Nexio

NEXIO Co.,Ltd.

www.inexio.co.kr

NEX104MF(R)T & NEX121MF(R)T & NEX150MF(R)T & NEX170MF(R)T & NEX190MF(R)T

VGA & 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 6 bit, 262K colors in a continuous spectrum, while NEX 150/170/190 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, and Audio In/Out.

☞ 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.

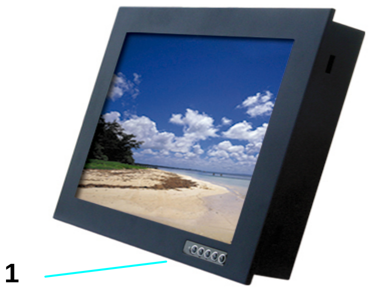
☞ Auto-setup control on OSD screen adjust image position, horizontal size or fine settings.

☞ 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.

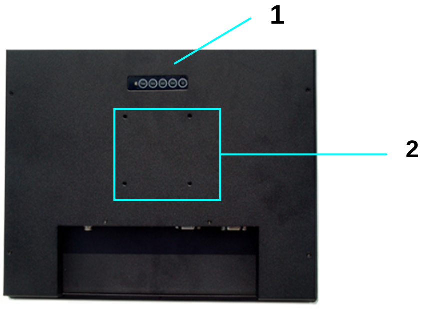
Monitor Parts(MF(R)T)

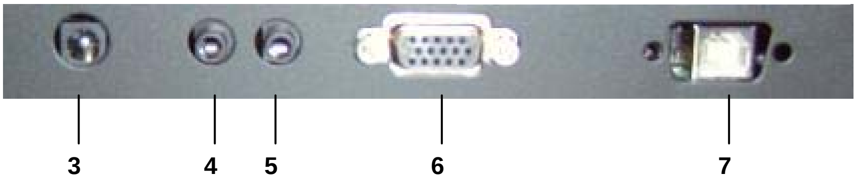
- **MFT(OSD Button in front of Model)**
- **MRT(OSD Button in rear of Model)**

FRONT



REAR





1. OSD control button
2. VESA standard hole (75mm x 75mm)
3. Power input connector
4. Audio In
5. Audio Out
6. D-SUB 15 pin VGA input connector
7. Touch interface connector (USB / Serial interface)

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)T)
      800 x 600 resolution @ 60Hz.(NEX121 MF(R)T)
      1024 x 768 resolution @ 60Hz.(NEX150 MF(R)T)
      1280 x 1024 resolution @ 60Hz.(NEX170/190/ MF(R)T)
   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.

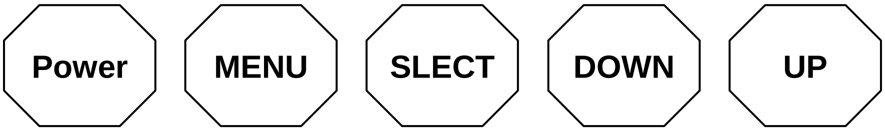
- Handle with care when transporting. Save packaging for transporting.

- 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 front of unit (MFT Version) or the rear of unit (MRT 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

MENU : Menu on/select button

- Show OSD menu on the screen and select the function to be adjusted.

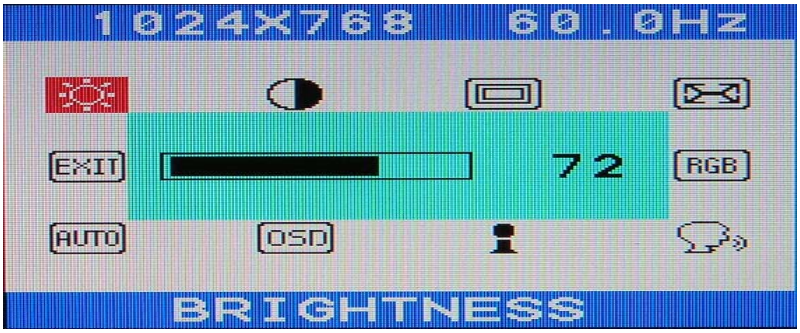
SELECT : **Exit / auto adjust button**

- Exit from the OSD menu and back to previous menu.
- Auto adjustment by press the EXIT button without OSD menu.

