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Please obtain the delivery specification for the latest design.

***Seedsware***

TM Series  
LCD Touchscreen Monitor  
Panel Mount Type

Product Specification

7" Wide

TMG-W207-1211-01

Seedsware Corporation  
<http://www.seedsware.co.jp/global/>

13A4A2-00055E-3

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Appendix: Outline drawing (SM3-001917-10)

## 1. Summary

This specification describes panel mounting type 7"W Touchscreen Monitor.

This monitor will be referred to as TM hereinafter.

## 2. Model

■Projected Capacitive Type Touchscreen

**TMG-W207-1211-01**

## 3. Items Included in Package

The following items are included in the package:

- |                      |   |
|----------------------|---|
| • TM                 | 1 unit  |
| • Mounting Brackets  | 1 set (4 pcs)                                     |
| • Waterproof Gasket  | 1 pc (preinstalled to unit)                       |
| • AC Adapter         | 1 set (w/AC cord)                                 |
| • Installation Guide | 2 pcs (1 English version and 1 Japanese version.) |
| • Packaging List     | 2 pcs (1 English version and 1 Japanese version.) |

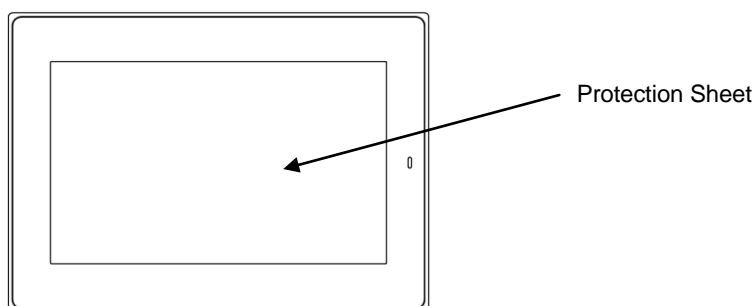
### \*Caution

The unit is shipped with the protection sheet already installed to the front side display.

Be sure to take the sheet off before installing.

The protection sheet may cause a drop in quality of the surface of the touchscreen depending on the storing environment of the product.

Please be sure to remove the protection sheet within 6 month after shipment.



## 4. Specifications

### 4-1 Function Specification

Items		Specifications	
LCD Panel	Method	TFT Active Matrix Method	
	Resolution	800(W)x480(H) pixels WVGA	
	Display Area	152.4mm(W)x91.44mm(H)	
	Pixel Pitch	0.0635mm(W)x0.1905mm(H)	
	Color	App. 260K colors	
	View Angle (Typ.)	Vertical	140°(80°/60°)
		Horizontal	160°(80°/80°)
		Direction	From 12 o'clock direction (Gray Inversion)
	Brightness (Typ.)	310 cd/m <sup>2</sup>	
	Backlight	LED	
Backlight Life (Typ.)	70,000 hours average <sup>※1</sup>		
Input Signal	Analog	SYNC	2.0 to 5.5V 2.2KΩ
		RGB	0 to 0.7Vp-p / 75Ω
		Horizontal Freq.	24KHz to 80KHz
		Vertical Freq.	50Hz to 75Hz
	Digital	DVI 1.0 Compliant	

※1 Time until brightness declines 50% from the initial value at maximum brightness (at ambient temperature of 25°C).

### 4-2 Touchpanel Specification

Item	Specification
Type	Projective Capacitive
Input Method	Finger
Maximum Simultaneous Input	Two points
Operating Life	Continuous Typing (finger input) : 50 million times
Communication Method	USB 2.0
Complying OS <sup>※1</sup>	Microsoft® Windows® 7 (32bit/64bit) Microsoft® Windows® 8/8.1 (32bit/64bit) <sup>※2</sup> Microsoft® Windows® 10 (32bit/64bit)

※1 Windows Standard can be used with touchscreen driver. (Windows 7/8/8.1/10)

※2 Operation confirmation made with two point touch and gesture operations.

