

17.3" 3G-SDI TFT LCD MONITOR TLM-170G Quick Start Guide

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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 damp cloth for cleaning.
4. Do not use this unit in or near water.
5. Do not place this unit on an unstable cart, stand, or table. The unit may fall, causing serious damage.
6. Slots and openings on the cabinet 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 on the bottom of the cabinet will be blocked. This unit should never be placed near or over a heat register 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, 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's 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 cabinet 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 cabinet has been damaged;
 - f. When the product exhibits a distinct change in performance, indicating a need for service.

Warranty

Standard Warranty

- Datavideo equipment is 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.
- Damage caused by accident, misuse, unauthorized repairs, sand, grit or water is not covered by this warranty.
- All mail or transportation costs including insurance are at the expense of the owner.
- All other claims of any nature are not covered.
- Cables & batteries are not covered under warranty.

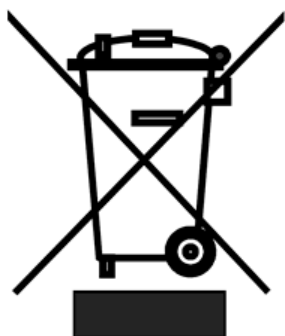
- Warranty only valid within the country or region of purchase.
- Your statutory rights are not affected.

Two Year Warranty

- All Datavideo products purchased after 01-Oct.-2008 qualify for a free one year extension to the standard Warranty, providing the product is registered with Datavideo within 30 days of purchase. For information on how to register please visit www.datavideo.com or contact your local Datavideo office or authorized Distributors
- Certain parts with limited lifetime expectancy such as LCD Panels, DVD Drives, Hard Drives are only covered for the first 10,000 hours, or 1 year (whichever comes first).

Any second year warranty claims must be made to your local Datavideo office or one of its authorized Distributors before the extended warranty expires.

Disposal






For EU Customers only - WEEE Marking

This symbol on the product indicates that it will not be treated as household waste. It must be handed over to the applicable take back scheme for the recycling of electrical and electronic equipment. For more detailed information about the recycling of this product, please contact your local Datavideo office.

