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TC040C12U00

4.0 Inches, 480*RGB*480, 16.7M Colors, IPS screen,Wire-Controller

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● **Display**

Item	Parameter	Description
Color	16.7M (16777216) colors	24 bit color 8R8G8B
Active Area(A.A.)	71.86mm (W) *67.96mm (H)	480*480
Resolution	480 * 480	Support 0°/90°/180°/270°rotated display
Backlight	LED	≥10000H(Continuous working with maximum brightness, time of brightness halves)
Brightness	250nit	100 levels adjustment(It's not recommend to set brightness to 1%~30% of the maximum,which may lead a flicker)
Note: You can use dynamic screen saver wallpapers to avoid afterimages caused by fixed page display for a long time.		

● **Voltage & Current**

Item	Condition	Min	Typ.	Max	Unit
Power Voltage	-	8	12	36	V
Operation Current	VCC = +12V, Backlight on	-	100	-	mA
	VCC = +12V, Backlight off	-	40	-	mA

● **Reliability Test**

Item	Condition	Min	Typ.	Max	Unit
Working Temperature	60%RH at 12V Voltage	-20	25	70	℃
Storage Temperature	-	-30	25	80	℃
Working Humidity	25℃	0%	60%	90%	RH
Protective Paint	-	-	None	-	-

● **Interface**

Item	Condition	Min	Typ.	Max	Unit
Baud Rate	User Set	3150	115200	3225600	bps
(V_AB)	Output 1	2.5	5.0	-	V
	Output 0	-	-5.0	-2.5	V
(V_AB)	Input 1	0	2.5	-	V
	Input 0	-	-2.5	-0.2	V
Interface	RS485 (UART2 & UART5)				
Socket	4PIN_2.0mm				
USB	None				
SD Slot	Yes (SDHC/FAT32 file format)				

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● Memory

Item	Typ.	Features	Typ.	Unit	Description
FLASH **(TA/DGUSⅡ)**	16Mbytes	Space of Font	4-12	Mbytes	A single font of 256Kbytes,store font, icon libraries,and other binary files
		Picture Storage (.ICL file)	12-4	Mbytes	JPEG format(Picture quantity relate to JPEG size,size of a single JPEG image file should not exceed 768 Kbytes)
RAM **(DGUSⅡ)**	128Kbytes	Variable Storage Space	/	/	Data is not saved when power down
Nor Flash **(DGUSⅡ)**	320Kbytes	User database	/	/	Data is saved when power down

● UI＆Peripheral

UI＆Peripherals	
UI Version	TA / DGUSⅡ（DGUSⅡ pre-installed）
Peripherals	Capacitive touch screen,Built-in Speaker

● Packing Capacity & Dimension

Dimension	
Dimension	88.0 mm(W) * 88.0mm (H) * 18.13 (T)mm
Net Weight	131 g

Packing Capacity				
Model	**Size**	**Layer**	**Quantity/Layer**	**Quantity(Pcs)**
Carton1:	220mm(L)*160mm(W)*47mm (H)	1	1	1
Carton2:	250mm(L)*200mm(W)*80mm (H)	2	2	4
Carton3:	320mm(L)*270mm(W)*80mm (H)	2	4	8
Carton4:	450mm(L)*350mm(W)*300mm(H)	-	-	-
Carton5:	600mm(L)*450mm(W)*300mm(H)	1	56	56

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

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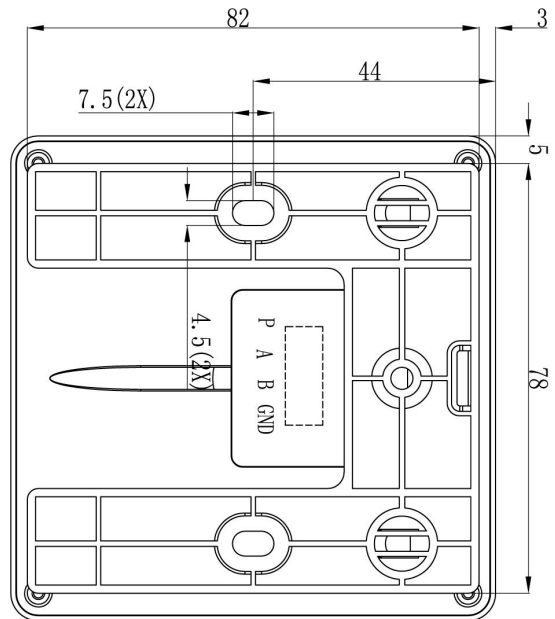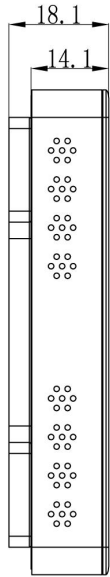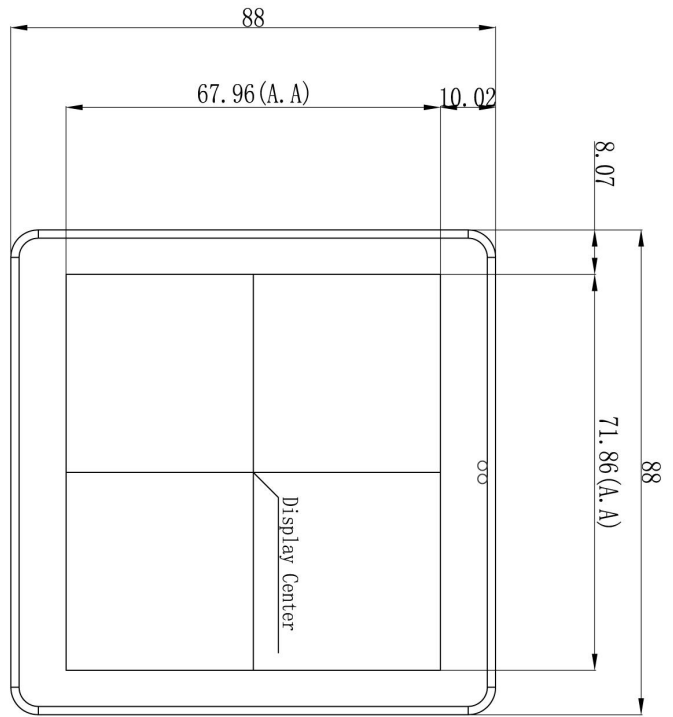
Pin	Definition	Type	Description
GND	4	P	GND
B	3	485-	485-
A	2	485+	485+
P	1	P	Power Input