### 4-3 General Specification

Item	Specification
Rated Voltage	12V DC
Permissible Voltage Range	12VDC ± 10%
Power Consumption	MAX 7W

#### 4-4 Environmental Specification

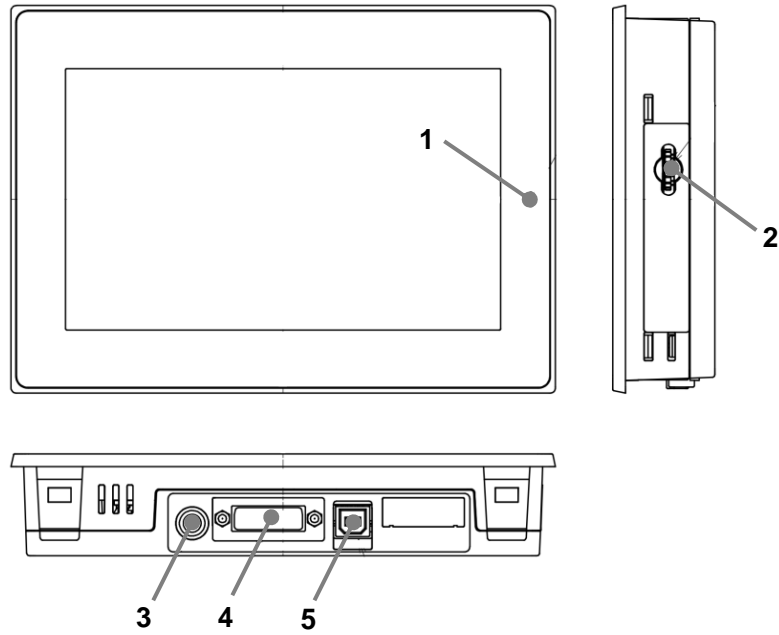
Item	Specification
Ambient Operating Temperature (Inside cabinet and Display side)	0°C to 50°C
Ambient Storage Temperature	-10°C to +60°C
Ambient Operating Humidity	10%RH to 85%RH (Non-condensing, Wet bulb temperature is 39°C or less)
Ambient Storage Humidity	10%RH to 85%RH (Non-condensing, Wet bulb temperature is 39°C or less)
Dust	Prohibited
Environment	Pollution Degree 2, Indoor use
Altitude Resistance	800hPa to 1114hPa (Altitude of 2000m or less)
Vibration Resistance	5Hz to 9Hz Single amplitude: 3.5mm 9Hz to 150Hz Constant Accelerated Velocity 9.8m/s <sup>2</sup> X,Y,Z each directions, 10 times (100 minutes) IEC61131-2(JIS B 3502) compliant
RoHS	Compliant with EU RoHS Directive (2011/65/EU)

#### 4-5 Installation Specification

Item	Specification
Grounding	Grounding resistance of 100Ω, 2mm <sup>2</sup> [0.0062inch <sup>2</sup> ] or thicker wire, or your country's applicable standard.
Structure	Protection Structure : IP65 <sup>※1</sup> (Only front display side at panel mount)
Cooling Method	Natural Convection
External Dimension	192(W) x 137(H) x 36(D) mm
Weight	App 700g
Panel cut-out dimension	183.5 <sub>+0.5/-0</sub> (W) x 128.5 <sub>+0.5/-0</sub> (H)mm

※1 Protection structure of front area when mounted to panel. The degree of protection provided has been confirmed, however their performance cannot be guaranteed for every environment. Especially for oils, if unit is prolonged to vaporized oil or cutting fluids with low viscosity, oil might enter from area where touchscreen has lifted, thus may need special measurements. Please check the installation environment prior to use. Also, gaskets that have been used for a long time or have once been applied to panels, original level of protection cannot be guaranteed due to possible damage or dirt. To maintain the original level of protection, be sure to replace the gasket regularly.