UP/DOWN : Adjust /move button

- Moves the selector left and right on the OSD menu.
- Increase or decrease the value of selected adjustment.

[MAIN MENU DISPLAY]



- **BRIGHTNESS**

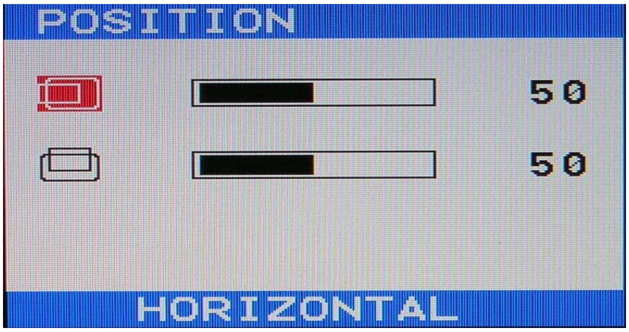
☼ Controls the brightness of the LCD
Use DOWN or UP button to decrease or increase the setting

- **CONTRAST**

Controls the contrast of the LCD
Use DOWN or UP button to decrease or increase the setting

- **POSITION**

Controls the horizontal or vertical image position within the display of the LCD
Use menu button to enter into the following submenu



50

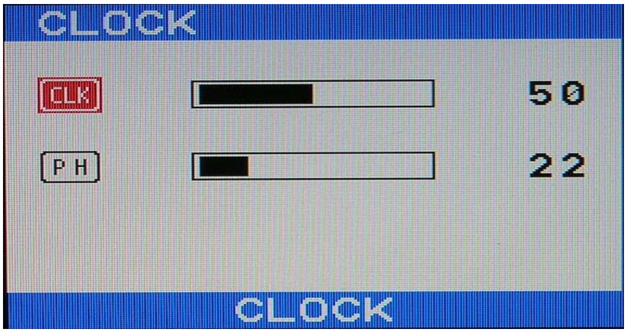
50

Horizontal : Use DOWN or UP button to move the image left or right

Vertical : Use DOWN or UP button to move the image up or down

- **CLOCK**

Improves focus, clarity and image stability
Use menu button to enter into the following submenu



CLK 50

PH 22

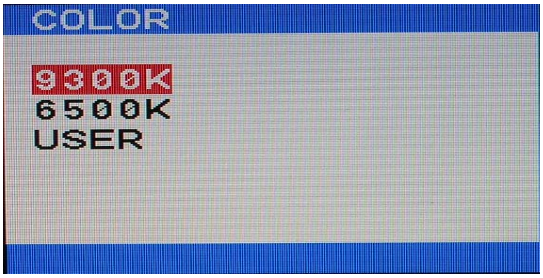
Clock : Improves focus, clarity and image stability by changing the horizontal image size

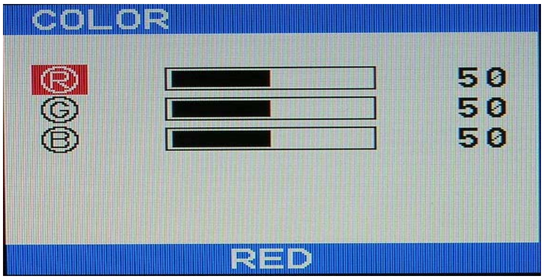
Phase : Improves focus, clarity and image stability

Use DOWN or UP button to decrease or increase the setting

- **COLOR**

Use menu button to enter into the following submenu





R 50
G 50
B 50

Color temperature

Provides two preset color adjustment : 9300K and 6500K

Select the preset by using DOWN or UP button

USER(RGB) Adjustment

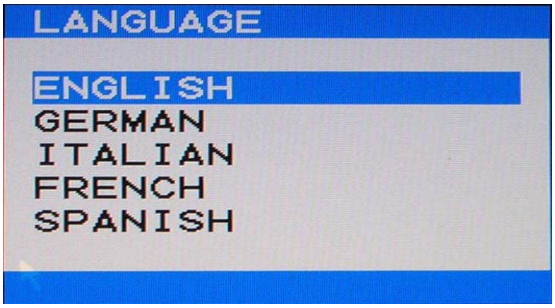
Decreases or increases Red, Green or blue color selected

Use DOWN or UP button to decrease or increase the setting

• LANGUAGE

Provides five languages for OSD menu.

