# HDW097\_001L

## 9.7-inch, 1024\*768, 65K Colors,

## **Resistive Touch, LVDS Multimedia Display**



#### **Display Parameters**

Properties	Parameters	Description			
Color	65K (65536) colors	16bit 5R6G5B			
Active area (A.A.)	196.6mm (W) *147.5mm (H)	1024*768 Pixel			
Resolution	1024*768 Pixel				
Backlight	LED	-			
Brightness	300nit	100 levels adjustment(It's not recommended to set brightness to 1%~30% of the maximum, which may lead to LCD flicker.)			
Note: You can use dynamic screen saver wallpapers to avoid afterimages caused by fixed page display for a long time.					

#### Voltage & Current

Item	Conditions	Min	Typical	Мах	Unit
Power Voltage	-	3.6	5.0	6.0	V
	VCC = +5V, Backlight on	-	760	-	mA
Operating Current	VCC = +5V, Backlight off	-	140	-	mA
Recommended power supply: 5V 2A DC					

#### **Reliability Test**

ltem	Conditions	Min	Тур	Мах	Unit
Operating Temperature	60%RH at 5V voltage	-20	25	70	°C
Storage Temperature	- 07	-30	25	85	°C
Operating Humidity	25°C	10%	60%	90%	RH
Protective Paint		-	None	-	-

#### Peripheral

eripheral					
Peripheral					
Peripheral	4-wire resistive touch screen				

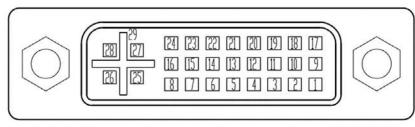
#### Installation

Properties	Description
Enclosure material   ABS+PC engineering material	
Enclosure Color	Black
Hole Size	245.3(mm)*196.0(mm)
Installation Depth	23.0 (mm) (maximum depth when connecting the connector)
Accessories	Waterproof rubber washers and buckles

### • Interface Parameters

Properties	Description
Interface Cable	LVDS( VDD=+5.0V)
User Interface	DVI-I interface

