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# **T-F190IU**

19 inch Infrared Type Touch Screen With USB interface

**IVIEWKOREA** 

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02. 2038. 8570

Our Signature	Design	checked	Approved
	T	T	1
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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Regardless of the foregoing statement, Hwayoung Systems Co., Ltd. assumes no responsibility for any errors that may appear in this document or for results obtained by the user as a result of using this product.

### 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.
- Turn off power when unattended or not in use.
- Unplug product before moving or when not in use for an extended period of time.
- Install the product in a close and easily accessible socket-outlet.
- Do not alter or extend electric plug.
- Plug is configured for appropriate electrical supply.
- Do not overload electrical outlets as this can result in a fire.

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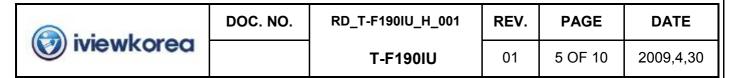
# **Revision History**

Rev	Date	Description	Remark
01	2009,4,30	Start	Ver 01

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### 1. Generals

### 1.1 Overview

This manual is written to describe the model T-F190IU- 19 inch Infrared touch screen.

It refers to the general specification, connector functions and dimension.

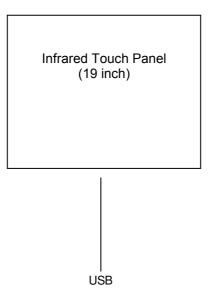
Please contact us for more information on this product.

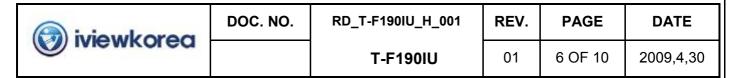
### 1.2 Features

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

# 2. System Block Diagram

# **TOUCH**





# 3. Specifications

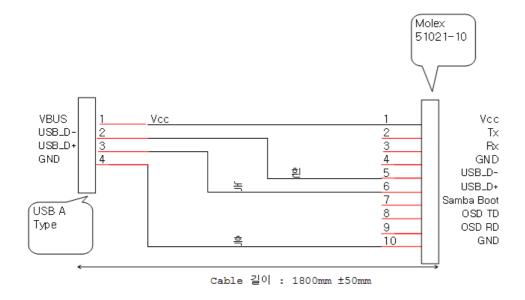
### 3.1 Touch Matrix Panel (TP190l6XXB + Mechanic) - Tempered glass (3T)

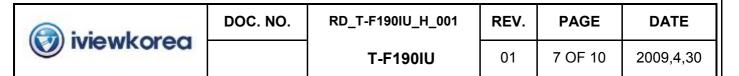
Item	Description
Detection	Infrared interruption detecting system with infrared sensors
Outline	428.8 ( H ) x 354.8 ( V ) x 10.2 (D)
Detection Area	378.0 (H) X 303.0 (V) mm ( Diagonal 19")
An optical element Space	6.0 (H) X 6.0 (V) mm
The number of optical elements	63 (H) X 50 (V) pcs
Touch plate	Tempered 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)

# Standard) USB

Item	Description
Interface	USB2.0
Signal	D+ , D- , VBUS, GND
Speed	12MBps (Full Speed)
Transfer Mode	Interrupt Mode

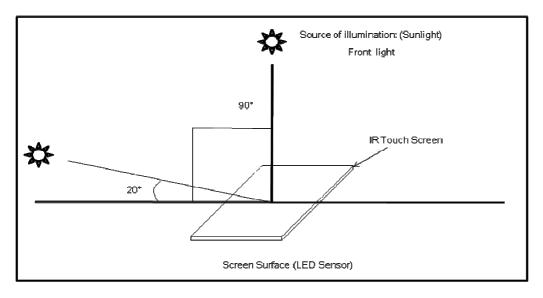
### 3.2 Touch Interface Cable





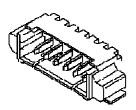
# 4. Electrical & Environmental

Item	Description
Supply voltage	5 Vdc ± 10%
Power consumption	2 [Watt]
Dimension	428.8 ( H ) x 354.8 ( V ) x 10.2 (D)
Accessory	USB Cable CD ( Install CD ) USER MANUAL
Temperature	Operation : 0 ~ 40 ℃ Storage : -10 ~ 50 ℃
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°)

