

# **21.5" HD-SDI / 3G Broadcast Monitor**

## **215LEDN**

**USER GUIDE(v1.0)**



Please read this manual carefully to ensure proper use, including connection and operation.  
Also, keep this manual for future use.



# Safety Instructions

Class B Equipment (Broadcasting and Telecommunications Equipment for Home Use)

This equipment is for home use (Class B) and granted a Certificate of Conformity for electromagnetic radiation. It is designed for home use and can be used in all regions.

(These images are for illustrative purposes only. They may vary depending on circumstances.)

Please read the Safety Instructions carefully to ensure proper use of the product.



Warning/Caution Label Description



This label indicates potential safety hazards during use.

Failure to do so may result in personal injury or property damage.



Warning/Caution Label Description



This label indicates prohibited actions.



This label indicates instructions that must be followed.

## Power Supply Instructions



- ▶ If you do not use the monitor for a long time, please set it to DPMS (Display Power Management Signaling) mode.
- ▶ If you turn on a screen saver, set it to Moving Picture mode.
- ▶ Do not use damaged power cords, plugs, or loose outlets. Failure to do so may cause an electric shock or fire.



Never remove the plug or power cord from the outlet with wet hands.

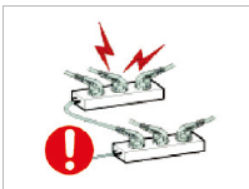
- Failure to do so may cause an accident due to an electric shock.



Make sure that the power cord is firmly plugged into the outlet and not loose.

- Unstable connection may cause a monitor blackout or fire.

- To disconnect, grip the plug and pull from the outlet. Pulling the cord may cause Fire.



Do not insert several plugs into an outlet.

- It may cause a fire or accident due to overloading.



Never use a damaged plug or outlet. Such use may result in an accident such as an electric shock or fire.

- Failure to do so may cause a fire or accident due to a short circuit.



# Safety Instructions



- Excessive bending of the power plug may cause disconnection or a short circuit.
- Please note that disconnection may cause a fire or accident due to a short circuit.



- Do not remove the power cord while using the monitor.
- An electric shock occurring during disconnection may damage the monitor.

## Installation Instructions



If the monitor is to be installed and used in a special place rather than under normal conditions, the surroundings may cause serious quality problems. Before installing the product, please check with our Service Engineer.



- Do not install or use the product in humid or dusty locations.
- Failure to do so may cause a fire or accident due to a short circuit or electric shock.



- Make sure that the monitor stand does not stick out of a desk, shelf, or case when installing the product.
- If the product falls to the ground, it may be broken or damaged.



- Maintain a distance of over 10cm from the wall when installing the monitor.
- An increase in the temperature inside the monitor may affect the service life and performance of its components.



- Set down the monitor gently to avoid impacts.
- An impact may cause monitor failure or personal injury.



- Make sure to keep the power cord away from any heat source.
- Melting of the cord coating may cause an electric shock or fire. Please adhere to the warning.
  - Do not place cigarettes, candles, or mosquito repellent incense on top of the product.



# Safety Instructions



To mount a wall-mount monitor on the wall, please consult an expert.

- Installation by an unqualified person may cause personal injury. Make sure to use the designated mounting device.

## Cleaning and Use Instructions



Do not spray a cleaning solution directly on the monitor.

- Directly spraying on the monitor may significantly increase the risk of discoloration, cracks, or peeling of the LCD panel surface.



Do not use or keep flammable sprays or substances near the product.

- Careless handling of flammable substances may cause an explosion or fire.



Make sure to disconnect the power cord before cleaning.

- Failure to do so may cause an electric shock or fire.



Pull out the power cord and wipe it with soft, dry cloth when cleaning the product.

- Do not use chemicals, including wax, benzene, alcohol, thinner, mosquito repellent, air freshener, lubricant, or cleaning solution.



Do not put items that can easily catch fire, such as metal chopsticks, wire, awls, paper, or matches, into the air vent, headphone port, or AV port.

