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› VILTROX DC-X3 6-inch 2000nits Camera Field Monitor User Manual

VILTROX DC-X3

VILTROX DC-X3 6-inch 2000nits Camera Field Monitor User Manual

INTRODUCTION

This manual provides detailed instructions for the operation and maintenance of your VILTROX DC-X3 6-inch 2000nits Camera Field Monitor. Please read this manual thoroughly before using the product to ensure proper function and to maximize its performance. Keep this manual for future reference.

PRODUCT OVERVIEW

The VILTROX DC-X3 is a professional 6-inch camera field monitor designed for enhanced video monitoring. It features a 2000 nits ultra-bright display, Full HD 1920x1080 resolution, 4K HDMI and 3G-SDI loop in/out, and a responsive touch screen interface. It supports various professional monitoring functions and custom 3D LUTs.

What's in the Box

- 1x VILTROX DC-X3 6-inch Camera Field Monitor
- 1x Cold Shoe Adapter
- 1x Sunshade Hood
- 1x VILTROX NP-F550 Battery
- 1x Standard HDMI Cable
- 1x Mini HDMI Cable
- 1x Type-C Cable
- 1x Carry Case
- 1x Custom Screen Protectors
- 1x User Manual
- 1x Packaging Box



Figure 1: Included accessories with the VILTROX DC-X3 monitor.

Monitor Components

TOUCHES DE RACCOURCI PRATIQUES

Bouton personnalisé F1, la valeur par défaut est le commutateur de fonction de forme d'onde complète.

Bouton personnalisé F2, la valeur par défaut est un commutateur de fonction de pseudo-couleur.

Bouton personnalisé F3, la valeur par défaut est le commutateur de fonction 3D LUT.

Bouton personnalisé F4, la valeur par défaut est le commutateur d'écran de verrouillage.

Les boutons personnalisés peuvent être définis sur 22 fonctions de raccourci, ou aucun réglage n'est requis.

Figure 2: Detailed diagram of the VILTROX DC-X3 monitor's interfaces and controls.

Refer to Figure 2 for a visual guide to the monitor's components:

1. Back/Menu Button
2. Cooling Air Intake
3. Shortcut Key (F1-F4)
4. DC Port
5. Display Screen
6. Type-C Port
7. Fan Exhaust Vent
8. Cooling Air Intake
9. Indicator Light
10. 1/4 Screw Hole
11. Power Button
12. USB Interface
13. HDMI Input
14. Battery Release Button
15. HDMI Output
16. Battery Slot
17. Headphone Jack
18. SDI Output

19. Cooling Air Intake
20. SDI Input
21. 1/4 Screw Hole

SETUP

1. Powering the Monitor

The DC-X3 monitor offers multiple power options:

- **NP-F Series Battery:** Insert a compatible NP-F550, NP-F750, or NP-F970 series lithium battery into the battery slot on the rear of the monitor.
- **DC Adapter:** Connect a 12-18V/2A DC power adapter to the DC IN port.
- **Type-C Power Bank:** Connect a Type-C power bank with $\geq 9V$ and 3A output to the Type-C port.

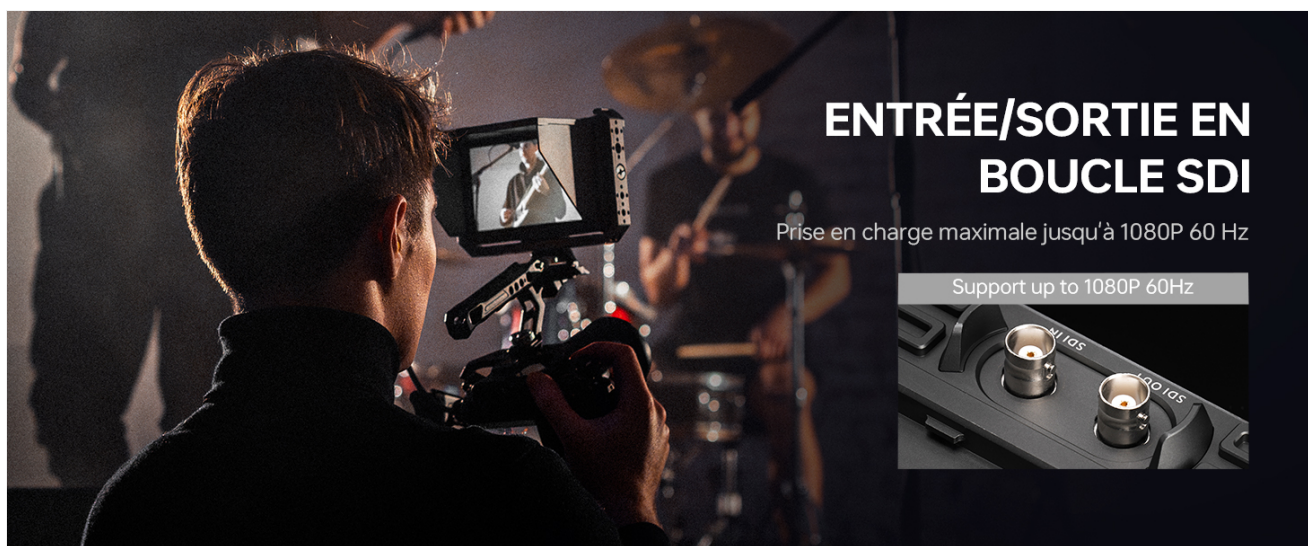


Figure 3: Various power supply methods for the DC-X3 monitor.

