backlight on	-	760	9 -	mA
Operating current	VCC = +5V, Backlight off	-	140	-	mA
Recommended power su	oply: 5V 1A DC		0)		

## Reliability Test

Item	Conditions	Min	Typical	Max	Unit
Operating temperature	60%RH at 5V voltage	-20	25	70	$^{\circ}$
Storage temperature		-30	25	85	$^{\circ}$
Operating humidity	25℃	10%	60%	90%	RH
Conformal coating		-	None	-	-

#### Peripheral

Peripheral	
Peripheral	4 Resistive touch screen

#### Installation

Properties	Description
Enclosure material	ABS engineering material
Enclosure color	Black
Dimension	209.40(mm)*149.2(mm)*23.90(mm)
Hole size	197.30(mm)*137.0(mm)
Installation depth	20.85 (mm) (maximum depth when connecting the connector)
Net weight	500 g
Accessories	Waterproof rubber washers and buckles

#### Packaging

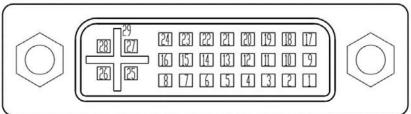
Model	Dimensions	Quantity(Pcs)
Carton3:	320mm(L)*270mm(W)*80mm (H)	2
Carton4:	450mm(L)*350mm(W)*300mm(H)	16
Carton5:	600mm(L)*450mm(W)*300mm(H)	30

Disclaimer: The product design is subject to alternation and improvement without prior notice.