88
67.96(A.A)
10.02
8.07
71.86(A.A)
88
18.1
14.1

Display Center

82
3
44
7.5(2X)
5
4.5(2X)
78

P A B GND

Unmarked Tolerance is +/-0.3mm
Active area is marked in Dash lines

Model	TC040C12U00				DWIN Technologies
Drawing	A 4	Drawn	DWIN	Date	
Scale		Review	Date	Date	
Unit	MM	Aprove			

Record of Revision

Version	Revise Date	Content	Editor
00	2023-02-24	First Edition	YML
01	2023-08-17	Update Installation Schmatic	YML

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

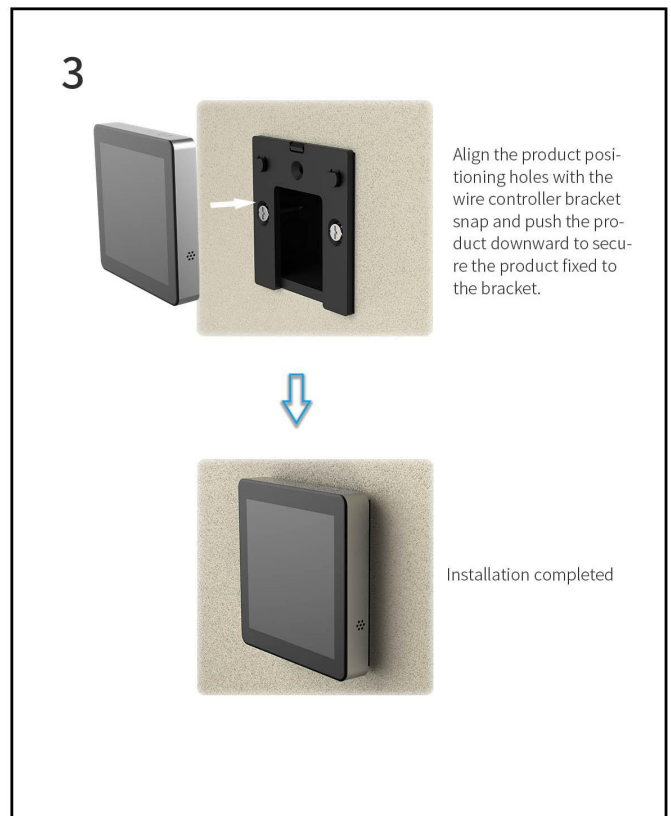Customer service E-mail: dwinhmi@dwin.com.cn
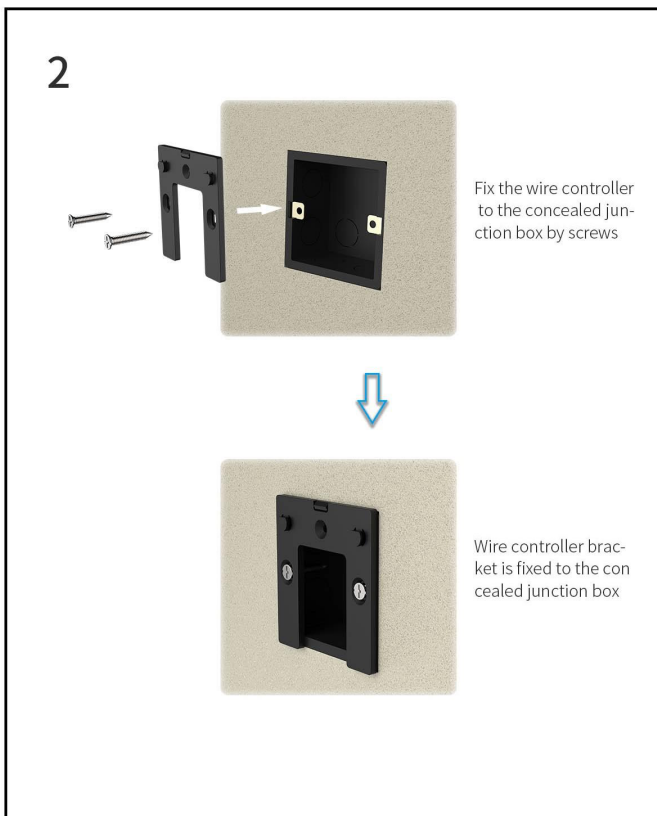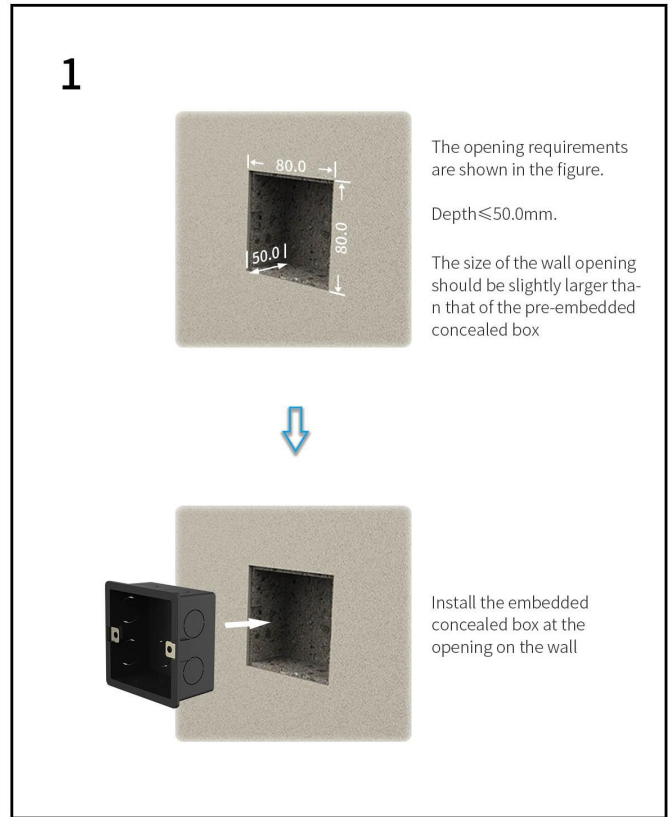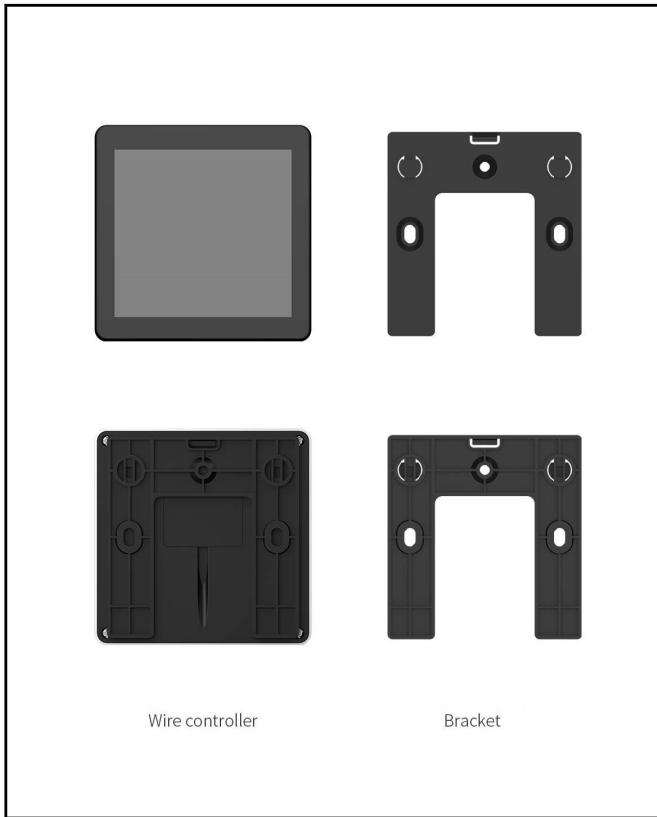
Website: www.dwin-global.com

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!

TC040C12W00
Installation Schematic

Wire controller

Bracket

1

The opening requirements are shown in the figure.

Depth≤50.0mm.

The size of the wall opening should be slightly larger than that of the pre-embedded concealed box

80.0

80.0

50.0

Install the embedded concealed box at the opening on the wall

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2

Fix the wire controller to the concealed junction box by screws

Wire controller bracket is fixed to the concealed junction box

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3

Align the product positioning holes with the wire controller bracket snap and push the product downward to secure the product fixed to the bracket.

Installation completed

TC040C12W00

Installation Schematic

Wire controller

Mounting plate

1

Attach the mounting plate to the wall using 3PCS M4 flat head self tapping screws

2

Insert the product positioning holes into the mounting plate positioning tabs and pull the product down to fully fix it to the mounting plate

Installation completed