- Failure to do so may cause an electric shock or fire.
- If water or any foreign object gets into the product, turn off the product, unplug it from the outlet, and contact our Service Center.



If one image is displayed for a long time, it may cause burn-in or image persistence.

- If the monitor is not used for a long time, set it to Power Saving mode or Moving Picture mode such as animated screensavers.



If the monitor makes unusual noises or smoke, unplug the product and contact our Service Center.

- Failure to do so may cause an electric shock or fire.



# Safety Instructions



Do not cover the air vent.

- Improper ventilation may cause monitor failure or a fire.



If the product is not used for a long time, disconnect the power cord.

- Dust buildup may result in an electric shock or short circuit or fire due to heat output, ignition or deteriorating insulation.



Do not place the monitor on unstable or vibrating locations, such as shaking shelves or inclined surfaces.

- The fall of the product may result in failure or personal injury. Using the monitor on a vibrating location may shorten its service life or cause a fire.



When moving the monitor, make sure to turn it off and unplug from the outlet. Also, make sure that other cords such as the antenna and other connecting cables have been disconnected.

- Moving the monitor without disconnecting the cord will damage the cord, which may cause a fire or electric shock.



Make sure that no child hangs on to or climb on the product.

- If the product collapses, it may cause injury or death.



Set the product resolution and frequency correctly. Otherwise, it may lead to eye problems.

- The resolution varies depending on the monitor size. Find and set the correct resolution

## Use the monitor in the correct posture.

- Sit up straight.
- Position the monitor at a distance of 40-50cm below eye level, and make sure to look straight at the monitor.
- Tilt the monitor back 1 to 20 degrees and adjust the height slightly below eye level.
- Keep the arms perpendicular to the body and parallel to the back of the hand.
- Make sure the elbows are positioned at a 90-degree angle.
- Maintain a knee angle of over 90 degrees and adjust the monitor height to keep the heels on the floor and the arms above the heart.

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This Monitor was  
Manufactured by ISO 9001  
Certified Factory

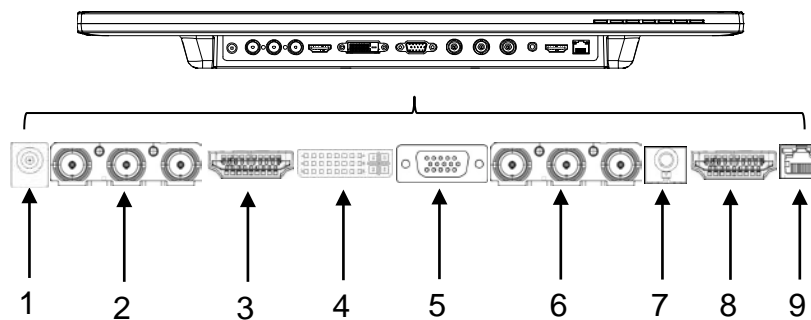
# Checking Control Buttons / Names & Functions of I/O Ports

## 1. Checking Control Buttons



1. Power
2. Auto
3. Enter
4. Up
5. Down
6. Menu
7. Source

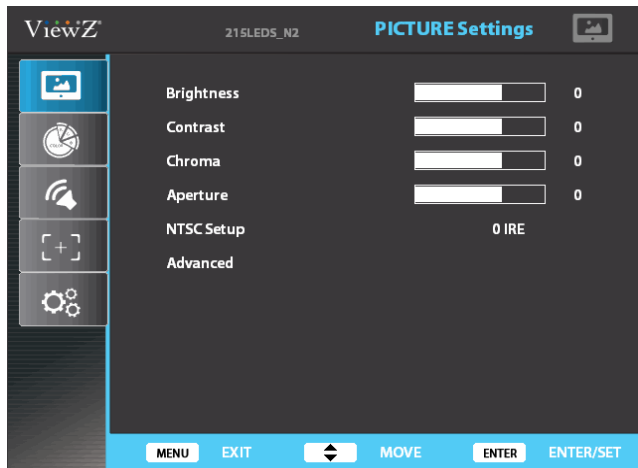
## 2. Names and Functions of I/O Ports



- |                    |             |
|--------------------|-------------|
| 1. DC 12V In       | 6. YPbPr    |
| 2. SDI A / SDI Out | 7. Audio In |
| 3. HDMI In         | 8. PGM      |
| 4. DVI             | 9. RS422 In |
| 5. VGA             |             |

