



USER MANUAL

DESKTOP TOUCH MONITOR

M1-156DT-A1

M1-215DT-A1

M1-238DT-A1

MACH
FEEL THE SPEED OF TOUCH



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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-003(B)/NMB-003(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.

Renseignements 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 monitor, 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 electric and/or magnetic field.

Avis d'utilisation



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 monitor power, press the “Power” button on the OSD keypad.

When turning off the monitor by pressing the POWER button on the OSD wired remote, the main power of the monitor 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 monitor is dropped; the housing is damaged; water is spilled onto or objects dropped inside the monitor.

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 monitor off, make sure the power plug has cooled down and remove the power plug from the outlet.

If the monitor is still used in this condition, it may cause fire or electrical shock. Contact your dealer for replacement.



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 vous ne débranchez pas immédiatement la fiche d'alimentation, vous risquez de provoquer un incendie ou un choc électrique. Contacter le personnel de service qualifié pour inspection.



Si le cordon d'alimentation ou la fiche est endommagé, ou devient 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 utilisé dans cet état, il peut provoquer un incendie ou un choc 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

No Touch Screen Drivers Required

MicroTouch Touch Monitors are plug and play when connected to Windows 7 or later Windows devices; Kernel 3.2 for most builds of Linux; Android 1.0 and most other modern Operating Systems. If you have a non-Plug and Play operating system, please refer to the Technical Support Section of www.microtouch.com or contact MicroTouch Technical Support to inquire about driver support for your particular operating system.

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 monitor 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 monitor on an unstable shelf or surface.

Don't place objects on the monitor.

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

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

Don't move the monitor when it is connected to the power cord and AV cables.

When moving the monitor, make sure to remove the power plug and cables from the outlet or source.

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

Product Overview

This product is a wide format LCD desktop touch monitor with optically bonded projected capacitive (PCAP) touch screen.

Key Features

Size (diagonal): 156DT: 15.6"

215DT: 21.45"

238DT: 24"

Resolution: 1920 x 1080

Contrast Ratio: 3000:1

Aspect Ratio: 16x9

Brightness: 298 nits

View Angle: H:178°, V:178°

Video Port: 1 HDMI, 1 DP, 1 USB Type-C with ALT-display and 12 vdc input power capabilities

VESA mount: 100 mm x 100 mm

Front is sealed to IP65 standard


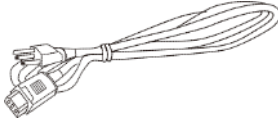
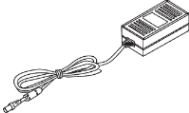

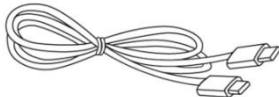
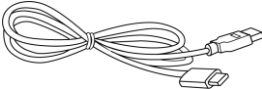
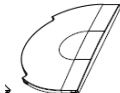


P-cap touch with up to 10 simultaneous touch points

Plug and Play: no touch driver installation required for most modern operating systems

Warranty: 3 years

Package Contents

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

No.	Part	Picture	Qty
1	LCD Monitor		1
2	AC power cable IEC C13 (1.8m)		1
3	AC-DC Converter		1
4564	HDMI cable (1.8m)		1
5	USB C-C cable (1.8m)		1
6	USB C-A cable (2m)		1
7	Portrait-orientation Cable Covers		2
8	Cable Containment Clips		2
9	Cable Ties		2