Use menu button to enter into the following submenu



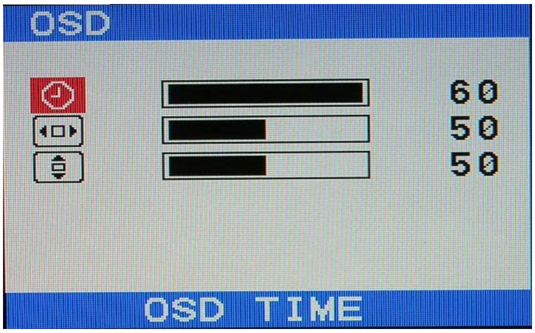
Use DOWN or UP button to select the OSD language

• INFORMATION

Show the resolution, horizontal and vertical frequency
Use menu button to show the information

• OSD

Use menu button to enter into the following submenu



OSD Time : Set the time-out period of the OSD menu(seconds)

H Position : Move the OSD menu horizontally

V Position : Move the OSD menu vertically

Use DOWN or UP button to decrease or increase the setting

• AUTO ADJUST

Automatically adjust image position, horizontal size or fine setting
Use menu button to adjust the settings automatically

• EXIT

Exit the OSD menu
Use menu button to exit the OSD menu

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		
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

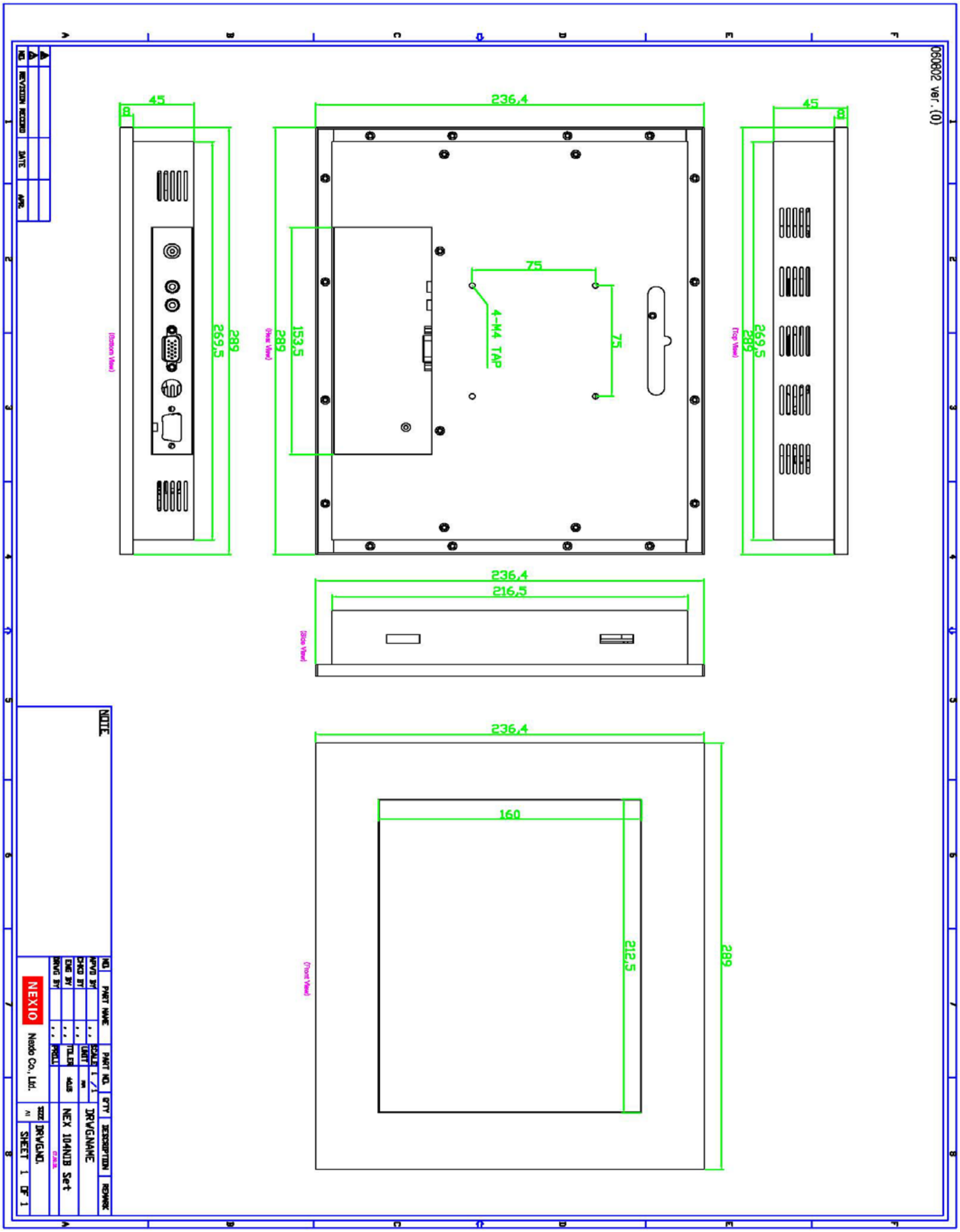