#### 4-6 Name of Each Parts and Their Functions



No	Name	Function
1	Status LED	Displays power of monitor and video input signal status Green: Power ON with input signal Red: Power ON without input signal Unlit: Power OFF
2	Dial Switch	Power ON/OFF OSD (On Screen Display) operation
3	DC IN	Input power (12V DC)
4	Video Input (DVI-i)	DVI Connector
5	Touchscreen Interface (USB)	USB Type-B Connector

#### \*Dial Switch Operations

- ① Power ON/OFF
  - Push dial switch to turn the monitor ON.
  - Push and hold for more than 2 seconds to turn the monitor OFF.
  - \*Leave an interval of 5 seconds when repeatedly turning the power ON and OFF
- ② OSD Operation
  - Push the dial switch when the touchscreen is ON to display the OSD
  - Turn the switch clock-wise or counter-clock-wise to move the selected item or to adjust value.
  - Push the dial switch to set the adjusted value or to decide on the item selected.

## 5. Interface Connectors (Ports)

### 5-1 DVI (Digital Video Input)

Interface: DVI 1.0

Connector: DVI-D Female

Pin No	Signal	Pin No	Signal	Pin No	Signal
1	DATA2-	11	GND	21	NC
2	DATA2+	12	NC	22	GND
3	GND	13	NC	23	CLKa+
4	NC	14	DDC 5V	24	CLKa-
5	NC	15	GND	C1	Analog RED
6	DVI_DDC_SCL	16	GND	C2	Analog GREEN
7	DVI_DDC_SDA	17	DATA0-	C3	Analog BLUE
8	NC	18	DATA0+	C4	Analog H-Sync
9	DATA1-	19	GND	C5	Analog GND
10	DATA1+	20	NC	-	-

### 5-2 Touchscreen Interface (USB)

Interface: USB 2.0

Connector: USB type B

Pin No	Signal	Pin No	Signal
1	Vbus	3	D+
2	D-	4	GND

## 6. Main Functions

### 6-1 Multi-Scanning

Automatically enlarges or shrinks images to match the input and LCD display resolution.

However, because it will be processed according to the resolutions, there are possibilities of deformation of images and/or blurring of characters.

### 6-2 OSD Function

Input and output image adjustment can be done with the OSD (On Screen Display).

Setting will be memorized even after power is turned off and will not change unless done so intentionally.

Items that can be adjusted with the OSD are as listed below.

#### Items that can be adjusted with the OSD

<b>Auto Adjust</b>	<b>Optimizes screen display automatically</b>
<b>Brightness</b>	<b>Adjusts the brightness of display</b>
<b>Contrast</b>	<b>Adjusts the contrast of display</b>
<b>Screen Setting</b>	<b>VGA only</b>
H.Position	Adjust horizontal position of display
V.Position	Adjust vertical position of display
Clock	Fine adjustment of horizontal position of video input.
Phase	Adjustment of phase
Exit	Go back to main menu
<b>Color Temp</b>	
9300K	
7500K	
6500K	
User Color	User adjust intensity of colors red, green, and blue
Auto Color	Adjust automatically color level of input signal
sRGB	
Exit	Go back to main menu
<b>Language</b>	<b>Choose a language (*Some items will appear in English)</b>
<b>OSD Settings</b>	
OSD H-Position	Adjust horizontal position of OSD display
OSD V-Position	Adjust vertical position of OSD display
OSD Time	Setting of time to be displayed on OSD
Transparency	Adjust transparency of OSD Display
<b>VGA/DVI</b>	<b>Select image input</b>
<b>Recall</b>	<b>Go back to initial setting (at shipment).</b>
<b>EXIT</b>	<b>Go back to main menu.</b>

### 6-3 Support Signal Timing

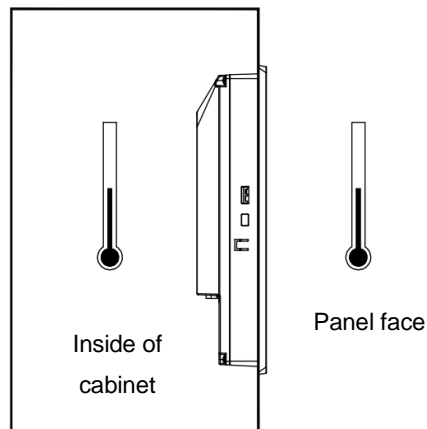
No	Resolution	H-Freq. (KHz)	V-Freq. (Hz)
1	640x480	31.47	60.24
2	VGA 640x480	31.47	59.94
3	VESA 640x480	37.86	72.81
4	VESA 640x480	37.50	75.00
5	VGA TEXT 720x400	31.47	70.09