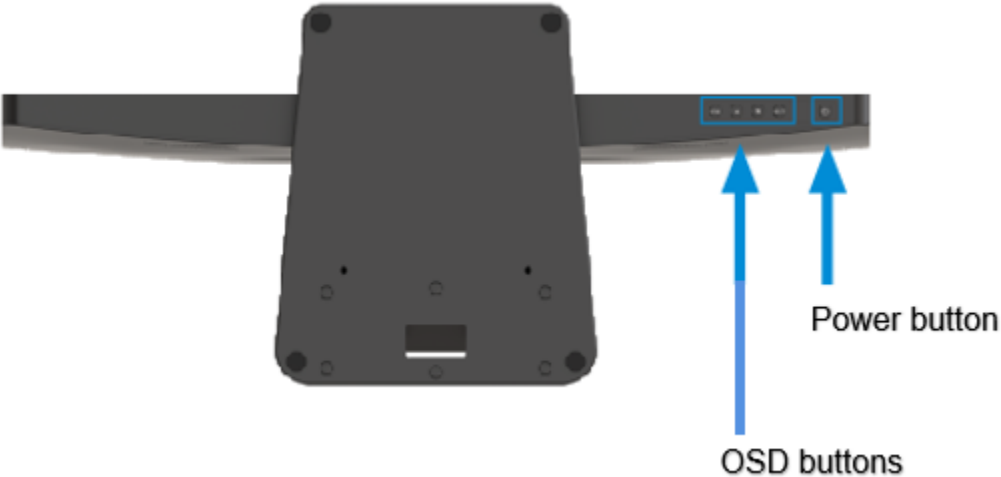
Product Setup and Use

Unpacking

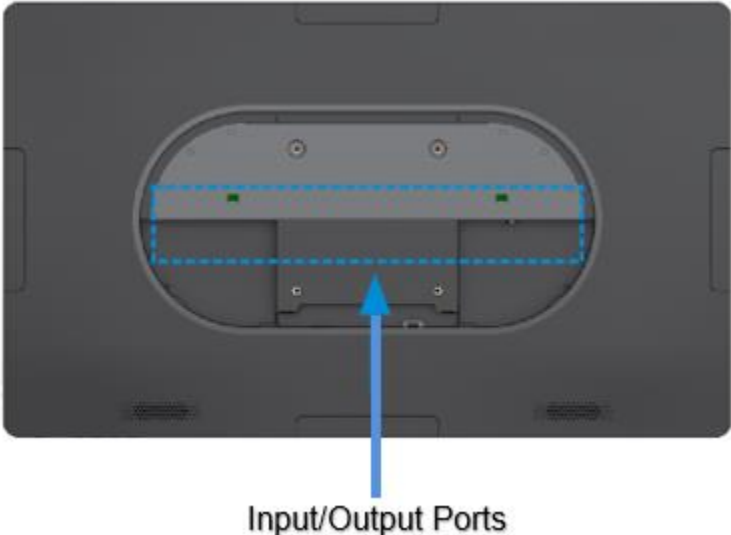
Put a protective pad on a work surface so the monitor can be placed face-down on the pad. Remove the accessory package from the box, then lift the packaging and monitor out of the box. Remove the packaging protector pieces, then remove the monitor from the protective plastic bag. Remove the plastic screen protector from the front of the monitor (*NOTE: the touchscreen may not function if the protective cover is not completely removed*).

Place the monitor face-down on the protective pad with the bottom of the monitor furthest from you (the wider part of the stand footplate will be toward you). Pull the footplate of the stand up until the stand is fully extended. Now pick the monitor up and rotate it 180 degrees so the top of the monitor is furthest from you. Rotate the stand toward the top of the monitor to facilitate cable routing and installation.

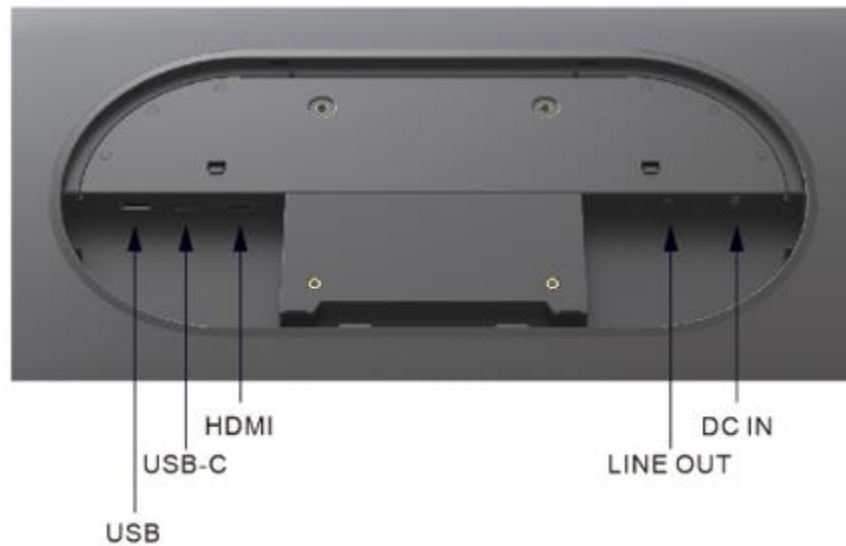
Control Buttons



I/O Port Locations



Input/Output Connectors



DC IN: Optional power connector (Center pin: + 12 vdc; Barrel: ground).

LINE OUT: Line-level audio output. Audio is supplied by the USB-C or HDMI connection. Amplification is required.

HDMI: Optional Digital video input.

USB-C: USB Type-C, capable of single-cable operation (power, video and touch output) – see Configuration and Cable Options section below. USB-C is the Touch output when HDMI video is used.

USB: General purpose USB Type-A input/output hub.

Cable Covers, Cable Routing and Securing the Cables

Place a protective pad on a work surface, then place the monitor face-down on the pad with the top of the monitor furthest from you. Rotate the stand toward the top of the monitor.

