cincoze

CS-100 Series

User Manual



Convertible Display Module

8.4" - 24" TFT-LCD Sunlight Readable Display Module

Version: V1.04

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Preface

Revision

Revision	Description	Date
1.00	First Released	2021/11/16
1.01	Add CS-W121C Display Module	2021/12/28
1.02	Add CS-W124C Display Module	2022/02/25
1.03	Partial model revised	2022/08/19
1.04	Correction Made	2024/01/30

Copyright Notice

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Acknowledgement

Cincoze is a registered trademark of Cincoze Co., Ltd. All registered trademarks and product names mentioned herein are used for identification purposes only and may be trademarks and/or registered trademarks of their respective owners.

Disclaimer

This manual is intended to be used as a practical and informative guide only and is subject to change without notice. It does not represent a commitment on the part of Cincoze. This product might include unintentional technical or typographical errors. Changes are periodically made to the information herein to correct such errors, and these changes are incorporated into new editions of the publication.

Declaration of Conformity



FCC

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 will be required to correct the interference at his own expense.



CE

The product(s) described in this manual complies with all application European Union (CE) directives if it has a CE marking. For computer systems to remain CE compliant, only CE-compliant parts may be used. Maintaining CE compliance also requires proper cable and cabling techniques.



RU

CHUS UL Recognized Components have been evaluated by UL for factory installation within equipment where the component's limitations of use are known and investigated by UL.

> UL Recognized Components have conditions of acceptability that describe how components can be used within end products.

Product Warranty Statement

Warranty

Cincoze products are warranted by Cincoze Co., Ltd. to be free from defect in materials and workmanship for 2 years (2 Years for PC Module, 1 Year for Display Module) from the date of purchase by the original purchaser. During the warranty period, we shall, at our option, either repair or replace any product that proves to be defective under normal operation. Defects, malfunctions, or failures of the warranted product caused by damage resulting from natural disasters (such as by lightening, flood, earthquake, etc.), environmental and atmospheric disturbances, other external forces such as power line disturbances, plugging the board in under power, or incorrect cabling, and damage caused by misuse, abuse, and unauthorized alteration or repair, and the product in question is either software, or an expendable item (such as a fuse, battery, etc.), are not warranted.

RMA

Before sending your product in, you will need to fill in Cincoze RMA Request Form and obtain a RMA number from us. Our staff is available at any time to provide you with the most friendly and immediate service.

RMA Instruction

- Customers must fill in Cincoze Return Merchandise Authorization (RMA) Request Form and obtain an RMA number prior to returning a defective product to Cincoze for service.
- Customers must collect all the information about the problems encountered and note anything abnormal and describe the problems on the "Cincoze Service Form" for the RMA number apply process.
- Charges may be incurred for certain repairs. Cincoze will charge for repairs to products whose warranty period has expired. Cincoze will also charge for repairs to products if the damage resulted from acts of God, environmental or atmospheric disturbances, or other external forces through misuse, abuse, or unauthorized alteration or repair. If charges will be incurred for a repair, Cincoze lists all charges, and will wait for customer's approval before performing the repair.
- Customers agree to ensure the product or assume the risk of loss or damage during transit, to prepay shipping charges, and to use the original shipping container or equivalent.
- Customers can be sent back the faulty products with or without accessories (manuals, cable, etc.) and any components from the system. If the components were suspected as part of the problems, please note clearly which components are included. Otherwise, Cincoze is not responsible for the devices/parts.
- Repaired items will be shipped along with a "Repair Report" detailing the findings and actions taken.

Limitation of Liability

Cincoze' liability arising out of the manufacture, sale, or supplying of the product and its use, whether based on warranty, contract, negligence, product liability, or otherwise, shall not exceed the original selling price of the product. The remedies provided herein are the customer's sole and exclusive remedies. In no event shall Cincoze be liable for direct, indirect, special or consequential damages whether based on contract of any other legal theory.

Technical Support and Assistance

- 1. Visit the Cincoze website at www.cincoze.com where you can find the latest information about the product.
- 2. Contact your distributor or our technical support team or sales representative for technical support if you need additional assistance. Please have following information ready before you call:
 - Product name and serial number
 - Description of your peripheral attachments
 - Description of your software (operating system, version, application software, etc.)
 - A complete description of the problem

The exact wording of any error messages

Conventions Used in this Manual



WARNING (AVERTIR)

This indication alerts operators to an operation that, if not strictly observed, may result in severe injury.

(Cette indication avertit les opérateurs d'une opération qui, si elle n'est pas strictement observée, peut entraîner des blessures graves.)



CAUTION (ATTENTION)

This indication alerts operators to an operation that, if not strictly observed, may result in safety hazards to personnel or damage to equipment.

(Cette indication avertit les opérateurs d'une opération qui, si elle n'est pas strictement observée, peut entraîner des risques pour la sécurité du personnel ou des dommages à l'équipement.)