## **DVI-I** interface

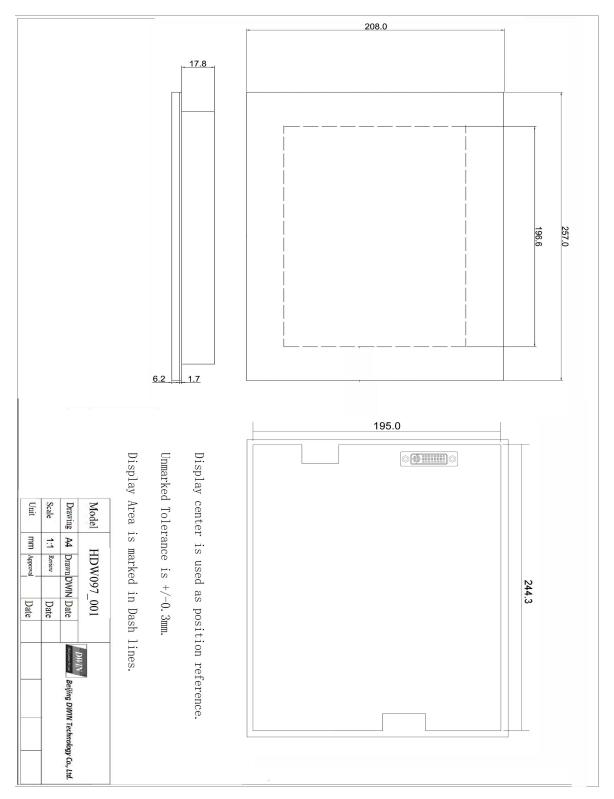


PinNameFunctionDescription1RX2+InputNegative electrode LVDS Differential data Input input2RX2+InputPositive electrode LVDS Differential data Input3GNDPowerGND4BL_PWMInputBacklight dimming control, PWM is used to adjust brightness output.5NC-NC6VDDPower5.0V Power Input7VDDPower5.0V Power Input8VDDPower5.0V Power Input9RX1+InputNegative electrode LVDS Differential data Input10RX1+InputPositive electrode LVDS Differential data Input11GNDPowerGND12RX3-InputNegative electrode LVDS Differential data Input13RX3+InputPositive electrode LVDS Differential data Input14VDDPowerGND15GNDPowerGND16GNDPowerGND17RX0-InputNegative electrode LVDS Differential data Input18RX0+InputNegative electrode LVDS Differential data Input19GNDPowerGND20USB_DMI/OUSB D- signal21USB_DPI/OUSB D- signal22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input<					
2 RX2+ Input Positive electrode 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 Negative electrode LVDS Differential data Input   10 RX1+ Input Positive electrode LVDS Differential data Input   11 GND Power GND   12 RX3- Input Negative electrode LVDS Differential data Input   13 RX3+ Input Positive electrode LVDS Differential data Input   14 VDD Power GND   15 GND Power GND   16 GND Power GND   17 RX0- Input Negative electrode LVDS Differential data Input   18 RX0+ Input Negative electrode LVDS Differential data Input	Pin	Name	Function	Description	
3GNDPowerGND4BL_PWMInputBacklight dimming control, PWM is used to adjust brightness output.5NC-NC6VDDPower5.0V Power Input7VDDPower5.0V Power Input8VDDPower5.0V Power Input9RX1-InputNegative electrode LVDS Differential data Input10RX1+InputPositive electrode LVDS Differential data Input11GNDPowerGND12RX3-InputNegative electrode LVDS Differential data Input13RX3+InputPositive electrode LVDS Differential data Input14VDDPowerGND16GNDPowerGND17RX0-InputNegative electrode LVDS Differential data Input18RX0+InputNegative electrode LVDS Differential data Input19GNDPowerGND20USB_DMI/OUSB D- signal21USB_DPI/OUSB D+ signal22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPower5.0V Power Input27NC-NC	1	RX2-	Input	Negative electrode LVDS Differential data Input input	
4BL_PWMInputBacklight dimming control, PWM is used to adjust brightness output.5NC-NC6VDDPower5.0V Power Input7VDDPower5.0V Power Input8VDDPower5.0V Power Input9RX1-InputNegative electrode LVDS Differential data Input10RX1+InputPositive electrode LVDS Differential data Input11GNDPowerGND12RX3-InputNegative electrode LVDS Differential data Input13RX3+InputPositive electrode LVDS Differential data Input14VDDPowerGND15GNDPowerGND16GNDPowerGND17RX0-InputNegative electrode LVDS Differential data Input18RX0+InputNegative electrode LVDS Differential data Input19GNDPowerGND20USB_DMI/OUSB D- signal21USB_DPI/OUSB D- signal22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPower5.0V Power Input27NC-NC	2	RX2+	Input	Positive electrode LVDS Differential data Input	
4BL_PWMInputbrightness output.5NC-NC6VDDPower5.0V Power Input7VDDPower5.0V Power Input8VDDPower5.0V Power Input9RX1-InputNegative electrode LVDS Differential data Input10RX1+InputPositive electrode LVDS Differential data Input11GNDPowerGND12RX3-InputNegative electrode LVDS Differential data Input13RX3+InputPositive electrode LVDS Differential data Input14VDDPowerS.0V Power Input15GNDPowerGND16GNDPowerGND17RX0-InputNegative electrode LVDS Differential data Input18RX0+InputPositive electrode LVDS Differential data Input19GNDPowerGND20USB_DMI/OUSB D- signal21USB_DPI/OUSB D+ signal22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPowerS.0V Power Input27NC-NC	3	GND	Power	GND	
