Nexio

NEXIO Co.,Ltd.

www.inexio.co.kr

NEX104MF(R)G & NEX121MF(R)G &

NEX150MF(R)G & NEX170MF(R)G & NEX190MF(R)G

VGA, Composite, S-video & Audio supported

LCD Monitor User Guide

Please see the following page for the latest enhancements.

Revised 02/08

Note : This information in this document is subject to change without notice.

Thank you for your selection of new TFT LCD Monitor.
Please take a few minutes to read this User's manual for the best performance of this monitor. Information in this manual is subject to change without prior notice for improving design, function and etc. IBM, DOS, PC and VGA are trademarks of International Business Machines Corporation.

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Features

☞The NEX 104/121 series is capable of displaying 6bit, 262K colors colors in a continuous spectrum, while NEX150/170/190 series is capable of displaying 16M colors. The height contrast LCD enhances the image with no geometric distortion.

☞ This LCD monitor is designed to act as a full monitor interface with the main functionality of an analogue RGB, Video(composite & S-Video) and Audio.

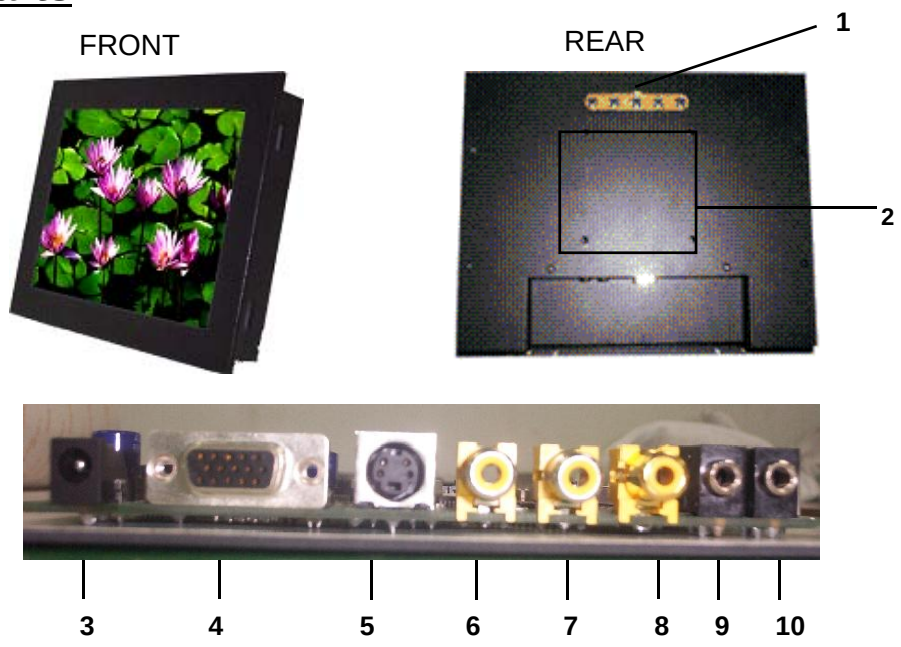
☞ NEX series is supplied with touch screen such as resistive and infrared in case of touch screen option or an anti-glare impact window on non touch screen models as per request from customers.

☞ This TFT-LCD monitor conforms to the VESA (Video Electronics Standards Association) standard and DDC1/DDC2B.
A picture adjustment function makes it possible to adjust the image quality to match the input signal.

☞ Auto-setup control on OSD screen adjust image position, horizontal size or fine settings.

☞ The power consumption can be reduced by using this TFT-LCD monitor in combination of a computer that conforms to the VESA DPMS(Display Power Management Signaling) standard.

Monitor Parts



1. OSD control button
2. VESA standard hole (100mm x100mm)
3. 12V DC
4. VGA
5. S-VHS
6. CVBS
7. AV(L)
8. AV(R)
9. Audio in
10. Audio out

Package Contents

Your LCD monitor package will consist of the primary components listed below.

Open shipping container and lay all components on a flat clean surface
☞ LCD Monitor
☞ DC Power adapter : Connects to DC In port on the base of monitor
☞ Power cord : Connects wall outlet to DC Power adapter
☞ D-SUB 15pin VGA cable : Connects PC to LCD monitor
☞ RS232 or USB Touch Interface cable(touch screen option units only)
☞ Manual and Touch Driver CD-ROM(touch screen units only)
☞ Brackets for mounting (Option)

Connecting to PC

To attach your TFT-LCD monitor to your system, follow the instructions hereunder

1. Connect 15-pin D-SUB cable to the connector or display card of your computer system. Tighten all the screws
2. Connect 15-pin D-SUB cable to the appropriate connectors on the back of the monitor head
3. Connect AC adapter cable to the power input connectors on the back of the monitor head
4. Connect one end of the power cord to the AC adapter and the other end to the power outlet
5. If the unit has a touch screen, connect the touch screen interface cable to the computer.
6. Turn on the monitor
7. To complete the setup
   A. set up your computer system to :
      640 x 480 resolution @ 60Hz.(NEX104 MF(R)G)
      800 x 600 resolution @ 60Hz.(NEX121 MF(R)G)
      1024 x 768 resolution @ 60Hz.(NEX150 MF(R)G)
      1280 x 1024 resolution @ 60Hz.(NEX170/190/ MF(R)G)
   B. Use the following OSD controls
      - Auto Adjust
      - Auto Color

❑ **Adjustment of the H/V Position and Image Adjust H. Size controls may be required to complete setup of your TFT- LCD monitor. For a full description of these OSD controls, refer to OSD menu functions**

Recommended Use

FOR OPTIMUM PERFORMANCE, PLEASE NOTE THE FOLLOWING WHEN SETTING UP AND USING THE TFT-LCD MONITOR.