# Menu Tree & Control

## 1. Menu Tree



Main menu includes

- 1) Picture Settings
- 2) Color Settings
- 3) Audio Settings
- 4) Marker Setting
- 5) System Settings

The picture above shows Picture Settings menus in ViewZ monitor.

## 2. Menu Control

Menu control can be handled by front keys

- 1) Menu
  - 2) Up
  - 3) Down
  - 4) Enter
- Press Menu button to enter menu
  - Use Up / Down keys on front to choose desired menu
  - To enter desired menu press Enter key
  - To exit to the previous step press Menu button
  - Menu turns to blue when selected
  - Grey menus are not yet activated



# To Get Started

To get ViewZ monitor started, connect required power and choice of your input signal. Turn on the power button on the front.

- 1) To choose the input signal after cable connection, please use Source button on front.



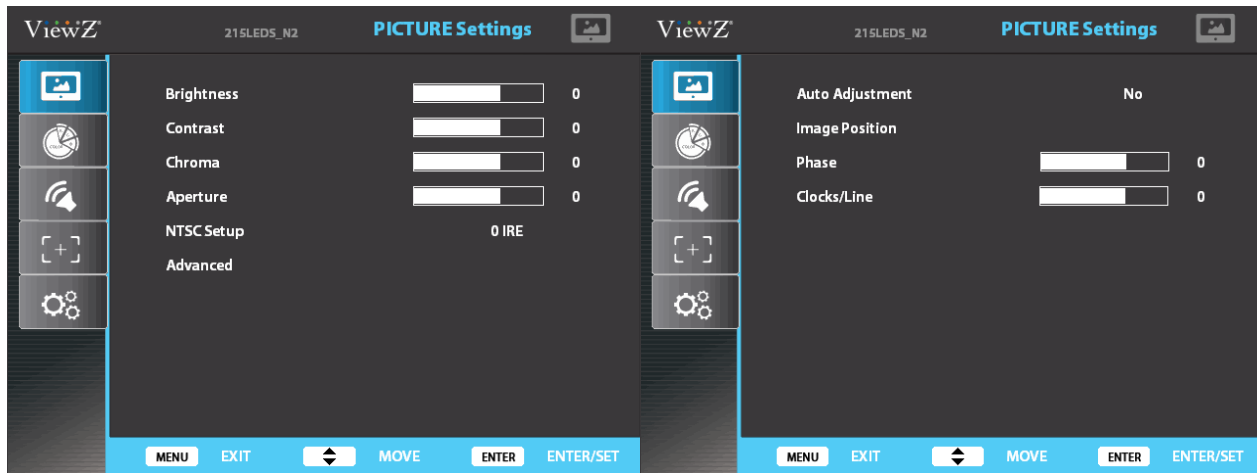
- Use either up and down keys to move to your input. Then, press enter to select.
- Blue arrow shows your choice and when selected the menu turns to blue

- 2) If there's no input for your selected source, the window will show No sync/signal.



