MicroTouch

USER MANUAL

TOUCH COMPUTER

M1-156IC-AA2
M1-215IC-AA2



Rev 1081123.1

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About This Document

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Compliance Information

For FCC (USA)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For IC (Canada)

CAN ICES-3(B)/NMB-3(B)

For CE (EU)

The device complies with the EMC Directive 2014/30/EU and Low Voltage Directive 2014/35/EU

Disposal Information

Waste Electrical and Electronic Equipment



This symbol on the product indicates that, under the European Directive 2012/19/EU governing waste from electrical and electronic equipment, this product must not be disposed of with other municipal waste. Please dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

For more information about recycling of this product, please contact your local city office or your municipal waste disposal service.

Renseighements relatifs à la conformité

Pour la FCC (États-Unis)

Ce matériel a fait l'objet d'essais qui ont déterminé qu'il respectait les limites d'un appareil de classe B selon la partie 15 des règlements de la FCC. Ces limites sont établies pour assurer une protection raisonnable contre les parasites nuisant à une installation résidentielle. Ce matériel génère, utilise et peut émettre des ondes radio électriques, et lorsqu'il n'est pas installé et utilisé selon les instructions, peut causer des parasites nuisant aux communications radio. Il n'y a toutefois aucune garantie qu'il n'y aura pas de parasites dans une installation en particulier. Si ce matériel cause des parasites à la réception d'ondes radio ou de télévision, ce qui peut être déterminé en l'éteignant et en l'allumant, l'utilisateur est invité à essayer de corriger le problème des parasites par l'une ou l'autre des mesures suivantes :

- Réorienter ou déplacer l'antenne de réception.
- Augmenter la distance entre le matériel et la réception.
- Brancher le matériel dans une prise sur un autre circuit que celui où le récepteur est branché.
- Consulter le distributeur ou un technicien radio ou TV expérimenté pour des conseils.

L'appareil respecte la partie 15 des règlements de la FCC. Le fonctionnement doit respecter les deux conditions suivantes : 1) cet appareil ne doit pas causer de parasites et (2) cet appareil doit accepter tous les parasites reçus, notamment ceux pouvant causer un fonctionnement non voulu.

Pour Industrie Canada

Norme canadienne NMB-3(B)

Pour la CE (UE)

L'appareil respecte la directive 2014/30/UE relative à la compatibilité électromagnétique et la directive 2014/35/EU sur les limites de basse tension

Informations sur l'élimination

Déchets d'équipements électriques et électroniques



Ce symbole sur le produit indique que, conformément à la directive européenne 2012/19/UE régissant les déchets d'équipements électriques et électroniques, ce produit ne doit pas être jeté avec les autres déchets municipaux. Veuillez éliminer vos déchets d'équipement en les remettant à un point de collecte désigné pour le recyclage des déchets d'équipements électriques et électroniques. Pour éviter d'éventuels dommages à l'environnement ou à la santé humaine dus à une élimination incontrôlée des déchets, veuillez séparer ces articles des autres types de déchets et les recycler de manière responsable afin de promouvoir la réutilisation durable des ressources matérielles. Pour plus d'informations sur le recyclage de ce produit, veuillez contacter votre mairie ou votre service municipal d'élimination des déchets.

Important Safety Instructions

Before using this product, please read the user manual thoroughly to help protect against property damage and to ensure your personal safety and the safety of others.

Be sure to observe the following instructions.

For installation or adjustment, please follow the instructions in this manual and refer all servicing to qualified service personnel.

Usage Notice

Warning
To prevent the risk of fire or shock hazards, do not expose the product to moisture.

Warning
Please do not open or disassemble the product, as this may cause electric shock.

Warning
The AC power cord must be connected to an outlet with ground connection.

Precautions

Please follow all warnings, precautions and maintenance as recommended in this user's manual to maximize the life of your unit.

Do :

Disconnect the power plug from AC outlet if the product is not going to be used for an extended period of time.

Don't :

Do not operate the product under the following conditions:

Extremely hot, cold or humid environment.

Areas susceptible to excessive dust and dirt.

Near any appliance generating a strong magnetic field.

Avis d’utilization

Mise en garde
Pour prévenir les risques d’incendie ou d’électrocution, ne pas exposer le produit à l’humidité.

Mise en garde
Prière de ne pas ouvrir ou démonter le produit, car cela pourrait entraîner l’électrocution.

Mise en garde
Le cordon d’alimentation doit être branché à une prise pourvue d’une mise à la terre.

Précautions

Veuillez suivre toutes les mises en garde, précautions et entretiens recommandés dans ce manuel d’utilisation pour maximiser la durée de vie de votre unité.

À faire :

Utiliser uniquement l’adaptateur d’alimentation prescrit pour votre appareil.

Débrancher l’appareil lorsqu’il n’est pas utilisé pendant une période prolongée.

À éviter :

Ne jamais utiliser l’appareil dans les conditions suivantes :

des conditions environnementales extrêmes (chaud, froid ou humidité)

des endroits remplis de poussières et de saletés.

à proximité d’appareils produisant un fort champ magnétique

Warnings

To turn off touch computer power, press the “Power” button on the right side on the back of the touch computer.

When the Power button is pressed, the main power of the touch computer is not turned off completely. To disconnect power completely, remove the power plug from the outlet.

If any of the following occur, remove the power plug from the outlet immediately: the touch computer is dropped; the housing is damaged; water is spilled onto or objects dropped inside the touch computer.