Remove the snap-on plastic cable guide from the center of the stand.

The monitor is shipped with the Landscape-orientation cable cover halves installed on the back of the monitor. To remove the cable cover to access the I/O and power connectors, slip your fingers or a screwdriver into the open slot and pull the bottom of the bottom cover away from the monitor. Determine which cables are to be used (next section, Configuration and Cable Options). Pass the required cable or cables up through the hole in the stand, just above the center of the footplate. Connect the cables to the monitor.

After the cables have been installed, route the cables toward the center. If the power converter is being used, the cylindrical electrical noise suppressor on the power cable will need to be pushed into the cavity at the side. The stick-on cable holders may be used to help route the cables – remove the backing tape and press into place. There are also two slots at the bottom of the cable opening where the included cable ties can be used to secure the cables more permanently. Position the six tabs on the straight side of the cable cover into the slots in the monitor and rotate the cover toward the monitor until it snaps into place. Gather the cables at the center of the stand, then snap the plastic cable cover back onto the center of the stand.

Configuration and Cable Options

Single-cable option: The USB Type-C cable can supply monitor power, video signal, audio signal and touch functionality if the computer/source equipment has a USB Type-C output that is capable of supplying those functions (USB Type-C with DP ALT mode and 12VDC @ 5A power). *Not all USB Type-C sources have all the functionality; consult the documentation for your equipment. It is very important that the MicroTouch-supplied USB Type-C cable be used when using the single cable option.*

Multiple-cable options: If the computer/source equipment does not have a USB Type-C port that supports 12VDC @ 5A power output, power is supplied by the included AC-to-DC power converter's fixed 12 volt DC cable connector. Plug the DC barrel connector into the DC IN jack on the monitor. 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.

If the computer/source equipment does not have a USB Type-C port that supports DP ALT mode, then connect the HDMI cable from the computer/source equipment to the monitor. Also, find the USB Type C-to-A cable and connect the Type-C end to the monitor and the Type-A end to the computer/source equipment to supply the Touch output.

Optional Portrait-orientation Using the Stand

The Landscape orientation cable cover and upper cover half must be removed in order to remove and reorient the stand. Remove the cable cover per above. Remove the upper cover half by inserting a screwdriver into the slot at the end of the straight side of the cover, then pulling or prying the cover loose at that end. Repeat on the other end. The cover can then be pulled away from the monitor. Remove the four screws that secure the stand, folding the stand up or down for access to all the screws. Rotate the stand 90 degrees and reinstall the screws. Connect the cables and install the included Portrait-orientation cable covers – insert the tabs on the curved end into the holes in the monitor, then push on the straight end to snap the cover into place. To remove the covers, insert a flat blade screwdriver into the middle of the straight end, then pry to cover away from the monitor.

Accessory Connectors

Accessory ports/mounts are provided on the top and bottom and each side of the monitor. *These ports are only to be used with appropriate Microtouch accessories.* Accessories are powered and operated by a USB Type-C connector at each port. *Do not attempt to power the monitor by any of these ports.*

To remove an accessory port cover, insert a very small screwdriver or a thin pointed tool into the notch in the center of the cover, then pry the cover away from the monitor.

To install an accessory, connect the accessory's cable, then attach the accessory using the screws provided with it.

Turning the Monitor On and Off

If the monitor does not come on when power is applied, press and release the power switch (right side of the bottom of the monitor as viewed from the front). The monitor should come on and find the correct video source within 10 seconds.




To turn the monitor off, press and hold the power button until the monitor turns off (approximately 5 seconds).

Note: If there is no video input signal for a preset period, the monitor will automatically go into standby mode.

On-Screen Display (OSD)

The On-Screen Display, or OSD, button controls on the bottom of the monitor allow the user to make changes to the video. The OSD can also be operated by touch.



Button	Normal display mode	When OSD Menu is displayed
	Power On/Off	
MENU	Activate the main menu	Exit Menu / Exit selection
	Brightness	Menu Up / Adjust Up
	Mute	Menu Down / Adjust Down
Select	Select / Enter	Enter / Select sub-item function

Using the OSD Menus

Button Method:

With the power on, press the **MENU** button. The on-screen menu will pop up.

Use the **▲**, **▼** and **SELECT** buttons to navigate through the menus and adjust options.

Press the **MENU** button to return to the previous menu or exit the OSD menu.

Once open, the menu and submenu items can also be touch-selected and adjusted.

Touch screen Method:

With the power on, first touch the upper right, then middle right, then the lower right areas of the touch screen. The OSD menu should pop up and selections and adjustments can then be made using the touch screen. Submenus are selected at the top of the OSD menu. To exit the OSD menu, wait for the timeout to elapse (15 seconds by default).