NOTE (NOTE)

This indication provides additional information to complete a task easily.

(Cette indication fournit des informations supplémentaires pour effectuer facilement une tâche.)

Safety Precautions

Before installing and using this device, please note the following precautions.

- 1. Read these safety instructions carefully.
- 2. Keep this User's Manual for future reference.
- 3. Disconnected this equipment from any AC outlet before cleaning.
- 4. For plug-in equipment, the power outlet socket must be located near the equipment and must be easily accessible.
- 5. Keep this equipment away from humidity.
- 6. Put this equipment on a reliable surface during installation. Dropping it or letting it fall may cause damage.
- 7. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
- 8. Use a power cord that has been approved for using with the product and that it matches the voltage and current marked on the product's electrical range label. The voltage and current rating of the cord must be greater than the voltage and current rating marked on the product.
- 9. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
- 10. All cautions and warnings on the equipment should be noted.
- 11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient overvoltage.
- 12. Never pour any liquid into an opening. This may cause fire or electrical shock.

13. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.

If one of the following situations arises, get the equipment checked by service personnel:

- The power cord or plug is damaged.
- Liquid has penetrated into the equipment.
- The equipment has been exposed to moisture.
- The equipment does not work well, or you cannot get it work according to the user's manual.
- The equipment has been dropped and damaged.
- The equipment has obvious signs of breakage.
- 14. CAUTION: Risk of Explosion if Battery is replaced by an Incorrect Type. Dispose of Used Batteries According to the Instructions.
 - ATTENTION: Risque d'explosion si la batterie est remplacée par un type incorrect. Mettre au rebus les batteries usagées selon les instructions.
- 15. Equipment intended only for use in a RESTRICTED ACCESS AREA.
- 16. Ensure to connect the power cord of power adapter to a socket-outlet with earthing connection.
- 17. Dispose of used battery promptly. Keep away from children. Do not disassemble and do not dispose of in fire.

Package Contents

Before installation, please ensure all the items listed in the following table are included in the package.

