



32" Outdoor Single-sided PIDS Portrait, Flat



Model: NIASM-320PC-124-LAS, Portrait, Single-sided

- ✓ Tamper-proof, anti-reflection, tempered glass over 32" screen
- ✓ Daylight readable, full high definition 1920 x 1080 pixels
- ✓ UL48 LCD outdoor signs certified, UL879 sign controller certified
- ✓ 3M IR film to block sunlight solar energy
- Hardware health monitoring maintenance VMS controller
- ✓ Powdered steel enclosure structure Silver color
- ✓ Option: outdoor interactive zoom touch glass



Screen

Parameter	Specification		
Video Orientation	Portrait		
Screen Dimensions	392.85mm(width) x698.4mm(height) (27.5inches x 15.5inches)		
Enclosure Dimensions	570mm(width) x 880mm(height) x 196mm(depth) (22.4inches x 34.6 inches x 7.72inches)		
Resolution	1920 x 1080 pixels		
Color	1.07 billion colors (10-bit)		
Dimming	50-100% automatic dimming		
Calibrated Intensity	1000 Cd/m ²		
Color Temperature Modes	Warm / Medium / Cool		
Refresh Rate	60 Hz		
Contrast Ratio	2,000:1 (Typical); 10,000:1 (Dynamic)		
Viewing Angle	178 degrees (side/side) 178 degrees (up/down)		
Burn Time (one static image)	30 min		



Power, Computer & Electronics

Parameter	Specification			
Power Consumption	320 W			
	CPU			
	RAM			
Embedded computer (Provided by ETA)	Storage			
	Dimensions (W x H x D)	150mm x 150mm x 50mm; (5.9inches x 5.9inches x 2.0inches)		
	OS	Windows 10		
Inputs / Outputs	HDMI DVI (720p/1080i/1080p) LAN (RJ45, Cat 6) RS-232C			
On Screen Display (OSD)	English (default),			
Interactive Outdoor PCAP Touch Glass (Optional)	 a) Projected Capacitive (PCAP), 2-point zoom -touch b) Works with bare fingers and gloved fingers c) High positional accuracy (2.5mm typical) d) 92% - 100% light transmission through PCAP Less than 10 milli seconds response time 			



System Level Design & Durability

Parameter	Specification			
Rated Operating Conditions	Temperature: -30°C to +45°C Humidity: 20% to 80%			
Heating, Ventilation & Air Circulation (HVAC)	Automated system for heating & cooling with active air inflow & exhaust [patent pending]			
External Housing	Fully-sealed, weather-proof enclosure Powder coated surface treatment Available finishing materials: Stainless steel, Aluminum, Architectural glass			
Glass	Anti-vandal, tempered glass			
Certification	FCC, CSA, Components UL			
Warranty	36 Months			
Mean Time Between Failure	50,000 hours			
Health Monitoring System [Model: NRMCB-300] Electric Sign Hardware Controller Module	 Health Monitoring capabilities: Monitor internet connectivity Environmental control via IoT sensors (2) Temperature sensors (1) Ambience sensor (1) Moisture sensor (1) Pixel moving sensor to detect screen is working or not (1) Door sensor for enhanced security and safety Sequential power booting program Remote CCD power reset Remote HVAC power reset 			



4G/LTE Modem/Router Specification

Features

- 4 x 1000 Mbit LAN ports, 1 x WAN/LAN port
- The 4G LTE Router of inter-operating with the AT&T mobile network.
- The 4G/LTE router support the standard protocols NAT, VLAN and IPV6.
- 4G/LTE dome antenna on the top side as a standard.

LTE Module	
LTE Release 9,	850MHz(Band5), 2.6GHz(Band7) Dual Band
LTE FDD Category 4	GCT GDM7243S Engine
LTE Release 9,	850MHz(Band5), 2.6GHz(Band7) Dual Band
LTE FDD Category 4	GCT GDM7243S Engine
GPS	
Standalone GPS	UBLOX, Sensitivity -162dBm
CPU Part	
CPU	MIPS 24KEc (400MHz)
ROM	Serial Flash 64Mbit
RAM	DDR2 SDRAM 1Gbit
OS	Linux 2.6.21
CPU Part	
Ethernet	4-Port Ethernet Switch (RJ45 Ethernet IP)
USB	USB 2.0Host
USIM	Push-Push Locking Type
WIFI	802.11 b/g/n Dipole antenna (SMA Type)
GPS	Active antenna (SMA Type)

Indicator	
LED (7ea)	Power, CPU, LAN(Link, Activity), WIFI, GPS, LTE
Power	
Power In	5 Vdc / 2A (Micro Fit 3.0 Type) Power Adapter









Nanov PA System Product Information

Product: Audio hardware embedded in LCD sign
Product Description: 20W PA hardware in LCD sign
Product model: TAH20-SFM
System consists: Microphone (Noise Sensor), Amplifier Board, Audio Board, Audio out USB port, and wire to amplifier

Transit Audio System Signal Flow – Las Vegas





Time	Description	
ТО	Nanov board samples microphone input and continuously adjust volume	
T1	PTT button activated (PTT Button provided by ETA)	
T2	Nanov board stops sampling noise one	
Т3	Nanov board send signal / message to ETA Media Player via USB2.0	
Τ4	ETA Media Player plays message	
T5	Message sent via HDMI cable to AD BD board	
Т6	AD BD board converts audio from digital to analog and plays through the speakers via the amplifier	
Τ7	ETA Media Player stops playing message and send signal/message to Nanov board via USB	
Т8	Nanov board reactivate ETA PTT button	
Т9	Nanov board resumes noise sampling via microphone	



