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RD- TM22015X2A-H-001

REV.

PAGE

DATE

TM22015X2A

01

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2009,3,16

TM22015X2A

**22 inch Infrared Touch Screen
With RS232C Interface Touch Controller**

IVIEWKOREA

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TEL : 02. 2038. 8570

Our Signature	Design	checked	Approved

For Customer Approval			

Please return one of these to us immediately with your Signature for Approval

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Important Information

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Safety precautions

The safety recommendations outlined in this section are to be read, understood and followed before operating the product.

Keep this information in a safe place for future reference.

Failure to comply with any of the following safety procedures could result in serious hazard.

- Do not operate product for any purposes other than its intended use.
- This product is intended for indoor use only.
- Do not operate product if power supply is damaged in anyway.
- Do not insert objects into openings.
- Do not immerse product in water or permit liquids to spill inside.



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Revision History

Rev	Date	Description	Remark
01	2009,3,16	Start	Ver 01



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1. Generals

1.1 Overview

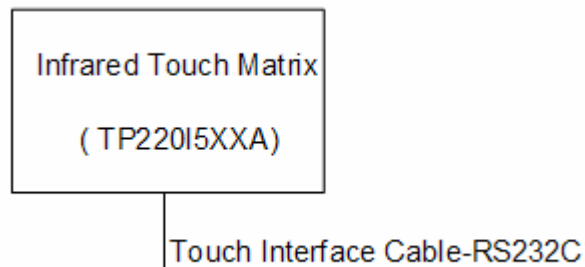
This manual is written to describe the model TM220I5X2A – 22 inch Infrared touch screen. It refers to the general specification, connector functions and dimension. Please contact us for more information on this product.

1.2 Features

- Infrared interruption detecting system with infrared sensors
- Input Mode: Finger, gloved hand or other stylus activation

2. System Block Diagram

The operating signal follows the diagram below.



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3. Specifications

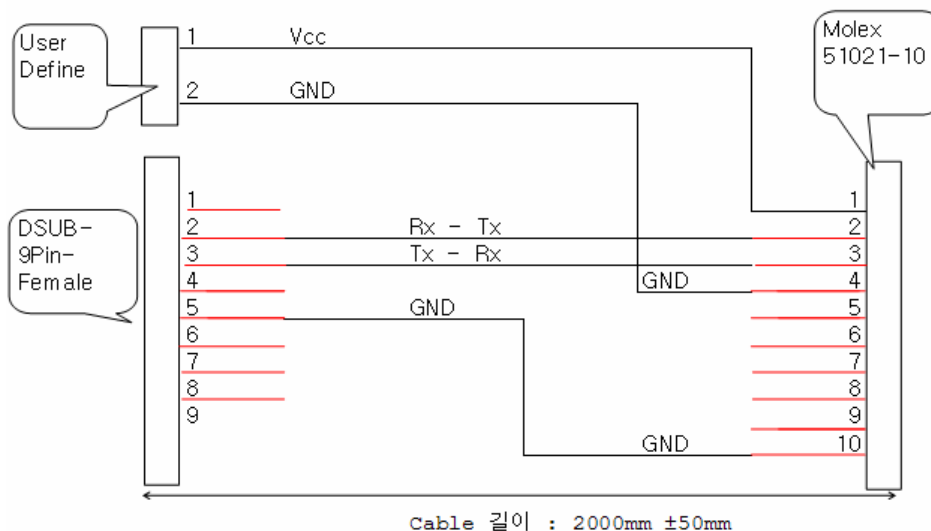
3.1 Touch Module (TP220I5XXA + Mechanic) - Tempered glass (3T)

Item	Description
Detection	Infrared interruption detecting system with infrared sensors
Outline	563.6 (H) x 377.6(V) x 13.7(D) mm
Detection Area	475.8 (H) x 298 (V) mm (Diagonal 22")
An optical element Space	5.0 (H) x 5.0(V) mm
The number of optical elements	94(H) x 59(V) pcs
Touch plate	Standard) Tempered glass (3T) Option 1) Hard Coating Acryl (3T) Option 2) Anti Glare Acryl (3T) Option 3) Customer's Special Spec
Scanning Rate	Normal Mode : 20msec (Typ) Sleep Mode : 50msec (Typ)