#### Interface Parameters

Properties	Conditions	
Interface cable	LVDS( VDD=+5.0V)	×
User interface	DVI-I	

#### **DVI-I** interface

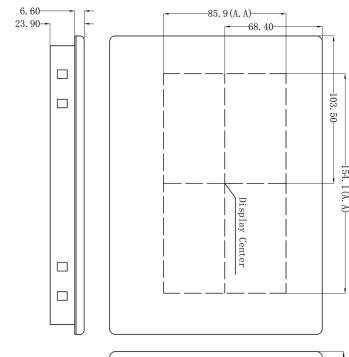


PinNameFunctionDescription1RX2-Input-LVDS Differential data Input input2RX2+Input+ LVDS Differential data Input3GNDPowerGND4BL_PWMInputBacklight dimming control, PWM is used to adjust brightness output.5NC-NC6VDDPower5.0V Power Input7VDDPower5.0V Power Input8VDDPower5.0V Power Input9RX1-Input- LVDS Differential data Input10RX1+Input+ LVDS Differential data Input11GNDPowerGND12RX3-Input- LVDS Differential data Input13RX3+Input+ LVDS Differential data Input14VDDPower5.0V Power Input15GNDPowerGND16GNDPowerGND17RX0-Input- LVDS Differential data Input18RX0+Input- LVDS Differential data Input19GNDPowerGND20USB_DMI/OUSB D- signal21USB_DPI/OUSB D+ signal				
2 RX2+ Input +LVDS Differential data Input 3 GND Power GND  4 BL_PWM Input Backlight dimming control, PWM is used to adjust brightness output.  5 NC - NC 6 VDD Power 5.0V Power Input 7 VDD Power 5.0V Power Input 8 VDD Power 5.0V Power Input 9 RX1- Input -LVDS Differential data Input 10 RX1+ Input +LVDS Differential data Input 11 GND Power GND 12 RX3- Input -LVDS Differential data Input 13 RX3+ Input +LVDS Differential data Input 14 VDD Power S.0V Power Input 15 GND Power GND 16 GND Power GND 17 RX0- Input -LVDS Differential data Input 18 RX0+ Input -LVDS Differential data Input 19 GND Power GND 20 USB_DM I/O USB D- signal	Pin	Name	Function	·
3 GND Power GND  4 BL_PWM Input Backlight dimming control, PWM is used to adjust brightness output.  5 NC - NC  6 VDD Power 5.0V Power Input  7 VDD Power 5.0V Power Input  8 VDD Power 5.0V Power Input  9 RX1- Input -LVDS Differential data Input  10 RX1+ Input +LVDS Differential data Input  11 GND Power GND  12 RX3- Input -LVDS Differential data Input  13 RX3+ Input +LVDS Differential data Input  14 VDD Power GND  15 GND Power GND  16 GND Power GND  17 RX0- Input -LVDS Differential data Input  18 RX0+ Input -LVDS Differential data Input  19 GND Power GND  20 USB_DM I/O USB D- signal	-	RX2-	Input	
4 BL_PWM Input Backlight dimming control, PWM is used to adjust brightness output.  5 NC - NC 6 VDD Power 5.0V Power Input 7 VDD Power 5.0V Power Input 8 VDD Power 5.0V Power Input 9 RX1- Input -LVDS Differential data Input 10 RX1+ Input +LVDS Differential data Input 11 GND Power GND 12 RX3- Input -LVDS Differential data Input 13 RX3+ Input +LVDS Differential data Input 14 VDD Power GND 15 GND Power GND 16 GND Power GND 17 RX0- Input -LVDS Differential data Input 18 RX0+ Input +LVDS Differential data Input 19 GND Power GND 20 USB_DM I/O USB D- signal		RX2+	Input	+ LVDS Differential data Input
BL_PWM	3	GND	Power	GND
6 VDD Power 5.0V Power Input 7 VDD Power 5.0V Power Input 8 VDD Power 5.0V Power Input 9 RX1- Input - LVDS Differential data Input 10 RX1+ Input +LVDS Differential data Input 11 GND Power GND 12 RX3- Input -LVDS Differential data Input 13 RX3+ Input +LVDS Differential data Input 14 VDD Power GND 15 GND Power GND 16 GND Power GND 17 RX0- Input - LVDS Differential data Input 18 RX0+ Input - LVDS Differential data Input 19 GND Power GND 20 USB_DM I/O USB D- signal	4	BL_PWM	Input	
7 VDD Power 5.0V Power Input 8 VDD Power 5.0V Power Input 9 RX1- Input - LVDS Differential data Input 10 RX1+ Input +LVDS Differential data Input 11 GND Power GND 12 RX3- Input -LVDS Differential data Input 13 RX3+ Input +LVDS Differential data Input 14 VDD Power 5.0V Power Input 15 GND Power GND 16 GND Power GND 17 RX0- Input - LVDS Differential data Input 18 RX0+ Input +LVDS Differential data Input 19 GND Power GND 20 USB_DM I/O USB D- signal	5	NC	(-)	NC
8 VDD Power 5.0V Power Input 9 RX1- Input - LVDS Differential data Input 10 RX1+ Input +LVDS Differential data Input 11 GND Power GND 12 RX3- Input -LVDS Differential data Input 13 RX3+ Input +LVDS Differential data Input 14 VDD Power 5.0V Power Input 15 GND Power GND 16 GND Power GND 17 RX0- Input - LVDS Differential data Input 18 RX0+ Input +LVDS Differential data Input 19 GND Power GND 20 USB_DM I/O USB D- signal	6	VDD	Power	5.0V Power Input
9 RX1- Input - LVDS Differential data Input 10 RX1+ Input +LVDS Differential data Input 11 GND Power GND 12 RX3- Input -LVDS Differential data Input 13 RX3+ Input +LVDS Differential data Input 14 VDD Power 5.0V Power Input 15 GND Power GND 16 GND Power GND 17 RX0- Input - LVDS Differential data Input 18 RX0+ Input +LVDS Differential data Input 19 GND Power GND 20 USB_DM I/O USB D- signal	7	VDD	Power	5.0V Power Input
10 RX1+ Input +LVDS Differential data Input 11 GND Power GND 12 RX3- Input -LVDS Differential data Input 13 RX3+ Input +LVDS Differential data Input 14 VDD Power 5.0V Power Input 15 GND Power GND 16 GND Power GND 17 RX0- Input -LVDS Differential data Input 18 RX0+ Input +LVDS Differential data Input 19 GND Power GND 20 USB_DM I/O USB D- signal	8	VDD	Power	5.0V Power Input
11 GND Power GND  12 RX3- Input -LVDS Differential data Input  13 RX3+ Input +LVDS Differential data Input  14 VDD Power 5.0V Power Input  15 GND Power GND  16 GND Power GND  17 RX0- Input - LVDS Differential data Input  18 RX0+ Input + LVDS Differential data Input  19 GND Power GND  20 USB_DM I/O USB D- signal	9	RX1-	Input	- LVDS Differential data Input
12 RX3- Input -LVDS Differential data Input 13 RX3+ Input +LVDS Differential data Input 14 VDD Power 5.0V Power Input 15 GND Power GND 16 GND Power GND 17 RX0- Input -LVDS Differential data Input 18 RX0+ Input +LVDS Differential data Input 19 GND Power GND 20 USB_DM I/O USB D- signal	10	RX1+	Input	+LVDS Differential data Input
13         RX3+         Input         +LVDS Differential data Input           14         VDD         Power         5.0V Power Input           15         GND         Power         GND           16         GND         Power         GND           17         RX0-         Input         - LVDS Differential data Input           18         RX0+         Input         + LVDS Differential data Input           19         GND         Power         GND           20         USB_DM         I/O         USB D- signal	11	GND	Power	GND
14         VDD         Power         5.0V Power Input           15         GND         Power         GND           16         GND         Power         GND           17         RX0-         Input         - LVDS Differential data Input           18         RX0+         Input         + LVDS Differential data Input           19         GND         Power         GND           20         USB_DM         I/O         USB D- signal	12	RX3-	Input	-LVDS Differential data Input
15         GND         Power         GND           16         GND         Power         GND           17         RX0-         Input         - LVDS Differential data Input           18         RX0+         Input         + LVDS Differential data Input           19         GND         Power         GND           20         USB_DM         I/O         USB D- signal	13	RX3+	Input	+LVDS Differential data Input
16         GND         Power         GND           17         RX0-         Input         - LVDS Differential data Input           18         RX0+         Input         + LVDS Differential data Input           19         GND         Power         GND           20         USB_DM         I/O         USB D- signal	14	VDD	Power	5.0V Power Input
17RX0-Input- LVDS Differential data Input18RX0+Input+ LVDS Differential data Input19GNDPowerGND20USB_DMI/OUSB D- signal	15	GND	Power	GND
18RX0+Input+ LVDS Differential data Input19GNDPowerGND20USB_DMI/OUSB D- signal	16	GND	Power	GND
19         GND         Power         GND           20         USB_DM         I/O         USB D- signal	17	RX0-	Input	- LVDS Differential data Input
20 USB_DM I/O USB D- signal	18	RX0+	Input	+ LVDS Differential data Input
	19	GND	Power	GND
21 USB_DP I/O USB D+ signal	20	USB_DM	I/O	USB D- signal
	21	USB_DP	I/O	USB D+ signal
22 GND Power GND	22	GND	Power	GND
23 RXCLK+ Input Clock + LVDS Differential data Input	23	RXCLK+	Input	Clock + LVDS Differential data Input
24 RXCLK- Input Clock - LVDS Differential data Input	24	RXCLK-	Input	Clock - LVDS Differential data Input
25 VDD Power 5.0V Power Input	25	VDD	Power	5.0V Power Input