Failure to immediately remove the power plug may result in fire or electrical shock. Contact qualified service personnel for inspection.

If the power cord or plug is damaged or becomes hot, turn the touch computer off, make sure the power plug has cooled down and remove the power plug from the outlet.

If the touch computer is still used in this condition, it may cause fire or electrical shock.

Si l’un des événements suivants se produit, débranchez immédiatement la fiche d’alimentation de la prise: le moniteur est tombé; le boîtier est endommagé; de l’eau est renversée ou des objets tombent à l’intérieur du moniteur.

Si vou ne débranchez pas immédiatement la fiche d’alimentation, vous risquez de provoquer un incendie ou un choc életrique. Contacter le personnel de service qualifé pou inspection.

Si le cordon d’alimentation ou la fiche est endommagé, ou deviant chaud, éteignez le moniteur, assurez-vous que la fiche d’alimentation a refroidi et débranchez la fiche d’alimentation de la prise.

Si le moniteur est toujours utilizé dans cet état, il peut provoquer un incendie ou un choq électrique. Contactez votre revendeur pour le remplacement.

Warning This product can expose the user to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm.

For more information go to www.P65Warnings.ca.gov

Installation Tips

Things to avoid

Don't install in a high-temperature environment. Operating temperature: 0˚C to 40˚C (0˚F to 104˚F), storage temperature -20°C - 60°C (-4˚F to 140˚F). If the touch computer is used in a high temperature environment or near any heat sources, the case and other parts may become distorted or damaged, resulting in overheating or electrical shock.

Don't install in a high-humidity environment.

Operating humidity: 20-90%

Don't insert the power plug into anything other than a grounded 100-240V AC outlet.

Don’t use a damaged power plug or worn outlet.

The use of extension cords is not recommended.

The use of the power supply that comes with the MicroTouch product is strongly recommended.

Don't place the touch computer on an unstable shelf or surface.

Don’t place objects on the touch computer.

If the touch computer is covered or the vents are blocked, the touch computer could overheat and cause a fire.

Please keep a 10 cm minimum distance between the touch computer and the surrounding structures to allow sufficient ventilation.

Don't move the touch computer when it is connected to the power cord When moving the touch computer, make sure to remove the power plug and cables.

If you encounter a problem during installation, please contact your dealer for assistance. Do not attempt to repair or open the touch computer.

Product Overview

These desktop touch computers with Android operating system are designed and developed to provide a flexible desktop touch computer solution with easily installed optional MSR, Camera, Light Bar and Barcode Scanner accessories. Their versatility makes them exceptional choices for applications in all business sectors, especially in the retail market.

Key Features

Processor: MediaTek MT8390

RAM & Storage: 8GB LPDDR4X + 64GB eMMC

Size: 15.6" / 21.5" TFT LCD

Resolution: 1920 x 1080

Contrast Ratio: 700:1 / 3000:1

Aspect Ratio: 16:9

Brightness: 382 cd/m^2 / 298 cd/m^2

View Angle: H:178˚, V:178˚

Network: Wi-Fi 6 2T2R, Bluetooth 5.2 1T1R

Video Output Port: 1 HDMI and 1 USB-C DP (Cannot display at the same time, the computer must be restarted after switching)

Camera: 5MP fixed-focus

100 mm x 100 mm VESA mount

P-cap touch with up to 10 simultaneous touches

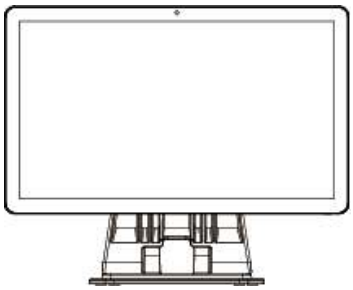
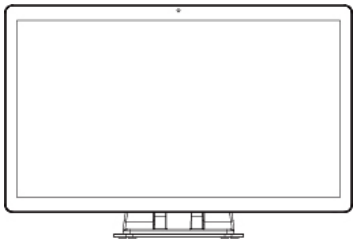
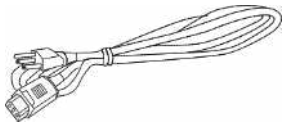
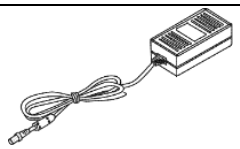
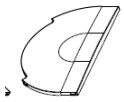
Plug and Play: no touch driver installation required

Warranty: 3 years

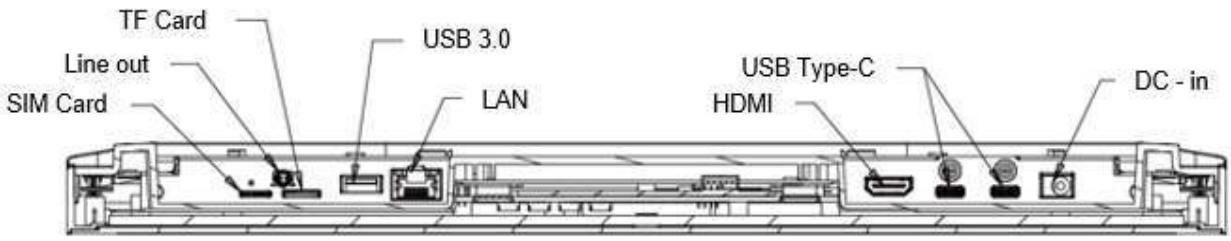
Unpacking

When unpacking please ensure that all the items in the following Accessories section are included. If any are missing or damaged, please contact the place of purchase for a replacement.