# Menu Controls and Functions

## 1. Picture Settings



### ■ Brightness

- used to control brightness(offset) level from 0 to 100
- shown in grey as it can be controlled by front knobs without entering the menu

### ■ Contrast

- used to control contrast(gain) level from 0 to 100
- shown in grey as it can be controlled by front knobs without entering the menu

### ■ Chroma

- used to control chroma(saturation) level from 0 to 100
- shown in grey as it can be controlled by front knobs without entering the menu

### ■ Aperture

- used to control sharpness level from 0 to 24 (0 for smooth and 24 for edge)
- ViewZ recommend to use internal pattern edge for easier selection

### ■ NTSC Setup

- used to control the difference black level when NTSCJ for Japan is used
- used for component signal only

### ■ Advanced

- used for VGA input only

#### 1) Auto Adjustment

- used to turn on and off automatic position of VGA input by controlling phase and clocks/line
- it can be controlled using Auto key on front

#### 2) Image Position

- used to move the position manually for VGA input

# Menu Controls and Functions

## 2. Color Settings



### ■ Color Temp

- used to control color temperature
- users can choose 3200K, 6500K, 9300K, User 1, User 2, and User 3
- in user # mode, users can define RGB Gain and Bias values for own purpose

### ■ Gain Red/Green/Blue

- changes only in user # mode
- used to set R/G/B Gain level from -128 to 128

### ■ Bias Red/Green/Blue

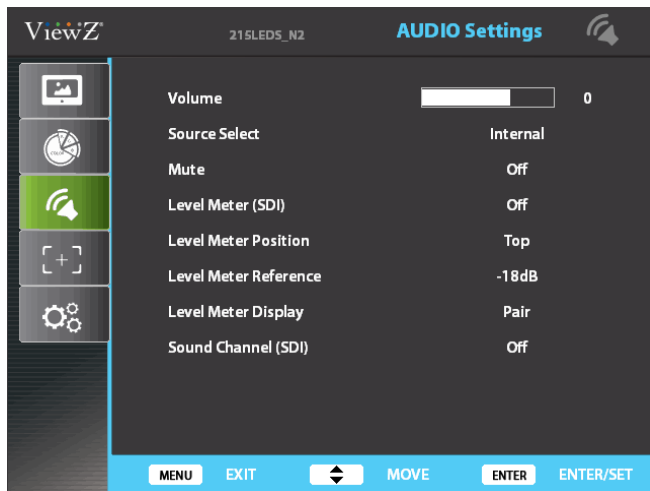
- changes only in user # mode
- used to set R/G/B Bias level from -50 to 50

### ■ Color Copy

- used to set standard for user # mode
- select color copy and choose among 3200K, 6500K, or 9300K, then preset values will be shown in RGB Gain and Bias. Users can define their own values based on these preset values.

# Menu Controls and Functions

## 3. Audio Settings



### ■ Volume

- used to control volume level of the internal speaker or audio out on the back of the monitor from 0 to 100
- shown in grey as it can be controlled by front knobs without entering the menu

### ■ Source Select

- used to select between Internal and External source of audio
- when an external source is connected to audio in, select External

### ■ Mute

- used to turn off entire audio volume for all sources both internal and external
- to turn back on the audio volume to previous level select OFF

### ■ Level Meter (SDI)

- used to set the level meter for embedded audio only available in SDI input
- users can choose Off, 16 Ch Horizontal, and 16 Ch Vertical
- 16 Ch Horizontal shows 8 channels in each side horizontally
- 16 Ch Vertical shows 8 channels in each side vertically

### ■ Level Meter Position

- used to select audio level meter position on screen depending on user's display
- users can choose Top, Middle, and Bottom for both horizontal and vertical

### ■ Level Meter Reference

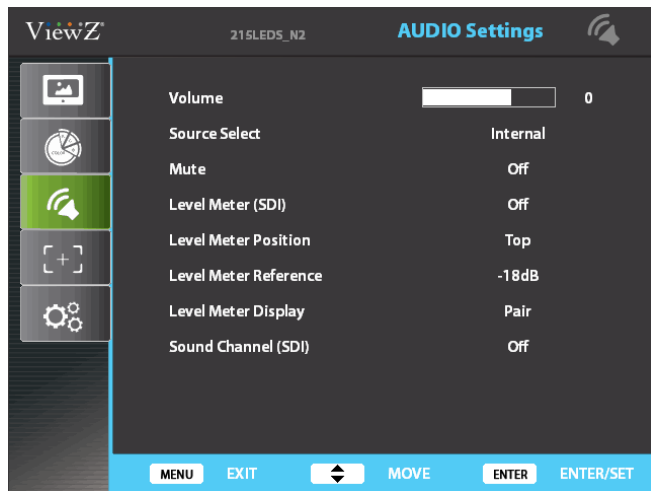
- used to select between -18dB and -20dB depending on user's source
- when -20dB is selected, yellow area expands to next marking. Audio level meter within selected value turns to green and exceeded audio level is displayed in yellow