CS-108C-R10

Item	Description	Q'ty
1	CS-108C Display Module	1
2	Panel Mounting Kit	1

CS-110HC-R10

Item	Description	Q'ty
1	CS-110HC Display Module	1
2	Panel Mounting Kit	1

CS-112HC-R10

Item	Description	Q'ty
1	CS-112HC Display Module	1
2	Panel Mounting Kit	1

CS-115C-R10

Item	Description	Q'ty
1	CS-115C Display Module	1
2	Panel Mounting Kit	1

CS-117C-R10

Item	Description	Q'ty
1	CS-117C Display Module	1
2	Panel Mounting Kit	1

CS-119C-R10

Item	Description	Q'ty
1	CS-119C Display Module	1
2	Panel Mounting Kit	1

CS-W121C-R10

Item	Description	Q'ty
1	CS-W121C Display Module	1
2	Panel Mounting Kit	1

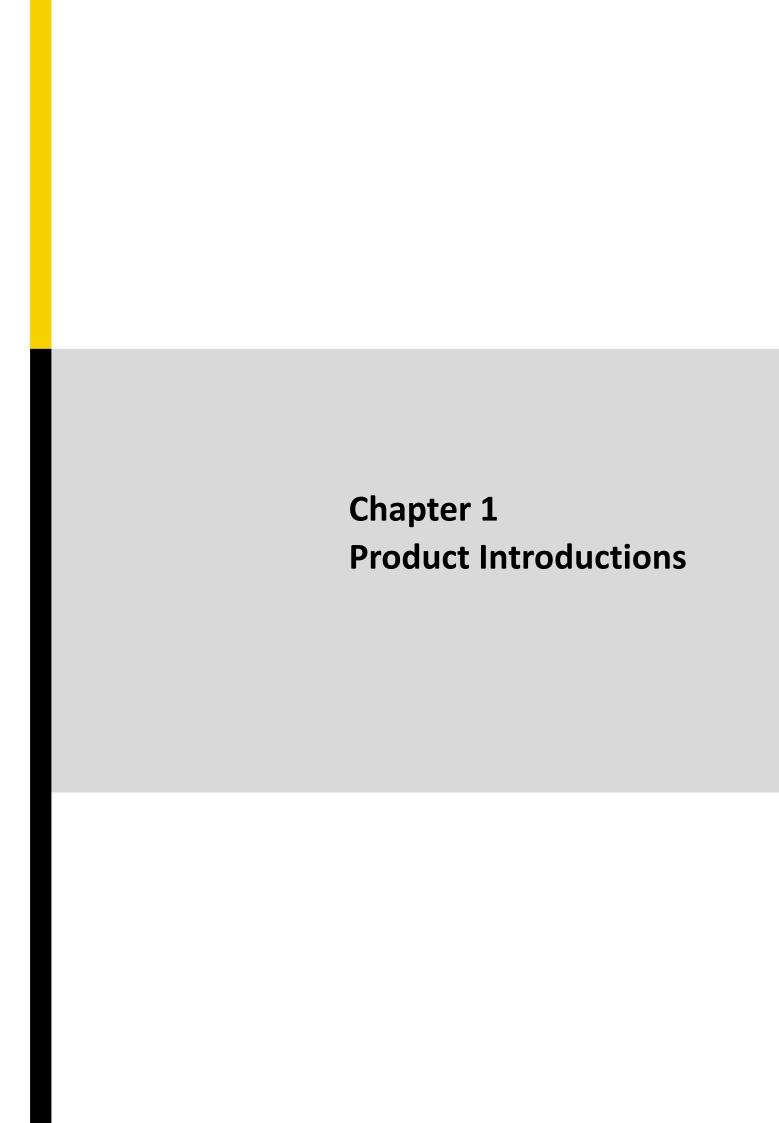
CS-W124C-R10

Item	Description	Q'ty
1	CS-W124C Display Module	1
2	Panel Mounting Kit	1

Note: Notify your sales representative if any of the above items are missing or damaged.

Ordering Information

Model No.	Product Description
CS-108C-R10	8.4" TFT-LCD 1600 nits SVGA 4:3 Display Module with Projected Capacitive Touch
CS-110HC-R10	10.4" TFT-LCD 1500 nits XGA 4:3 Display Module with Projected Capacitive Touch
CS-112HC-R10	12.1" TFT-LCD 1500 nits XGA 4:3 Display Module with Projected Capacitive Touch
CS-115C-R10	15" TFT-LCD 1800 nits XGA 4:3 Display Module with Projected Capacitive Touch
CS-117C-R10	17" TFT-LCD 1500 nits SXGA 5:4 Display Module with Projected Capacitive Touch
CS-119C-R10	19" TFT-LCD 1600 nits SXGA 5:4 Display Module with Projected Capacitive Touch
CS-W121C-R10	21.5" TFT-LCD 1000 nits Full HD 16:9 Display Module with Projected Capacitive Touch
CS-W124C-R10	24" TFT-LCD 1000 nits Full HD 16:9 Display Module with Projected Capacitive Touch



1.1 Overview

CS-100 Series is TFT-LCD touch display module. It offers ultra high brightness and high resolution, allowing viewers to see clear images even under any bright ambient light or direct sunlight environments. CS-100 Series is a rugged and reliable display solution featuring wide range operating temperature -20°C to 70°C, a solid aluminum die-casting front bezel and true flat IP65 front panel protection. Supporting Convertible Display System (CDS) technology, CS-100 Series allows you to configure, upgrade and maintain your display system according to your need.

1.2 Key Features

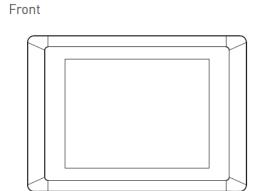
- 8.4"~24" TFT-LCD with Ultra High Brightness and High Resolution
- Wide Range Operating Temperature -20°C to 70°C
- True Flat IP65 Front Panel Protection
- Rugged Aluminum Die-casting Bezel
- Convertible Display System (CDS) Technology Supported

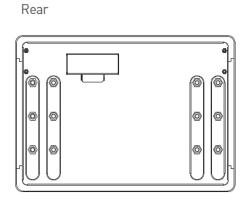
1.3 Hardware Specification

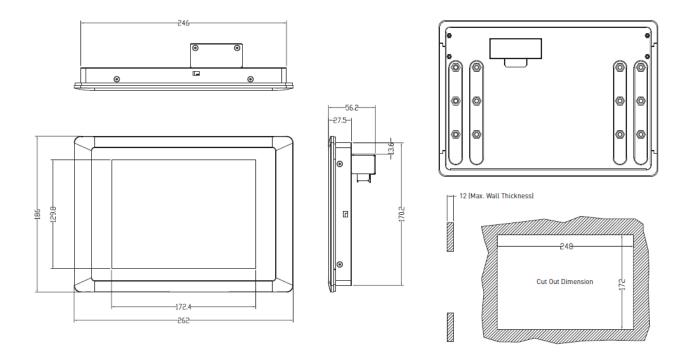
1.3.1 CS-108C-R10

Model Name	CS-108C	
Display		
LCD Size	• 8.4" (4:3)	
Max. Resolution	• 800 x 600	
Brightness (cd/m2)	• 1600	
Contract Ratio	• 600:1	
LCD Color	• 16.2M	
Pixel Pitch	• 0.213 (H) x 0.213 (V)	
Viewing Angle	• 160 (H) / 140 (V)	
Backlight MTBF	• 50,000 hrs(LED Backlight)	
Touchscreen		
Touchscreen Type	Projected Capacitive Touch	
Physical		
Dimension (WxDxH)	• 262 x 186.2 x 56.2mm	
Weight	• 1.58kg	
Construction	Flat Rugged Aluminum Die-casting Bezel	
Environment		
Front Panel Protection	• IP 65 Compliant	
Operating Temperature	Ambient with Air flow: -20°C to 70°C (extended temperature peripherals)	
Storage Temperature	• -20°C to 70°C	
Relative Humidity	85% RH @ 40°C (non-condensing)	
Safety	• UL, cUL, CB, IEC, EN 62368-1	