Locking the OSD and Power button functions

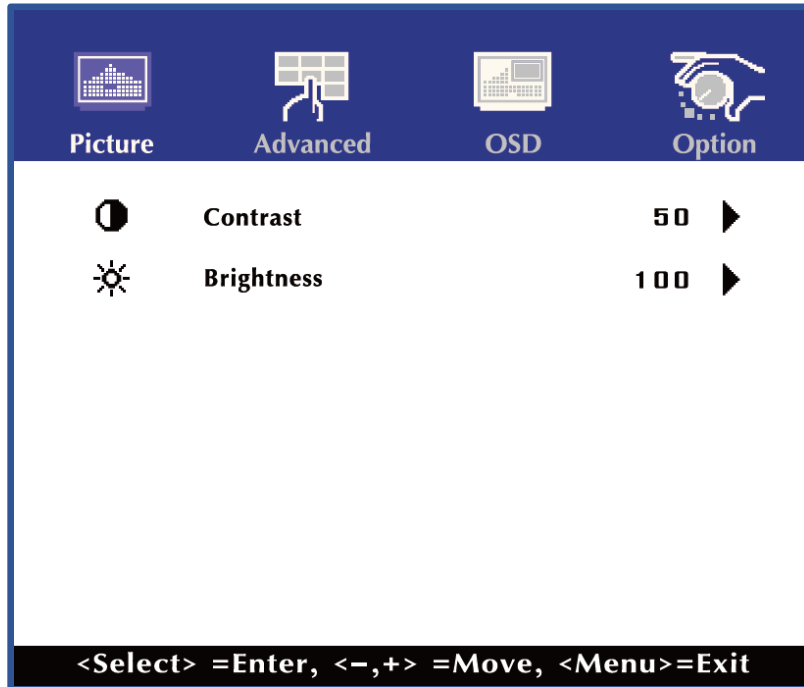
Lock OSD: prevents all the monitor settings from being changed. When this function is activated, all OSD controls and hotkey operations will be disabled except for the Power and RS232 buttons.

1. Press the MENU and Down arrow keys simultaneously, then release; on release, the Lock menu appears, showing OSD “Active” (not locked) or “Inactive” (locked) and Power Active or Inactive.
2. Use the UP/Down buttons to highlight OSD or Power.
3. Press Select.
4. Use Up/Down buttons to select Yes or No (to select the setting).
5. Press Select.
6. The menu will go away after a few seconds and the selected item will lock or unlock per the selection (pressing the Menu button causes the selection to take effect immediately).

Note: The MENU and Down arrow must be pressed at exactly the same time; it may take a few tries to get the buttons pushed simultaneously.

Picture Menu

This menu is used for making common image adjustments.



Contrast

Increases or decreases the contrast of the picture. Press ◀ or ▶, select the desired level, and then press **SELECT**.

Range: 0-100

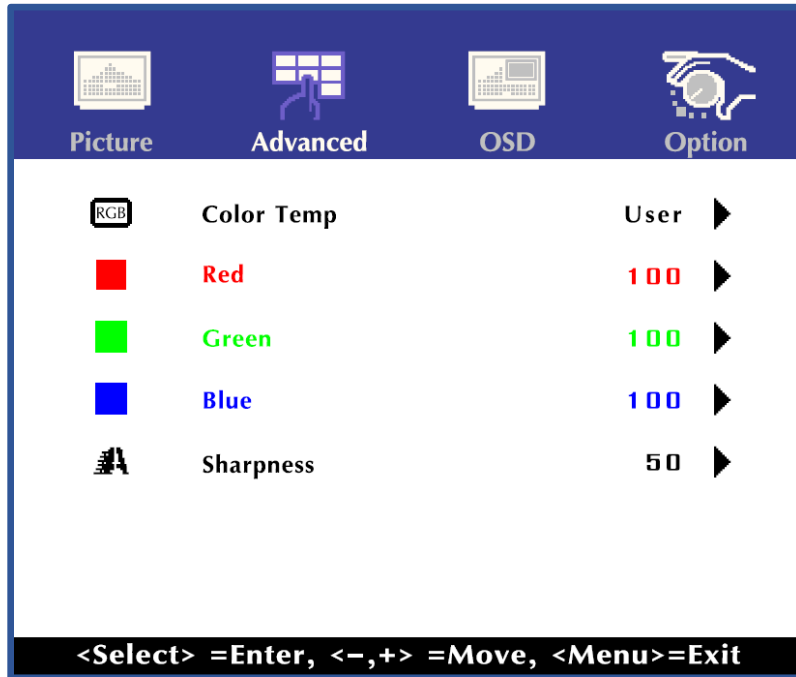
Brightness

Increases or decreases the brightness of the picture. Press ◀ or ▶, select the desired level, and then press **SELECT**.

