



# DOP-B07

High Color • Wide Screen • User-Friendly HMI Products

## Instruction Sheet

### 1 Preface

Thank you for purchasing DELTA's DOP-B series. This instruction sheet will be helpful in the installation, wiring and inspection of Delta HMI. Before using the product, please read this instruction sheet to ensure correct use. You should thoroughly understand all safety precautions before proceeding with the installation, wiring and operation. Place this instruction sheet in a safe location for future reference. Please observe the following precautions:


- Install the product in a clean and dry location free from corrosive and inflammable gases or liquids.
- Ensure that all wiring instructions and recommendations are followed.
- Ensure that HMI is correctly connected to a ground. The grounding method must comply with the electrical standard of the country (Please refer to NFPA 70: National Electrical Code, 2005 Ed.).
- Do not disassemble HMI, modify or remove wiring when power is applied to HMI.
- Do not touch the power supply during operation. Otherwise, it may cause electric shock.

If you have any questions during operation, please contact our local distributors or Delta sales representatives.

The content of this instruction sheet may be revised without prior notice. Please consult our distributors or download the most updated version at <http://www.delta.com.tw/ia>.

### 2 Pin Definition of Serial Communication

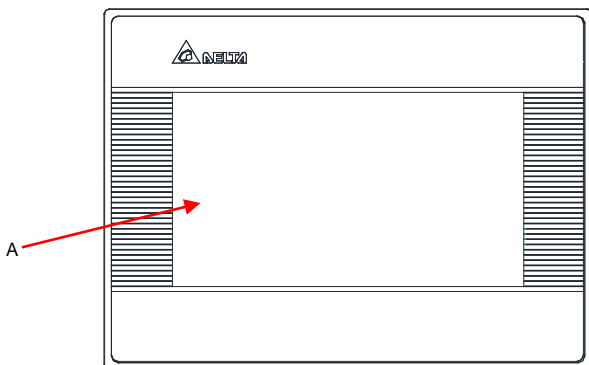
#### B07S410 COM Port

COM Port	Pin	MODE1	MODE2	MODE3
		RS-232	RS-422	RS-485
	1		TXD+	D+
	2	RXD		
	3	TXD		
	4		RXD+	
	5	GND	GND	GND
	6		TXD-	D-
	7	RTS		
	8	CTS		
	9		RXD-	

Note1: Blank = To avoid malfunction, it must be left unconnected.

### 3 Parts Names

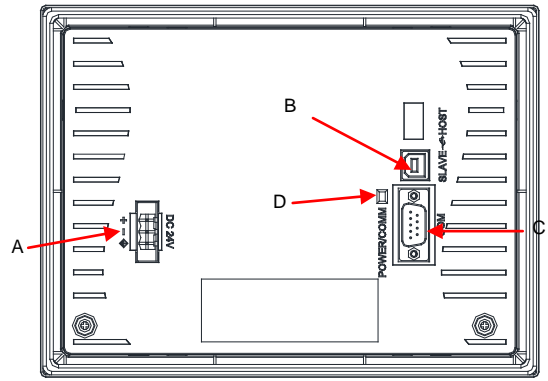
#### DOP-B07S410 (Front View)



A Touch Screen / Display

Please note DOP-B07S410 model has not system key, user could press at blank space for a while to enter system menu.

#### DOP-B07S410 (Rear View)

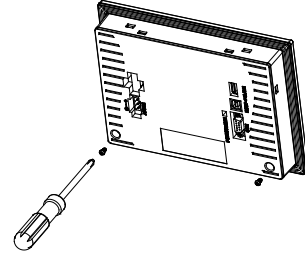


A	Power Input Terminal	B	USB Slave
C	COM	D	Power and Communication LED Light.

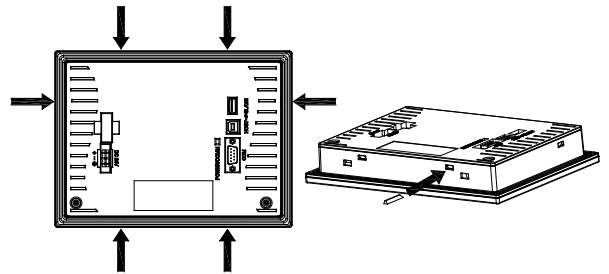
### 4 DOP-B07S410 Battery change notice

Please do not use other company battery in DOP-B07S410. If users need to buy the battery, please look for Delta suppliers.