### ■ Level Meter Display

- used to set the display method for audio level meter between Group and Pair.
- Pair represents level meter in even and odd, and Group shows first 8 channels on left and next 8 channels on right

# Menu Controls and Functions

## 3. Audio Settings (Continued)

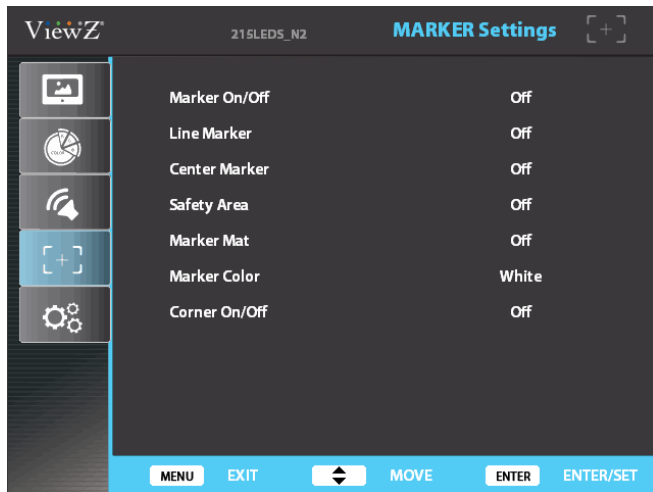


### ■ Sound Channel (SDI)

- used to set embedded audio channel for internal speaker or Audio Out
- select from CH1, CH2, CH1+CH2, CH3, CH4, CH3+CH4, CH5, CH6, CH5+CH6, CH7, CH8, CH7+CH8, CH9, CH10, CH9+CH10, CH11, CH12, CH11+CH12, CH13, CH14, CH13+CH14, CH15, CH16, and CH15+CH16
- when CH1 is chosen, user can hear Ch1 from both speakers. When CH1+CH2 is chosen, user can hear Ch1 from left speaker and Ch2 from right speaker

# Menu Controls and Functions

## 4. Marker Settings



### ■ Marker On/Off

- used to activate the marker function
- Marker should be ON to use any features in Marker Setting menu

### ■ Line Marker

- used to select user's desired marker type
- available in off, 16:9, 4:3, 4:3(on air), 15:9, 14:9, 13:9, 1.85:1, 2.35:1, 1.85:1 and 4:3

### ■ Center Marker

- used to turn on and off center marker

### ■ Safety Area

- used to select safety area among off, 80%, 85%, 88%, 90%, 93% and 100%

### ■ Marker Mat

- used to change darkness of areas out of line marker
- select level from OFF (transparent) to 7 (black)

### ■ Marker Color

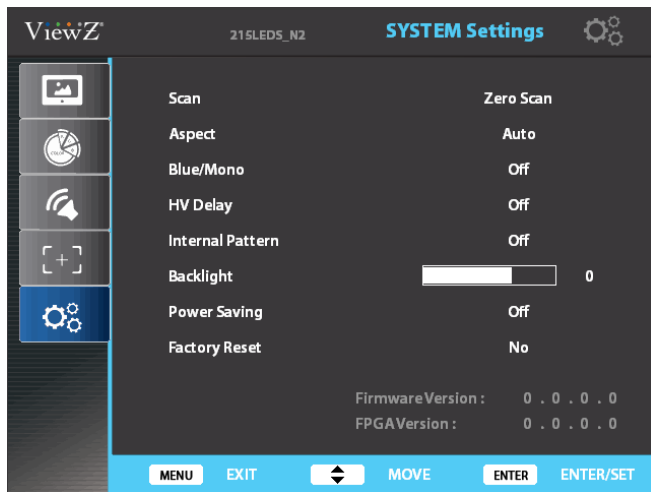
- used to change marker color on the screen
- select from blue, green, red, gray, black, and white

