

ACUBRITE™ 21-NAV

Sunlight Readable Marine Certified Monitor

User's Guide
Edition 1.0



Overview

ACUBRITE™ 21-NAV, the high-performance, rugged touch monitor, is specially engineered to survive from the most demanding working environment. Housed in a milled billet aluminum case, the slim-profile ACUBRITE™ 21-NAV is light weight and watertight. The front-mounted sunlight readable touch screen makes the industrial rugged monitor vividly and user-friendly. In addition, the high power efficiency and low heat design guarantee the stability and longevity required for mission critical deployment.

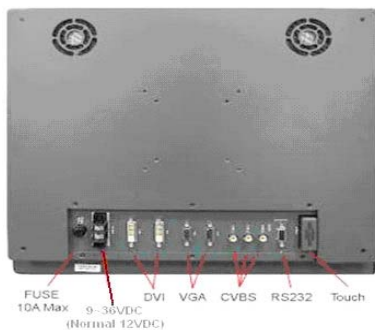
Main Features

- 1000 nits Sunlight Readable LCD
- Long Life, Low Power Consumption LED Backlight
- Wide Operating Temperature
- Picture In Picture Function
- Advanced Optical Bonding (AOT)
- High Shock & Vibration Resistance
- Resistive Touch Support
- IP65 Facial Waterproof
- 9-36V DC Input

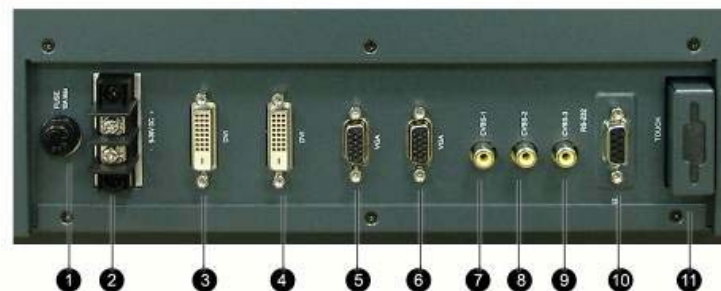
Application:

- Marine

CONNECTIONS AND CONTROL FEATURES



Rear connections



- 1.Fuse 2. Power Input 3. DVI-1 Input 4.DVI-2 Input 5. VGA-Input
- 6. VGA-2 Input 7. CVBS-1 Input (Composite Video) AV Input 8. CVBS-2 Input
- 9. CVBS-3 Input 10. RS232 Input 11. USB for Touch control (option)

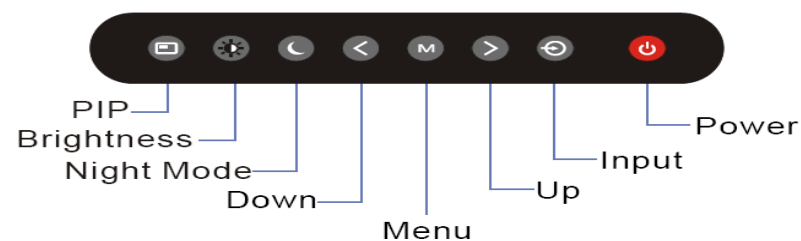
This monitor is designed to run on marine vehicle's power systems, with 9-36V DC wide range power input.

You must ground the monitor by connecting the drain wire (shield) of the power input. It is important that an effective radio frequency (RF) ground is connected to the monitor.

Power connections



The power connection to the monitor should be made at either the output of the battery. isolator switch, or at a DC power distribution panel. Acubrite 21-Nav recommends that power is fed directly to the monitor via its own dedicated cable system and **MUST** be protected by a thermal circuit breaker or fuse, fitted close to the power connection. If you do not have a thermal circuit breaker or fuse in your power circuit, you **MUST** fit an in-line breaker or fuse to the positive (red) lead of the power cable.



INPUT KEY 

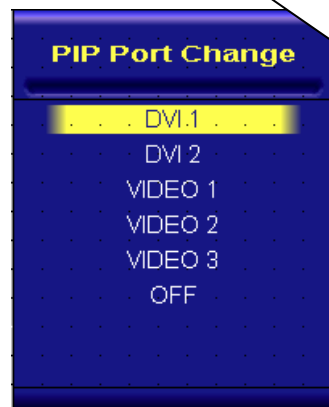


When you press and hold the "INPUT" KEY, the menu screen will show as

RGB1→RGB2→ · · →VIDEO3→VIDEO2→ · ·

If you release the "INPUT" KEY for 5 seconds without any action, the menu selection screen will be closed. And it will remain at the item which you'd selected.