^{*} Product Specifications and features are for reference only and are subject to change without prior notice. For more information, please refer to the latest product datasheet from Cincoze's website.







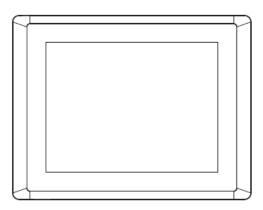
1.3.2 CS-110HC-R10

Model Name	CS-110HC	
Display		
LCD Size	• 10.4" (4:3)	
Max. Resolution	• 1024 x 768	
Brightness (cd/m2)	• 1500	
Contract Ratio	• 1400 : 1	
LCD Color	• 16.2M	
Pixel Pitch	• 0.206 (H) x 0.206 (V)	
Viewing Angle	• 178 (H) / 178 (V)	
Backlight MTBF	50,000 hrs(LED Backlight)	
Touchscreen		
Touch Type	Projected Capacitive	
Physical		
Dimension (WxDxH)	• 295 x 227.3 x 56.2mm	
Weight	• 2.24kg	
Mechanical Construction	Flat Rugged Aluminum Die-casting Bezel	
Environment		
Front Panel Protection	• IP 65 Compliant	
Operating Temperature	Ambient with Air flow: -20°C to 70°C (extended temperature peripherals)	
Storage Temperature	• -20°C to 70°C	
Relative Humidity	• 80% RH @ 40°C (non-condensing)	
Safety	• UL, cUL, CB, IEC, EN 62368-1	

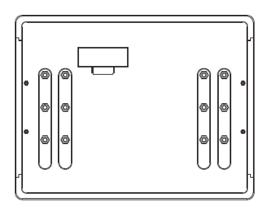
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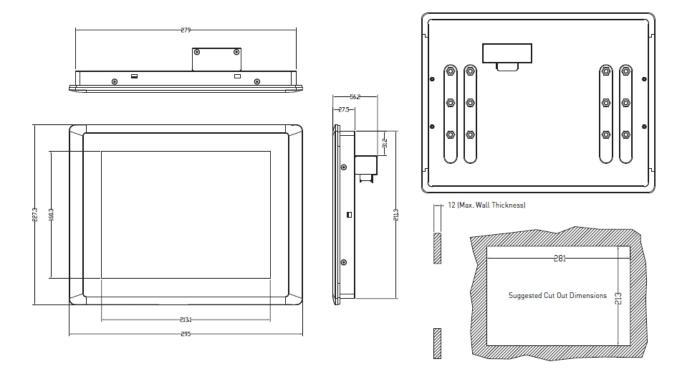
External Layout

Front



Rear

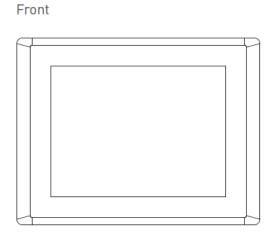


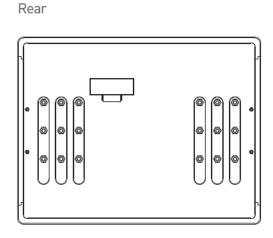


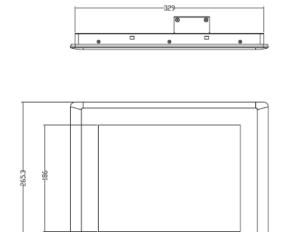
1.3.3 CS-112HC-R10

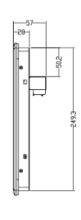
Model Name	CS-112HC	
Display		
LCD Size	• 12.1" (4:3)	
Max. Resolution	• 1024 x 768	
Brightness (cd/m2)	• 1500	
Contract Ratio	• 700:1	
LCD Color	• 16.7M	
Pixel Pitch	• 0.24 (H) x 0.24 (V)	
Viewing Angle	• 160 / 160	
Backlight MTBF	• 30,000 hrs (LED Backlight)	
Touchscreen		
Touch Type	Projected Capacitive	
Physical		
Dimension (WxDxH)	• 345 x 265.3 x 57 mm	
Weight	• 3.16 kg	
Construction	Flat Rugged Aluminum Die-casting Bezel	
Environment		
Front Panel Protection	• IP 65 Compliant	
Operating Temperature	Ambient with Air flow: -20°C to 70°C (extended temperature peripherals)	
Storage Temperature	• -20°C to 70°C	
Relative Humidity	• 80% RH @ 40°C (non-condensing)	
Safety	• UL, cUL, CB, IEC, EN 62368-1	