### ■ Corner On/Off

- used to show safety area by ticks rather than a box
- Safety area shown in regular line when the feature is off

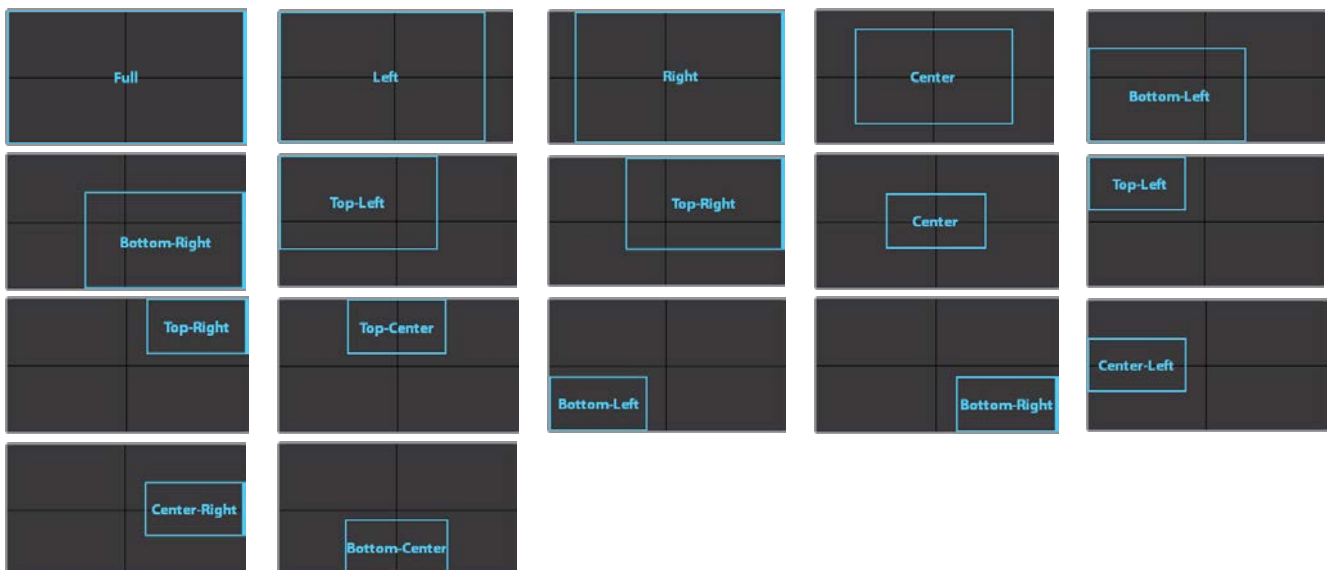
# Menu Controls and Functions

## 5. System Settings



### ■ Scan

- used to change the scan mode among zero scan, over scan, and pixel to pixel
- when pixel to pixel is on, turn the main jog to move the position



- *when system setting is in pixel to pixel, marker features don't work*

### ■ Aspect

- used to change the display ratio among full screen, 16:9, and 4:3

### ■ BlueMono

- used to change the display among off(regular), mono, and blue

### ■ H/V Delay

- used to observe blank area for H sync and V sync
- *when system setting is in H/V delay, marker features don't work*