Package Contents

No.	Part	Picture	Qty
1	LCD Touch computer M1-156IC-AA2 or M1-215IC-AA2	 	1
2	AC Power Cord (1.8 m)		1
3	AC-DC converter		1
4	Cable Cover		2

Product Setup and Use



Power Connector

Power Input: DC - in (Center pin: + 12 VDC; Barrel: ground).

Communications Ports

USB 3.0 is a Type-A USB communications port

USB Type-C are Type-C USB communications ports.

Video Output

HDMI: Digital video output.

Removable Storage Media

TF Card and SIM Card are slots for removable storage

Network Connection

LAN is an Ethernet network connector

Peripheral Connection Points

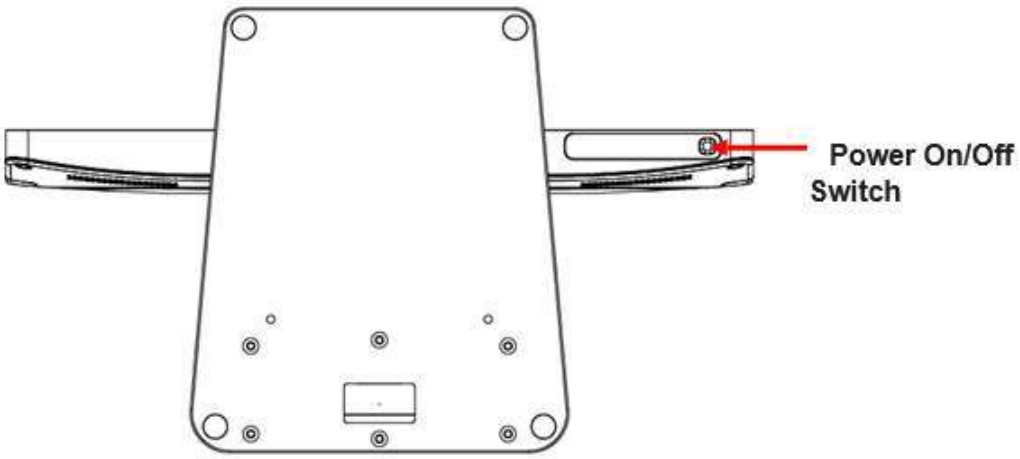
There are four peripheral connection points, one on each side and the top and bottom sides. Connection is by provided USB Type-C connectors. These peripheral points/potrs are for MicroTouch-supplied accessories only.

Configuration and Cable Connections

Power is supplied by the included AC-to-DC power supply's fixed 12 volt DC cable connector. Plug the power adapter's DC barrel connector into the DC jack on the touch computer. Plug the AC power cable female connector into the receptacle on the power converter, then plug the male connector of the AC cable into a wall outlet.

Connect your network cable to the LAN connector or WI FI. All other ports are optional I/O or outputs.

Turning the Touch Computer On and Off



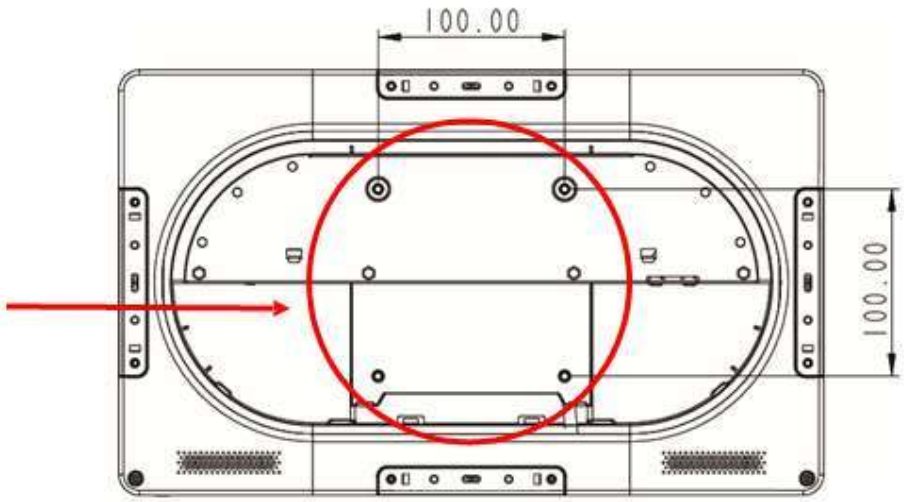
Function	Description
Power On	Press and hold the Power button for 2 seconds to power on
Sleep	Press and release the power button to enter sleep mode. Press and release again to resume from sleep mode.
Power Off	Press and hold the Power button for 2 seconds to power off

Mounting options

The touch computer may be mounted to a stand, arm, or other device that has a 100mm x 100mm standard VESA mount hole pattern.

VESA Mount

The touch computer has an integral VESA standard mount pattern that conforms to the “VESA Flat Display Mounting Interface Standard” which defines a physical mounting interface and corresponds to the standards for touch computer mounting devices.



Warning

Please use the correct screws! The distance between the back cover surface and the bottom of the screw hole is 8 mm. Please use four M4 diameter screws with 8 mm length to mount the touch computer. Do not exceed 10 to 12 kg-cm torque (8.7 to 10.4 lb-in).