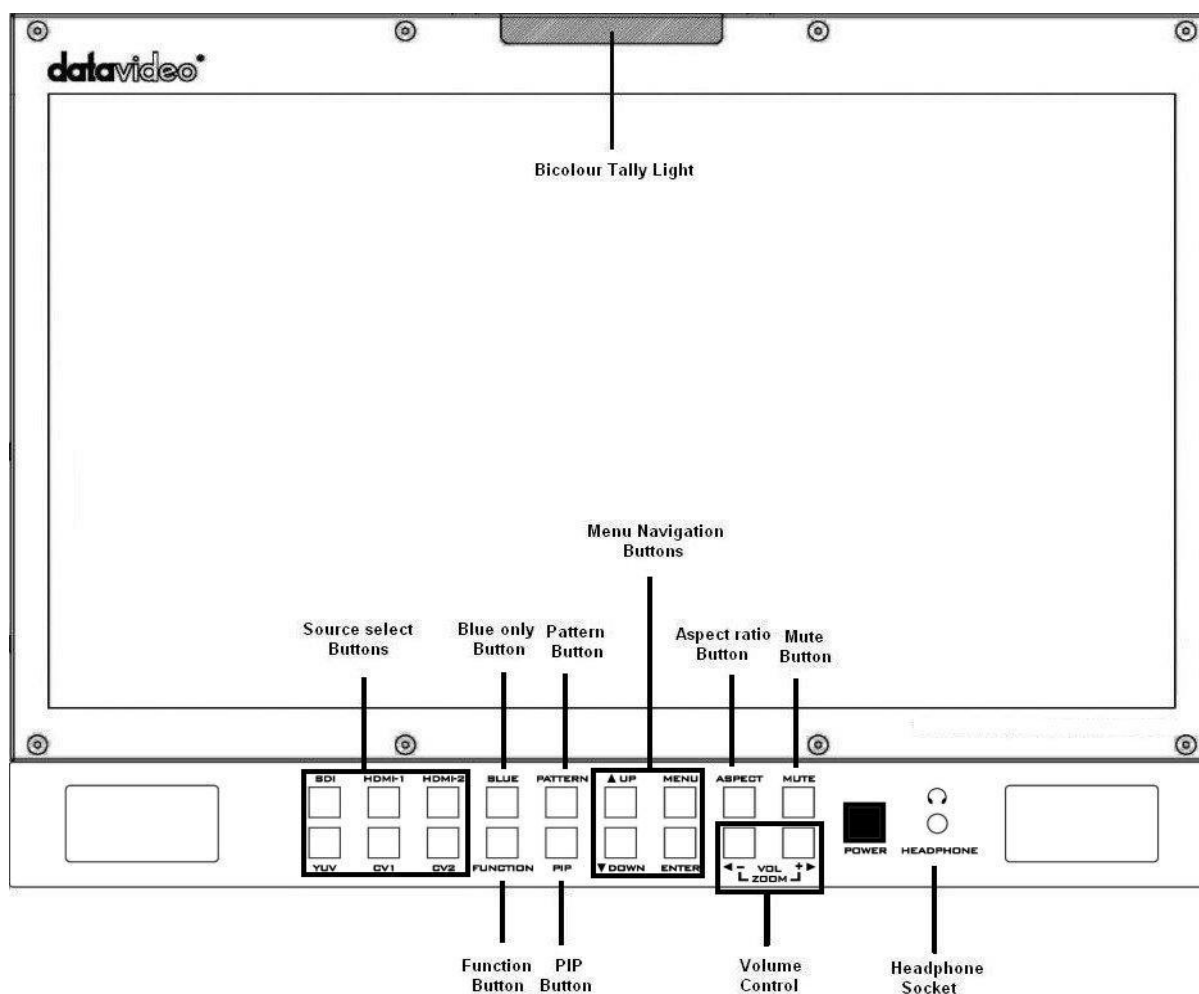
Packing List

1	x	Accessory Note
1	x	TLM-170G
1	x	Quick Start Guide

TLM-170G Model Types

Model	TLM-170G	TLM-170GR	TLM-170GM
Image			
System	Desktop	7U Rack Mount	1U Mobile Tray Rack Mount

Front Panel



Name	Description
Bi-Colour Tally Light	To indicate Live (Red) or Cued (Amber) source.
Source Select Buttons	Select SDI, HDMI, YUV or CV; The active input will be indicated by a red LED on the Source Button.
BLUE	Blue only: remove the red and green component of input signals. This allows adjustments of chroma and phase. (Phase adjustment is effective with NTSC signals).
Function	Zoom the SDI-HD video source - See Pixel ZOOM for more details.

Pattern Button	Display SMPTE 75% Colour Bars
PIP Button	Activates Picture in Picture Mode
Menu Navigation Buttons	Display and navigate setup menus – See <i>Menu Options for more details.</i>
Aspect Ratio Button	Sets the Aspect Ratio to 16:9 / 4:3
Mute Button	Mutes the audio from the internal speakers or headphone socket.
Volume Control	Adjusts the speaker / headphone volume up / down.
Headphone Socket	3.5mm headphone socket; internal speaker circuit will automatically mute when headphones are connected.
<i>N.B. Main Power On/Off switch is located on the rear of the TLM-170G.</i>	