Communication) RS232C

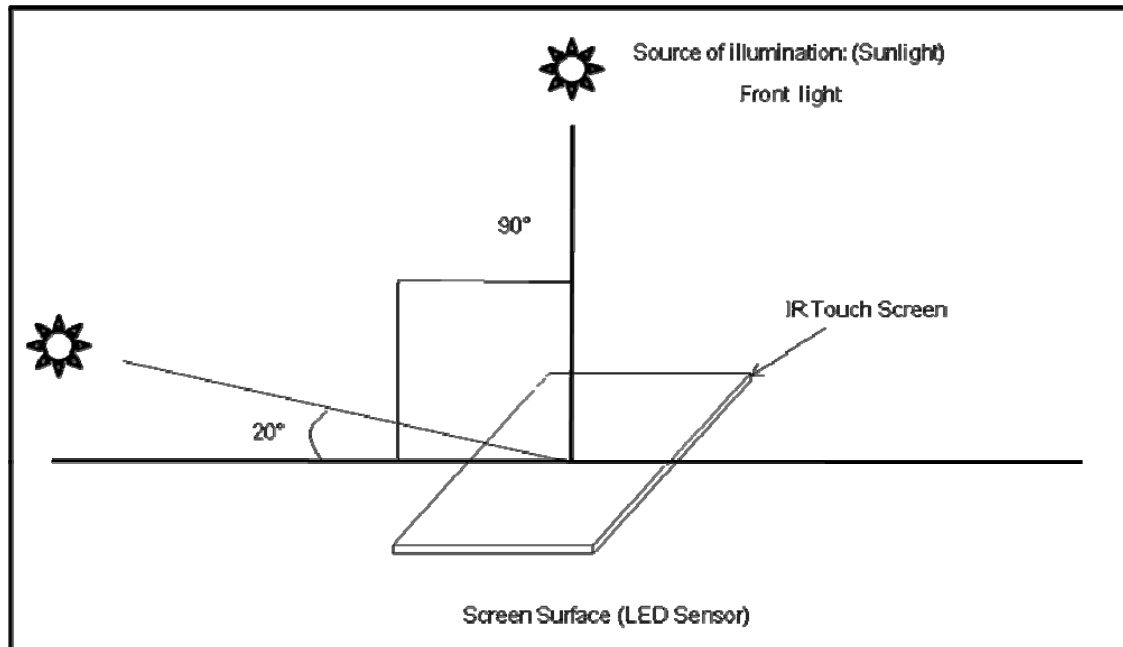
Item	Description
Interface	RS-232C
Signal	RxD , TxD , GND
Speed	9600 bps
Parameter	1 Start , 8Bit , No Parity , 1 Stop

3.2 Touch Interface Cable (HSDJ091001A-2000)



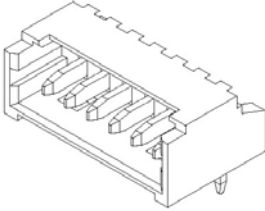
4. Electrical & Environmental

Item	Description
Supply voltage	5 Vdc \pm 10%
Power consumption	2 [Watt] = Controller + Touch Module (Typically)
Temperature	Operation : 0 ~ 40°C Storage : -10 ~ 50°C
Humidity	Operation : 0 ~ 90% Storage : 0 ~ 95%
Resistance of ambient light	Side light 5,000 Lx (incident angle 20°) Front light 60,000 Lx (incident angle 90°)