Mise en garde

Veuillez utilizer les vis correcte! La distance entre la surface du capot arrière et le fond du trou de vis est de 8 mm. Veuillez utilizer quatre vis de diamètre M4 d’une longueur de 8 mm pour mounter le moniteur. Ne pas dépasser un couple de serrage de 10 à 12 kg-cm.

Specifications and Dimensions

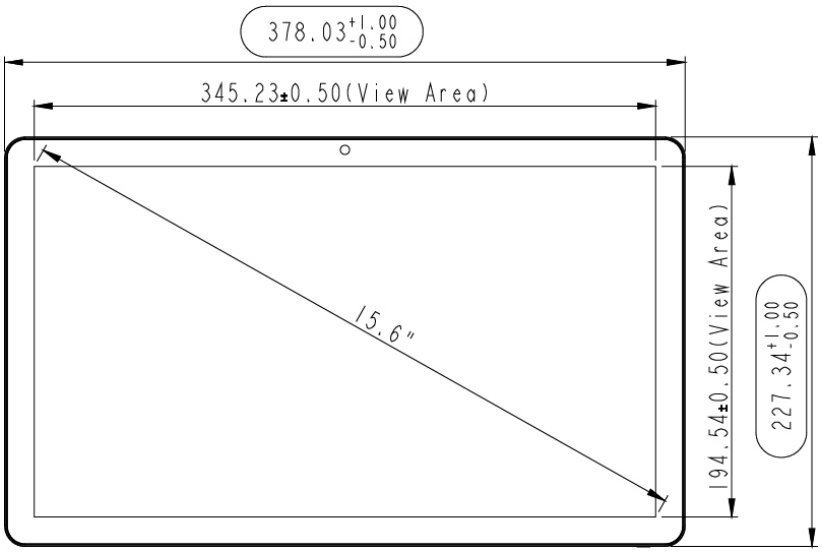
Specifications

Item	Category	Specifications
Operating System	Android 13 with MS(EDLA)	
Processor	MediaTek MT8390	Dual-core Cortex-A78 up to 2.2GHz Six-core Cortex-A55 up to 2.0GHz
GPU	Mali-G57 MC3	
Memory	8GB	LPDDR4X
Storage	64GB	eMMC
W-Fi	802.11	a/b/g/n/ac/ax
Bluetooth	5.2	Supports BLE
LAN	1 x RJ45	Giga LAN, Support 802.3bt
Camera	Built-in 5MP	Fixed focus
Communications Ports	2 x USB	One 3.0 Type-C One 3.0 Type-A
	TF Slot	SDHC3.0
LCD Panel	Size	M1-156IC-AA2:15.6” TFT LCD M1-215IC-AA2: 21.5” TFT LCD
	Resolution	1920 x 1080
	Brightness (typical)	M1-156IC-AA2: 382 cd/m^2 M1-215IC-AA2: 298 cd/m^2
	Contrast Ratio (typical)	M1-156IC-AA2: 700:1 M1-215IC-AA2: 3000:1
	Viewing Angle (typical)	Horizontal: 178 degrees; Vertical: 178 degrees
	Number of Colors	16.7 million
Removeable Storage Slots	TF	SDHC3.0
	SD	
Accessory Ports	MicroTouch optional accessories only	4 x USB Type-C with mounting points
Audio	Speakers	2 x 2W

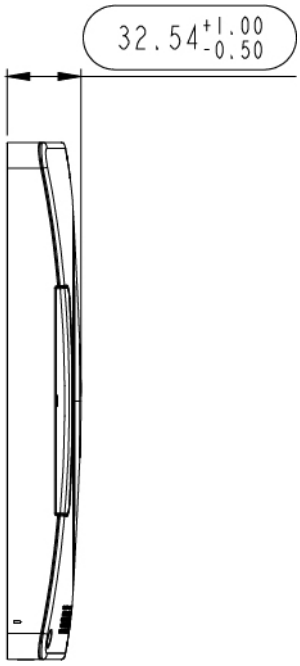
Item	Category	Specifications
	Earphone	Line out & MIC IN
Touch Screen	Touch Type	P-CAP
	Simultaneous touch points	Up to 10
Video Output	Type	HDMI Type-A, 4K@60Hz
		USB-C DP, 4K@60Hz
Power	Power Adapter Input	AC 100V - 240V (50/60Hz), 50W max
	Power Adapter Output	12VDC, 4.16A max
Size and Weight	Dimensions (W x H x D) Without stand	M1-156IC-AA2: 378.03 mm x 227.34 mm x 32 mm 14.88 in x 8.95 in x 1.26 in
		M1-215IC-AA2: 515.44 mm x 306.91 mm x 41 mm 20.30 in x 12.08 in x 1.61 in
	Dimensions (W x H x D) With stand	M1-156IC-AA2: 378.03 mm x 303 mm x 255 mm 14.88 in x 11.9 in x 10.04 in
		M1-215P-A-A1/M1-215P-X-XX: 515.44 mm x 342.78 mm x 255 mm 20.30 in x 13.50 in x 10.04 in
	Net Weight	M1-156IC-AA2: 2.04 kg without stand, 5.12 kg with stand 4.50 lb without stand, 11.29 lb with stand
		M1-215IC-AA2: 3.87 kg without stand, 6.92 kg with stand 8.5 lb without stand, 15.26 lb with stand
Mounting	VESA Mount	100 mm x 100 mm
Environment	Compliance	CE, FCC, LVD, UL/cUL, CB, RoHS, UKCA, RCM
	Operating Temperature	0°C - 40°C
	Storage Temperature	-20°C - 60°C