Pixel ZOOM

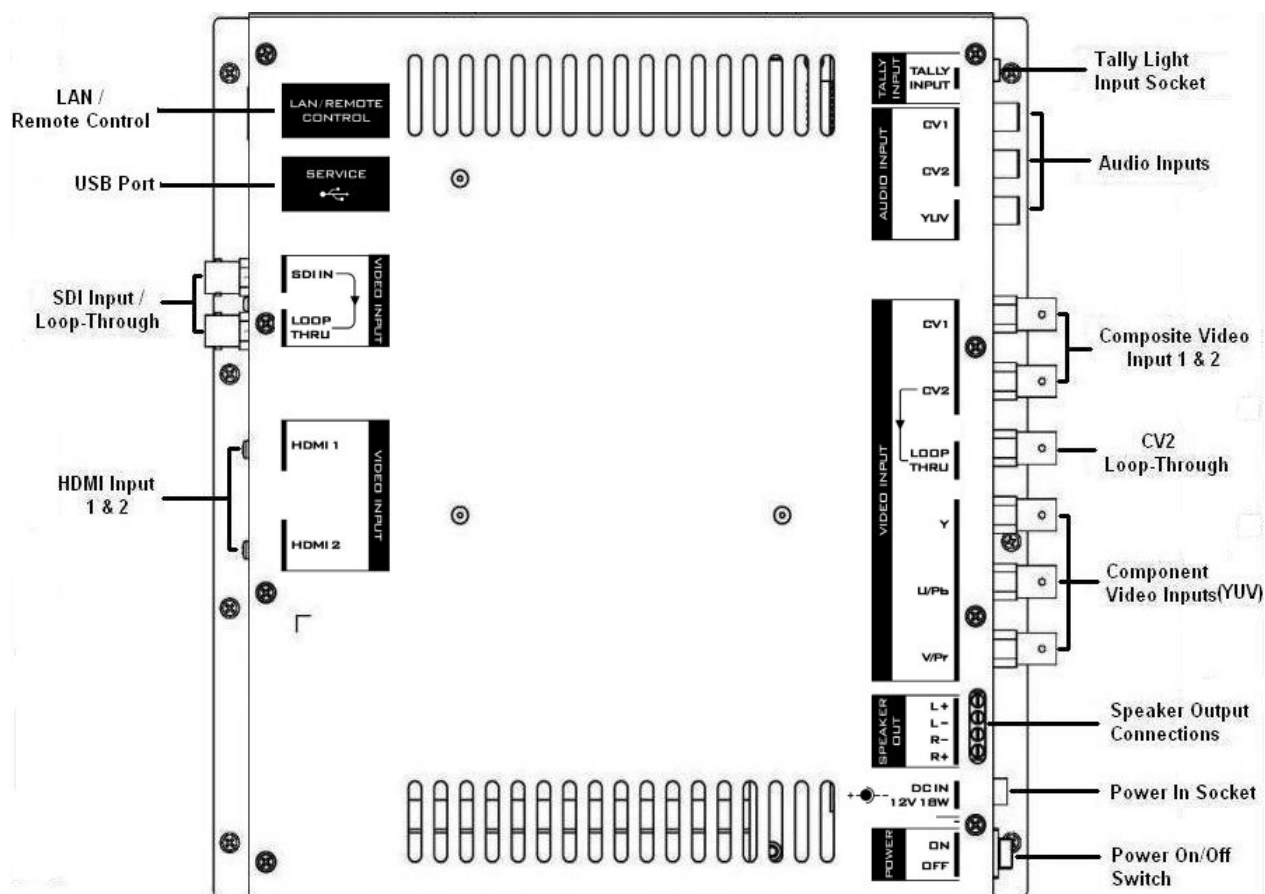
This function magnifies the incoming source to fill the screen. This is strictly a zooming function and does not alter the native aspect ratio of the source to fill the screen. When viewing a 4:3 source in Zoom mode on a 16:9 display the aspect ratio of the visible video will remain 4:3 though the entire 16:9 screen will be filled.

** ZOOM must be HD mode (above 720P resolution) can be active. If the source is not HD, Zoom cannot work.*

Feature Navigator

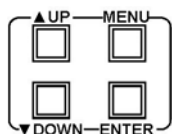
Once assigned to a **FUNCTION** button this feature allows you to toggle the Pixel Zoom feature on/off in OSD. When turned on this feature generates a positionable and resizable rectangle on screen. The rectangle may be moved left or right using the **VOL + /- ZOOM** key and up or down using the up/down key. The **FUNCTION** key may be used to change the size of the onscreen rectangle. Using these adjust keys you can select any area on screen and then press down on the **ENTER** key to zoom to the selected area. This pixel zoom feature is designed to work with any HD / **SD** signal. A Flashing Tally light or **FUNCTION key's light** will be activated on your monitor whenever you are in a zoomed mode. To exit the mode, simply press down on the MENU key once more. To exit the Pixel Zoom feature entirely simply press the MENU button assigned to this feature once more.