Range: 0-100

Advanced Menu

This menu is used to adjust color temperature and image sharpness.



Color Temp

Select the color temperature

Options: 5500K, 6500K, 7500K, 9300K, User

Red

Adjust the amount of red in color content

Range: 0-100

Green

Adjust the amount of green in color content

Range: 0-100

Blue

Adjust the amount of blue in color content

Range: 0-100

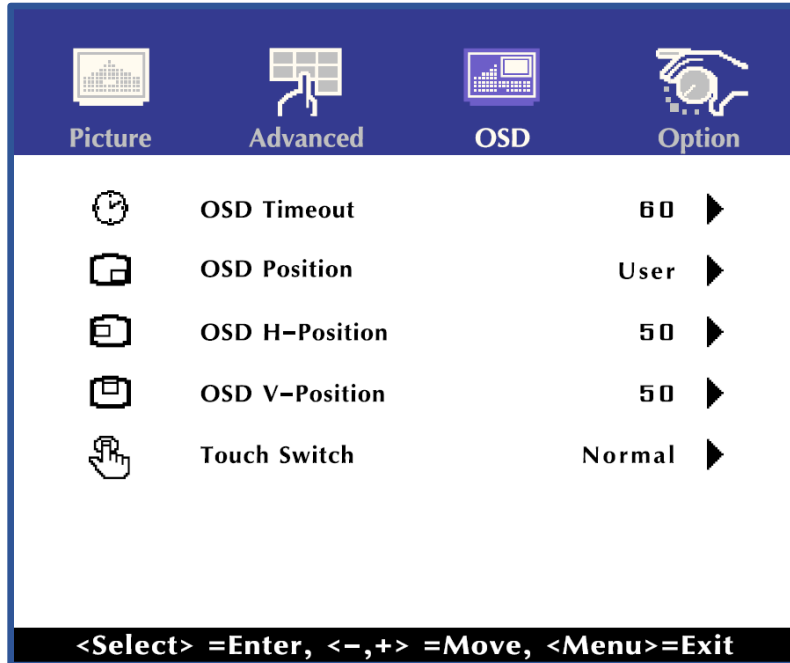
Sharpness

Adjusts the definition of the picture. Press ◀ or ▶, select the desired level, and then press **SELECT**. Selectable only when VGA input is in use.

Range: 0-50

OSD Menu

This menu is used to make set-up adjustments to the OSD itself, as well as other on-screen messages.



OSD Timeout

Adjusts the time in seconds before the OSD menu disappears after no usage.

Range: 0-60 sec

OSD Position

Selects the OSD Position (center or corners). Press ◀ ▶ to select the location.

Options: Top Left, Bottom Left, Top Right, Bottom Right, Center

OSD H-Position

Adjusts the horizontal position of the OSD menu. Press ◀ or ▶ to select the desired horizontal position, then press **SELECT**.

Range: 0-100

OSD V-Position

Adjust the vertical position of the OSD menu. Press ◀ or ▶ to select the desired vertical position, then press **SELECT**.

Range: 0-100

Touch Sensitivity

Adjusts the sensitivity of the touch function. Press ◀ or ▶ to select any of the three sensitivities, then press **SELECT**.

Normal: Standard touch sensitivity.

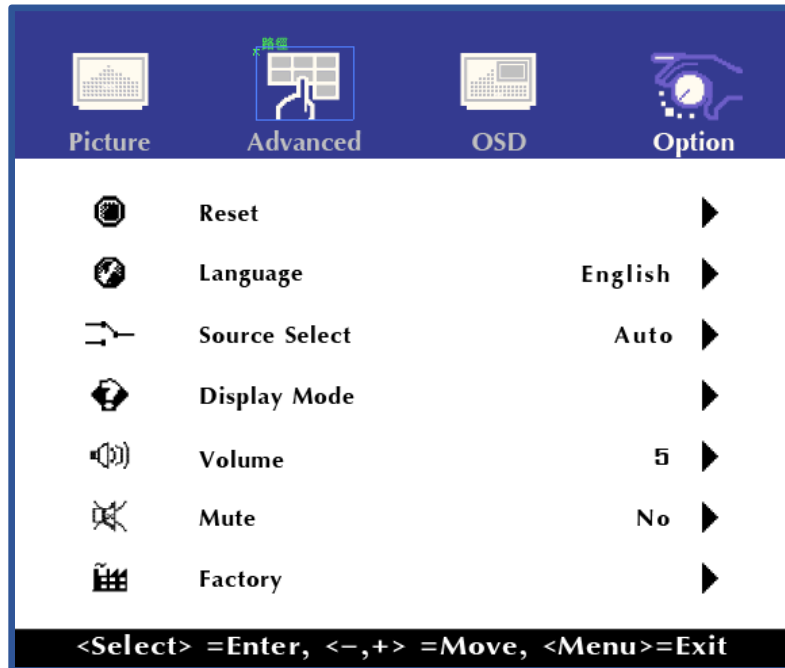
Glove: Increases touch sensitivity for use with or without cotton or similar gloves.