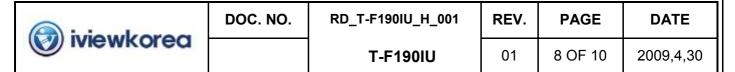


# 5. Interface ( Connector )

### **5.1 USB interface - CN1 (Molex-**53261-10)

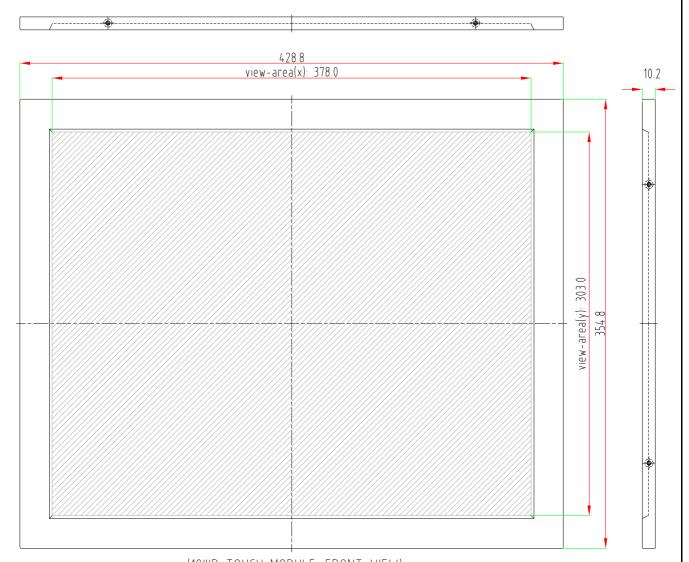


Pin No.	Description	Pin No.	Description
1	VCC	6	USB DP
2	Tx	7	Samba_Boot
3	Rx	8	OSD TD
4	GND	9	OSD RD
5	USB DM	10	GND

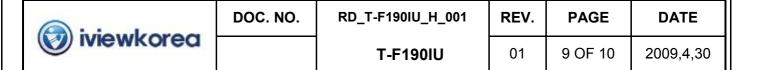


### 6. Dimension & View

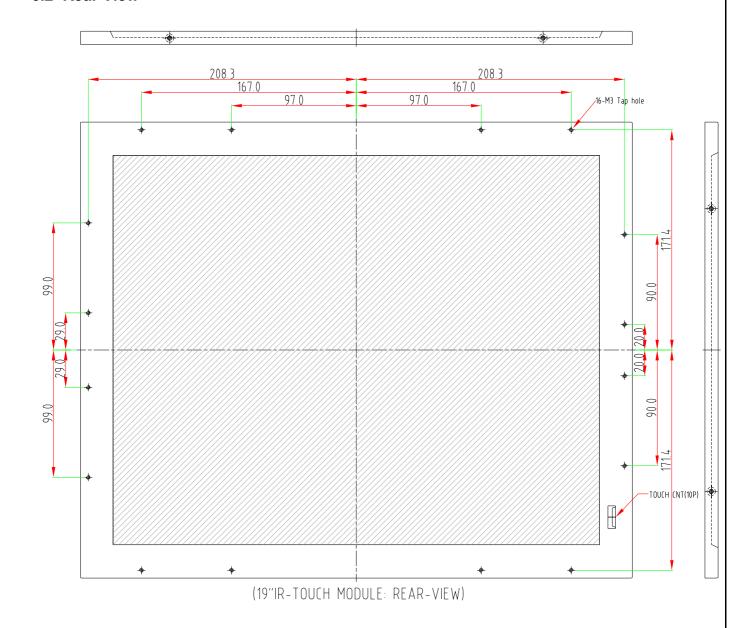
### 6.1 Front View



(19"IR-TOUCH MODULE: FRONT-VIEW)



### 6.2 Rear View



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### 7. Serial Number Identification

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

yymm- ppp- vv- nnnn

yy : year mm : month

ppp : part number ( 113 )

vv : version

nnnn: number of products produced

### 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 18 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 18 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.
- User fault by exceeding electrical connection requirements.
- Damage caused by natural disaster. (Fire, Flood, Earthquake, Lightening, etc.)
- Replacement of any parts.