SIZE		15.0”	17”	19”
PANEL	Display Type	XGA TFT	SXGA TFT	SXGA TFT
	Max. Resolution	1024 x768	1280 x 1024	1280 x 1024
	Screen (Diagonal) Size	15Inche	17Inche	19Inche
	Display Colors	16M Colors	16M Colors	16M Colors
	Pixel Pitch	0.264 x 0.264mm	0.264 x 0.264mm	0.294 x 0.294mm
	Brightness	300cd/㎡	450cd/㎡	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	DVI, 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”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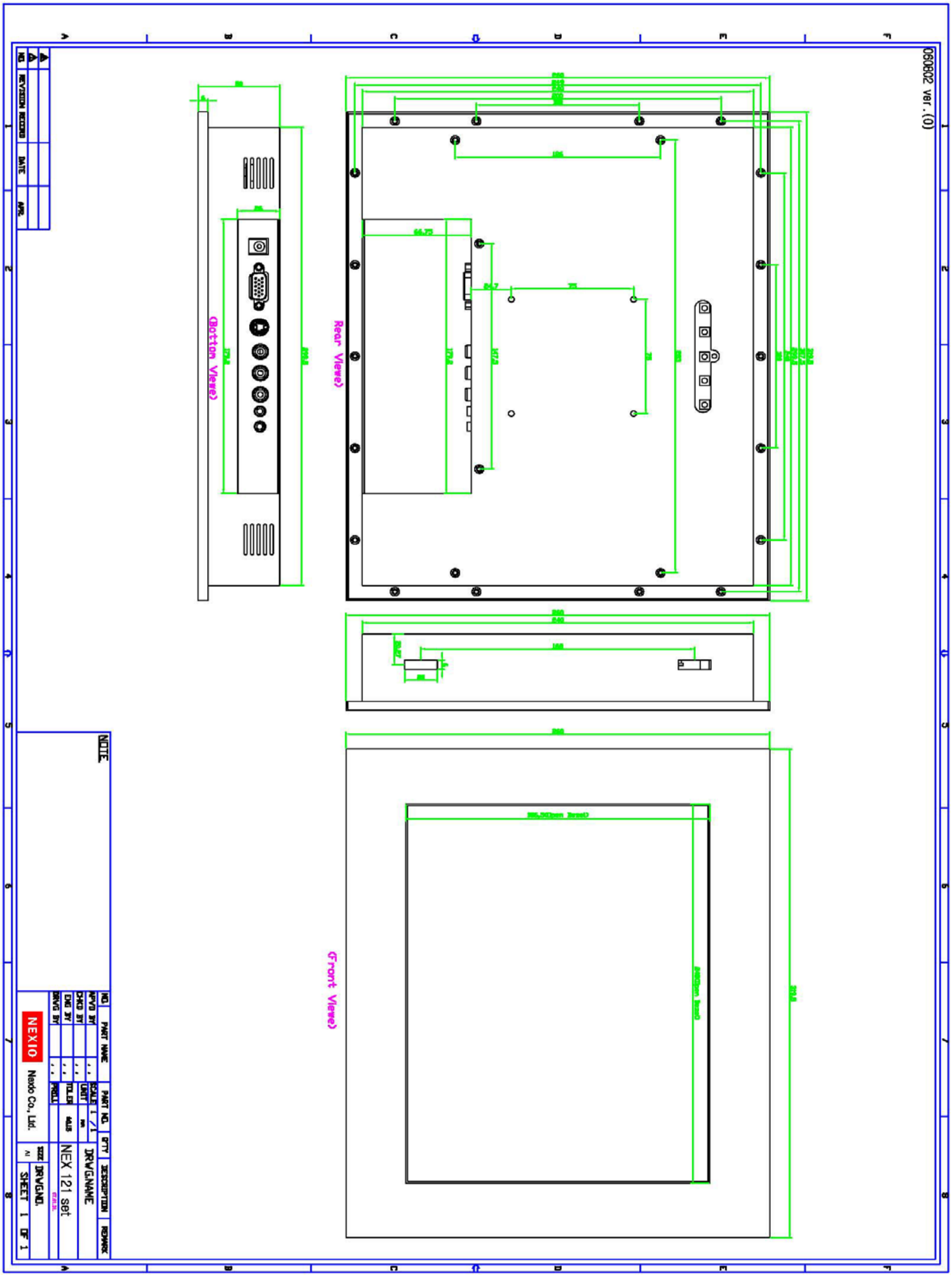
45
8
236,4
289
269,5
153,5
75
4-M4 TAP
(Bottom View)
(Rear View)
(Top View)
216,5
(Side View)
160
212,5
(Front View)
NOTE.
NO.
PART NAME
PART NO.
QTY
DESCRIPTION
REMARK
APV'D BY
CHK'D BY
ENG BY
DRW'G BY
SCALE 1 / 1
UNIT mm
TOLER
PROJ.
DRWG.NAME
NEX 104NIB Set
SIZE A3
DRWG.NO.
SHEET 1 OF 1
NEXIO
Nexio Co., Ltd.
REVISION RECORD
DATE
APR.

