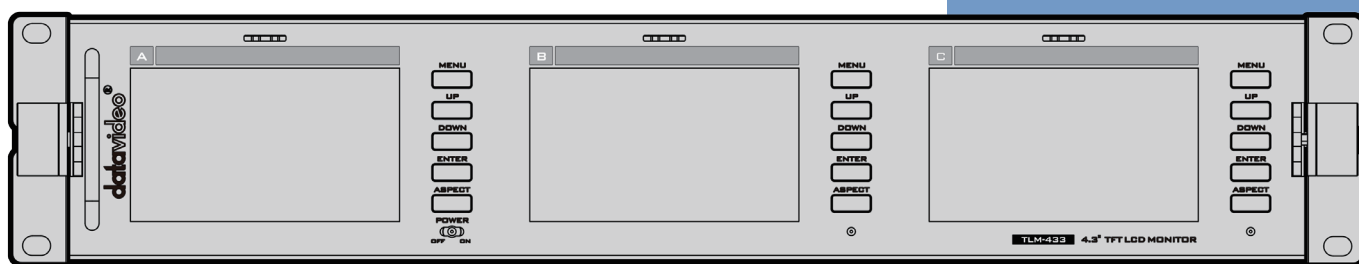


# datavideo



**3 X 4.3" SD TFT LCD  
MONITOR**

**TLM-433**

**Instruction manual**

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

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### **Disclaimer of Product and Services**

The information offered in this instruction manual is intended as a guide only. At all times, Datavideo Technologies will try to give correct, complete and suitable information. However, Datavideo Technologies cannot exclude that some information in this manual, from time to time, may not be correct or may be incomplete. This manual may contain typing errors, omissions or incorrect information. Datavideo Technologies always recommend that you double check the information in this document for accuracy before making any purchase decision or using the product. Datavideo Technologies is not responsible for any omissions or errors, or for any subsequent loss or damage caused by using the information contained within this manual. Further advice on the content of this manual or on the product can be obtained by contacting your local Datavideo Office or dealer.

## FCC Compliance Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

## Warnings and Precautions



1. Read all of these warnings and save them for later reference.
2. Follow all warnings and instructions marked on this unit.
3. Unplug this unit from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a slightly damp cloth for cleaning.
4. Do not use this unit in or near water.
5. Do not place this unit on an unstable surface, cart, stand, or table. The unit may fall, causing serious damage.
6. Any slots and openings on the case top, back, and bottom are provided for ventilation. To ensure safe and reliable operation of this unit, and to protect it from overheating, do not block or cover these openings. Do not place this unit on a bed, sofa, rug, or similar surface, as the ventilation openings may become blocked. This unit should never be placed near or over a heat source or radiator. This unit should not be placed in a built-in installation unless proper ventilation is provided.
7. This product should only be operated from the type of power source indicated on the marking label of the AC adapter. If you are not sure of the type of power available, consult your Datavideo dealer or your local power company.
8. Do not allow anything to rest on the power cord. Do not locate this unit where the power cord will be walked on, rolled over, damaged or otherwise stressed.
9. If an extension cord must be used with this unit, make sure that the total of the ampere ratings on the products plugged into the extension cord do not exceed the extension cord rating.
10. Make sure that the total amperes of all the units that are plugged into a single wall outlet do not exceed 15 amperes.
11. Never push objects of any kind into this unit through the case ventilation slots, as they may touch dangerous voltage points or short out parts that could result in risk of fire or electric shock. Never spill liquid of any kind onto or into this unit.
12. Except as specifically explained elsewhere in this manual, do not attempt to service this product yourself. Opening or removing covers that are marked "Do Not Remove" may expose you to dangerous voltage points or other risks, and will void your warranty. Refer all service issues to qualified service personnel.
13. Unplug this product from the wall outlet and refer to qualified service personnel under the following conditions:
  - a. When the power cord is damaged or frayed;
  - b. When liquid has spilled into the unit;
  - c. When the product has been exposed to rain or water;

- d. When the product does not operate normally under normal operating conditions. Adjust only those controls that are covered by the operating instructions in this manual; improper adjustment of other controls may result in damage to the unit and may often require extensive work by a qualified technician to restore the unit to normal operation;
- e. When the product has been dropped or the case has been damaged;
- f. When the product exhibits a distinct change in performance, indicating a need for service.