Dimensions, M1-156IC-AA2, without stand

Front view

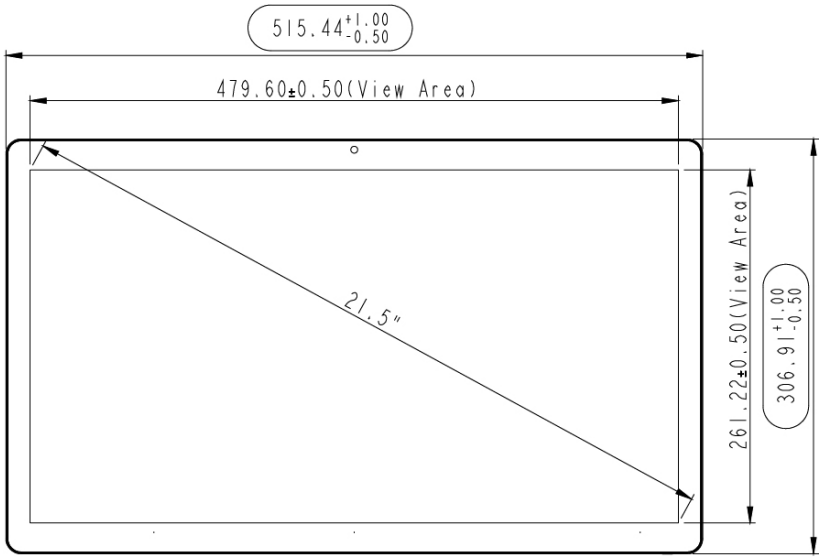


Side View

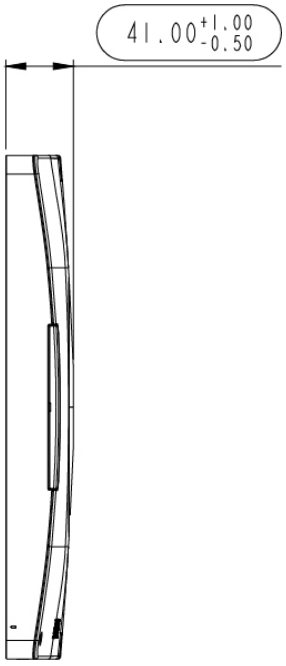


Dimensions, M1-215IC-AA2, without stand

Front view

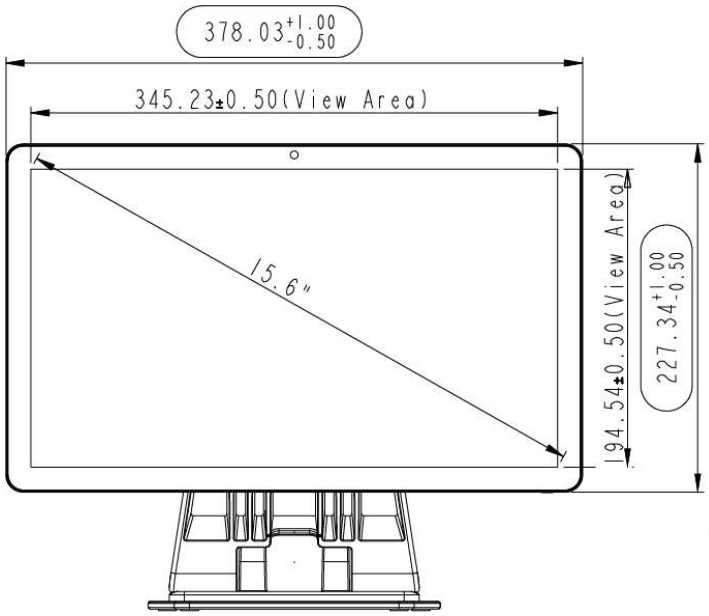


Side View

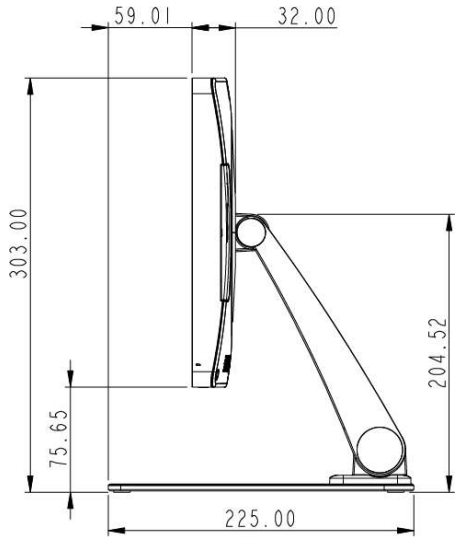


Dimensions, M1-156IC-AA2, with stand

Front view

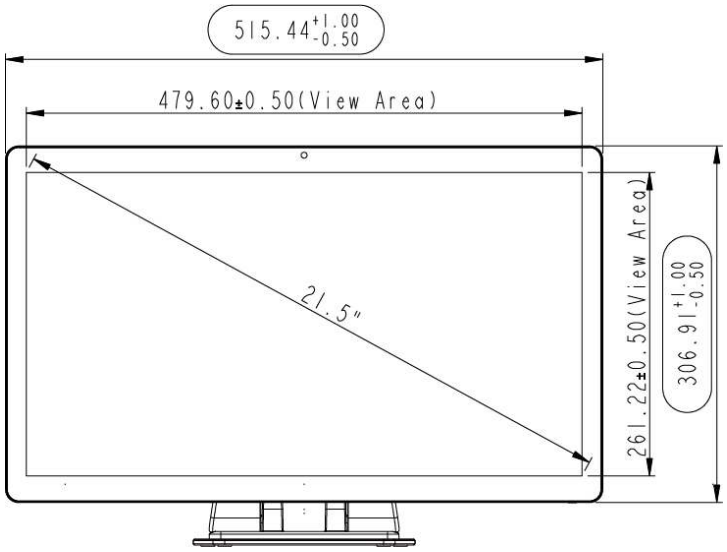


Side View

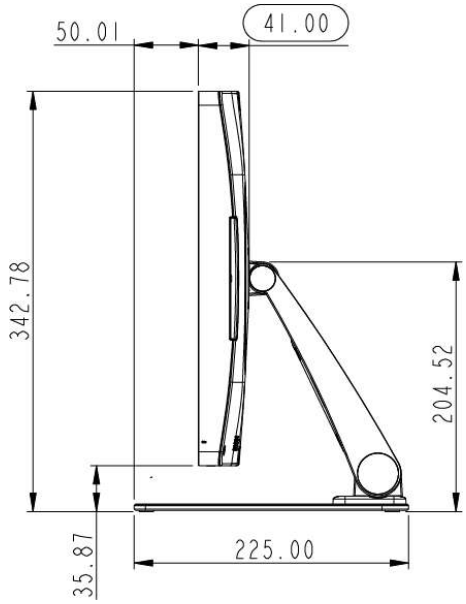