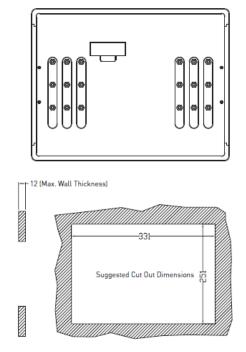
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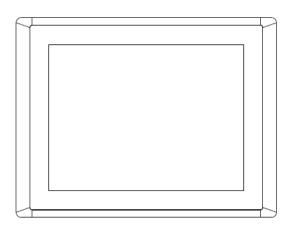


1.3.4 CS-115C-R10

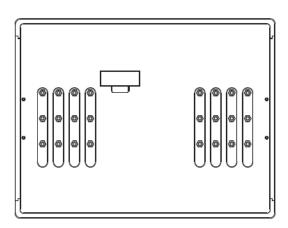
Model Name	CS-115C	
Display		
LCD Size	• 15" (4:3)	
Max. Resolution	• 1024 x 768	
Brightness (cd/m2)	• 1800	
Contract Ratio	• 800:1	
LCD Color	• 16.2M	
Pixel Pitch	• 0.297 (H) x 0.297(V)	
Viewing Angle	• 160 / 150	
Backlight MTBF	• 50,000 hrs (LED Backlight)	
Touchscreen		
Touchscreen Type	Projected Capacitive Touch	
Physical		
Dimension (WxDxH)	• 408 x 312.4 x 59.2 mm	
Weight	• 4.36kg	
Construction	Flat Rugged Aluminum Die-casting Bezel	
Environment	Environment	
Front Panel Protection	• IP 65 Compliant	
Operating Temperature	Ambient with Air flow: -20°C to 70°C (extended temperature peripherals)	
Storage Temperature	• -20°C to 70°C	
Relative Humidity	• 80% RH @ 40°C (non-condensing)	
Safety	• UL, cUL, CB, IEC, EN 62368-1	

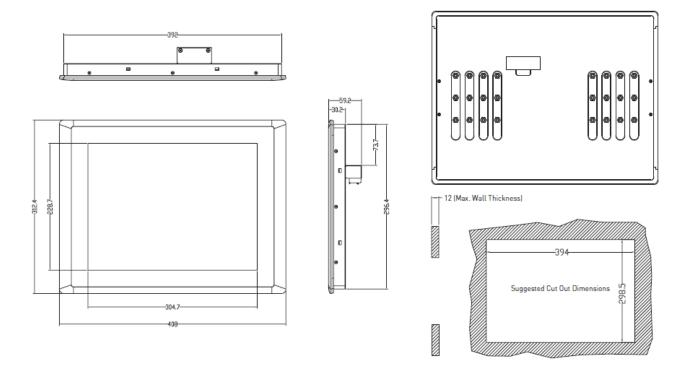
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Rear