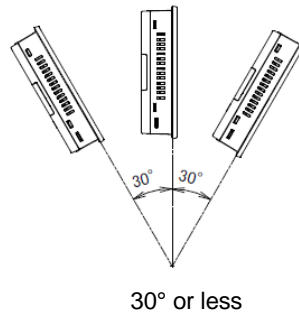
## 7. Installation

### 7-1 Mounting Conditions

- When mounting the TM to panels, be sure to have enough room for inserting and removing OSD Switch, cables, and mounting brackets.
- Be sure that the ambient operation temperature (0°C to 50°C) and the ambient humidity (10%RH to 85%RH. Wet-bulb temperature is 39 °C or less) are within their designated ranges.
- “Ambient operation temperature” indicates both the display side and inside of cabinet where the TM will be installed  
( Ambient temperature is for both inside the cabinet and panel face. )



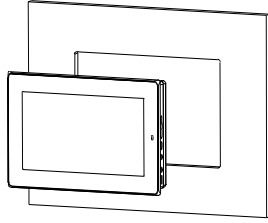
- TM should be mounted perpendicular, but if it should be mounted in an angle, the angle shall not be more than 30degrees from the vertical position shown in the illustration below.



- When installing the TM in a slanted panel of angle 30 degrees or more, please use forced air cooling to ensure the temperature specification.

## 7-2 How to Mount

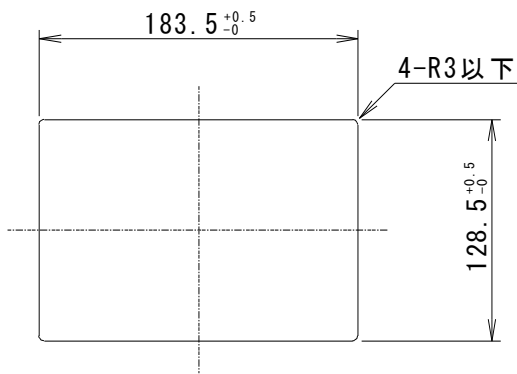
### 7-2-1 Installing to Panels



Panel thickness shall be 1.0mm to 1.6mm

Panel cut-out dimension is as shown in below diagram.

#### Panel Opening Dimensions



The material of the mounting panel, please use the metal.

Be recommended panel thickness range, depending on material and size, may not maintain the strength when an impact is applied.

Please do take into account, such as reinforcement in the environment impact, such as join.

There is a possibility of personal injury or product damage when dropped product,

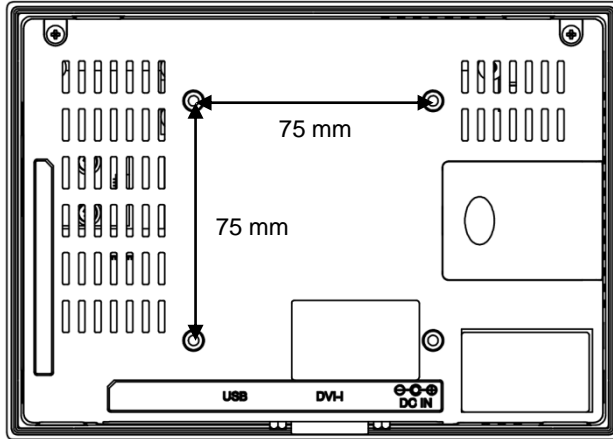
Please be careful not to drop.

### 7-2-2 Attaching to “VESA” Standard Arms

TM can be installed on a commercially available Video Electronics Standards Association (VESA) MIS-D arm, stand, or apparatus that is listed to comply with the UL1678 standard.