Through-glass mode: Increased touch sensitivity to allow touch operation to project through up to 6 mm of standard window glass.

Range: N/A

Option Menu

This menu is used select, adjust, or display various functions.



Reset

Restore the factory default settings.

Options: Yes, No

Language

Select the OSD language

Options: English, French, Deutsch, Italian, Spanish, Japanese, Traditional Chinese and Simplified Chinese

Source Select

Select the Video Input Source

Options: Auto, USB, HDMI

Display Mode

Display the current video source and resolution information.

Volume

Set the speaker volume.

Range: 0-100

Mute

Mute the speakers

Factory

Enter factory mode

This is only for maintenance by service personnel only.

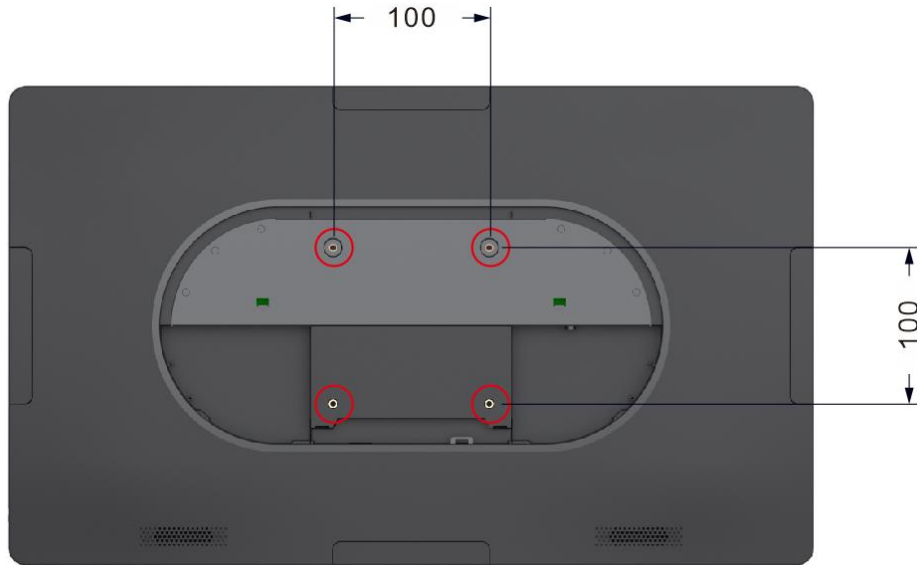
OSD Default Settings

Note: N/A applies when a digital video input (DP or HDMI) is in use

Menu	Parameter	Default Settings
Picture	Contrast	50
	Brightness	100
Advanced	Color Temp	User
	Red	100
	Green	100
	Blue	100
	Sharpness	50
OSD	OSD Timeout	15
	OSD Positon	User
	OSD H-Positon	50
	OSD V-Positon	50
	Touch Switch	Normal
Option	Reset	N/A
	OSD Language	English
	Source Select	Auto
	Volume	50
	Mute	Off

Mounting

The monitor has an integral 100 mm x 100 mm 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 monitor mounting devices.



The monitor may be mounted horizontally (output connectors facing down) or vertically (output connectors facing right). Ensure that the surface material and the standard VESA wall mount bracket (purchased separately) are strong enough to support the weight of the monitor (refer to the Specifications table below for weight information).

To maintain proper ventilation and heat dissipation, keep at least 60mm of clear space from the mounted display to the mounting surface.

Warning

Please use the correct screws! The distance between the back cover surface and the bottom of the screw hole is 5 mm. Please use four M6 diameter screws with 5 mm length to mount the monitor.

Mise en garde

Veuillez utiliser les vis correcte! La distance entre la surface du capot arrière et le fond du trou de vis est de 5 mm. Veuillez utiliser quatre vis de diamètre M6 d'une longueur de 5 mm pour monter le moniteur.