- DO NOT OPEN THE MONITOR.
  Opening or removing covers may expose you to dangerous shock hazards or other risks.
  Once you open it the warranty voids.

- To protect from electrical shock, unplug the display power supply from the wall before moving.

- Do not put anything on top of the monitor.

- Do not spill any liquids into the cabinet or use your monitor near water.

- Do not place this product on a sloping or unstable cart, stand or table, as the monitor may fall, causing serious damage to the monitor.

- If you connect or disconnect the VGA cable while both of PC's and LCD monitor's power is turned on, the monitor might show some garbage on the screen or could be damaged. Please turn off the TFT-LCD monitor's power before connect or disconnect VGA cable.

- Ensure that sufficient space is available around the display to provide air circulation for cooling.

- Ensure that ambient air temperature will not exceed the specified maximum temperature.

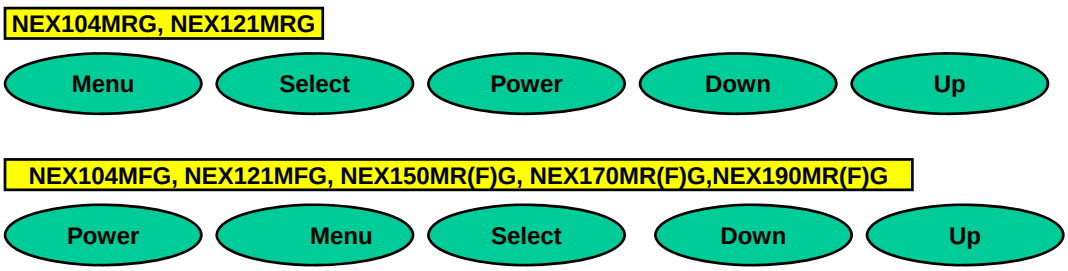
- Handle with care when transporting. Save packaging for transporting.

- Do not touch or press the surface of the LCD panel, it will cause a permanent damage. Use only soft cloth with non-ammonia glass cleaner to clean the panel.

Adjusting the displays

The microprocessor in the display has the capability to adjust itself to the computer to which it is attached. This auto adjustment will take place when the unit is first installed and connected to a computer and there after. If the video input change, or is user imitated. If the picture is not satisfactory, the first step is to allow the unit to attempt to re-adjust itself to your computer.

Located on the rear of unit (MRG Version) or the front of unit (MFG version) is a membrane keypad used for adjusting the display. Please see the figure below :



OSD menu functions

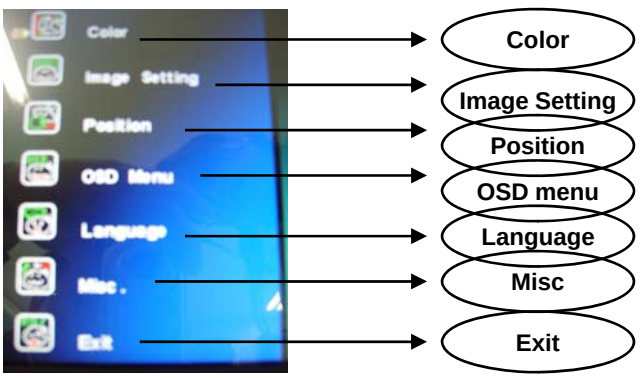
OSD (On-Screen-Display) control functions as follows :
To access OSD Menu, press MENU button

Display mode

To change the display mode, press the select key each time

OSD Screen for Monitor Mode

Press MENU key, OSD screen appears as below.



Press UP/DOWN Key, you can move between the ten primary functions.
Press Select key at Picture group to highlight this sub menu. You can now navigate the sub menu using the UP/DOWN keys. To make an adjustment to an item, use the UP/DOWN buttons to make your adjustments. At anytime, press the Menu button three times to exit and save your settings.

Color

Press MENU key to bring up the OSD. Press UP/DOWN key to move between the 7 primary screen functions. Press the Select button at Color to select it. Press the UP/DOWN key, you can now move between functions and press Select to adjust the value of each item with the UP/DOWN key. Please MENU key to return previous state.

* Brightness Adjust the brightness of the screen
* Contrast Adjust the contrast of the screen
* Color Adjust Adjust the color of the screen's image
* Color Temp 9300 and 6500 Temperature and user Temperature, Red, Green & Blue.

Image Setting

Press MENU key to bring up the OSD. Press UP/DOWN key to move between the 7 primary screen functions. Press the Select button at Image Setting to select it. Press the UP/DOWN key, you can now move between functions and press Select to adjust the value of each item with the UP/DOWN key. Please MENU key to return previous state.

* Clock Adjust the horizontal size of the screen's image
* Phase Adjust the focus of the screen's image
* Sharpness Adjust the clearness of the screen's image

Position

Press MENU key to bring up the OSD. Press UP/DOWN key to move between the 7 primary screen functions. Press the Select button at Position to select it. Press the UP/DOWN key, you can now move between functions and press Select to adjust the value of each item with the UP/DOWN key. Please MENU key to return previous state.