Audio Amplifier Board Specification

Parameter	Specification		
Model Name	PAM8610		
Work	D Class		
Quiescent Current	20mA		
Efficiency	90%		
Rated output power	10W +10W (8Ω)		
Frequency response	20Hz to 50KHz		
Operating voltage	DC7.5-15V		
Recommended supply voltage	12V, the center PIN of 12VDC is +.		
PCB board size	40*40*20mm		





Microphone Specification

Description: Microphone Noise Sensor

Parameter	Specification		
Model Type	Wire Type CMT-762		
Pin Type	CMP-762		
Sensitivity (0dB =1V/Pa at 1Khz)	-42 +/- 2dB		
Impedance	Max. 2.2KΩ		
Standard Power Supply	4.5 V DC		
Current Consumption	Max. 0.8mA		
Sensitivity Reduction	Within -3dB at 3.0V		
S/N Ratio	More than 6dB		
Directivity	Omnidirectional		





Audio Board Specification

Parameter	Specification		
Size	50*70*20mm		
Audio in	Microphone		
I/O	Dry Contact PTT switch input		
Interface	Serial to USB		
Power	DC12V 1A		

Outdoor Speakers Specification,

Model NICS-100825

Impedance	8 Ohms	
Bower	Nominal	10 Watts
Fower	Maximum	20 Watts









Physical Dimensions

Total System Weight: 50 kg. (110 lbs.) per unit





Remote Health Monitoring System Dashboard

ywords	₫ de	elete					
		Name	Туре 🕴	Group 🕴	IP	MAC	🕴 Status 🔺
- 🗑 🗁 Groups		SouthGarland-11-025-1946-132A	G3	Deployed	192.168.32.3	70:B3:D5:2D:04:D4	ON-LINE
🗹 🖿 Deployed		MLK-12-007-1945-063A-F	G3	Deployed	192.168.32.3	70:B3:D5:2D:04:C9	ON-LINE
📝 🖿 Lab 📝 🖿 Ready		MLK-12-007-1945-063B-F	G3	Deployed	192.168.32.4	70:B3:D5:2D:04:CA	ON-LINE
- 😪 🖿 Sl		LakeRayHubbard-09-033-1945-075A	G3	Deployed	192.168.32.3	70:B3:D5:2D:05:12	ON-LINE
- I I ON-LINE		LakeRayHubbard-09-033-1945-075B	G3	Deployed	192.168.32.4	70:B3:D5:2D:05:15	ON-LINE
- 👻 🖿 OFF-LINE		MLK-12-006-1945-066A-F	G3	Deployed	192.168.32.3	70:B3:D5:2D:05:58	ON-LINE
		MLK-12-006-1945-066B-F	G3	Deployed	192.168.32.4	70:B3:D5:2D:05:66	ON-LINE
- 🛃 🏷 LCD Color		SouthGarland-11-023-1946-097A	G3	Deployed	192.168.32.3	70:B3:D5:2D:05:72	ON-LINE
		SouthGarland-11-023-1946-097B	G3	Deployed	192.168.32.4	70:B3:D5:2D:05:73	ON-LINE
- 📝 🏷 Door		JackHatchell-08-019-1946-089B	G3	Deployed	192.168.32.4	70:B3:D5:2D:05:78	ON-LINE
Closed		JackHatchell-08-019-1946-089A	G3	Deployed	192.168.32.3	70:B3:D5:2D:05:74	ON-LINE
Refresh		JackHatchell-08-020-1946-084A	G3	Deployed	192.168.32.3	70:B3:D5:2D:05:84	ON-LINE
		JackHatchell-08-020-1946-084B	G3	Deployed	192.168.32.4	70:B3:D5:2D:05:82	ON-LINE
		SouthGarland-11-024-1946-082A	G3	Deployed	192.168.32.3	70:B3:D5:2D:05:79	ON-LINE

LCD Signs Control

Home / Equipment

55 Modified se can modify Equipment Valu	etting (Follow the co for each equipmer e Ber Control Value	ontrol settings for the default setti nt.)	ing or you S Modifie can mo equipment	d setting (Follow the c dify for each equipme t Value Ger Control Value	control settings for the default setting or you nt.) e
Operation Mode	Auto	Auto	✓ LED R	255	0 0 64 127 191
LCD Display ON/OFF	ON	ON	LED G	255	0 0 64 127 191
Brightness	70%	0% 50% 10% 10% 10% 10% 10% 10% 10% 10% 10% 1	100% LED B 75 100	0	0 0 64 127 191
Volume	50%	0% 0 25 50	100% 75 100		
Input Source	HDMI	HDM			



Archive History





Remote Access Disclaimer

Remote access of Nanov Sign controller (NRMCB-300)

It is the customer's decision to connect sign controllers via the internet. At any point, the customer can pull the internet line out. The customer can always request to send IoT data to their own server but developing an API or Amazon server user fee is paid for by the customer.

Nanov controllers are connected to the following sensors to monitor hardware health system – heater, computer, fan, temperature sensor, pixel moving sensor, door sensor, LCD panel. The controllers are registered with the MAC address. When the internet is connected to the controller for the first time, the controller searches for the Nanov Amazon server connection and registers the IP address automatically. When the customer designates their own server, Nanov re-routes the sign controller to the customer server. Nanov provides a confidential ID and PW to the customer when they are connected into the Nanov server. Nanov provides three months of complimentary server access to the customer. For the first three months, Nanov can use the IoT sensor data to monitor the hardware health of the LCD signs and recommend default set up value to customer. After three months, Nanov has a right to request disconnecting the internet from the controller. The customer will then pull the internet line out from the controller.



Concept Drawing – Speakers, I/O Ports







NIASM-320PC-124-LAS Concept Drawing



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