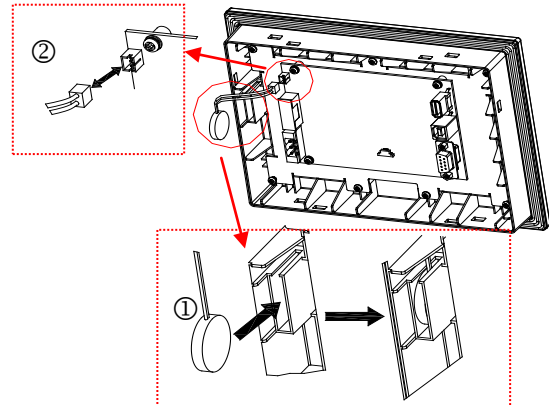
Step1. Please dismantle a screw of back cover.



Step2. Use the implement to dismantle the back cover with tenon-mortise like as arrow figures out.

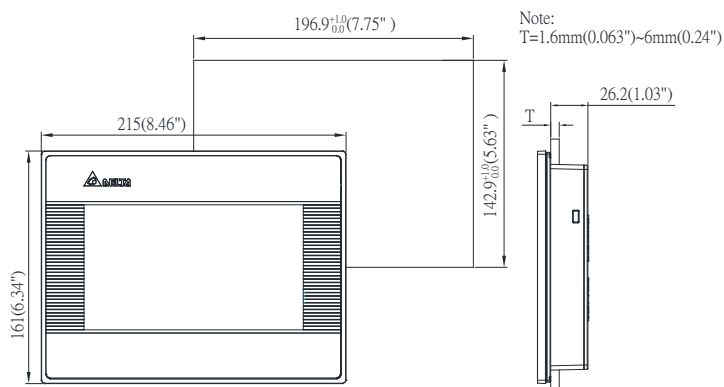


Step3. Please follow as below figure to change(①) and install the battery(②)



## 5 Dimensions

### DOP-B07S410



- 1) The half-life of backlight is defined as original luminance being reduced by 50% when the maximum driving current is supplied to HMI. The life of LED backlight shown here is an estimated value under 25 °C normal temperature and humidity conditions.
- 2) The value of the power consumption indicates the electrical power consumed by HMI only without connecting to any peripheral devices. In order to ensure the normal operation, it is recommended to use a power supply which the capacity is 1.5 ~2 times the value of the power consumption.
- 3) The content of this instruction sheet may be revised without prior notice. Please consult our distributors or download the most updated version at <http://www.delta.com.tw/ia>

## 6 Specifications

Model Name		DOP-B07S410
LCD MODULE	Display Type	7" TFT LCD (65536 colors)
	Resolution	800 x 480 pixels
	Backlight	LED Back Light (less than 20,000 hours half-life at 25°C) <sup>(Note 1)</sup>
	Display Size	154.08 x 85.92mm
Operation System		Delta Real Time OS
MCU		32-bit RISC Micro-controller
NOR Flash ROM		Flash ROM 4 MB ( OS System: 2MB / User Application: 2MB )
SDRAM		64Mbytes
Backup Memory		32Kbytes
Buzzer		Multi-Tone Frequency ( 2K ~ 4K Hz ) / 85dB
USB		1 USB Slave Ver 2.0
Serial COM Port	COM1	RS-232 (supports hardware flow control) / RS-422 / RS-485
Perpetual Calendar (RTC)		Built-in
Cooling Method		Natural air circulation
Safety Approval		CE
Waterproof Degree		IP65
Operation Voltage <sup>(Note2)</sup>		DC +24V ( -10% ~ +15% ) (please use isolated power supply)
Voltage Endurance		AC500V for 1 minute (between charging (DC24V terminal) and FG terminals)
Power Consumption <sup>(Note 2)</sup>		3.5W
Backup Battery		3V lithium battery CR2032 x 1
Backup Battery Life		It depends on the temperature used and the conditions of usage, about 3 years or more at 25°C.
Operation Temperature		0°C ~ 50°C
Storage Temperature		-20°C ~ +60°C
Ambient Humidity		10% ~ 90% RH [0 ~ 40°C], 10% ~ 55% RH [41 ~ 50°C] Pollution Degree 2
Vibration		IEC 61131-2 compliant 5Hz ≤ f < 8.3Hz = Continuous: 3.5mm, 8.3Hz ≤ f ≤ 150Hz = Continuous: 1.0g
Shock		IEC 60068-2-27 compliant 15g peak for 11 ms duration, X, Y, Z directions for 6 times
Dimensions (W) x (H) x (D) mm		215 x 161 x 35.3
Panel Cutout (W) x (H) mm		196.9 x 142.9
Weight		Approx.700g