6VDDPower5.0V Power Input7VDDPower5.0V Power Input8VDDPower5.0V Power Input9RX1-InputNegative electrode LVDS Differential data Input10RX1+InputPositive electrode LVDS Differential data Input11GNDPowerGND12RX3-InputNegative electrode LVDS Differential data Input13RX3+InputPositive electrode LVDS Differential data Input14VDDPower5.0V Power Input15GNDPowerGND16GNDPowerGND17RX0-InputNegative electrode LVDS Differential data Input18RX0+InputNegative electrode LVDS Differential data Input19GNDPowerGND20USB_DMI/OUSB D- signal21USB_DPI/OUSB D+ signal22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPower5.0V Power Input27NC-NC	4	BL_PWM	Input		
7VDDPower5.0V Power Input8VDDPower5.0V Power Input9RX1-InputNegative electrode LVDS Differential data Input10RX1+InputPositive electrode LVDS Differential data Input11GNDPowerGND12RX3-InputNegative electrode LVDS Differential data Input13RX3+InputPositive electrode LVDS Differential data Input14VDDPower5.0V Power Input15GNDPowerGND16GNDPowerGND17RX0-InputNegative electrode LVDS Differential data Input18RX0+InputNegative electrode LVDS Differential data Input19GNDPowerGND20USB_DMI/OUSB D- signal21USB_DPI/OUSB D- signal22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPower5.0V Power Input27NC-NC	5	NC	-	NC	
8VDDPower5.0V Power Input9RX1-InputNegative electrode LVDS Differential data Input10RX1+InputPositive electrode LVDS Differential data Input11GNDPowerGND12RX3-InputNegative electrode LVDS Differential data Input13RX3+InputPositive electrode LVDS Differential data Input14VDDPower5.0V Power Input15GNDPowerGND16GNDPowerGND17RX0-InputNegative electrode LVDS Differential data Input18RX0+InputNegative electrode LVDS Differential data Input19GNDPowerGND20USB_DMI/OUSB D- signal21USB_DPI/OUSB D+ signal22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPower5.0V Power Input27NCNCNC	6	VDD	Power	5.0V Power Input	
9RX1-InputNegative electrode LVDS Differential data Input10RX1+InputPositive electrode LVDS Differential data Input11GNDPowerGND12RX3-InputNegative electrode LVDS Differential data Input13RX3+InputPositive electrode LVDS Differential data Input14VDDPower5.0V Power Input15GNDPowerGND16GNDPowerGND17RX0-InputNegative electrode LVDS Differential data Input18RX0+InputNegative electrode LVDS Differential data Input19GNDPowerGND20USB_DMI/OUSB D- signal21USB_DPI/OUSB D+ signal22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPower5.0V Power Input27NCNCNC	7	VDD	Power	5.0V Power Input	
10RX1+InputPositive electrode LVDS Differential data Input11GNDPowerGND12RX3-InputNegative electrode LVDS Differential data Input13RX3+InputPositive electrode LVDS Differential data Input14VDDPower5.0V Power Input15GNDPowerGND16GNDPowerGND17RX0-InputNegative electrode LVDS Differential data Input18RX0+InputNegative electrode LVDS Differential data Input19GNDPowerGND20USB_DMI/OUSB D- signal21USB_DPI/OUSB D+ signal22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPowerS.0V Power Input27NC-NC	8	VDD	Power	5.0V Power Input	
11GNDPowerGND12RX3-InputNegative electrode LVDS Differential data Input13RX3+InputPositive electrode LVDS Differential data Input14VDDPower5.0V Power Input15GNDPowerGND16GNDPowerGND17RX0-InputNegative electrode LVDS Differential data Input18RX0+InputNegative electrode LVDS Differential data Input19GNDPowerGND20USB_DMI/OUSB D- signal21USB_DPI/OUSB D+ signal22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPowerS.0V Power Input27NC-NC	9	RX1-	Input	Negative electrode LVDS Differential data Input	
12RX3-InputNegative electrode LVDS Differential data Input13RX3+InputPositive electrode LVDS Differential data Input14VDDPower5.0V Power Input15GNDPowerGND16GNDPowerGND17RX0-InputNegative electrode LVDS Differential data Input18RX0+InputPositive electrode LVDS Differential data Input19GNDPowerGND20USB_DMI/OUSB D- signal21USB_DPI/OUSB D+ signal22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPowerS.0V Power Input27NC-NC	10	RX1+	Input	Positive electrode LVDS Differential data Input	