NEX 12.1”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(Rear View)
(Bottom View)
(Front View)
NOTE
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PART NO.
Q'TY
DESCRIPTION
REMARK
DRWG.NAME
NEX 121 set
SCALE 1 / 1
UNIT mm
DRWG BY
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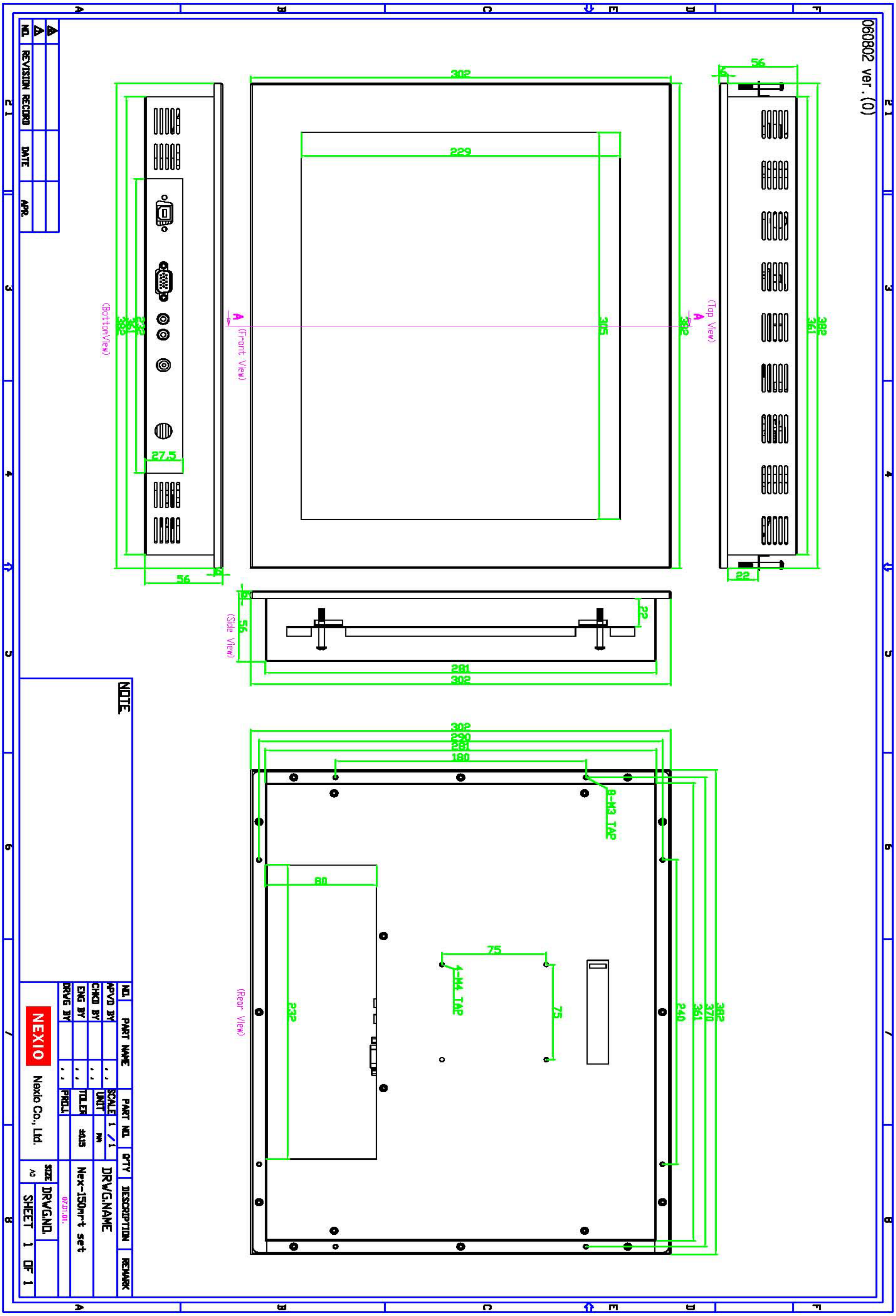
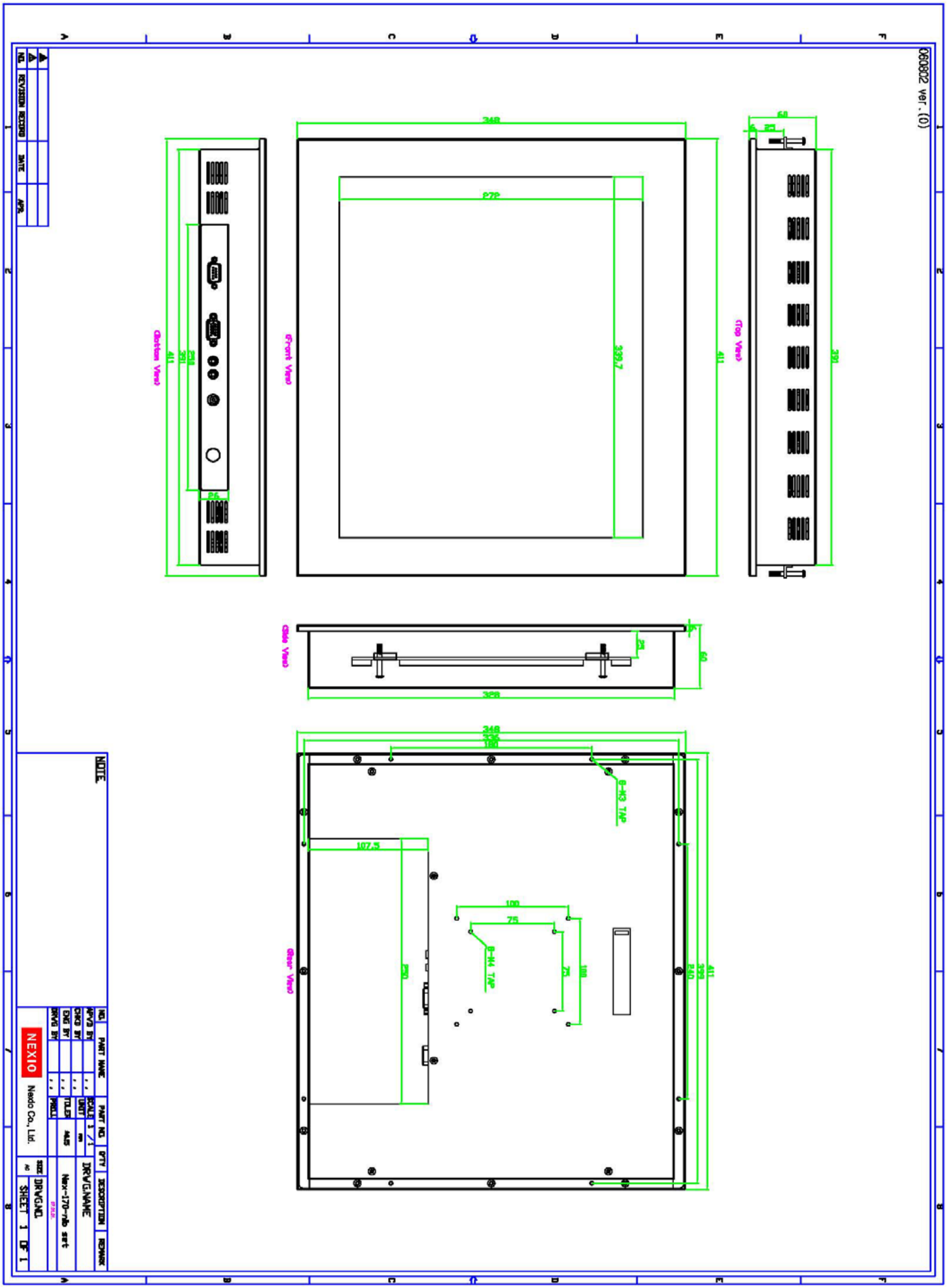
APVD BY
ENG BY
SIZE
A2
DRWG.NO.
SHEET 1 OF 1
NEXIO
Nexio Co., Ltd.