Dimensions, M1-215IC-AA2, with stand

Front view



Side View



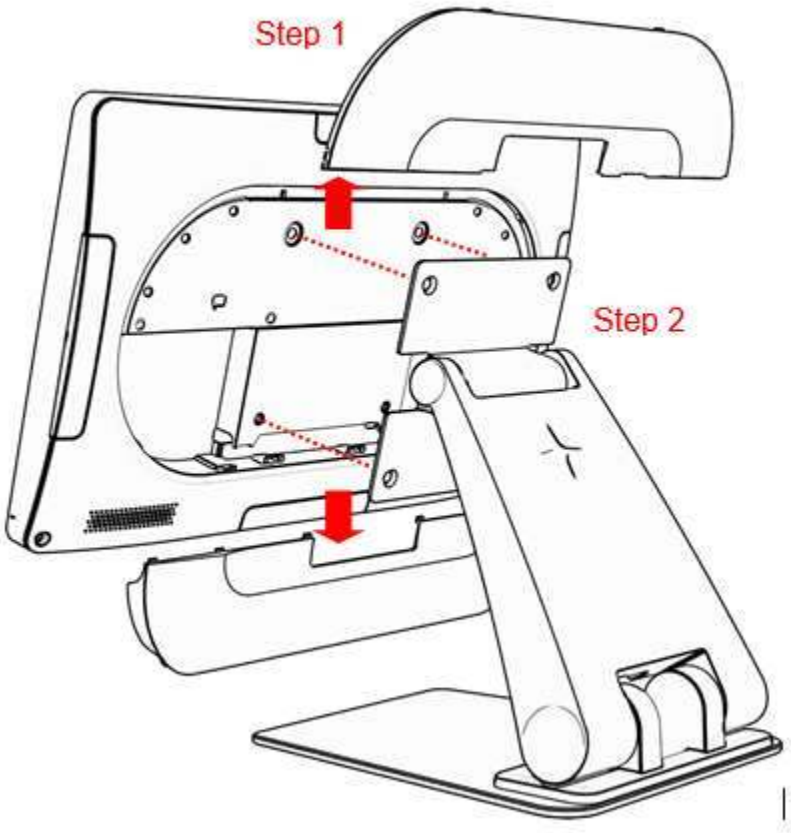
Optional Accessory Installation

Note: Power the touch computer down before installing/ removing accessories.
Note: Installation is the same regardless of which model you choose.

Installing the Stand

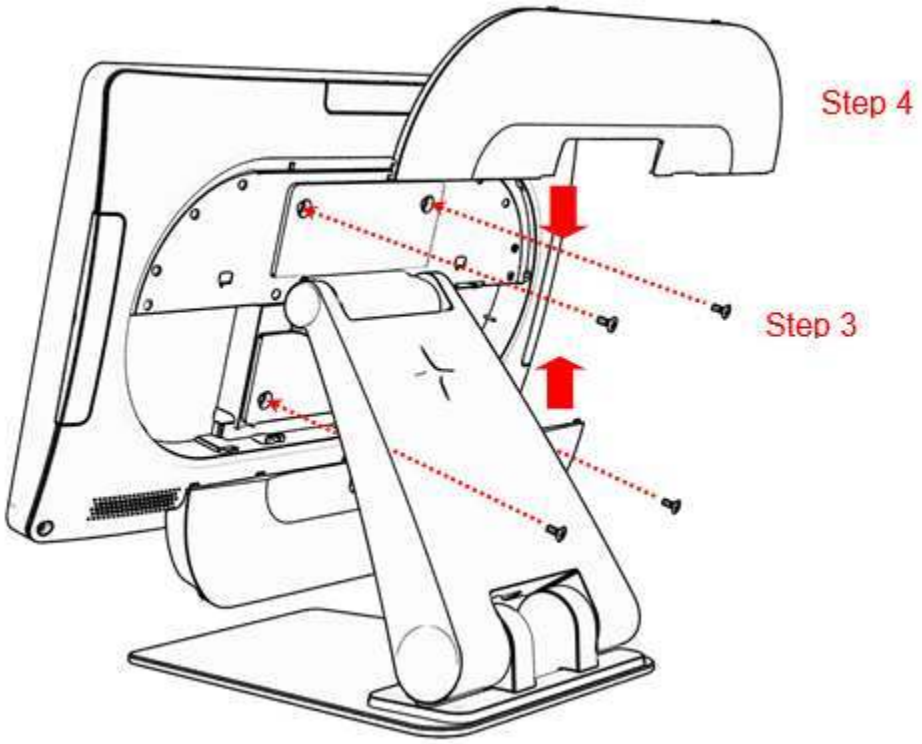
Place the touch computer face down on a clean padded surface.