Please refer to each arm or stand manual for attaching directions.

Dimensions of the installation holes are as shown in below diagram.



Use M4 screw at torque range of 0.7Nm to 0.8Nm when attaching.

Select M4 screws so it is 6mm or less in depth from the rear side of the TM case.

## 8. Compatible Standards

TM is intended for use in industrial environments and, when properly installed, shall comply with the following agency approvals.

### 8-1 UL Standards

This product is UL standard compliant

UL standard No.	UL Registration Model No.	UL File No.
UL 61010-1 / UL 61010-2-201 CSA C22.2 No.61010-1-12 / No.61010-2-201	G-0010U	E464360

TM is intended for use in industrial environments and, when properly installed, shall comply with the following agency approvals.

### 8-2 RoHS Directives

This product is RoHS Directive of EU complaint.

### 8-3 FCC

The FCC requires the following note to be published according to FCC guidelines:

**Note:**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user is required to correct the interference at their own expense. Changes or modifications to this unit that are not expressly approved by Seedsware could void the user's authority to operate the equipment.

Industry Canada requires the following note to be published:

**Note:**

This Class A digital apparatus complies with Canadian CAN ICES-3 (A)/NMB-3 (A).

## **9. Warranty**

### **9-1 Warranty Period**

The warranty period is limited to 12 months (1 year) from the date of shipment. Warranty for any repair needed to the same repaired part of the same product is three months. Any defects that occur upon normal use under conditions specified herein will be repaired (factory repair) free of charge.

Any defected parts under proper use will be examined by the supplier and replaced by the new parts if the defect is considered to be caused by the supplier.

### **9-2 Warranty Exceptions**

You will be liable for all repair fees even within the warranty period for any conditions listed below:

- (1) Any malfunctions, defects, and/or damages that occurred during transport, transfer, or mishandling by the user after delivery
- (2) Any malfunctions, defects, and/or damages caused by natural or man-made disaster.
- (3) Any malfunctions and damages caused by static electricity.
- (4) If the product is used under any condition, in any environment, or by any method other than those specified in the specifications, catalogs, manuals, notes, and/or other documents.
- (5) Any replacement of consumables.
- (6) Any malfunctions, defects, and/or damages caused by associated equipment and/or usage of inappropriate consumables and media.
- (7) If the product is repaired, remodeled, modified, or disassembled by a party other than Seedware
- (8) If the product cannot be identified by a serial number.
- (9) Any malfunctions, defects, and/or damages that are to have been caused on your behalf.

This warranty covers only the product itself. Any damages, on-site repairs and replacement driven by the failure of the product will be decided upon discussion by both parties as necessary.

This product is structurally not repairable. All damaged parts are subject for replacement and freight will be charged.

## **10. Production Discontinuance**

In the event of production discontinuance, an announcement will be made on our website six months prior to the last possible order reception date.

## 11. Others

For comments or inquiries, feel free to contact us via e-mail or phone.

\* Product, specification and/or anything noted are subject to change for improvement without prior notice.

### By Phone

 **+1-630-832-0438 (Business Hours 9:00a.m.~5:45p.m.)**

### By E-mail

 **sales@uscoamerica.com**

### FAQ

 **[www.seedsware.co.jp/global/support/faq/](http://www.seedsware.co.jp/global/support/faq/)**

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3<sup>rd</sup> Edition January 2017

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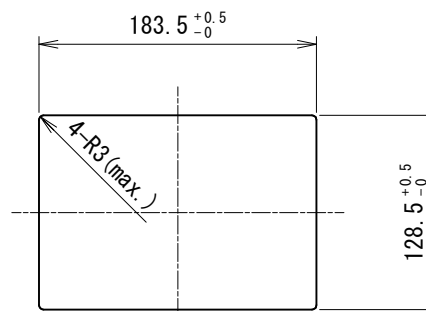
Business hours: 9:00a.m. ~5:45p.m. (Central Time)