Rear Panel



Name	Description
LAN Remote Control	Use a crossover Ethernet cable for direct connection between TLM-170G and the PC RJ-45 port.
USB Port	For firmware updates only. See Firmware Update section for more details. See Firmware Update for more details.
SDI Input & Loop Through	BNC Input for HD / SD SDI with a loop through output.
HDMI Input	Video and Audio input from HDMI.
3.5mm Tally Light Input	Tally light information can be supplied to the TLM-170G from the Datavideo RMC-140, TB-5 or TB-10 via this socket.
Analog Audio Inputs	Mono audio inputs to correspond to the analog video inputs (CV 1 & CV 2).
Composite Video Inputs 1 & 2	BNC connectors for composite video with one loop through output.
Component Video Input	BNC connectors for Component (YUV (Y/R-Y/B-Y)) Video.
Speaker Output Connections	Speaker Output connections Max 5v p - p (2w)
DC In Socket	2.1 mm In Line Power Socket with screw lock, for connecting the suitable 12v 18W feed.
On / Off Switch	Main on / off switch, switches the TLM-170G on and off.

Menu Options



The TLM-170G is set up via on-screen menus. To display the on-screen menu, press the MENU button.

The menus are navigated using the Up / Down buttons. Press Enter button to into or exit the setting mode.

MAIN ADJUST

You can choose:	BRIGHTNESS	0~100
	CONTRAST	0~100
	SHARPNESS	0~100
	SATURATION	0~100
	TINT	0~100
	BACK LIGHT	0~100
	3D COMB	DISABLE / ENABLE
	NR	HIGH / MID / LOW / OFF
	MPEG NR	HIGH / LOW / OFF
	DLC	DISABLE / ENABLE
	VOLUME	0~100
	EXIT	

3D COMB is for video noise suppression.

NR is for video noise reduction.

MPEG NR is for MPEG format noise reduction.

DLC is for Dynamic luminance control

COLOR ADJUST

You can choose:	6500	RED GREEN BLUE EXIT
	9300	RED GREEN BLUE EXIT
	7500	RED GREEN BLUE EXIT
	USER COLOR	RED GREEN BLUE EXIT

SCAN SETTING

You can choose:	UNDER SCAN
	OVER SCAN

INFORMATION

Display:	H. FREQUENCY
	V. FREQUENCY
	RESOLUTION

This mode will display the video resolution.

PIP SETTING

You can choose:	PIP	PIP / OFF
	SOURCE	YUV / CVBS 1 / CVBSI 2

POSITION	LF-TOP / RT-TOP / RT-BOT / LF-BOT
SIZE	LARGE / SMALL / MID
SWAP	

EXIT

LANGUAGE

You can choose:

- English
- Español
- Deutsch
- Español
- Italiano
- Dutch
- Português
- Russian
- EXIT

SETUP MENU

You can choose:

- OSD TIMEOUT 5~120 sec
- EXIT

SPECIAL FUNCTION I

You can choose:

- FRAME RATIO 80 / 90 / OFF
- 4:3 MARK LINE ON / OFF
- CENTRAL MARK ON / OFF
- CINEMA ZONE MARK ON / OFF
- MARK TYPE OVERLAY / TRANSPARENT
- EXIT

SPECIAL FUNCTION II

You can choose:

- TIMECODE SETUP (VALID FOR SDI ONLY)
- TITLE EDIT
 - TITLE DISPLAY ON / OFF
 - TITLE POSITION MID-TOP / MID-BOT
 - FONT SIZE SMALL / LARGE
 - FONT COLOR RED / GREEN / ORANGE / WHITE
 - EDIT TITLE A~Z
- EXIT