## **Warranty**

### ***Standard Warranty***

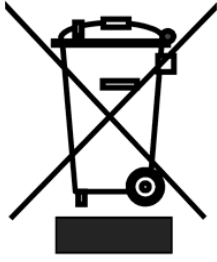
- Datavideo equipment are guaranteed against any manufacturing defects for one year from the date of purchase.
- The original purchase invoice or other documentary evidence should be supplied at the time of any request for repair under warranty.
- The product warranty period begins on the purchase date. If the purchase date is unknown, the product warranty period begins on the thirtieth day after shipment from a Datavideo office.
- All non-Datavideo manufactured products (product without Datavideo logo) have only one year warranty from the date of purchase.
- Damage caused by accident, misuse, unauthorized repairs, sand, grit or water is not covered under warranty.
- Viruses and malware infections on the computer systems are not covered under warranty.
- Any errors that are caused by unauthorized third-party software installations, which are not required by our computer systems, are not covered under warranty.
- All mail or transportation costs including insurance are at the expense of the owner.
- All other claims of any nature are not covered.
- All accessories including headphones, cables, and batteries are not covered under warranty.
- Warranty only valid in the country or region of purchase.
- Your statutory rights are not affected.

### ***Three Year Warranty***

- All Datavideo products purchased after July 1st, 2017 are qualified for a free two years extension to the standard warranty, providing the product is registered with Datavideo within 30 days of purchase.
- Certain parts with limited lifetime expectancy such as LCD panels, DVD drives, Hard Drive, Solid State Drive, SD Card, USB Thumb Drive, Lighting, Camera module, PCIe Card are covered for 1 year.
- The three-year warranty must be registered on Datavideo's official website or with your local Datavideo office or one of its authorized distributors within 30 days of purchase.



## Disposal



### **For EU Customers only - WEEE Marking**

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.



**CE Marking** is the symbol as shown on the left of this page. The letters "CE" are the abbreviation of French phrase "Conformité Européene" which literally means "European Conformity". The term initially used was "EC Mark" and it was officially replaced by "CE Marking" in the Directive 93/68/EEC in 1993. "CE Marking" is now used in all EU official documents.

## Introduction

The Datavideo TLM-433 is a 19" rack mountable 3 x 4.3" LCD TFT Monitor Bank.

It is an ideal accessory for the Datavideo SE 1000 Vision Mixers, or many other 19" rack mount applications.

The all-metal construction makes the TLM-433 robust and durable; and the 12V power requirements make it easy to power in the field or studio.

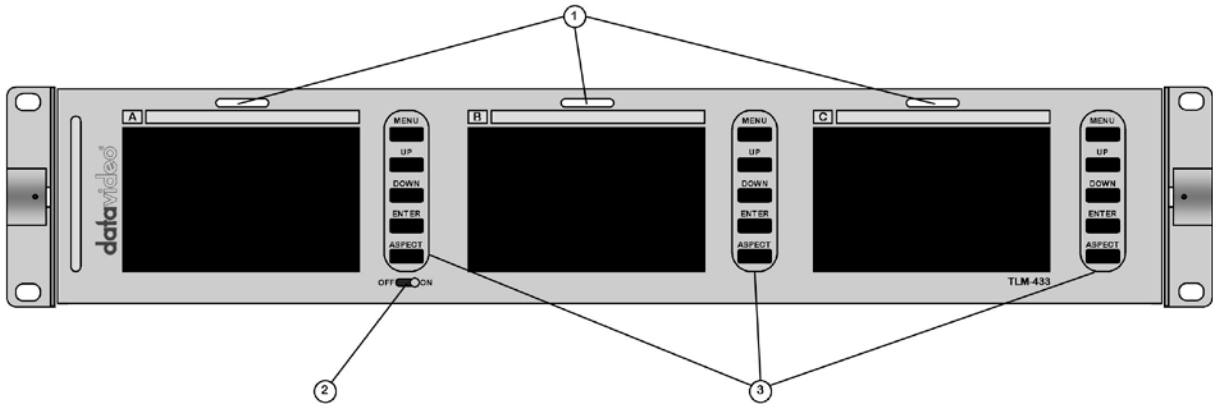
The high resolution TFT screens have a wide viewing angle and feature NTSC / PAL auto detection and selectable 4:3 / 16:9 aspect ratio.