* H. Position Adjust the horizontal position of the screen's image
* V. Position Adjust the vertical position of the screen's image.

OSD Menu

Press MENU key to bring up the OSD. Press UP/DOWN key to move between the 7 primary screen functions. Press the Select button at OSD Menu to select it. Press the UP/DOWN key, you can now move between functions and press Select to adjust the value of each item with the UP/DOWN key. Please MENU key to return previous state.

* Language	Select one of the six language (Korean, English, French, German, Italian, Spanish)
* OSD H. Pos	Adjust the horizontal position of the OSD Window
* OSD V. Pos	Adjust the vertical position of the OSD window
* OSD Timer	Adjust the maintain timing of the OSD window

Language

Press MENU key to bring up the OSD. Press UP/DOWN key to move between the 7 primary screen functions. Press the Select button at Language to select it. Press the UP/DOWN key, you can now move between functions and press Select to adjust the value of each Item with the UP/DOWN key. Please MENU key to return previous state.

* Language	Select one of the seven language(English, French, German, Spanish, Korean, Chinese, Japanese)

Miscellaneous

Press MENU key to bring up the OSD. Press UP/DOWN key to move between the 6 primary screen functions. Press the Select button at Misc to select it. Press the UP/DOWN key, you can now move between functions and press Select to adjust the value of each Item with the UP/DOWN key. Please MENU key to return previous state.

* Signal Source	Select the input signal source.(Ex. Analog/Video etc…)
* Reset	Initializing that memory in store of the user mode
* Audio	Adjust the volume of sound
* Mute	Function of Mute

Exit

Exit the OSD menu

Note : This OSD button is used to select other inputs to the LCD, such as Composite and S-Video.

Troubleshooting

No Picture	Check that the signal cable is properly connected to the display. Try disconnecting the video cable from the display and connecting to another display if available to confirm the presence of proper video. Make sure power is connected to the proper AC source. Make sure the resolution mode is supported by the display and check display settings of the PC Confirm that the video cables is not defective.
Image Persistence	Image persistence occurs when a ghost of an image remains on the screen after the screen image has been changed. Unlike a CRT monitor, and LCD monitor's image persistence is not permanent. To erase an image ghost, turn the monitor off for several hours. What happens is the liquid crystals after extended periods of operation. Check for proper Max. Resolution and Frequency.
Picture Quality & Image Stability	Check for proper video cable for proper grounding and shielding. Check the signal source for proper signal. Check for proper adjustment of the Phase and Frequency controls. Check for proper recommended signal timing.
Green LED not lit	Check for proper power and power connections.
Display image is not properly sized	Press the "Select" button to Auto Adjust the display. Adjust the Vertical and Horizontal size controls via the OSD. (Reference setup adjustments) Ensure that a supported mode is selected on the display card or system being used. Consult the display card or system manual for proper video.
Display is present but "bar" Appear or roll across screen	Ground loop problem between computer and display. Interference from adjacent equipment.

Image will not adjust	Video timing outside of range Use the one-screen menu to adjust the clock setting. Make sure timing is within VESA standard.

Slight distortion in text or Graphics	Not working in native resolution.

Vertical shaded bars on Screen image	Horizontal size not properly adjusted. Adjust horizontal size.

Image is not stable	Monitor has incorrect or bad sync signals. Check for proper video cable installation. Replace suspected faulty cable. Check to ensure that video source is within the display's operating range.

Specification

SIZE		10.4”	12.1”
PANEL	**Display Type**	VGA TFT	SVGA TFT
	Max. Resolution	640 x 480	800 x 600
	Screen (Diagonal) Size	10.4Inche	12.1Inche
	Display Colors	6bit, 262K Colors	6bit, 262K Colors
	Pixel Pitch	0.33 x 0.33mm	0.3075 x 0.3075mm
	Brightness	400cd/㎡	300cd/㎡
	Contrast Ratio	300 : 1(Typical)	200 : 1(Typical)
	Viewing Angle (typical)	60º/60º(L/R) & 40º/50º(U/D)	60º/60º(L/R)&40º/55º(U/D)
	Display Area	211.2 x 158.4mm	246.0 x 184.5mm
IINPUT SIGNAL	**Supported Video signal**	VGA (15Pin D-Sub), Audio Input/output	
	Option	Composite, S-Video (PAL/Secam/NTSC)	
RESOLUTION SUPPORT	**Supported**	640 x 350 @ 70 Hz 720 x 400 @ 70 HZ 640 X 480 @ 60Hz ~ 75Hz	640 x 350 @ 70 Hz 720 x 400 @ 70 HZ 640 X 480 @ 60Hz ~ 75Hz 832 x 624 @ 75Hz (MAC) 800 x 600 @ 56Hz ~ 75 Hz
	Recommended	640 x 480@60Hz	800 x 600@60Hz
POWER CONSUMPTION	**On working** **Off**	<30 watt (Max.) <3 watt	
OSD CONTROL	**Function**	Brightness, Contrast, Position(H/Position), Clock(Clock, Phase, Use), Color (Color temperature, User Adjustment), Language, Information, OSD(OSD time, H/V position, Use), Auto Adjust	
	Language	English, French, German, Italian, Spanish	
Plug & Play		DDC1/DDC2B	
POWER SAVING		VESA DPMS	
POWER SUPPLY ADAPTER	**Input**	AC 100V~240V, 50~60Hz	
	Output	12V DC	
OPERRATING Temperature		0-50 ℃	
STORAGE Temperature		-20 ℃ - 65 ℃	
OPERRATING Humidity		10-90% (Non Condensing)	
DIMENSION		289 x236.4 x 43mm	319.5 x 260.5 x 45mm
WEIGHT		2.5 / 4kg	3.2 / 4.6kg
STANDARD ACCESSORIES		15-PIN VGA cable, AC adapter, Power cord, Manual CD-ROM	
Options	**Front Bezel**	Aluminum	
	Touch Screen	Infrared Touch	
	Touch Interface	USB / Serial	