26	VDD	Power	5.0V Power Input
27	NC	-	NC
28	NC	-	NC
29	GND	Power	GND

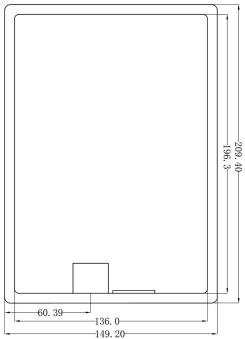
Interface Timing refers to the corresponding LCD Timing parameters. Please confirm the relevant LCD screen information with the DWIN salesperson.

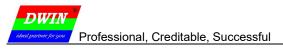


	_	Date		mm Approval	mm	Unit	
	6	Date		1:1 Review	1:1	Scale	
Beijing DWIN Technology Co., Ltd.		Date	DWI	Drawn	<b>A</b> 4	Drawing A4 Drawn DWIN Date	
NMA	2L	00	70_	HDW070_002L	Ε	Model	

Active area is marked in dashes.

Unmarked '	Location
Tole	hole
can	18
ce is	used
+	as
Tolerance is +/-0.3mm	hole is used as position
	reference





Version	Revise date	Content	Editor
00	2023-7-18	First Edition	Kaya
01	2024-4-12	Add Important Disclaimer	YML

Please contact us if you have any questions about the use of this document or our products, or if you would like to know the latest information about our products:

Customer service Tel: +86-400-018-9008

Customer service E-mail: dwinhmi@dwin.com.cn

Website: www.dwin-global.com

DWIN Developer Forum: https://forums.dwin-global.com/index.php/forums

Thank you all for continuous support of DWIN, and your approval is the driving force of our progress!

#### **Important Disclaimer**

DWIN reserves the right to make any changes to product designs without prior notice.

Customers should ensure strictly adhering to all the relevant standards and requirements during the product application process, including but not limited to functional safety, information security, and regulatory provisions. DWIN shall not bear any joint and several liability for any consequences that may arise from customers' adoption of DWIN products. In particular, for risks that may lead to significant property losses, environmental hazards, personal injury, or even death, especially in high-risk application areas such as military applications, flammable and explosive places, and life-saving medical equipment, customers should independently assess the risks and take corresponding preventive and protective measures. DWIN shall not bear any relevant responsibility.