SETUP NETWORK

You can choose:

- DHCP** ON / OFF User's choice
- IP** 127.127.127.127. User defined/ set by DHCP if DHCP=ON
- MASK** 255.255.255.255. User defined/ set by DHCP if DHCP=ON
- GATEWAY** 127.127.127.127. User defined/ set by DHCP if DHCP=ON
- MAC** xx.xx.xx.xx.xx.xx unique to monitor cannot be changed
- EXIT**

See **Remote Control Setup** for more details.

UPDATE F.W.

You can choose: UPDATE SCALER F.W.
SCALER VER:
UPDATE FPGA F.W.
FPGA VER:
EXIT

Datavideo QA recommends using the four USB dongles listed below for firmware upgrade:

- Sony 8G (Micro Vault USB flash drive)
- SanDisk 8G (Cruzer Glide USB flash drive)
- Transcend (Jet Flash 16G)
- Kingston (DT101 G2 8GB)

FACTORY RESET

You can push ENTER button to reset the TLM-170G to factory default setting.

AUDIO CONTROL

You can choose:	INTERNAL AUDIO	ON / MUTE CONTROL / OFF
	EXTERNAL AUDIO	ON / MUTE CONTROL /
	AUDIO INDICATOR	ON / OFF
	AUDIO CHANNEL L	1
	AUDIO CHANNEL R	2
	EXIT	

Firmware update procedure

From time to time Datavideo may release new firmware to either add new features or fix reported bugs in the current TLM-170P firmware. Customers can update the DAC-70 firmware themselves or contact their local dealer for assistance.

This page describes the firmware update process and it should take ***approximately 15 minutes of total time*** to complete.

A working TLM-170P requires the following:

The latest firmware file for the TLM-170P monitor. This can be obtained from your local Datavideo office or dealer.

A USB 2.0 pen drive (128MB or larger) with a USB A connector.

Once started ***the update process should not be interrupted in any way*** as this could result in a non-responsive unit.

How to update the Scaler firmware

1. Unzip / extract the supplied zipped archive or rar file.
2. Erase the contents of the USB 2.0 pen drive.
3. Transfer / copy the unzipped / extracted file to the USB 2.0 pen drive.
4. Plug the USB 2.0 pen drive into the USB 2.0 port labelled MAINTENANCE located on the rear panel of the TLM-170P monitor.
5. Power on the monitor and press the MENU button to display the OSD Main Menu.
6. Use the OSD Menu buttons [UP, DOWN & ENTER] to select the SETUP F.W. option.
7. Use the OSD Menu buttons [UP, DOWN & ENTER] to select UPDATE SCALER F.W.
8. The TLM-170P tally light will flash different colours whilst the update is in progress.
9. The TLM-170P monitor reboots itself at the end of the process.

How to update the FPGA firmware

1. Unzip / extract the supplied zipped archive or rar file.
2. Erase the contents of the USB 2.0 pen drive.
3. Transfer / copy the unzipped / extracted file to the USB 2.0 pen drive.
4. Plug the USB 2.0 pen drive into the USB 2.0 port labelled MAINTENANCE located on the rear panel of the TLM-170P monitor.
5. Power on the monitor and press the MENU button to display the OSD Main Menu.
6. Use the OSD Menu buttons [UP, DOWN & ENTER] to select the SETUP F.W. option.
7. Use the OSD Menu buttons [UP, DOWN & ENTER] to select UPDATE FPGA F.W.
8. The TLM-170P tally light will flash different colours whilst the update is in progress.
9. The TLM-170P monitor reboots itself at the end of the process.