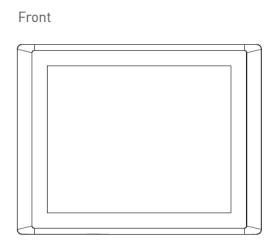


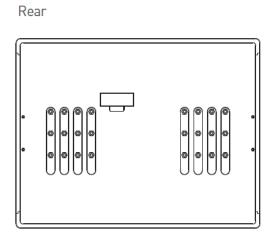


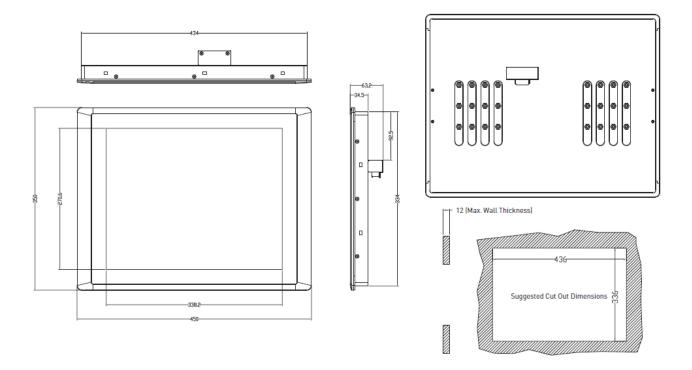
1.3.5 CS-117C-R10

Model Name	CS-117C	
Display		
LCD Size	• 17" (5:4)	
Max. Resolution	• 1280 x 1024	
Brightness (cd/m2)	• 1500	
Contract Ratio	• 800:1	
LCD Color	• 16.7M	
Pixel Pitch	• 0.264 (H) x 0.264 (V)	
Viewing Angle	• 160 / 140	
Backlight MTBF	50,000 hrs (LED Backlight)	
Touchscreen		
Touchscreen Type	Projected Capacitive Touch	
Physical		
Dimension (WxDxH)	• 450 x 350 x 63.2mm	
Weight	• 5.64 kg	
Construction	Flat Rugged Aluminum Die-casting Bezel	
Environment	Environment	
Front Panel Protection	IP 65 Compliant	
Operating Temperature	Ambient with Air flow: -20°C to 70°C (extended temperature peripherals)	
Storage Temperature	• -20°C to 70°C	
Relative Humidity	80% RH @ 40°C (non-condensing)	
Safety	• UL, cUL, CB, IEC, EN 62368-1	

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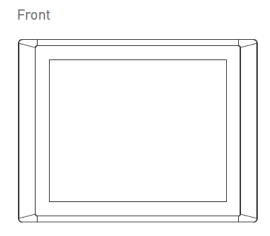


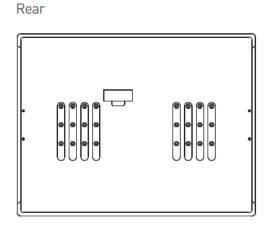


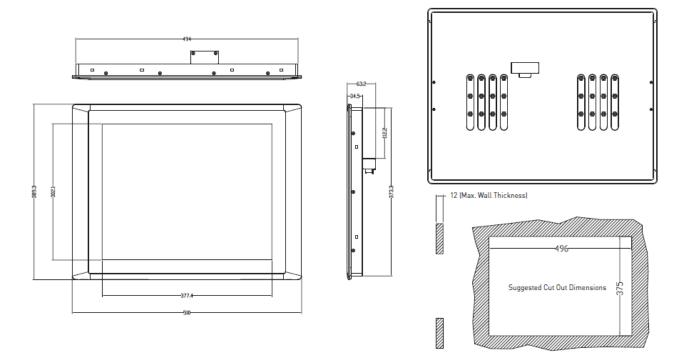
1.3.6 CS-119C-R10

Model Name	CS-119C	
Display		
LCD Size	• 19" (5:4)	
Max. Resolution	• 1280 x 1024	
Brightness (cd/m2)	• 1600	
Contract Ratio	• 1000:1	
LCD Color	• 16.7M	
Pixel Pitch	• 0.294 (H) x 0.294 (V)	
Viewing Angle	• 170 / 160	
Backlight MTBF	50,000 hrs (LED Backlight)	
Touchscreen		
Touch Type	Projected Capacitive	
Physical		
Dimension (WxDxH)	• 510 x 389.3 x 63.2 mm	
Weight	• 6.96 kg	
Construction	Flat Rugged Aluminum Die-casting Bezel	
Environment	Environment	
Front Panel Protection	IP 65 Compliant	
Operating Temperature	Ambient with Air flow: -20°C to 70°C (extended temperature peripherals)	
Storage Temperature	• -20°C to 70°C	
Relative Humidity	80% RH @ 40°C (non-condensing)	
Safety	• UL, cUL, CB, IEC, EN 62368-1	

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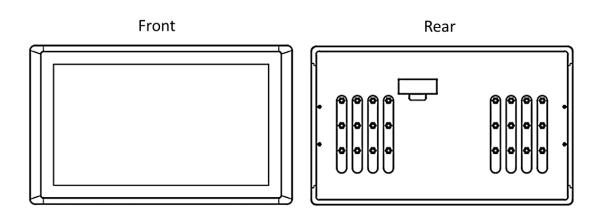