Note : Features and specifications are subject to change without notice

Specification

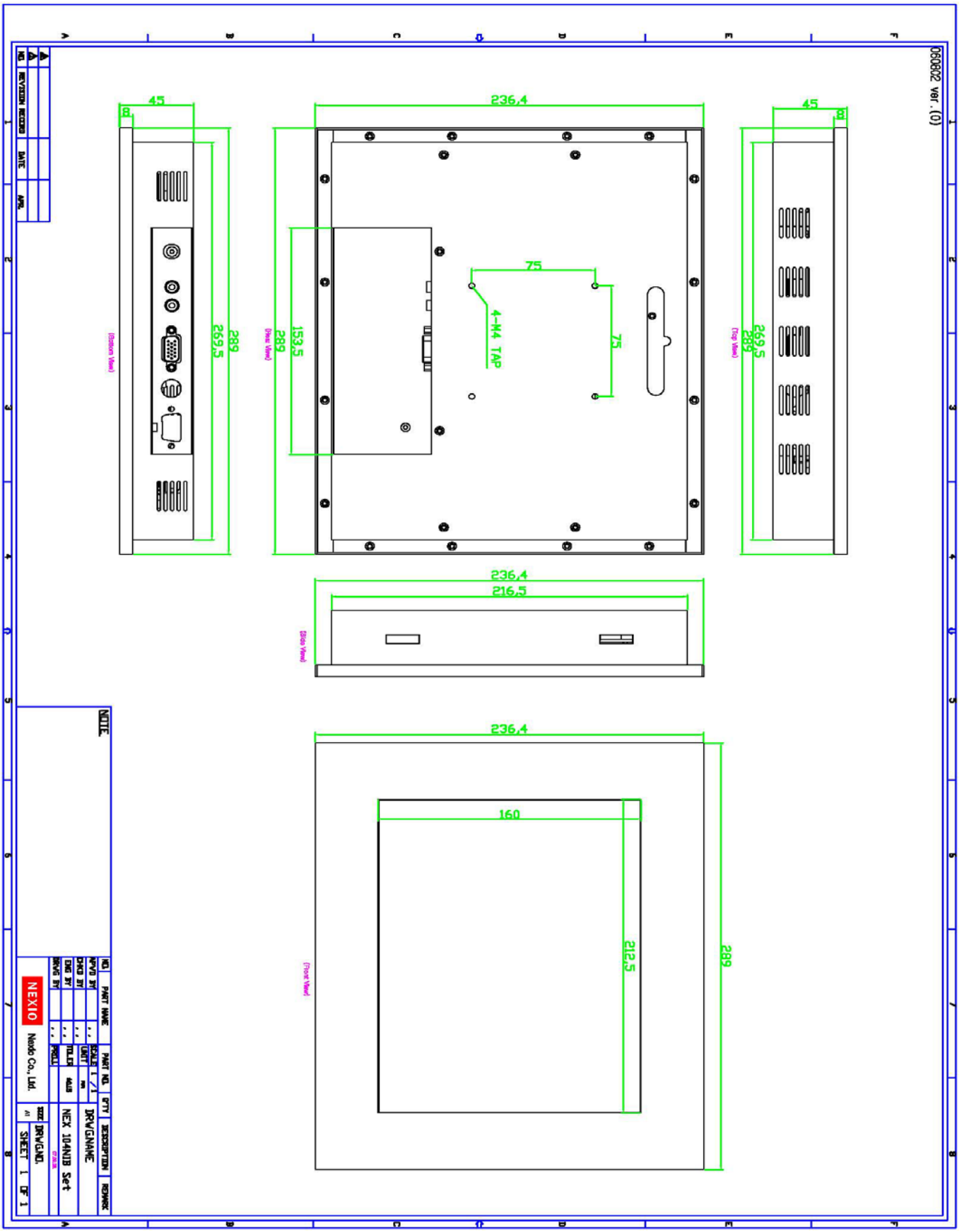
SIZE		15.0”	17”	19”
PANEL	**Display Type**	XGA TFT	SXGA TFT	SXGA TFT
	Max. Resolution	1024 x768	1280 x 1024	1280 x 1024
	Screen (Diagonal) Size	15Inche	17Inche	19Inche
	Display Colors	16M Colors	16M Colors	16M Colors
	Pixel Pitch	0.264 x 0.264mm	0.264 x 0.264mm	0.294 x 0.294mm
	Brightness	300cd/㎡	450cd/㎡	1000cd/㎡
	Contrast Ratio	400 : 1(Typical)	350 : 1(Typical)	500 : 1(Typical)
	Viewing Angle (typical)	80º/80º(L/R) & 80º/80º(U/D)	80º/80º(L/R)&70º/70º(U/D)	89º/89º(L/R)&89º/89º(U/D)
	Display Area	304.1 x 228.1mm	337.92 x 270.33mm	376.32 x 301.056mm
IINPUT SIGNAL	**Supported Video Signal**	VGA (15Pin D-Sub), Audio Input/output		
	Option	Composite, S-Video (PAL/Secam/NTSC)		
RESOLUTION SUPPORT	**Supported**	640 x 350 @ 70 Hz 720 x 400 @ 70 HZ 640 X 480 @ 60Hz ~ 75Hz 832 x 624 @ 75Hz (MAC) 800 x 600 @ 56Hz ~ 75 Hz 1024 X 768 @ 60Hz ~ 75Hz	640 x 350 @ 70 Hz 720 x 400 @ 70 HZ 640 X 480 @ 60Hz ~ 75Hz 832 x 624 @ 75Hz (MAC) 800 x 600 @ 56Hz ~ 75 Hz 1024 X 768 @ 60Hz ~ 75Hz 1280 x 1024@ 60Hz ~ 75Hz	
	Recommended	1024 x 768@60Hz	1280 x 1024@60Hz	
POWER CONSUMPTION	**On working** **Off**	<36 watt (Max.) <3 watt		
OSD CONTROL	**Function**	Brightness, Contrast, Position(H/Position), Clock(Clock, Phase, Use), Color (Color temperature, User Adjustment), Language, Information, OSD(OSD time, H/V position, Use), Auto Adjust		
	Language	English, French, German, Italian, Spanish		
Plug & Play		DDC1/DDC2B		
POWER SAVING		VESA DPMS		
POWER SUPPLY ADAPTER	**Input**	AC 100V~240V, 50~60Hz		
	Output	12V DC		
OPERRATING Temperature		0-50 ℃		
STORAGE Temperature		-20 ℃ - 65 ℃		
OPERRATING Humidity		10 - 95% (Non Condensing)		
DIMENSIO		382 x 302 x 56mm	411 x 348 x60mm	460x392x64.6mm
WEIGHT		4.2 / 5.9kg	5.5 / 7.2kg	6.8 / 8.5kg
STANDARD ACCESSORIES		15-PIN VGA cable, AC adapter, Power cord		
Options	**Front Bezel**	Aluminum		
	Touch Screen	Infrared , 5-wire Resistive Touch		
	Touch Interface	USB / Serial		