Remote Control Setup

Access TLM-170G via a Router

- Connect TLM-170G and the PC to a router using an Ethernet cable
- Press TLM-170G MENU button and use the Up/Down buttons to browse to "SETUP Network"
- Press Enter button to select "SETUP Network"
- Enable DHCP mode on TLM-170G
- On the router GUI, find the IP address of the TLM-170G
- Open any web browser on the PC and enter the IP address of the TLM-170G to open the interface shown in the diagram below

The screenshot displays the datavideo® web interface with a blue header. The header contains the logo on the left and navigation links for [AV Setting](#), [PIP](#), [MarkLine](#), and [NetWork](#) on the right. The main content area is divided into two panels. The left panel, titled "Image Setting", contains a "Main Adjust" section with sliders for Brightness (225), Contrast (177), Sharpness (35), and Saturation (230), each with "+" and "-" buttons. Below these is a "Set" button. The bottom section of the left panel is titled "Color Temperature" and features radio buttons for 6500K, 9300K, and User Define. Below these are sliders for RED (225), GREEN (180), and BLUE (196), each with "+" and "-" buttons, and a "Set Color Tempature" button. The right panel, titled "Audio Setting", contains three toggle switches for Internal Audio, External Audio, and Indicator, each with "ON" and "OFF" positions. Below these is a "Volume Control" slider set to 57, with "+" and "-" buttons.

Setting	Value	+	-
Brightness	225		
Contrast	177		
Sharpness	35		
Saturation	230		
RED	225		
GREEN	180		
BLUE	196		

Direct Connection between the PC and TLM-170G

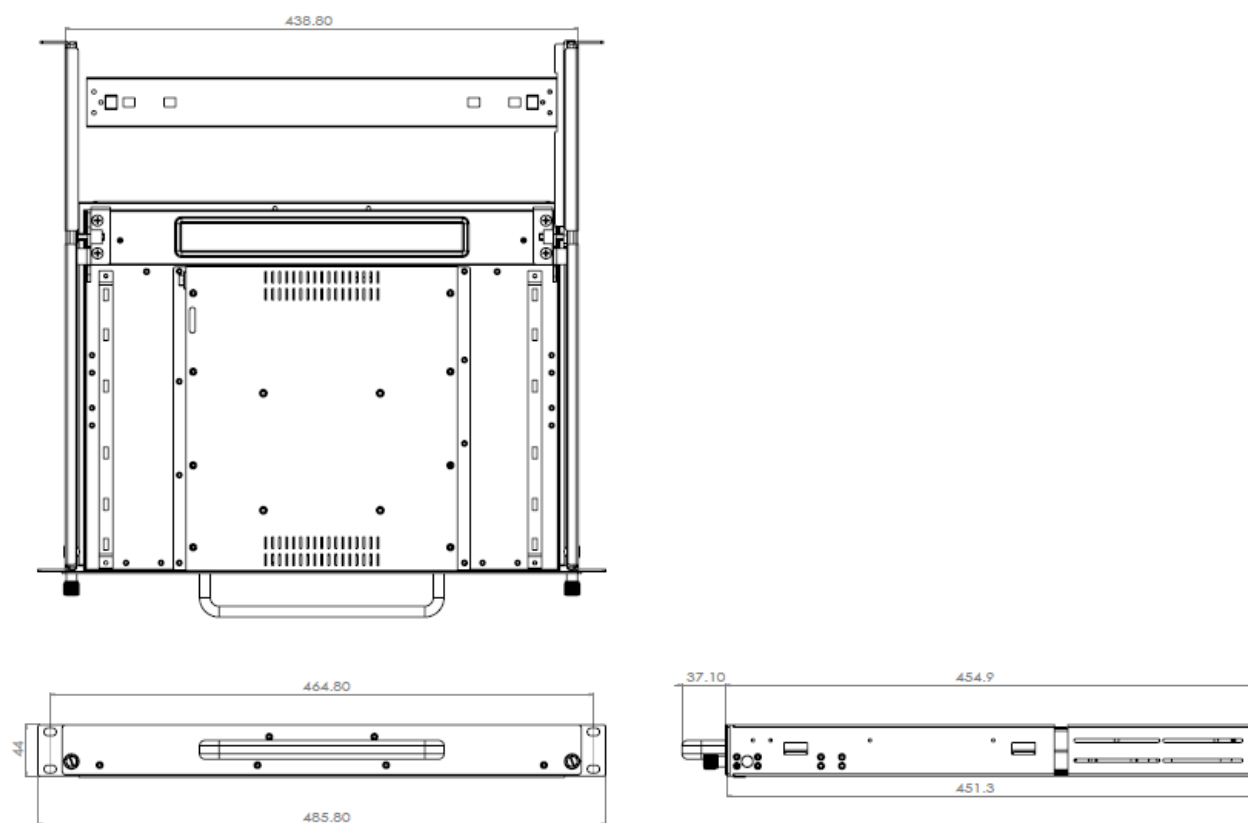
- Connect TLM-170G to a PC using a crossover Ethernet cable
- Press TLM-170G MENU button and use the Up/Down buttons to browse to "SETUP Network"
- Press Enter button to select "SETUP Network"
- Disable DHCP mode on TLM-170G and configure the network setting to the following
 - IP: 192.168.1.101
 - Mask: 255.255.255.0
 - Gateway: 192.168.1.1
- Configure the PC's network setting to the following
 - IP: 192.168.1.102
 - Mask: 255.255.255.0
 - Gateway: 192.168.1.1
- Open any web browser on the PC and enter the IP address of the TLM-170G (192.168.1.101) to open the interface shown in the diagram below