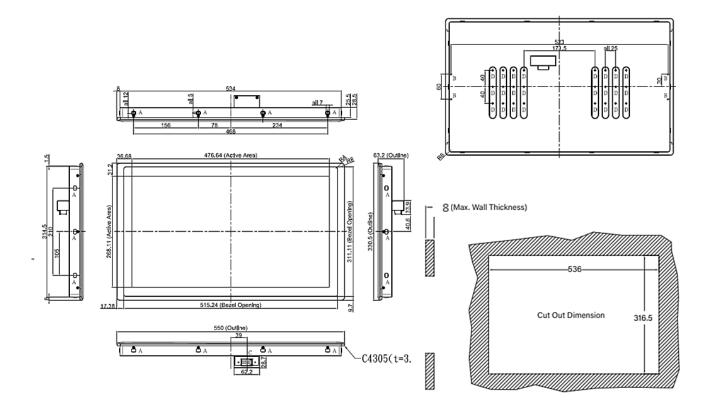


1.3.7 CS-W121C-R10

Model Name	CS-W121C	
Display		
LCD Size	• 21.5" (16:9)	
Max. Resolution	• 1920x1080 (Full HD)	
Brightness (cd/m2)	• 1000	
Contract Ratio	• 5000 : 1	
LCD Color	• 16.7M	
Pixel Pitch	• 0.24825 (H) x 0.24825 (V)	
Viewing Angle	• 178/178	
Backlight MTBF	• 50,000 hrs (LED Backlight)	
Touchscreen		
Touch Type	Projected Capacitive	
Physical		
Dimension (WxDxH)	• 550 x 330.5 x 63.2mm	
Weight	• 5.56 kg	
Construction	Flat Rugged Aluminum Die-casting Bezel	
Environment	Environment	
Front Panel Protection	IP 65 Compliant	
Operating Temperature	Ambient with Air flow: 0°C to 70°C (extended temperature peripherals)	
Storage Temperature	• -20°C to 70°C	
Relative Humidity	• 90% RH @ 39°C (non-condensing)	
Safety	• UL, cUL, CB, IEC, EN 62368-1	

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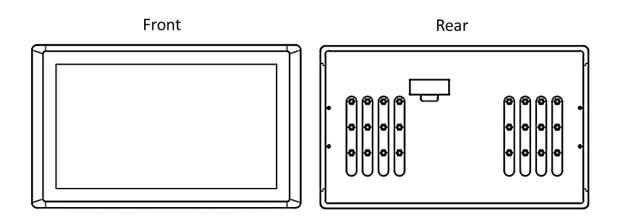


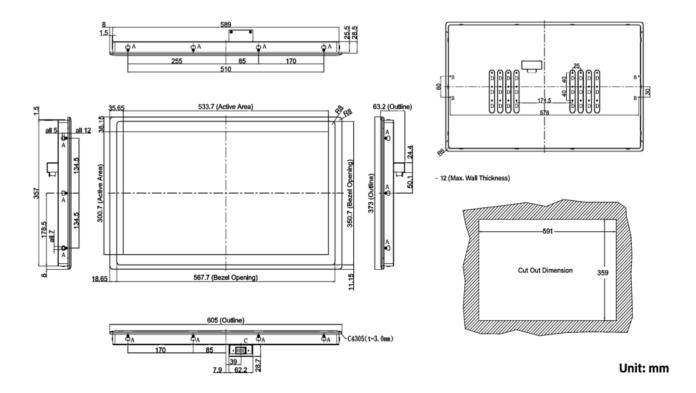


1.3.8 CS-W124C-R10

Model Name	CS-W124C	
Display		
LCD Size	• 24" (16:9)	
Max. Resolution	• 1920x1080	
Brightness (cd/m2)	• 1500	
Contract Ratio	• 5000:1	
LCD Color	• 16.7M	
Pixel Pitch	• 0.27675 (H) x 0.27675 (V)	
Viewing Angle	• 178/178	
Backlight MTBF	• 50,000 hrs (LED Backlight)	
Touchscreen		
Touch Type	Projected Capacitive	
Physical		
Dimension (WxDxH)	• 605 x 373 x 63.2 mm	
Weight	• 6.64 kg	
Construction	Flat Rugged Aluminum Die-casting Bezel	
Environment	Environment	
Front Panel Protection	• IP 65 Compliant	
Operating Temperature	Ambient with Air flow: -20°C to 70°C (extended temperature peripherals)	
Storage Temperature	• -20°C to 70°C	
Relative Humidity	• 80% RH @ 50°C (non-condensing)	
Safety	• UL, cUL, CB, IEC, EN 62368-1	

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Chapter 2 System Setup

2.1 Connecting with PC Module or Monitor Module



WARNING (AVERTIR)

In order to prevent electric shock or system damage, must turn off power and disconnect the unit from power source before removing the chassis cover.

(Afin d'éviter tout risque d'électrocution ou d'endommagement du système, vous devez couper l'alimentation et débrancher l'appareil de la source d'alimentation avant de retirer le couvercle du châssis.)

The photos show the male connector (on display module) and female connector (on PC module or monitor module)