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寸法許容差 TOLERANCE	
呼び寸法 Nominal Dimensions	
L ≤ 3	±0.4
3 < L ≤ 6	±0.48
6 < L ≤ 10	±0.58
10 < L ≤ 18	±0.7
18 < L ≤ 30	±0.84
30 < L ≤ 50	±1.0
50 < L ≤ 80	±1.2
80 < L ≤ 120	±1.4
120 < L ≤ 180	±1.6
180 < L ≤ 250	±1.85
250 < L ≤ 315	±2.1
315 < L ≤ 400	±2.3
400 < L ≤ 500	±2.5

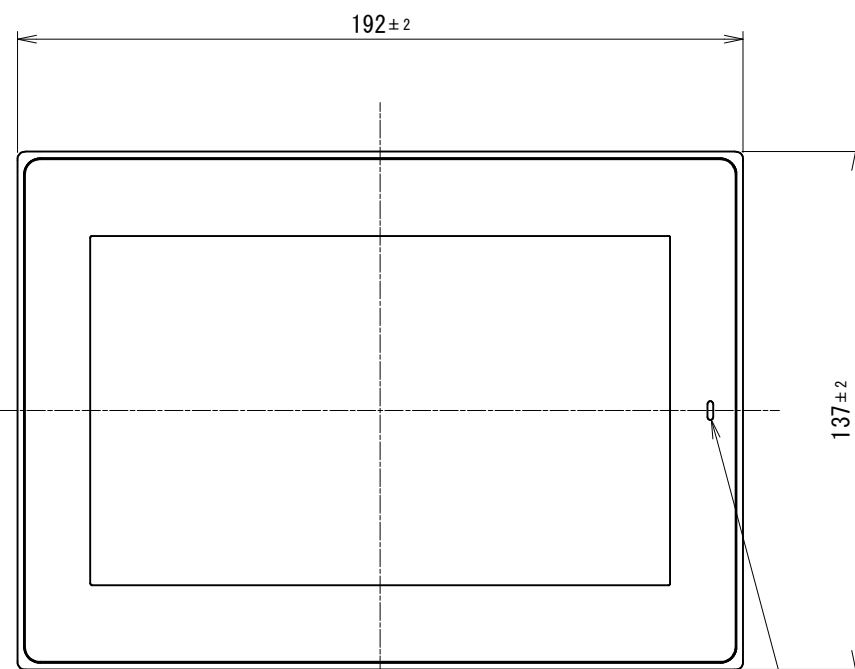
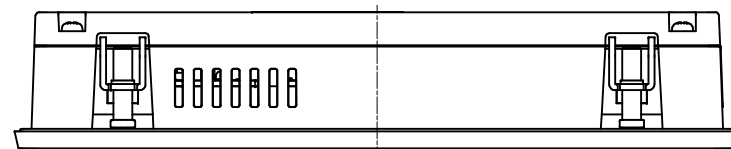
SYM	改訂日 DATE	改訂内容 DESCRIPTION	ページ PAGE	担当 DESIGNED
	2016.10.03	新規図面登録 New Diagram Registration	-	S. Yoshimoto



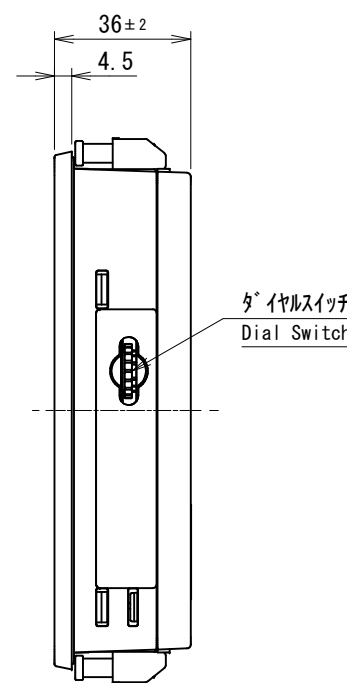
パネル開口寸法 (S=1:5)  
Panel Cutout Dimensions (S=1:5)