## Features

- Each monitor has a composite video input with loop-through output.
- High resolution TFT Screens - 1440 x 234 dots
- Individual adjustments of Brightness, Contrast, Colour Saturation and Backlight Level for each monitor
- Pivoting mount to enable the screens to be angled up or down
- Wide viewing angle - (Vertical) +40/-60 degree, (Horizontal) +60/-60 degree
- Switchable Aspect Ratio - 16:9 / 4:3 selectable
- 2 Colour Tally Light (Red and Amber)
- NTSC/PAL compatible (Automatic switching)

# Functions

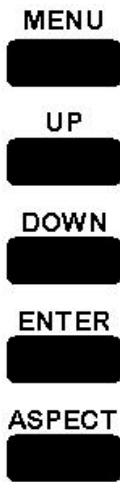
## Front Panel



1. Each monitor has a bi-colour tally light indicator which can be connected to the Datavideo TB-10, or similar products. AMBER indicates Cued-Up and RED indicates Live (On-Air).



2. Power On / Off switches the monitor bank On or Off



3. Each panel has a set of control buttons alongside it.

MENU calls up the on-screen adjustment menu. (see on-screen menu settings).

UP / DOWN navigate the on-screen menu and set the levels.

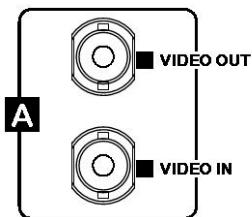
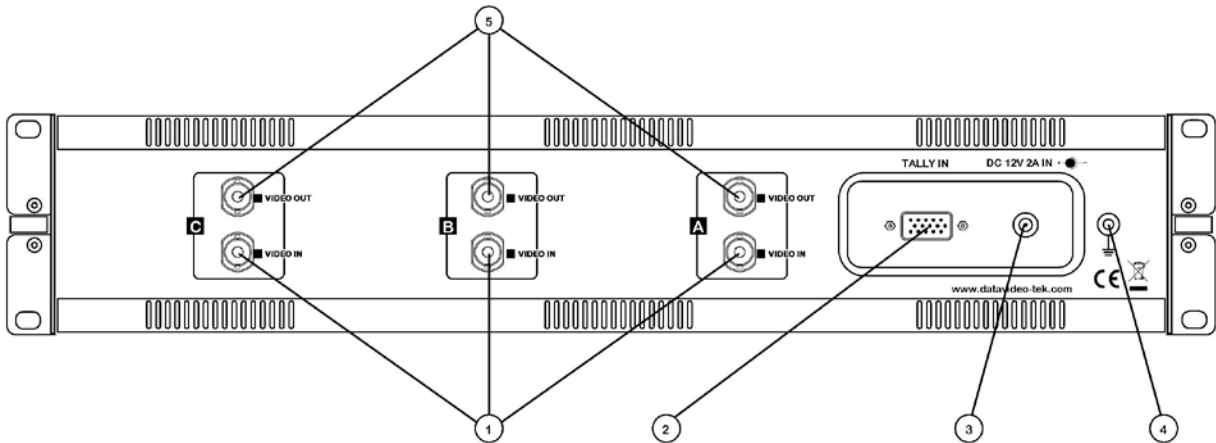
ENTER confirms the new settings and closes the on-screen menu.

ASPECT sets the LCD aspect ratio to 16:9 or 4:3

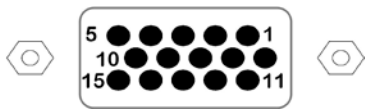


On either side of the TLM-433 are small Allen Key screw tension adjustments. These alter the tension on the pivoting mechanism. If you want to change the angle of the monitors, i.e. aim them up or down, you can loosen these screws and adjust the TLM-433. Once you have set the correct angle tighten the screws back up.

## Rear Panel



1. Each monitor has a composite video input, with a loop-through output (5). The video input can be PAL or NTSC, the TLM-433 will automatically detect the video standard.



2. 15 Pin Tally Light Input. The TLM-433 has bi-colour tally lights above each monitor, these are controlled via the 15 Pin tally input socket. The Datavideo TB-10 can be connected to supply tally information from the SE-1000 switcher. (For other tally systems, see Tally Light Socket Wiring for more details)

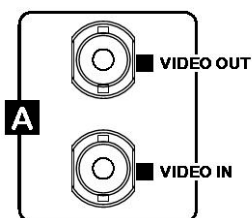
DC 12V 2A IN



3. Connect the supplied switch mode power supply to this socket. The locking collar screws into place once the plug has been inserted. It is also possible to power the TLM-433 from other regulated 12V supplies.



4. The earth terminal can be used with other equipment that has the same feature. Connect all items together to ensure that they are grounded.



5. Each monitor has a composite video input (1), with a loop-through output. The video input can be PAL or NTSC, the TLM-433 will automatically detect the video standard.



# On-Screen Menu Settings

Each monitor is set up from an on-screen menu.