Step 1: Pull the cover away from the touch computer to remove it.
Step 2: Place the stand on the VESA mount and align the screw holes.



Step 3: Install the four M4 screws to secure the stand to the touch computer.

Step 4: Install the cover.

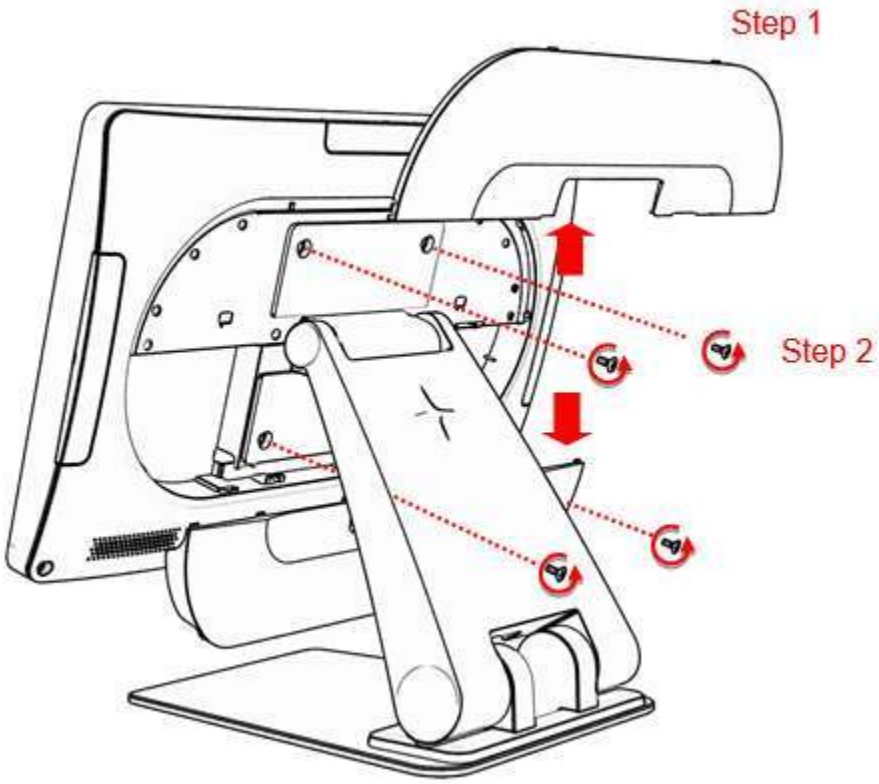


Removing the Stand

Step 1: Place the touch computer face down on a clean padded surface.

Step 2: Loosen the four screws

Step 2: Pull the stand away from touch computer and remove.



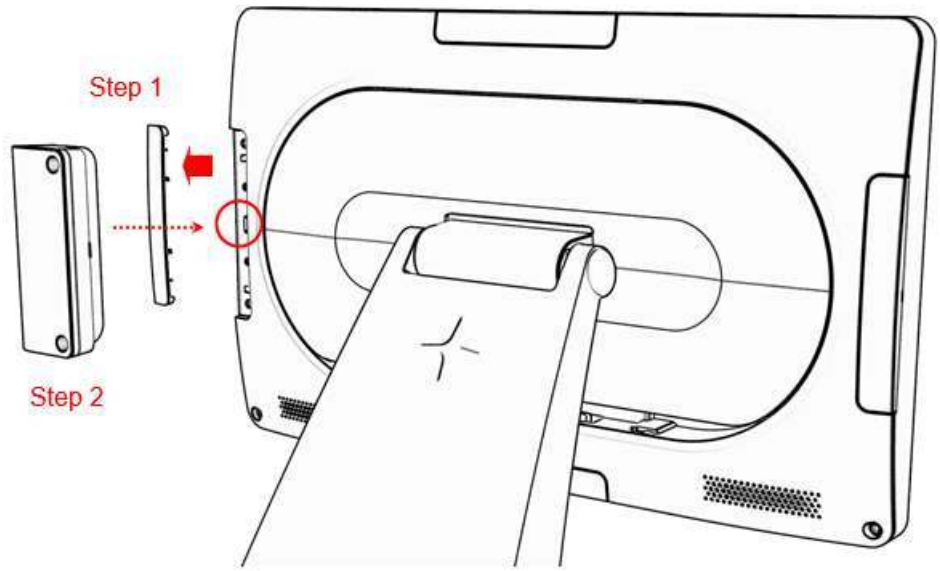
Installing the MSR

The MSR is best installed on the right of the touch computer, as viewed from the front, to accommodate the majority right-handed users.

Step 1: Insert a small, pointed tool into the notch in the middle of the accessory port cover and pry the cover loose from the accessory port.