Specifications and Dimensions

Specifications

Model	M1-156DT-A1	M1-215DT-A1	M1-238DT-A1
LCD Panel			
Type	TFT LCD		
Size (Diagonal)	15.6 inch	21.45 inch	23.8 inch
Resolution	1920 x 1080		
Contrast (typ.)	1500:1	3000:1	4000:1
Brightness (typ.)	425 nits	298 nits	301 nits
Response Time (typ.)	16 ms	6.5 ms	16 ms
Viewing Angle	178° H / 178° V		
Touch System			
Type	Optically bonded P-CAP		
Touch Points	Normal mode: up to 10 simultaneous points Glove mode: up to 5 simultaneous points Through-glass mode: up to 2 simultaneous points		
Touch Screen Interface	USB-HID Type-C (or Type-A using included converter cable)		
Antiglare treatment	Etch		
Audio			
Speakers	Two, each 2W, 4 ohm		
Power			
Power Supply	12VDC @ 5A (center pin positive, barrel ground)		
Power Consumption	32W monitor only 46W max w/peripherals	32W monitor only 46W max w/peripherals	37W monitor only 51W max w/peripherals
Power Saving	Sleep mode <1.5W Off mode <0.3W		
Dimensions			
Width	378.03 mm/14.88 in	515.44 mm/20.29 in	571.8 mm/22.51 in
Height w/o stand with stand	227.34 mm/8.94 in 304.65 mm/11.99 in	306.9 mm/12.08 in 344.4 mm/13.56 in	341.6 mm/13.44 in 361.7 mm/14.24 in
Depth w/o stand with stand	32 mm/1.26 in 225 mm/10.04 in	41 mm/1.61 in 225 mm/10.04 in	42.2 mm/1.66 in 225 mm/10.04 in

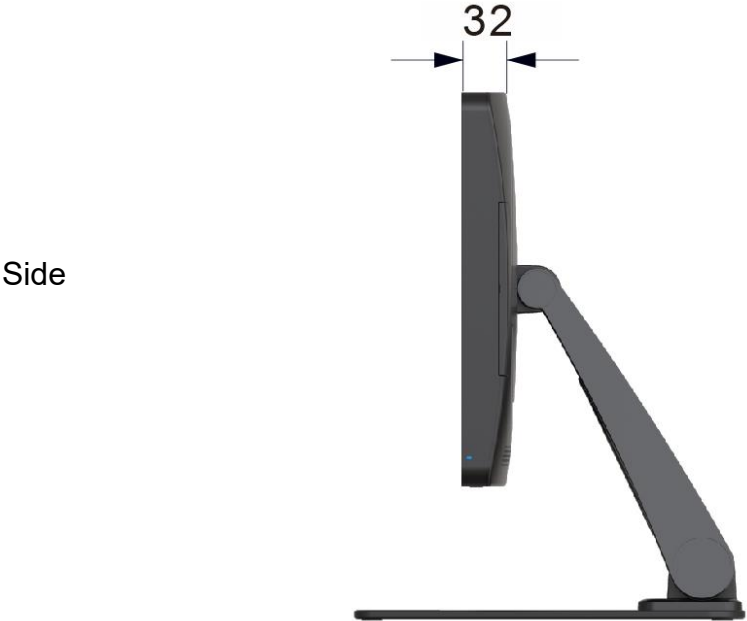
Model	M1-156DT-A1	M1-215DT-A1	M1-238DT-A1
Weight			
Net Weight w/o stand	2.94 kg/6.48 lb	4.27 kg/4.41 lb	4.03 kg/8.88 lb
with stand	4.91 kg//10.82 lb	6.92 kg/15.26 lb	7.1 kg/15.66 lb
Shipping Weight	6.25 kg/13.78 lb	9.1 kg/20.06 lb	9.75 kg/21.5 lb
Mounting			
VESA Mount Pattern (mm)	100 x 100		
Environmental			
Operating Temperature	0°C ~ 40°C		
Operating Humidity	35% ~ 85% RH. (non-condensing)		
Storage Temperature	-20°C ~ 60°C		
Storage Humidity	35% ~ 85% RH. (non-condensing)		

Supported Timings

Mode	Resolution	H-Freq. (KHz)	Bandwidth (MHz)	Polarity	
				H	V
1	720 x 400 @ 70Hz	31.47	28.322	-	+
2	640 x 480 @ 60Hz	31.47	25.175	-	-
3	640 x 480 @ 66Hz	35	32.24	-	-
4	640 x 480 @ 72Hz	37.86	31.5	-	-
5	640 x 480 @ 75Hz	37.5	31.5	-	-
6	800 x 600 @ 56Hz	35.16	36	+	+
7	800 x 600 @ 60Hz	37.88	40	+	+
8	800 x 600 @ 75Hz	46.88	49.5	+	+
9	800 x 600 @ 72Hz	48.08	50	+	+
10	832 x 624 @ 75Hz	49.72	57.283	-	-
11	1024 x 768 @ 60Hz	48.36	65	-	-
12	1024 x 768 @ 70Hz	56.48	75	-	-
13	1024 x 768 @ 75Hz	60.02	78.75	+	+
14	1280 x 1024 @ 60Hz	64	108	+	+
15	1280 x 1024 @ 75Hz	80	135	+	+
16	1152 x 864 @ 75Hz	67.5	108	+	+
17	1280 x 960 @ 60Hz	60	108	+	+
18	1440 x 900 @ 60Hz	56	106.5	-	+
19	1440 x 900 @ 75Hz	70.6	136.75	-	+
20	1680 x 1050 @ 60Hz	65.2	146	-	+
21	1280 x 768 @ 60Hz	47.776	79.5	-	+
22	1920 x 1080 @ 60Hz	67.5	148.5	+	+