The screenshot displays the web interface of the datavideo TLM-170G. The top navigation bar includes the 'datavideo' logo and four tabs: 'AV Setting' (selected), 'PIP', 'MarkLine', and 'NetWork'. The main content area is divided into two columns. The left column contains the 'Image Setting' section, which has a 'Main Adjust' subsection with sliders for Brightness (225), Contrast (177), Sharpness (35), and Saturation (230), each with '+' and '-' buttons. Below this is a 'Set' button. The 'Color Temperature' section offers three radio button options: 6500K (selected), 9300K, and User Define. Below these are sliders for RED (225), GREEN (180), and BLUE (196), each with '+' and '-' buttons, and a 'Set Color Tempure' button. The right column contains the 'Audio Setting' section, which includes three radio button options for Internal Audio (ON selected, OFF), External Audio (ON selected, OFF), and Indicator (ON selected, OFF). Below these is a 'Volume Control' slider set to 57, with '+' and '-' buttons.

Specifications

LCD	Panel Size: 17.3" Contrast: 650 Resolution: 1600 x 900 White Luminance: 220cd View Angle: Top: 20 Bottom: 45 Left: 45 Right: 45
Video Input	HDMI x 2 (Ver 1.3) HD/SD SDI x 1 Component x 1 (3 BNC) Composite x 2
Video Loop Thru Out	SDI Loop Thru x 1 Composite x 1
SDI Signal Format	SMPTE-425M - 1080p (60/59.94/50/30/25/24) 1080i (60/59.94/50) SMPTE-296M - 1080P(60/59.94/50) SMPTE-125M - 480I(59.94) ITU-R BT.656 - 576I(50)
Audio Input	Composite x 2 YUV x 1
Audio Output	Speaker cable output connections (L-, L+, R-, R+) Max 5v p - p (2w) Speaker Output connections Max 5v p - p (2w)
Tally	Tally input x 1
Service	F/W Upgrade - USB 2.0 x 1
Network	Remote Control - LAN (RJ-45) x 1
Functions	Support SDI audio embedded Support HDMI audio embedded Audio Indicator: SDI / 8 CH HDMI / 2 CH CV/YUV 2CH Temperature Selection: 6500K, 9300K, User-Defined On Screen Time Code Safe Area Blue Only PIP Pixel Zoom up to 8x Under scan / Over scan selection

Dimensions



Service & Support

It is our goal to make your products ownership a satisfying experience. Our supporting staff is available to assist you in setting up and operating your system. Please refer to our web site www.datavideo.com for answers to common questions, support requests or contact your local office below.

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