Step 2: Connect the MSR to the touch computer and secure with the provided screws.

Do not discard the port cover; store it in a convenient place so that it may be reinstalled to cover the port as needed in the future.



Removing the MSR

Step 1: Loosen the screws.

Step 2: Disconnect the MSR from the touch computer

Step 3: Reinstall the accessory port cover.

Installing & Removing the Camera

The steps are the same as for the MSR except that the camera should be installed in the top accessory port to preserve the proper image orientation.

Installing & Removing the Barcode Scanner

The steps are the same as for the MSR. Any accessory port may be used.

Installing & Removing the Light Bar

The steps are the same as for the MSR. Any accessory port may be used.

Appendix

Cleaning

Turn off the product and disconnect from AC power before cleaning. Turning the product off protects against accidental touch selections that could cause problems or hazardous results. Disconnecting power protects against hazardous interaction between accidental liquid entry and electricity.

To clean the case, dampen a clean cloth lightly with water and a mild detergent and wipe gently. Use a soft, dry cloth to clean areas that have ventilation openings to avoid getting any liquid or moisture inside. If liquid does get inside, do not use the product until it has been inspected and tested by a qualified service technician.

To clean the touch screen, apply a glass cleaning solution to a soft cloth and wipe the screen clean. To ensure that liquid does not enter the product, do not spray cleaning solution directly onto the touch screen or any other part.

Do not use volatile solvents, waxes or any abrasive cleaners on any part of the product.

Solutions to Common Problems

Touch functionality doesn't work or works incorrectly.

Completely remove any protective sheets from the touch screen, then cycle power Off/On.

Ensure that the touch computer is in an upright position with nothing touching the screen, then cycle power Off/On.

Warranty Information

Except as otherwise stated herein, or in an order acknowledgment delivered to Buyer, Seller warrants to Buyer that the Product shall be free of defects in materials and workmanship. The warranty for the touch computer and its components is three years. Seller makes no warranty regarding the model life of components. Seller's suppliers may at any time and from time to time make changes in the components delivered as Products or components. Buyer shall notify Seller in writing promptly (and in no case later than 30 days after discovery) of the failure of any Product to conform to the warranty set forth above; shall describe in commercially reasonable detail in such notice the symptoms associated with such failure; and shall provide to Seller the opportunity to inspect such Products as installed, if possible. The notice must be received by Seller during the Warranty Period for such product, unless otherwise directed in writing by the Seller. Within thirty days after submitting such notice, Buyer shall package the allegedly defective Product in its original shipping carton(s) or a functional equivalent and shall ship to Seller at Buyer's expense and risk. Within a reasonable time after receipt of the allegedly defective Product and verification by Seller that the Product fails to meet the warranty set forth above, Seller shall correct such failure by, at Seller's options, either (i)modifying or repairing the Product or (ii) replacing the Product. Such modification, repair, or replacement and the return shipment of the Product with minimum insurance to Buyer shall be at Seller's expense. Buyer shall bear the risk of loss or damage in transit and may insure the Product. Buyer shall reimburse Seller for transportation cost incurred for Product returned but not found by Seller to be defective. Modification or repair, of Products may, at Seller's option, take place either at Seller's facilities or at Buyer's premises. If Seller is unable to modify, repair, or replace a Product to conform to the warranty set forth above, then Seller shall, at Seller's option, either refund to Buyer or credit to Buyer's account the purchase price of the Product less depreciation calculated on a straight-line basis over Seller's stated Warranty Period. These remedies shall be the buyer's exclusive remedies for breach of warranty. Except for the express warranty set forth above, seller grants no other warranties, express or implied by statute or otherwise, regarding the products, their fitness for any purpose, their quality, their merchantability, their non-infringement, or otherwise. No employee of Seller or any other party is authorized to make any warranty for the goods other than the warranty set forth herein. Seller's liability under the warranty shall be limited to a refund of the purchase price of the product. In no event shall Seller be liable for the cost of procurement or installation of substitute goods by Buyer or for any special, consequential, indirect, or incidental damages. Buyer assumes the risk and agrees to indemnify Seller against and hold Seller harmless from all liability relating to (i) assessing the suitability for Buyer's intended use of the Products and of any system design or drawing and (ii) determining the compliance of Buyer's use of the Products with applicable laws, regulations, codes, and standards. Buyer retains and accepts full responsibility for all warranty and other claims relating to or arising from Buyer's products, which include or incorporate Products or components manufactured or supplied by Seller. Buyer is solely responsible for any and all representations and warranties regarding the Products made or authorized by Buyer. Buyer will indemnify Seller and hold Seller harmless from any liability, claims, loss, cost, or expenses (including reasonable attorney's fees) attributable to Buyer's products or representations or warranties concerning same.

RoHS Declaration

Equipment name：Touch LCD Touch computer　Type designation (Type) ： M1-156IC-AA2 M1-215IC-AA2						
Component	Restricted substances and their chemical symbols					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent chromium (Cr^{+6})	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Plastic Parts	○	○	○	○	○	○
Metal Parts	-	○	○	○	○	○
Cable components	-	○	○	○	○	○
LCD Panel	-	○	○	○	○	○
Touch Panel	-	○	○	○	○	○
PCBA	-	○	○	○	○	○
Software	○	○	○	○	○	○
Notes 〝○〞 indicates that the percentage of the restricted substance does not exceed the permissible limit. 〝−〞 indicates that the restricted substance is exempt.						

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