To call up the menu press the MENU button.

## MAIN MENU

- OUTLINE FRAME
- BACKLIGHT
- BRIGHTNESS
- CONTRAST
- SATURATION

## RESET / DEFAULT

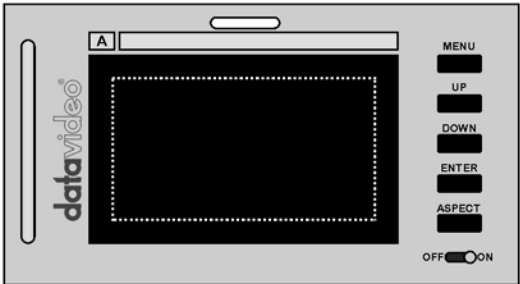
There are options for Outline Frame, Backlight, Brightness, Contrast, Saturation and Reset/Default, which are navigated via the UP / DOWN and ENTER buttons.

**Outline Frame** - Each monitor can be set to display a “safe area” border frame (16:9 Aspect Ratio only) of either 80% or 90%. When Outline Frame is on you will see a white dotted line detailing the safe area.

### MAIN MENU

- OUTLINE FRAME OFF
- BACKLIGHT 90%
- BRIGHTNESS 80%
- CONTRAST
- SATURATION

### RESET / DEFAULT



**Backlight** - There are 3 preset backlight levels which control the overall brightness of the monitor output. In a bright area it may be necessary to set Level 3 for maximum output, whereas in subdued lighting Level 1 will be adequate.

### MAIN MENU

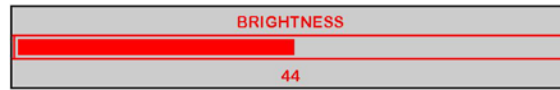
- OUTLINE FRAME
- BACKLIGHT LEVEL 1
- BRIGHTNESS LEVEL 2
- CONTRAST LEVEL 3
- SATURATION

### RESET / DEFAULT

**Brightness / Contrast / Saturation** - Each monitor can be individually adjusted for brightness, contrast and colour saturation. The settings are all done in a similar way.

Select the adjustment that you want to make and press the ENTER button. The adjustment bar will appear on the screen, and can be adjusted using the UP / DOWN buttons. Once set as required press the ENTER button.

**MAIN MENU**  
**OUTLINE FRAME**  
**BACKLIGHT**  
**BRIGHTNESS**  
**CONTRAST**  
**SATURATION**  
  
**RESET / DEFAULT**

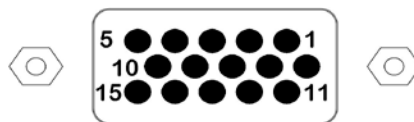


**Reset / Default** - This can be used to return the monitor to the factory default settings.

## Tally Light Socket Wiring

The Tally Light Socket controls the tally lights which are above each monitor. The Tally Lights are bi-colour - RED indicates the source is LIVE (On-Air) AMBER indicates the source is (CUED UP).

The socket works on simple contact closure between pins, the following table shows the pins for each monitor.



### Monitor A

Pins 1 - 4 = RED  
 Pins 3 - 4 = AMBER

### Monitor B

Pins 6 - 9 = RED  
 Pins 8 - 9 = AMBER

### Monitor C

Pins 11 - 14 = RED  
 Pins 13 -14 = AMBER

## Specifications

- LCD Display 3 x 4.3" TFT LCD active matrix, resolution 1440 x 234 dots
- Aspect Ratio 4:3 and 16:9 selectable
- Brightness (Luminance) 500 cd/m<sup>2</sup>
- Contrast Ratio 300
- View Angle  
Top: 40 deg  
Bottom: 60 deg  
Left: 60 deg  
Right: 60 deg
- Video Input CV input 1.0Vp-p, with self Loop-Through output (75 Ohm-terminated)
- Video System NTSC/PAL auto recognition
- Colour Adjustment Brightness, Contrast, Colour Saturation
- Tally Indication Bi-Colour Tally LED indicators
- Operation condition Operation temperature from 0°C to 50°C;  
Relative Humidity less than 90%
- Power Consumption DC12Volt, 1.0Amp (7W)
- Dimensions of LCD Panel 484mm x 88mm x 75mm (W x H x D)

# Service & Support

It is our goal to make owning and using Datavideo products a satisfying experience. Our support staff is available to assist you to set up and operate your system. Contact your local office for specific support requests. Plus, please visit [www.datavideo.com](http://www.datavideo.com) to access our FAQ section.

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