Dimensions

M1-156DT-A1



M1-215DT-A1

Front

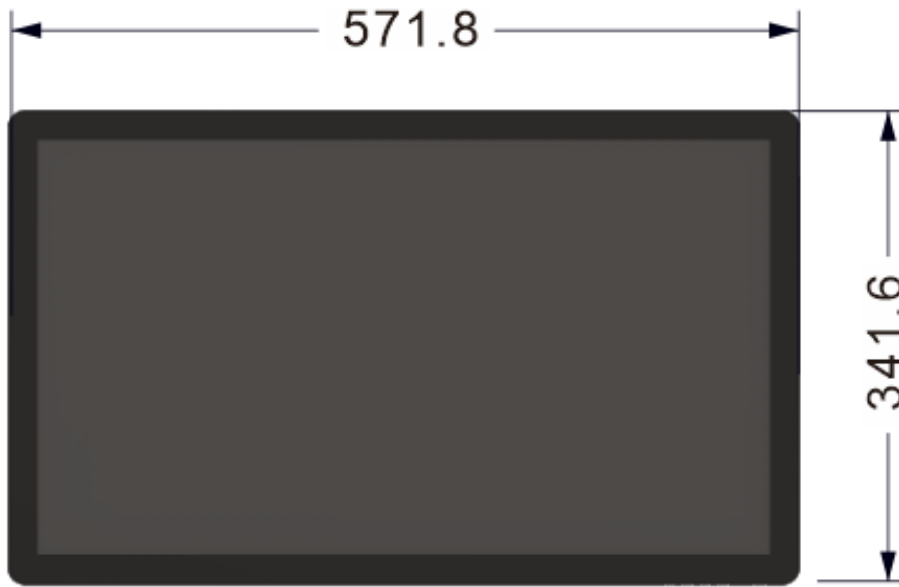


Side



M1-240DT-A1

Front



Side



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

No image on monitor

- Check that the video signal source device is turned on.
- Check that the selected video input signal matches the video connection.
- The monitor or computer may be in SLEEP mode. Press any key/move the mouse/touch the touchscreen and wait a few seconds to see if the image appears.
- Check that the DC power connector is fully seated.
- Check that the AC cable is securely connected to the wall outlet and to the AC to DC converter.
- Make sure the MicroTouch power converter is being used.
- Try another MicroTouch-approved power converter if possible.

Monitor display is dim.

- Use the OSD controls to increase the brightness.
- Use the OSD controls to increase the contrast.

Can only adjust Contrast and Brightness using OSD, cannot select Position, AutoAdjust, etc.

- Monitor is connected to a digital video signal source (HDMI or DP), which does not need such adjustments. Only analog (VGA) video signal needs these adjustments.

Monitor displays the “Out of Range” message.

- This message will only occur when using the VGA video signal input; use either the HDMI or Display Port video signal input if your signal source equipment supports either of those.
- Reduce the resolution to a resolution the monitor supports – see the Supported Timings chart in the Specifications and Dimensions section of this manual.

Monitor display image looks strange.

- Try the Auto Adjust function in the OSD (only available when using the VGA video signal input).
- Adjust your computer’s resolution/timing mode to be within the allowable timing ranges specified for your touch monitor (see section above).

Touch functionality doesn’t work or works incorrectly.

- Make sure the USB cable is properly connected.
- Fully remove any protective sheets from the screen, then cycle power Off/On.
- Ensure that the monitor is in an upright position with nothing touching the screen, then cycle power Off/On.
- Legacy operating systems, prior to circa 2007, may require drivers to support Touch Devices. Please contact MicroTouch Technical Support.

Neither the OSD nor power buttons respond when pressed.

- See the Lock/Unlock section to check if both functions are locked.
- If the wired OSD remote is in use, make sure it is securely connected.

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 touchscreen display and their 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 Monitor Type designation (Type) : M1-156DT-A1 M1-215DT-A1 M1-238DT-A1						
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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