13RX3+InputPositive electrode LVDS Differential data Input14VDDPower5.0V Power Input15GNDPowerGND16GNDPowerGND17RX0-InputNegative electrode LVDS Differential data Input18RX0+InputPositive electrode LVDS Differential data Input19GNDPowerGND20USB_DMI/OUSB D- signal21USB_DPI/OUSB D+ signal22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPowerS.0V Power Input27NC-NC	11	GND	Power	GND	
14VDDPower5.0V Power Input15GNDPowerGND16GNDPowerGND17RX0-InputNegative electrode LVDS Differential data Input18RX0+InputPositive electrode LVDS Differential data Input19GNDPowerGND20USB_DMI/OUSB D- signal21USB_DPI/OUSB D+ signal22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPowerS.0V Power Input27NC-NC	12	RX3-	Input	Negative electrode LVDS Differential data Input	
15GNDPowerGND16GNDPowerGND17RX0-InputNegative electrode LVDS Differential data Input18RX0+InputPositive electrode LVDS Differential data Input19GNDPowerGND20USB_DMI/OUSB D- signal21USB_DPI/OUSB D+ signal22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPowerS.0V Power Input27NC-NC	13	RX3+	Input	Positive electrode LVDS Differential data Input	
16GNDPowerGND17RX0-InputNegative electrode LVDS Differential data Input18RX0+InputPositive electrode LVDS Differential data Input19GNDPowerGND20USB_DMI/OUSB D- signal21USB_DPI/OUSB D+ signal22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPowerS.0V Power Input27NC-NC	14	VDD	Power	5.0V Power Input	
17RX0-InputNegative electrode LVDS Differential data Input18RX0+InputPositive electrode LVDS Differential data Input19GNDPowerGND20USB_DMI/OUSB D- signal21USB_DPI/OUSB D+ signal22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPowerS.0V Power Input27NC-NC	15	GND	Power	GND	
18RX0+InputPositive electrode LVDS Differential data Input19GNDPowerGND20USB_DMI/OUSB D- signal21USB_DPI/OUSB D+ signal22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPowerS.0V Power Input27NC-NC	16	GND	Power	GND	
19GNDPowerGND20USB_DMI/OUSB D- signal21USB_DPI/OUSB D+ signal22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPower5.0V Power Input27NC-NC	17	RX0-	Input	Negative electrode LVDS Differential data Input	
20USB_DMI/OUSB D- signal21USB_DPI/OUSB D+ signal22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPower5.0V Power Input27NC-NC	18	RX0+	Input	Positive electrode LVDS Differential data Input	
21USB_DPI/OUSB D+ signal22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPower5.0V Power Input27NC-NC	19	GND	Power	GND	
22GNDPowerGND23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPower5.0V Power Input27NC-NC	20	USB_DM	I/O	USB D- signal	
23RXCLK+InputClock positive pole LVDS Differential data Input24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPower5.0V Power Input27NC-NC	21	USB_DP	I/O	USB D+ signal	
24RXCLK-InputClock negative pole LVDS Differential data Input25VDDPower5.0V Power Input26VDDPower5.0V Power Input27NC-NC		_	Power	GND	
25VDDPower5.0V Power Input26VDDPower5.0V Power Input27NC-NC	-		•	Clock positive pole LVDS Differential data Input	
26VDDPower5.0V Power Input27NC-NC				•	
27 NC - NC	-	VDD	Power	5.0V Power Input	
		VDD	Power	5.0V Power Input	
28 NC - NC	-		-	NC	
	28	NC	-	NC	

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

## • Packaging & Dimensions

<u> </u>					
Form Factor	257.0mm(l)*208.0mm(w)*24.0mm(h)	257.0mm(I)*208.0mm(w)*24.0mm(h)			
Net Weight	785g				
Packaging Standards					
Model	Dimensions	Quantity(Pcs)			
Carton3:	320mm(L)*270mm(W)*80mm (H)	2			
Carton4:	450mm(L)*350mm(W)*300mm(H)	10			
Carton5:	600mm(L)*450mm(W)*300mm(H)	16			



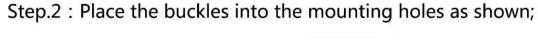




Step.1: Embed the HMI in the hole;



The mounting holes are marked by the red circles. The picture above shows the top view ,there are the same mounting holes on the other side.





Step.3 : Tighten the screws to fix the HMI on the device.

**DWIN** Kend Partner Argunt Professional, Creditable, Successful

### • Revision Records

Version	Revise Date	Content	Editor
00	2023-5-19	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.