Monitor module

PC module

1. Connect the modules.



2. Fasten the 6 screws to fix the PC module or monitor module on the display module.

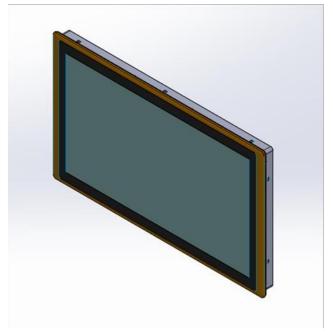


2.2 Installing Panel Mount

1. Accessories provided by Cincoze are as follows.

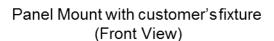


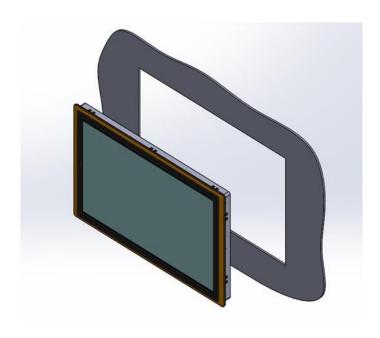
Mounting Kits



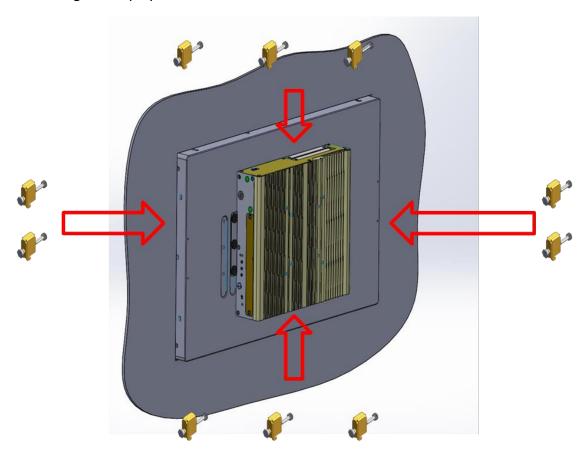
Panel Mount PPC

Before assembly, please prepare panel mount PPC and customer's fixture.





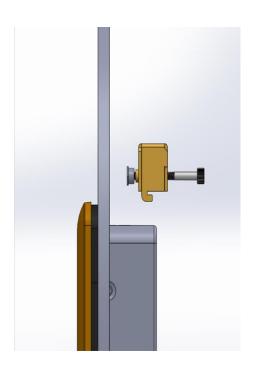
2. All mounting kits displayed are to be inserted into holes.



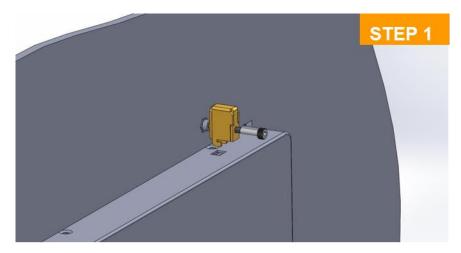
3. Installation preparation and steps.



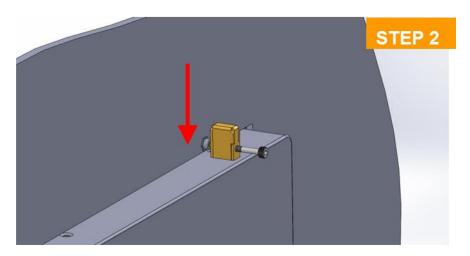
Panel mount side view with LVDS connector of CS series



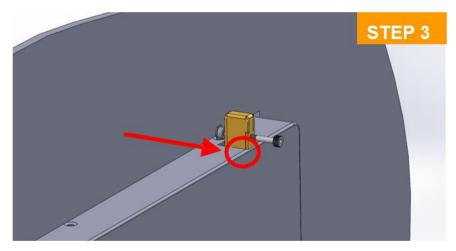
Before Mounting Kits are installed



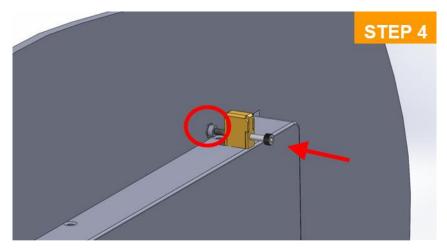
Position panel mount kits



Insert the panel mounting kit into bottom hole

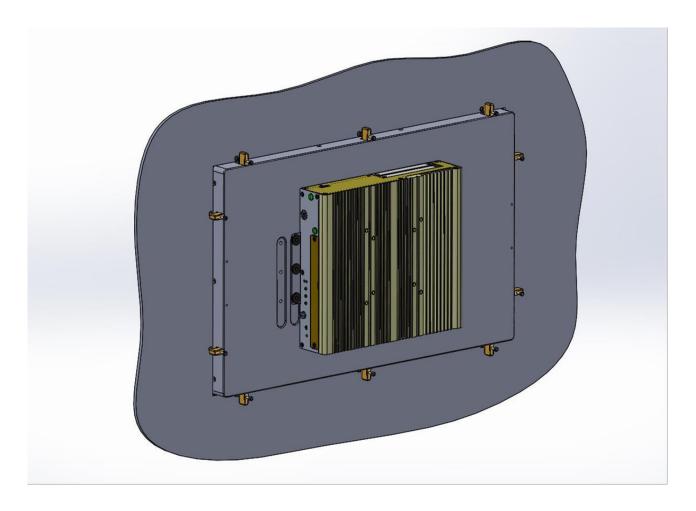


Slide the kit toward back



Tighten the screw forward until the front screw just touches the surface

4. Apply all mount kits to the rest of holes. And you have completed the panel mount installation, as shown below.



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