PIP KEY 




PIP KEY Function

Choose PIP size scaling from 1~10 times and PAP1 (4:3 aspect ratio) or PAP2 (side by side for half full screen). In general,PAP2 setting is recommended.


UP  / **DOWN**  **KEY**


It works as menu item selection use, the "UP"KEY can be used as "RIGHT" KEY and the "DOWN" KEY can be used as "LEFT"KEY.



PIP (1~10) Picture

You can press "RIGHT /LEFT" key to move PIP window position

RIGHT KEY : the PIP window will move horizontally. You may put the PIP window to any desired horizontal position.

LEFT KEY : the PIP window will move vertically. You may put the PIP window to any desired vertical position.

MENU KEY 

When press "MENU" KEY, the OSD main menu screen will appear as below:



If release the "MENU" KEY for 30 seconds without any action, the menu OSD screen will disappear automatically. You can also choose "QUIT" and then press "MENU" KEY to exit this OSD menu screen.

RGB1 & 2's setting screen:



RGB Setting Item Description:

- PHASE—— Horizontal Sampling Phase Adjustment
- CONTRAST—— Contrast Adjustment
- H_POSITION—— Horizontal Screen Adjustment
- V_POSITION—— Vertical Screen Adjustment
- R_LEVEL—— Red Color level Adjustment
- G_LEVEL—— Green Color level Adjustment
- B_LEVEL—— Blue Color level Adjustment
- TEMPERATURE—— Color Temperature Adjustment
- DISP MODE——FULL—— Full Screen
 EVEN—— Half Screen
 NORMAL—— Keep normal aspect ratio
- AUTO_ADJUST—— Auto adjustment
- EXIT—— Quit from current setting

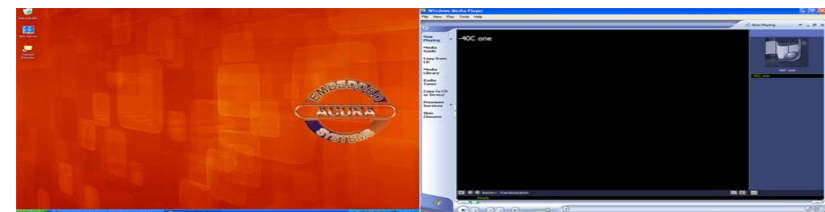
DVI 1 & 2's setting screen:



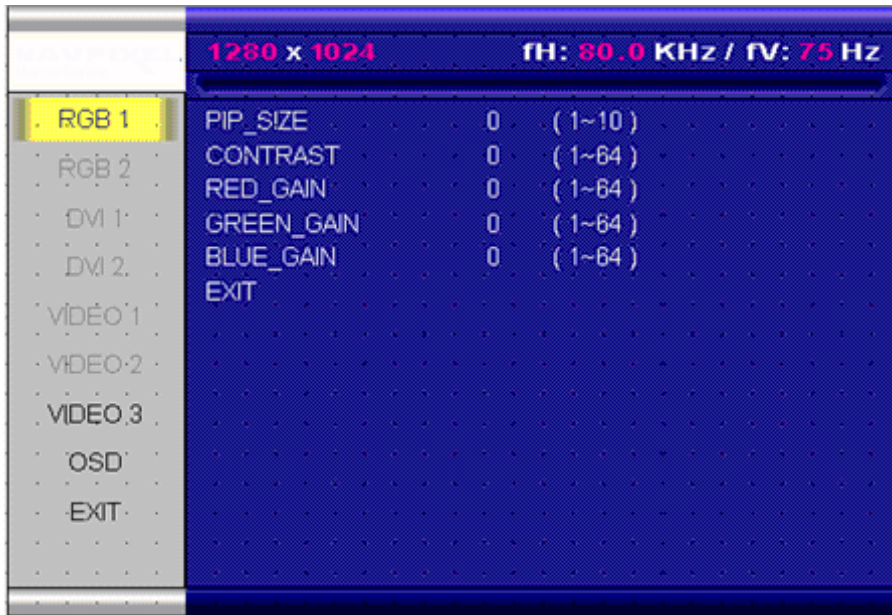
DVI Setting Item Description:

- CONTRAST —— Contrast adjustment
- R_LEVEL —— Red Color level Adjustment
- G_LEVEL —— Green Color level Adjustment
- B_LEVEL —— Blue Color level Adjustment
- TEMPERATURE—— Color Temperature Adjustment
- DISP MODE —— FULL—— Full Screen
 EVEN—— Half Screen
 NORMAL—— Keep normal aspect ratio
- EXIT —— Quit from current setting

For different double screens, both of VGA and DVI ' DISP MODE must be EVEN.