2. Mounting the Monitor

Attach the monitor to your camera rig or tripod using the included cold shoe adapter or the 1/4-inch screw holes located on the monitor's sides and bottom.

3. Connecting to a Camera

Connect your camera to the monitor using either an HDMI or 3G-SDI cable:

- **HDMI Connection:** Use the provided Standard or Mini HDMI cable to connect your camera's HDMI output to the monitor's HDMI IN port. The monitor supports up to 4K 30Hz (3840x2160p, 4096x2160p at 24/25/30Hz) HDMI signals.
- **3G-SDI Connection:** Connect your camera's SDI output to the monitor's SDI IN port. The monitor supports up to 1080p 60Hz SDI video signals.

The monitor also features HDMI OUT and SDI OUT ports for looping the signal to other devices.



Figure 4: HDMI and SDI connectivity options.

For audio monitoring, connect headphones to the 3.5mm stereo headphone jack.

OPERATING INSTRUCTIONS

1. Basic Operation

- **Power On/Off:** Press and hold the Power Button to turn the monitor on or off.
- **Touch Screen Control:** The intuitive UI allows for quick menu access and setting adjustments via simple tap and swipe gestures.
- **Shortcut Keys (F1-F4):** Four customizable function buttons provide quick access to frequently used features. These can be configured in the settings menu.



Figure 5: Touch screen and shortcut key functionality.

2. Professional Monitoring Functions

The DC-X3 monitor includes a suite of professional tools to assist with accurate exposure, focus, and color analysis:

- **Waveform Parade:** Displays the luminance and chrominance levels of your video signal.
- **Oscillogram (Y):** Provides a graphical representation of the video signal's brightness.
- **Vector Graph:** Shows the color saturation and hue of the video signal.
- **Brightness Histogram:** Illustrates the distribution of tones in your image.

- **Peaking Focus:** Highlights in-focus areas to aid in precise focusing.
- **Audio Column:** Visualizes audio levels.
- **Image Flip:** Flips the image horizontally or vertically.
- **False Color:** Uses color overlays to represent exposure levels.
- **Zoom:** Magnifies a portion of the image for detailed inspection.
- **Gridlines:** Provides compositional guides.
- **Color Temperature:** Adjusts the color balance of the display.
- **Pixel to Pixel:** Displays the image at its native resolution without scaling.



Figure 6: Professional monitoring functions interface.

3. Custom 3D LUTs

The monitor supports importing custom 3D LUTs (Look-Up Tables) to preview different color effects and camera Log modes. To import LUTs:

1. Save your 3D LUT files to a USB-A drive.
2. Connect the USB-A drive to the monitor's USB-A interface.
3. Navigate to the 3D LUT menu option and select the desired LUT for import.



Figure 7: Custom 3D LUT import and application.

KEY FEATURES

- **High Brightness Display:** 6-inch IPS panel with 2000 nits brightness for clear visibility in direct sunlight.
- **Full HD Resolution:** 1920x1080 resolution with 1000:1 contrast ratio and SRGB/REC-709 color calibration for sharp, rich images.
- **Wide Viewing Angle:** 160° super wide viewing angles.
- **Versatile Connectivity:** 4K HDMI and 3G-SDI loop in/out ports.
- **Audio Monitoring:** 3.5mm headphone jack for real-time audio monitoring.
- **Intuitive Touch Screen:** Easy navigation and control of monitor functions.
- **Customizable Shortcuts:** Four programmable function buttons for quick access to preferred settings.
- **Lightweight and Portable:** Designed for easy transport and use in various shooting environments.



Figure 8: High-brightness, Full HD display with wide viewing angles.