### ■ Internal Pattern

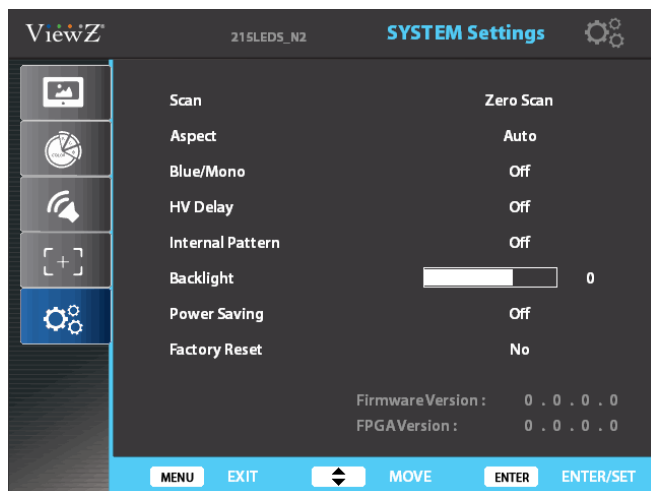
- used to turn on internal pattern among off, color bar, and white

### ■ Backlight

- to control backlight of screen from 0 to 100

# Menu Controls and Functions

## 6. System Settings (Continued)



### ■ Power Saving

- select between off and DPMS
- when DPMS is selected and there's no input signal for longer than 15sec, monitor takes sleep mode
- LED light on front: red-power off, green-power on, orange blink-no input, orange-DPMS(sleep mode)

### ■ Factory Reset

- used to reset the monitor to factory default setting



# Specification

VZ-LED-N			
Display			
Screen Size		21.5"	
Max Resolution		1920 X 1080	
Pixel Pitch		0.2475mm X 0.2475mm	
Brightness		250cd/m²(Typical)	
Contrast Ratio		1000:1	
Aspect Ratio		16:9	
Viewing Angle (H/V)		178°/178°	
Color Depth		16.7M	
Input Connector			
2 x BNC		SDI (SD/HD/3G)	
3 x BNC		COMPONENT Input	
1 x HDMI		HDMI Input	
1 x DVI		DVI Input	
1 x VGA		VGA Input	
1 x Phone Jack		Analog Stereo Audio Input	
1 x RJ45 Jack		RS422 Color Calibration Port	
1 x HDMI		PGM Download Port	
Output Connector			
1 x BNC		SDI (SD/HD/3G)	
Input Signal Format			
SDI	SMPTE 425M-A	YCbCr 4:2:2 10bit	1080P (60/59.94/50)
	SMPTE 274M	YCbCr 4:2:2 10bit	1080i (60/59.94/50)
			1080P (30/29.97/25/24/23.98)
			1080Psf (30/29.97/25/24/23.98)
	SMPTE 296M	YCbCr 4:2:2 10bit	720P(60/59.94/50/30/29.97/25/24/23.98)
	SMPTE 125M	YCbCr 4:2:2 10bit	525i (NTSC 59.94)
	ITU-R BT.601	YCbCr 4:2:2 10bit	625i (PAL 50)
	2K Format	YCbCr 4:2:2 10bit	2048 x 1080P (24/23.98/24sF/23.98sF)
ANALOG	COMPONENT		1080P (60/59.94/50)
			1080i (60/59.94/50)
			1080P (30/29.97/25/24/23.98)
			720P(60/59.94/50)

<b>HDMI</b>			480i/480P/576i/576P/1080i/1080P
<b>DVI</b>			VGA, SGA, XGA, SXGA, WXGA, WUXGA
<b>VGA</b>			VGA, SGA, XGA, SXGA, WXGA, WUXGA

Dimensions	
Outline Dimension	20.25" x 14.56" x 1.77"
(W x H x D)	(514.5mm x 370mm x 45mm)
Net Weight	8.4lbs (3800g)
General	
Power	DC 12V
Power Consumption	24W
Operating Temperature	0~40℃ (32~104°F)

**Memo**



[www.viewzusa.com](http://www.viewzusa.com)

**MODEL VZ-215LEDN**  
HD-SDI / 3G Broadcast Monitor

## **OPERATION MANUAL**

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