NOTES

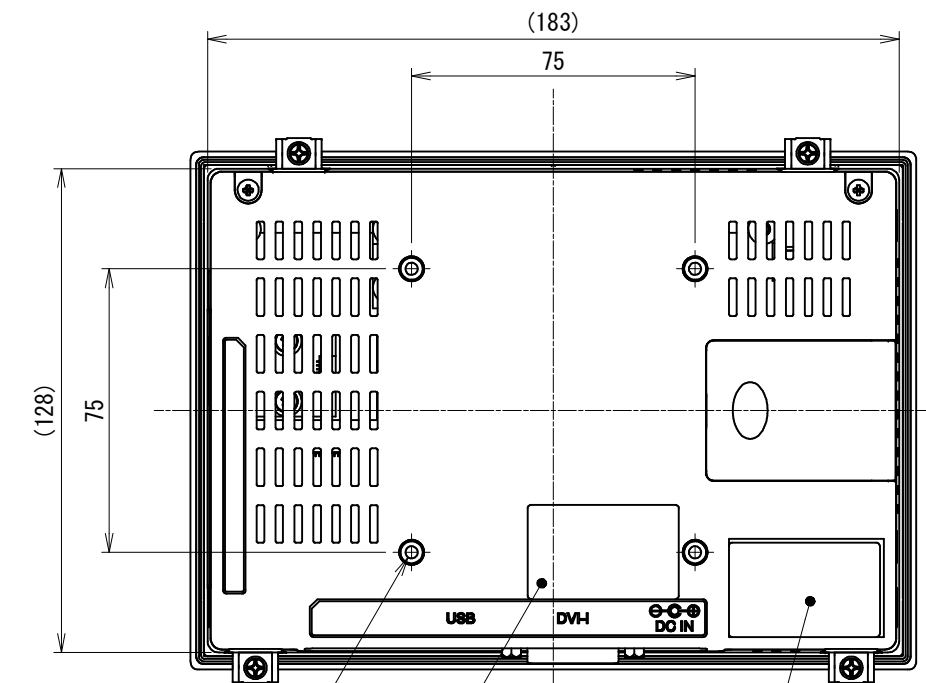
- 誤動作の恐れがある為、パネル開口寸法をお守り下さい。  
又、取付けパネルには、反り、傷、凹凸のないものを使用して下さい。  
To prevent malfunctions, panel opening dimension shall strictly be as specified.  
Be sure to use installation panels without warpage, scratches, and dents.



状態表示LED  
Status Display LED



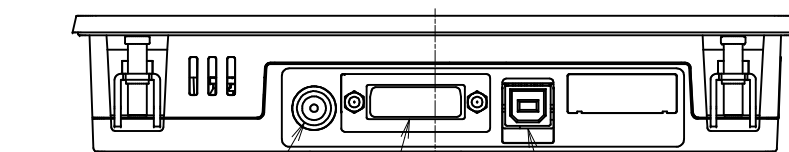
ダイヤルスイッチ  
Dial Switch



4-M4  
有効侵入深さ6mm以下  
Effective Screw Depth 6mm

製品銘板シール  
Product Label

FCCラベル  
FCC Label



電源入力 (DCジャック)  
Power Input (DC Jack)

タッチパネルインタフェース  
Touchscreen Interface

映像入力 (デジタル)  
Video Input (Digital)

NOTES

- 指示なき寸法公差は一般寸法公差とする。  
Tolerance shall be of general dimensional tolerance unless specified otherwise.

製図日 ISSUED	2016.10.03	部署 SECTION	Technical Dept.	尺度 SCALE	CAD登録名 CAD FILE NAME	13K0032-2_TM-7_OUTLINE	RoHS対応品 RoHS compliant
承認 APPROVED		検図 CHECKED		1:2	製品名 MODEL	TMG-W207-1211-01	
		製図 DRAWN	S. Yoshimoto	単位 UNIT	図名 TITLE	OUTLINE	ページ PAGE
		設計 DESIGNED	S. Yoshimoto	mm			1 / 1
H. Tsuji			T. Okada	Seedsware		図番 DWG No.	SM3-001917-10
				A3			