5. Interface (Connector)

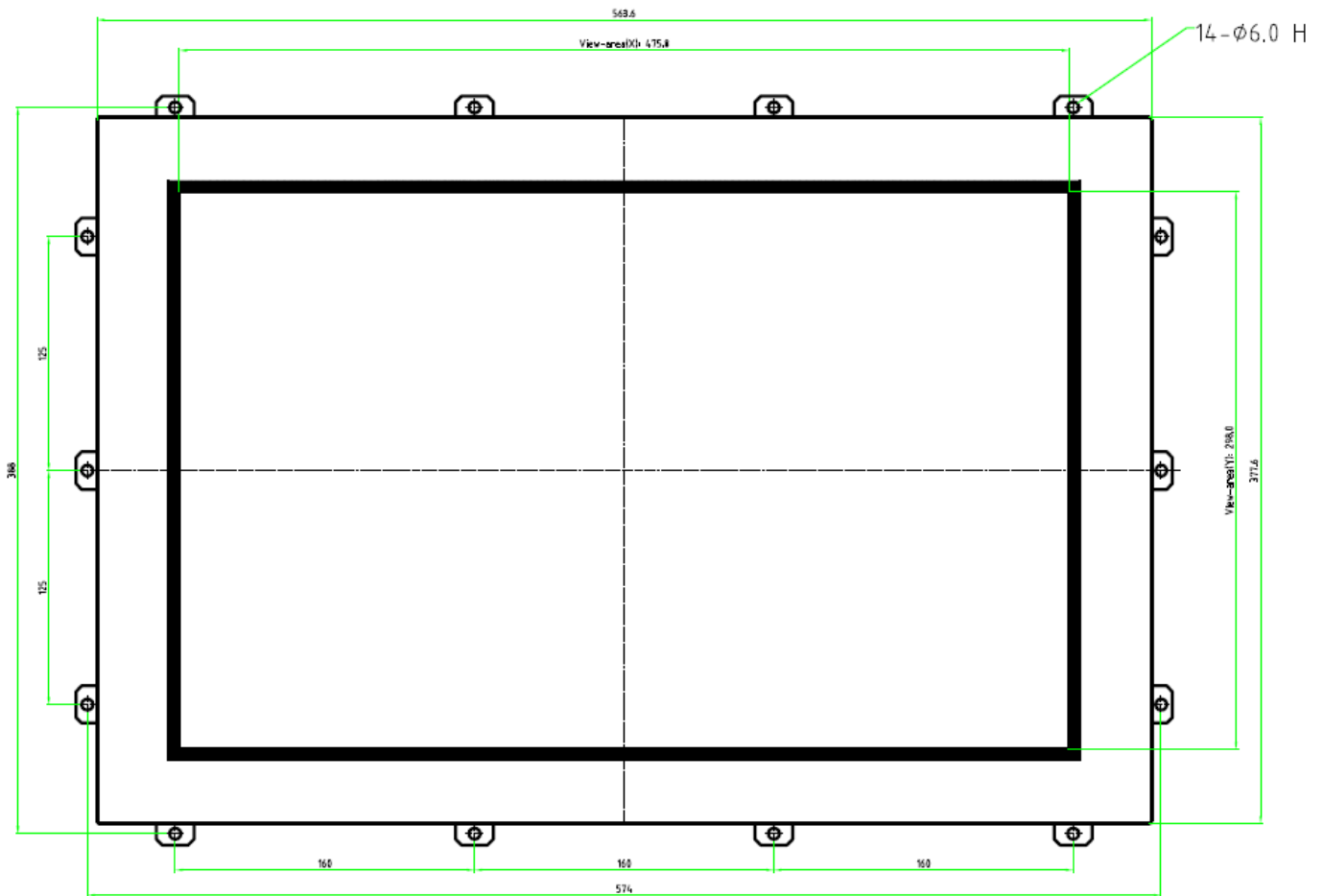
5.1 CN1 – UART / USB – CN1 (Molex-53048-10A) , 53047-10A