Note : Features and specifications are subject to change without notice

Infrared Touch Screen Specification

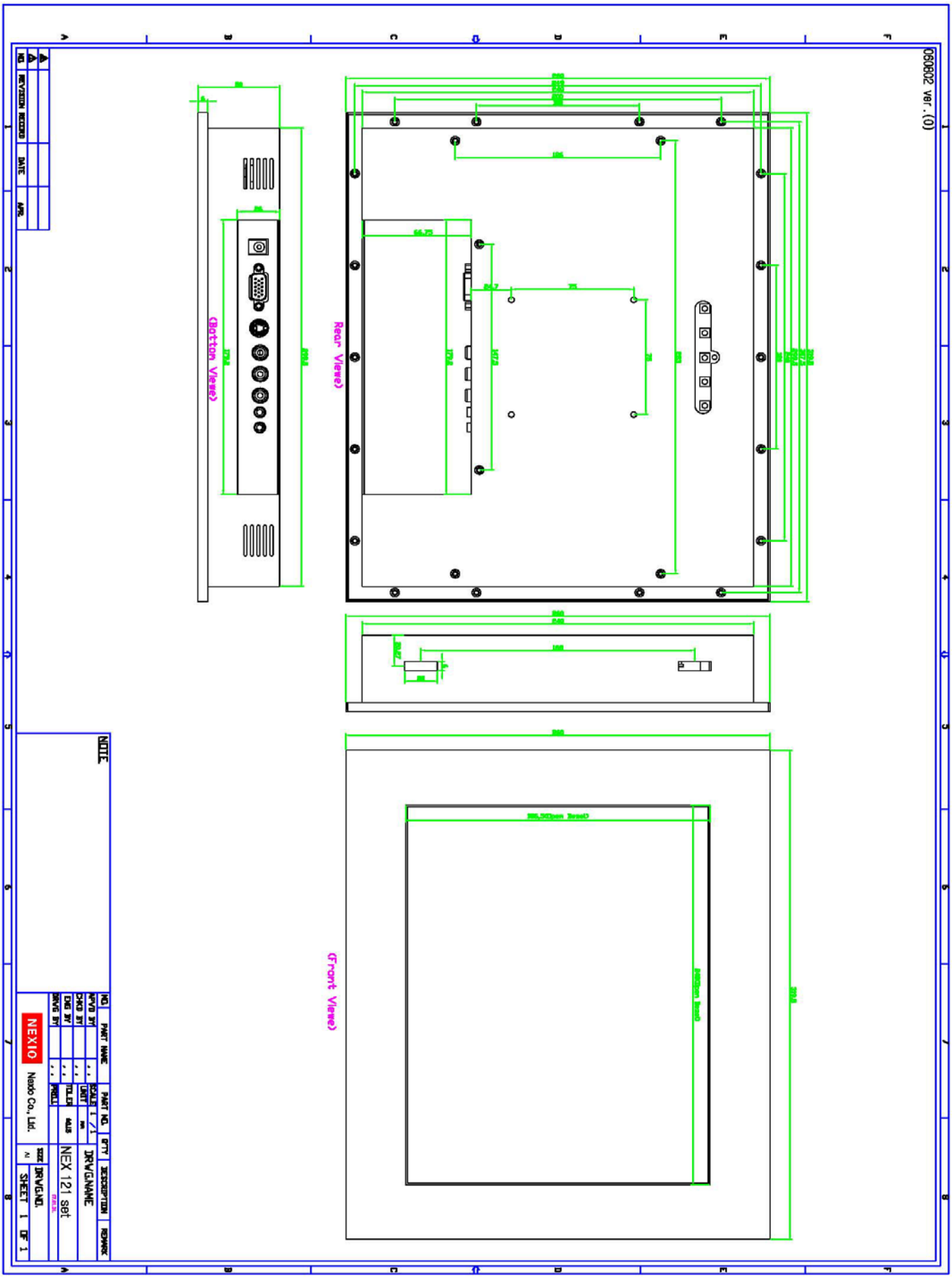
MECHANICAL	
Input Method	Finger or gloved hand activation
ELECTRICAL	
Position Accuracy	Typical centroid accuracy 2.5mm
Resolution	Touch point density is based on controller resolution of 16,384x16,384
Touch Activation Force	No minimum touch activation force
Operating Voltage	DC 5V
Power	0.6W(Current) 120mA at DC 5V
PANEL	
Transmission	92%, Up to 100%
Response Time	Under 10ms
Touch Intensity	Over 60,000,000 single point touch
Thickness of glass	3.2mm with anti-vandal
ENVIRONMENT	
Temperature	Operating -20℃to 85℃ Storage -40℃to 85℃
Humidity	Operating 10% to 85% Storage 0 to 95%
Altitude Operating	3,000m
Seal Ability	Can be sealed to meet NEMA4 and IP65 standard
Interface	RS232(C) or USB
Multi monitor	Split, Dual, multi monitor support
Drift	No drift
Mouse Click	Right click function support
Available size	10.4” to 103”(custom size for OEM available)
Warranty	5 years – limited warranty