NEX 15”


060802 ver.(0)
A
B
C
D
E
F
1
2
3
4
5
6
7
8
NO.
REVISION RECORD
DATE
APR.
56
6
302
229
305
382
361
232
27.5
22
281
A
(Front View)
(Top View)
(BottomView)
(Side View)
(Rear View)
NOTE
230
180
8-M3 TAP
80
75
4-M4 TAP
240
370
NO.
PART NAME
PART NO.
QTY
DESCRIPTION
REMARK
APVD BY
CHKD BY
ENG BY
DRWG BY
SCALE 1 / 1
UNIT MM
TOLER ±0.15
PROJ.
DRWG.NAME
Nex-150mrt set
07.01.01.
SIZE
A0
DRWG.NO.
SHEET 1 OF 1
NEXIO
Nexio Co., Ltd.

NEX 17”


060802 ver.(0)
(Bottom View)
(Front View)
(Top View)
(Side View)
(Rear View)
348
272
339.7
411
391
331
231
26
68
6
328
60
336
180
8-M3 TAP
107.5
250
100
75
8-M4 TAP
240
399
NOTE
NO.
REVISION RECORD
DATE
APR.
PART NAME
PART NO.
QTY
DESCRIPTION
REMARK
APVD BY
CHKD BY
ENG BY
DRWG BY
SCALE 1 / 1
UNIT mm
TOLER.
PROJ.
DRWG.NAME
Nex-170-nb set
SIZE
DRWG.NO.
SHEET 1 OF 1
NEXIO
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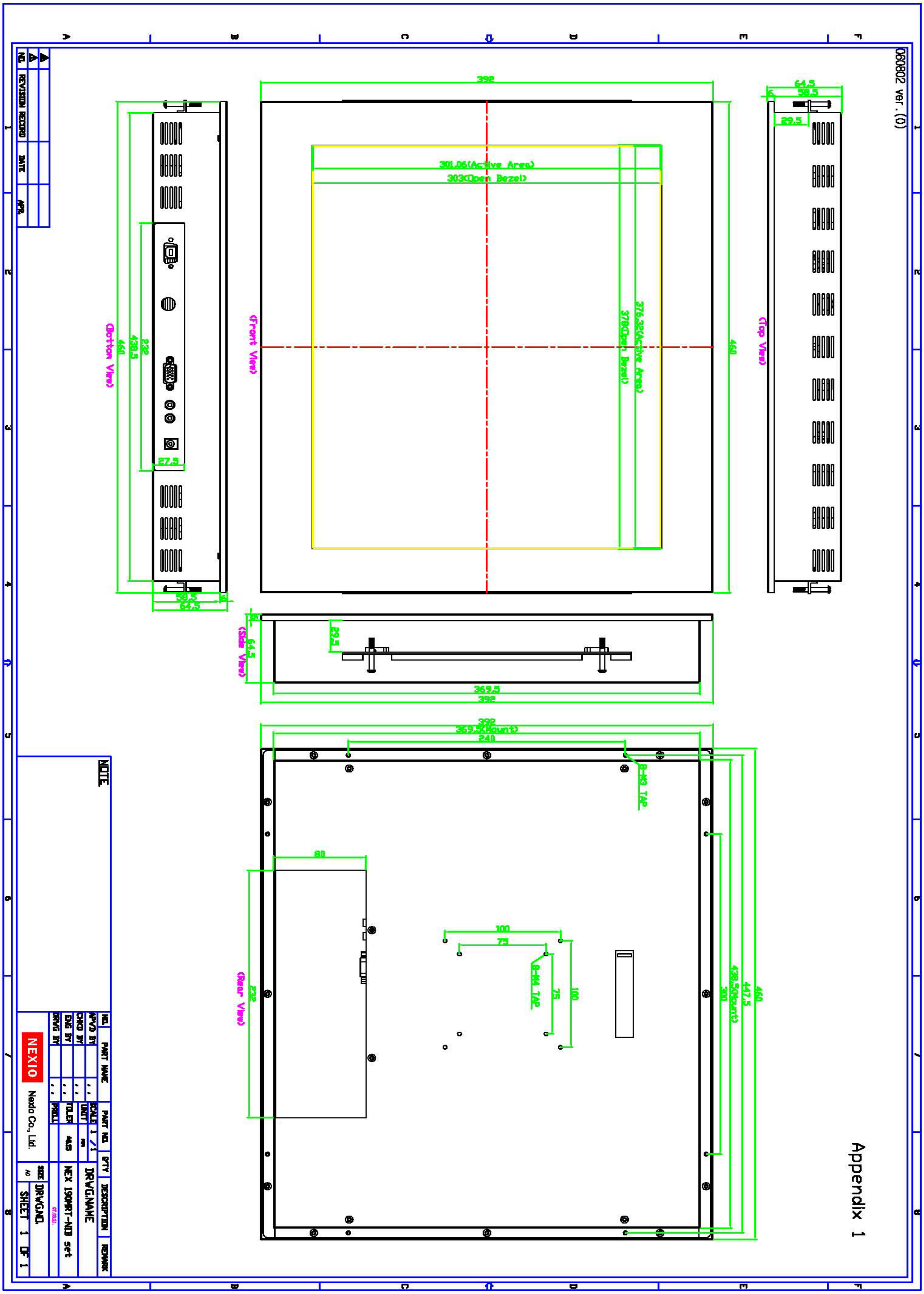
NEX 19”


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)
64.5
58.5
29.5
(Bottom View)
460
438.5
232
27.5
64.5
(Side View)
369.5
392
369.5(Mount)
240
8-M3 TAP
80
232
(Rear View)
100
75
8-M4 TAP
438.5(Mount)
447.5
300
NOTE
NO.
REVISION RECORD
DATE
APR.
PART NAME
PART NO.
Q'TY
DESCRIPTION
REMARK
APVD BY
CHKD BY
ENG BY
DRWG BY
SCALE 1/1
UNIT mm
TOLER
PROJ.
DRWG.NAME
NEX 19ORT-N(3 set
07.08.01.
SIZE
A0
DRWG.NO.
SHEET 1 OF 1
NEXIO
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