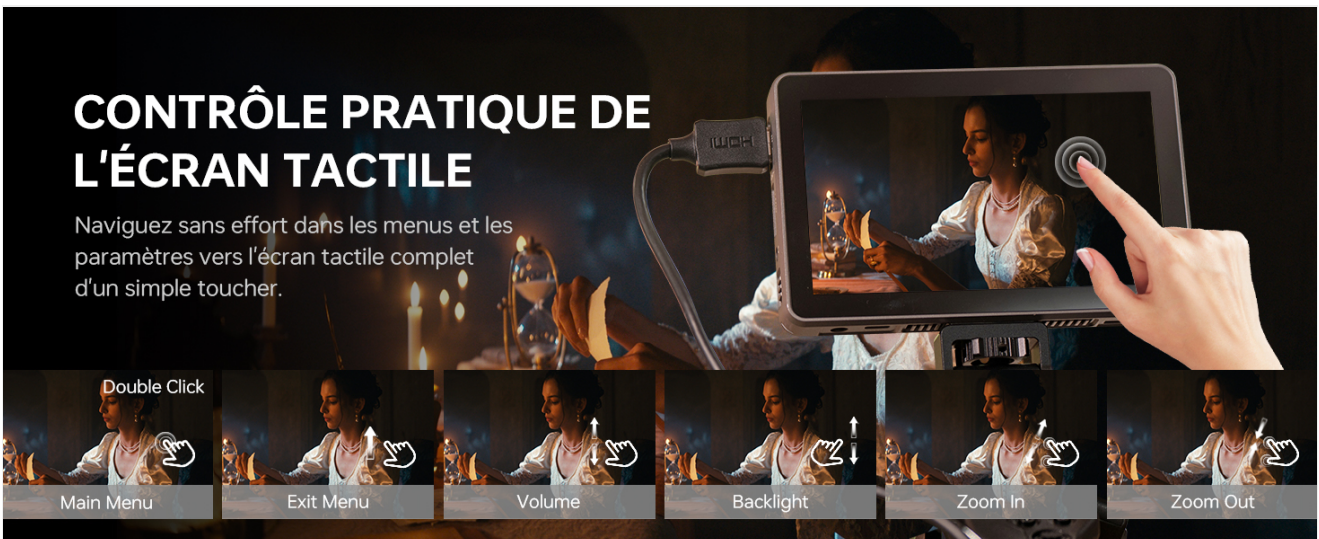


Figure 9: Portable and lightweight design.

SPECIFICATIONS

Feature	Description
Brand	VILTROX
Model Number	DC-X3

Feature	Description
Screen Size	6 Inches
Resolution	FHD 1080p (1920 x 1080)
Max Display Resolution	3840 x 2160
Refresh Rate	30 Hz
Contrast Ratio	1000:1
Brightness	2000 candela_per_square_meter (nits)
Viewing Angle	160 Degrees
Display Technology	IPS LCD
Connectivity Technology	HDMI, 3G-SDI
Total HDMI Ports	1 (Input), 1 (Output)
Total USB 3.0 Ports	1 (USB-A for LUTs/Firmware)
Special Feature	Touch Screen, Portable
Compatible Devices	Cameras, Camcorders, Tripods
Item Weight	1.32 Kilograms
Country of Origin	China

MAINTENANCE

To ensure the longevity and optimal performance of your VILTROX DC-X3 monitor, follow these maintenance guidelines:

- **Cleaning the Screen:** Use a soft, lint-free cloth specifically designed for electronics screens. Do not use abrasive cleaners or solvents. For stubborn smudges, lightly dampen the cloth with water or a screen-cleaning solution.
- **General Cleaning:** Wipe the monitor body with a dry, soft cloth. Avoid getting moisture into ports or vents.
- **Storage:** When not in use, store the monitor in its protective carry case in a cool, dry place away from direct sunlight and extreme temperatures.
- **Battery Care:** If using NP-F batteries, ensure they are charged and stored according to the battery manufacturer's recommendations. Remove batteries if the monitor will not be used for an extended period.
- **Firmware Updates:** Periodically check the VILTROX official website for firmware updates to ensure your monitor has the latest features and bug fixes. Follow the instructions provided with the firmware update carefully.

TROUBLESHOOTING

If you encounter issues with your VILTROX DC-X3 monitor, refer to the following common troubleshooting steps:

- **No Power:**

- Ensure the battery is fully charged and correctly inserted, or that the DC adapter/Type-C power bank is properly connected and supplying adequate power.
- Press and hold the power button for a few seconds to ensure it's not just a short press.
- **No Video Signal:**
 - Verify that the HDMI or SDI cable is securely connected to both the camera and the monitor.
 - Check the camera's video output settings to ensure it's sending a signal.
 - Try a different HDMI or SDI cable to rule out cable malfunction.
 - Ensure the input source on the monitor is correctly selected (HDMI or SDI).
- **Display Issues (e.g., flickering, incorrect colors):**
 - Check the monitor's display settings (brightness, contrast, color temperature) and reset them to default if necessary.
 - Ensure the camera's output resolution and frame rate are compatible with the monitor.
 - If using 3D LUTs, try disabling them to see if the issue persists.
- **Touch Screen Unresponsive:**
 - Restart the monitor.
 - Ensure the screen is clean and free of debris or moisture.
- **Overheating:**
 - Ensure the cooling vents are not obstructed.
 - Operate the monitor in a well-ventilated area.

If the problem persists after trying these steps, please contact VILTROX customer support.

WARRANTY AND SUPPORT

The VILTROX DC-X3 Camera Field Monitor comes with a **1-year manufacturer's warranty**. This warranty covers defects in materials and workmanship under normal use.

For warranty claims, technical support, or further assistance, please contact VILTROX customer service through their official channels. You can also visit the [VILTROX Brand Store](#) for more information and resources.

PRODUCT VIDEO OVERVIEW

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Video 1: A comprehensive overview of the VILTROX DC-X2 and DC-X3 professional video monitors, showcasing their features, setup, and use in various filming scenarios.