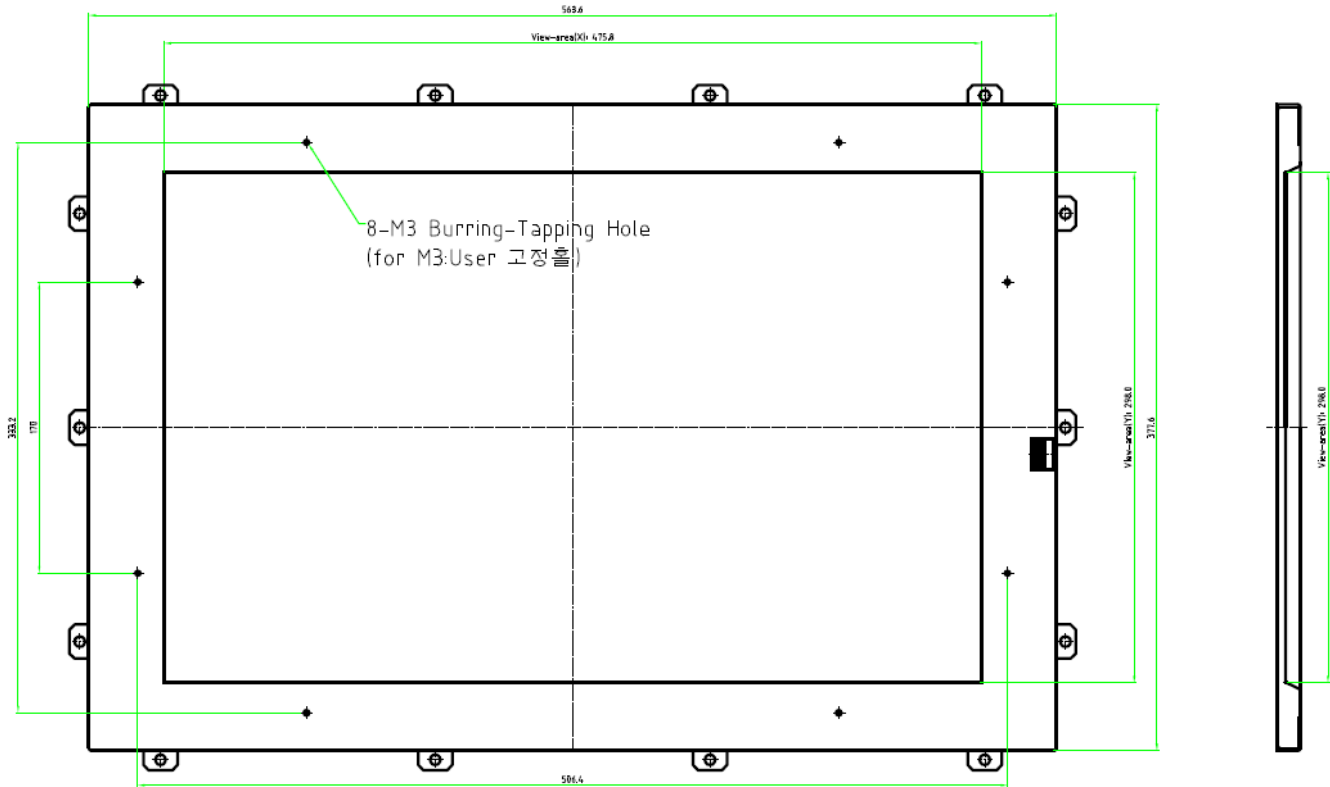
Pin No.	Description	Pin No.	Description
1	VCC	6	USB DP
2	Tx	7	Samba_Boot
3	Rx	8	OSD TD
4	GND	9	OSD RD
5	USB DM	10	GND

6. Dimension & View

6.1 Front View



6.2 Rear View



7. Serial Number Identification

1) Touch Module (TP220I5XXA + Mechanic)

The serial number shall be indicated on the back of the unit.

yymm-ppp-vv-nnnn


yy : year

mm : month

ppp : part number (108)

vv : version

nnnn : number of products produced

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8. Caution

In order to maintain superior performance for the life of this product, customers are advised to maintain the following guidelines:

8.1 Storage

- Do not store the product in humidity or temperature ranges exceeding those listed above.
- Do not store products out of original packaging.
- Do not expose product to direct sunlight.

8.2 Unpacking

- Do not attempt to dismantle or repair.

8.3 Handling

- Do not use product for any purpose outside its intended use.*
- Do not operate product if power supply is damaged in anyway.
- Do not insert objects into openings.
- Do not immerse product in water or spill liquids inside.
- Turn off power when unattended or not in use.
- Do not by the sharp edge on the screen.
- Do not stock product outside of packaging.
- Clean the screen with alcohol and a soft lint-free cloth**.

* This product is not intended for outdoor use.

** Do not allow alcohol to spill inside the product.

8.4 Assembling

- Avoid extreme pressure on the product.
- Avoid unnecessary strain to cables & connectors

9. Warranty

This product manufactured to this specification should be capable of meeting all characteristics for 12 Months from the delivery date of Hwayoung Systems Co., Ltd. when stored and used as specified in this document.

Use of this product outside the specified criteria herein will negate the 12 Months warranty

The damages (defaults) described below are NOT covered under the warranty.

- User fault through lack of care.
- User fault through intentional dismantle or attempted repair.
- Damage caused by natural disaster. (Fire, Flood, Earthquake, Lightening, etc.)
- Replacement of any parts.