NEX 10.4”



060802 ver.(0)
45
8
236,4
289
269,5
153,5
75
4-M4 TAP
216,5
160
212,5
(Bottom View)
(Rear View)
(Top View)
(Side View)
(Front View)
NOTE
NEXIO
Nexio Co., Ltd.
DRWGNAME
NEX 104NIB Set
DRWGNO.
SHEET 1 OF 1

NEX 12.1”


060802 ver.(0)
(Bottom View)
Rear View)
(Front View)
NOTE
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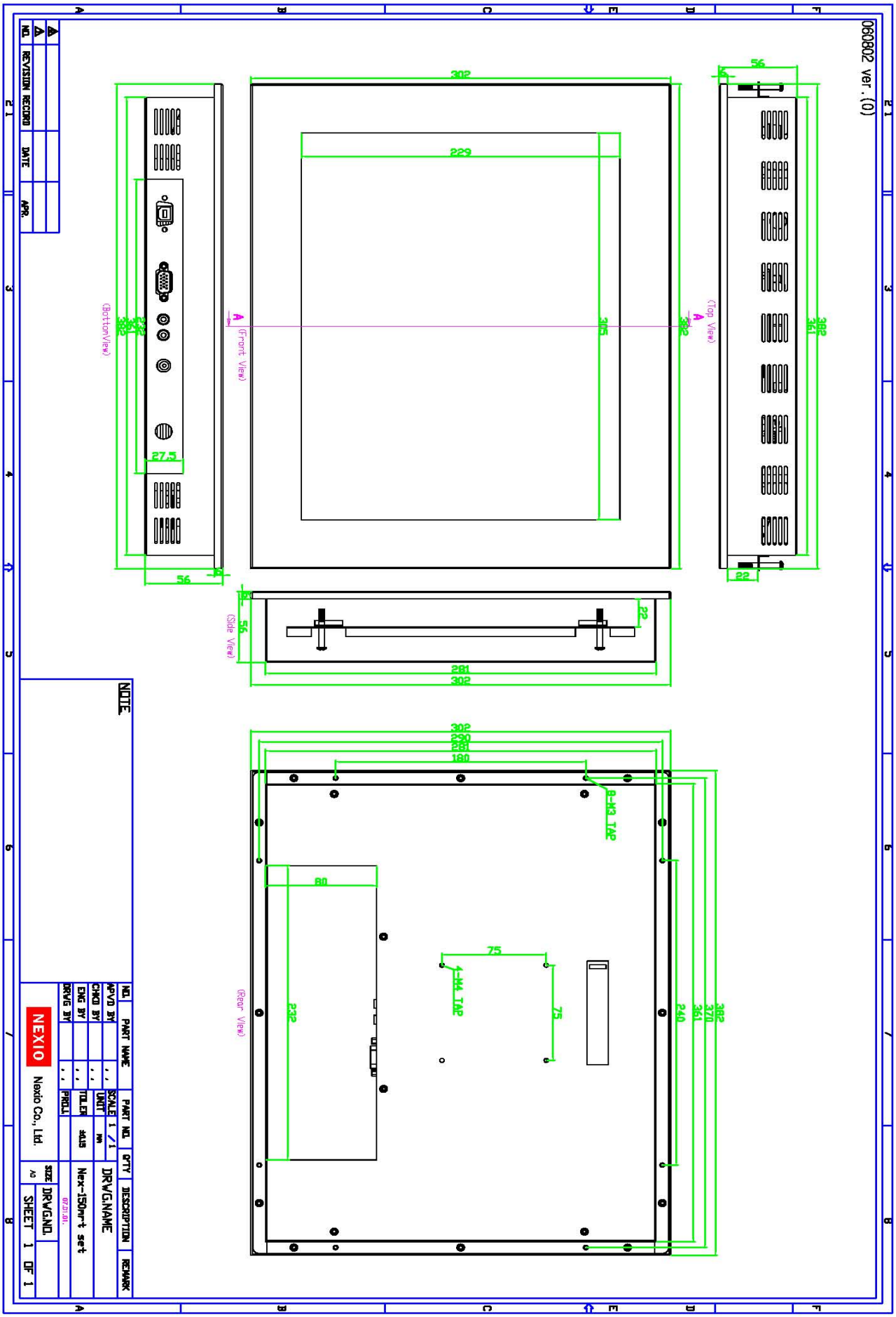
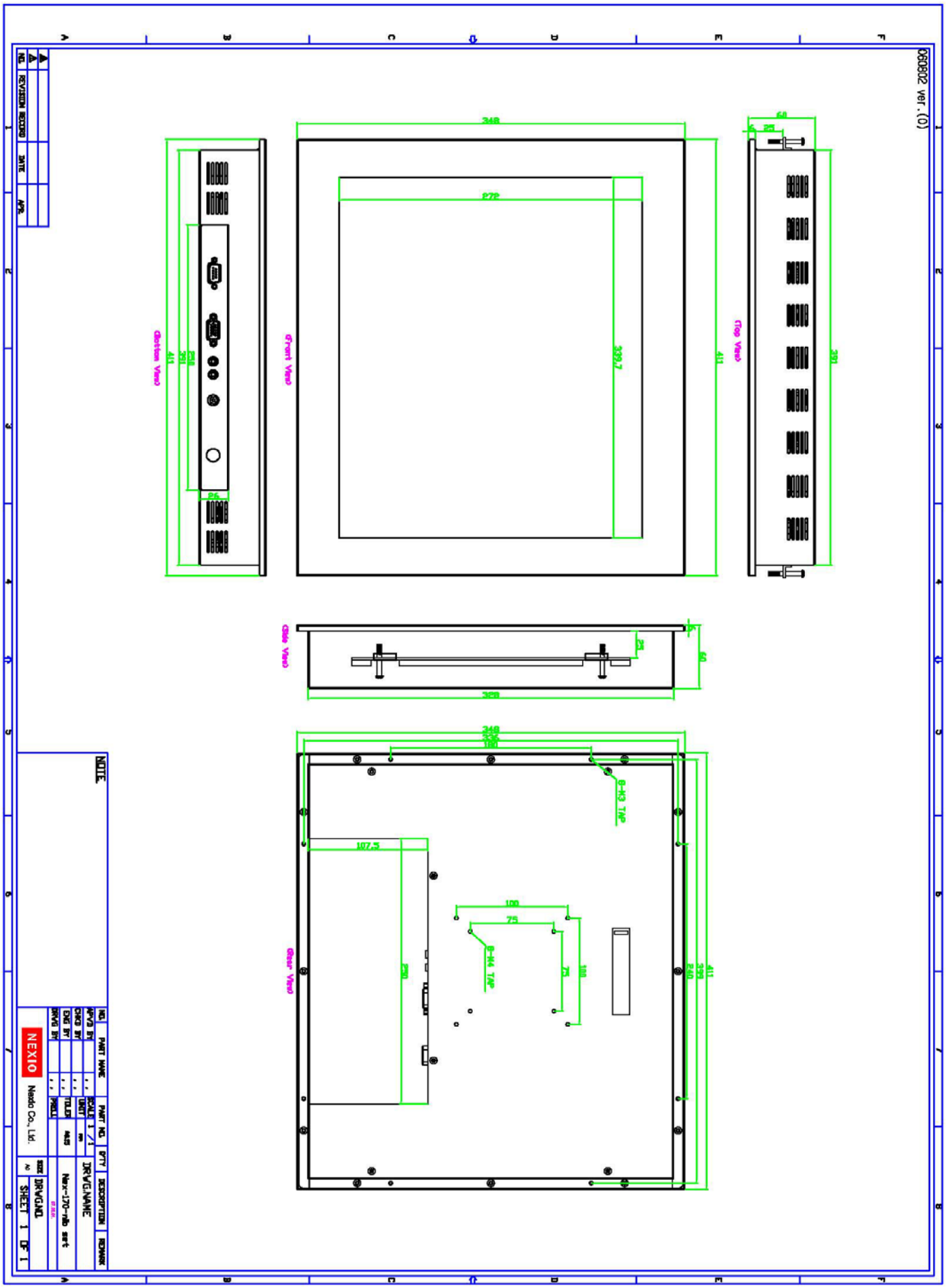
Nexio Co., Ltd.
NEX 121 set
DRWGNAME
SHEET 1 OF 1