PIP Sub-menu setting screen:



PIP Setting Item Description:

- PIP_SIZE —— Picture in Picture Screen Size Adjustment
- CONTRAST —— Contrast Adjustment
- R_LEVEL —— Red Color level Adjustment
- G_LEVEL —— Green Color level Adjustment
- B_LEVEL —— Blue Color level Adjustment
- EXIT —— Quit from current setting

BRIGHTNESS Key



When you press the BRIGHTNESS Key, the screen will show the following image

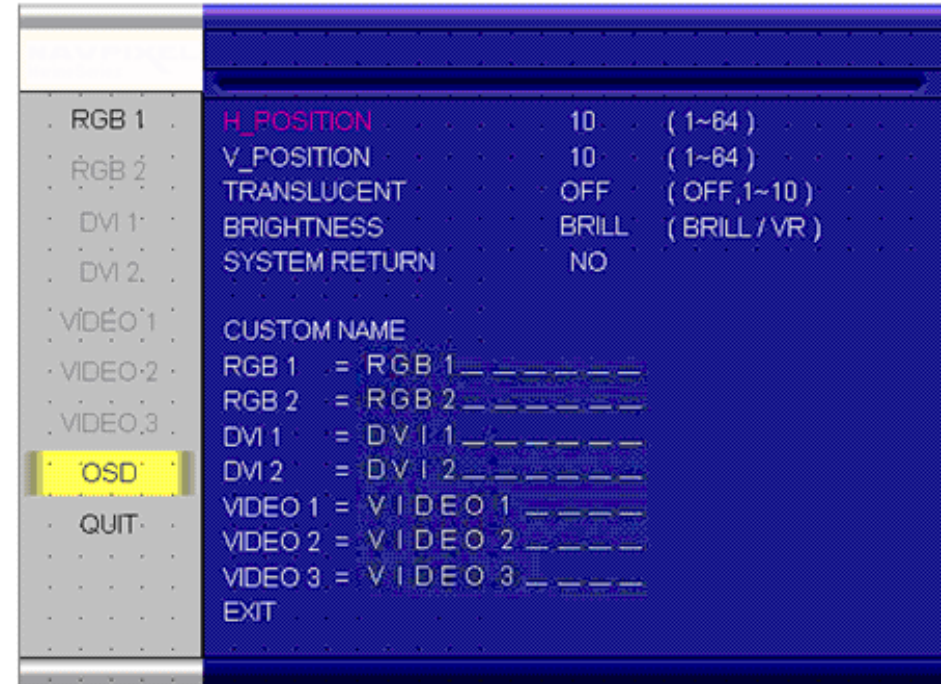


NIGHT MODE KEY



When you press the “NIGHT MODE” KEY, the dimming will be down to under 0.5 nit directly. And if you press “BRIGHTNESS” KEY or “VR” knob at this moment, it will be no function until you press the “NIGHT MODE” KEY again to release this restriction.

OSD Setting Main Screen:



OSD Setting Item Description:

- H_POSITION —— Horizontal Screen Adjustment
- V_POSITION —— Vertical Screen Adjustment
- TRANSLUCENT —— Screen background color can be adjusted as transparent as you want (total 10 scales)
- BRIGHTNESS —— Selection between “BRIGHTNESS” key or “VR” Button for brightness adjustment
- SYSTEM RETURN —— Restore all parameter setting to factory default value
- EXIT —— Quit from current setting

Customer

Name: _____

Location: _____

Serial Number: _____

VIN Number: _____

Unit Number: _____

Date Installed: _____

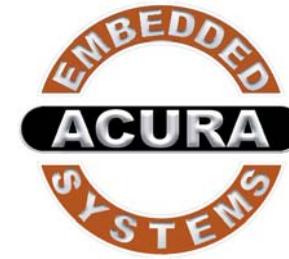
Who Installed: _____

Contact Number: _____

Notes:



Toll Free 1-866-502-9666
www.acuraembedded.com



With the unique set of products, Acura Embedded Systems remains committed to its goal of providing trouble-free and customer-friendly service. A special customer service unit has been set up specifically to cater to our esteemed customers' needs.

Technical Support:

For technical support contact your [Salesperson](#)
support@acuraembedded.com

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