NEX 15”



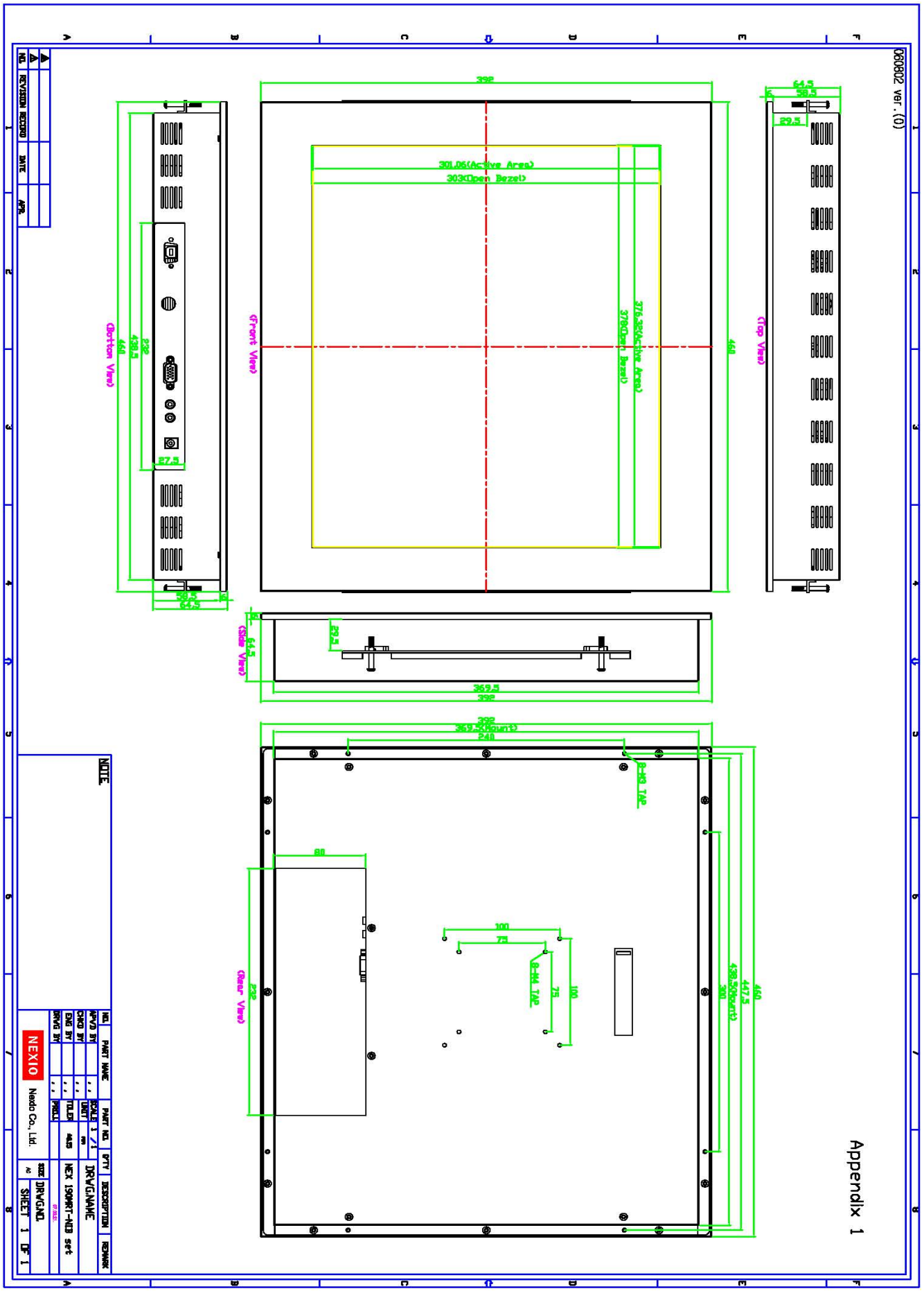
060802 ver.(0)
(Bottom View)
(Front View)
(Top View)
(Side View)
(Rear View)
8-M3 TAP
4-M4 TAP
NOTE
NEXIO
Nexio Co., Ltd.
DRWG.NAME
Nex-150mrt set
DRWG.NO.
SHEET 1 OF 1

NEX 17”



060802 ver.(0)
348
272
339.7
411
391
60
25
(Top View)
(Front View)
(Bottom View)
(Side View)
(Rear View)
328
107.5
100
75
8-M3 TAP
8-M4 TAP
NOTE
NEXIO
Nexio Co., Ltd.
DRWG.NAME
Nex-170-mb set
DRWG.NO.
SHEET 1 OF 1

NEX 19”



060802 ver.(0)
Appendix 1
392
301.06(Active Area)
303(Open Bezel)
376.32(Active Area)
378(Open Bezel)
460
(Front View)
(Top View)
(Bottom View)
(Side View)
(Rear View)
64.5
58.5
29.5
232
438.5
27.5
369.5
369.5(Mount)
240
8-M3 TAP
8-M4 TAP
80
100
75
447.5
438.5(Mount)
300
NOTE
NEXIO
Nexio Co., Ltd.
DRWG.NAME
NEX 190MRT-NIB set
SHEET 1 OF 1