

# transvideo



*CineMonitor HD Evolution*

## **Operator Manual**

# ABOUT

This Operator Manual describes the use of the Transvideo CineMonitorHD Evolution family.

The first CineMonitor has been introduced to the Film Industry during year 1995. The CineMonitorHD Evolution is our latest contribution to the Digital Cinematography world, including advanced decision tools for the HD world.

The CineMonitorHD Evolution family includes the following products:

<i>CineMonitorHD<sup>6</sup> SBL Evolution</i>	6" HD Monitor SuperBright
<i>CineMonitorHD<sup>8</sup> Evolution</i>	8" HD Monitor
<i>CineMonitorHD<sup>8</sup> SBL Evolution</i>	8" HD Monitor SuperBright
<i>CineMonitorHD<sup>10</sup> SB Evolution</i>	10" HD Monitor SuperBright
<i>CineMonitorHD<sup>12</sup> SB Evolution</i>	12" HD Monitor SuperBright
<i>CineMonitorHD<sup>15</sup> SBL Evolution</i>	15" HD Monitor SuperBright
<i>CineMonitorHD<sup>15</sup> Studio Evolution</i>	15" HD Monitor Studio version

If the physical, electrical and optical characteristics of the products are different, the user interface is the same.

Several configurations are optionally available for this family of products.

There is the choice at the order between several input boards, which gives different functionalities described in this document. Some options can be not implemented in your CineMonitorHD Evolution.

**This manual describes CineMonitorHD Evolution with Software 6.xx or later and Firmware 10.xx or later.**

Depending of the hardware, it is possible to upgrade the CineMonitorHD Evolution. For that, contact your local Transvideo representative.

The products described in this manual are professional equipments. They are not designed for consumer use. Utilization of these products implies knowledge of basics in video signal management, HDTV and film making concept.

# WARNING & CAUTION

## WARNING:

There is very high voltage inside of the component. Risk of injury or death.

## WARNING:

This product must be used in a correct grounded electrical environment; ground defects can create severe problems to the equipment, the picture quality and even cause danger for the user.

## WARNING:

**Copyright law and international treaties protect this product, its design and its software. One or several international patents apply to the CineMonitorHD Evolution. Unauthorized reproduction or distribution of this product or its design or its software or any portion of them, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law.**

## CAUTION:

Warranty is void if the product is opened. The unit contains electrostatic sensitive devices, which can be damaged or destroyed if you touch them. Very high voltage is present in the product and there is some risk of electric shock if opened by a non-accredited technician. Standard ESD procedures must be strictly followed during disassembly/re-assembly of the unit.

The user and/or technician assume full responsibility or any risk of bodily injury, death or property damage arising out of the use or disassembly or repair of this equipment. In no event shall Transvideo S.A. or its local representatives be liable to a user, technician or third party for any loss of income or any damage of any kind resulting from the use of or work on the said equipment.

# TABLE OF CONTENT

<b>ABOUT</b> .....	<b>2</b>
<b>WARNING &amp; CAUTION</b> .....	<b>3</b>
<b>TABLE OF CONTENT</b> .....	<b>4</b>
<b>INTRODUCTION</b> .....	<b>7</b>
<i>Condensed Operating Instructions</i> .....	7
<i>Unpacking and Inspection</i> .....	7
<i>Safety Inspection</i> .....	7
<i>Product Overview</i> .....	8
<i>Installation</i> .....	10
<i>Power Requirements</i> .....	11
<b>OPERATION</b> .....	<b>13</b>
<i>Sart-Up &amp; Power</i> .....	13
<i>Using the direct functions</i> .....	13
<i>Using the sub functions F1...F4</i> .....	13
<i>Using the rotating knob</i> .....	14
<b>DIRECT FUNCTIONS</b> .....	<b>15</b>
<i>Colorimetry Temperature Dimming</i> .....	15
<i>Markers</i> .....	15
<i>Measure (Waveform, Histogram, Vectorscope)</i> .....	16
Waveform .....	16
Histogram .....	18
Vectorscope .....	18
<i>Zoom</i> .....	19
<i>Aspect Ratio</i> .....	19
<i>User</i> .....	20
<i>Input Selection (Input Sel)</i> .....	21
<i>Adjust (ADJ)</i> .....	21
<b>MENU FUNCTIONS</b> .....	<b>23</b>
<b>HELP</b> .....	<b>23</b>
MONITOR INFO .....	23
UPDATE .....	23
ADVANCED UPDATE .....	23

<b>DISPLAY MODE</b> .....	<b>23</b>
COLOR .....	23
GREEN * .....	23
B/W .....	24
<b>BLUE CHECK</b> .....	<b>24</b>
<b>COLORIMETRY</b> .....	<b>24</b>
MANUAL .....	24
D56 CALIBRATED .....	24
D65 CALIBRATED .....	24
<b>CURVES</b> .....	<b>24</b>
LOG C .....	24
LOG F .....	25
PANALOG .....	25
GAMMA ADJUST .....	25
STANDARD 0.45 .....	25
<b>LOCK</b> .....	<b>25</b>
<b>TOOLS</b> .....	<b>26</b>
AUDIO .....	26
TIMECODE .....	26
I/ LENS .....	26
FOCUS HELPER .....	27
FRAMELINE .....	28
HORIZON .....	28
LIMITS .....	29
MEASUREMENTS .....	31
TALLY .....	32
<b>PICTURE FX</b> .....	<b>32</b>
<b>RANGE: STANDARD / EXTENDED</b> .....	<b>33</b>
<b>SCAN</b> .....	<b>33</b>
<b>TECHNICAL</b> .....	<b>34</b>
CVBS STD SELECT * .....	34
NTSC * .....	34
ACCESSORY * .....	34
HDMI MODE: CANON/NORMAL ** .....	34
GPI .....	34
VOLTAGE ALARM .....	35
REVERSE SCROLLING .....	35
EXIT TEMPO .....	35
LED DIMMER .....	35
<b>MEMORY</b> .....	<b>35</b>
MEM 1 ... MEM 4 .....	35
PRESET .....	36
<b>SERVICE &amp; MAINTENANCE</b> .....	<b>37</b>
<b>General</b> .....	<b>37</b>
<b>Useful tips</b> .....	<b>37</b>
Cleaning .....	37
Full reset .....	37
<b>Hardware, Software and Firmware</b> .....	<b>38</b>

*Updating your CineMonitorHD Evolution*..... 38  
*Calibration* ..... 39  
*Product Return* ..... 39

**SPECIFICATIONS**..... 41

*Common Characteristics* ..... 41  
*Connections* ..... 42  
*List of Standards per Input*..... 43  
*Specific Characteristics* ..... 43

**TRANSMEDIA EQUIPMENT LIMITED WARRANTY**..... 45

# INTRODUCTION

## Condensed Operating Instructions

- ① Connect an appropriate power supply to the XLR4 connector or a battery if any socket available.
- ② Connect a video source to the input
- ③ Switch on the monitor with the back switch
- ④ Select the correct input with "Input Sel" key

For more information, refer to chapter "OPERATION".

## Unpacking and Inspection

The CineMonitorHD Evolution is delivered in a rugged waterproof case. Use this case for storage and transportation.

Control the content of the package accordingly to the packing list.

Visit our website <http://www.transvideo.eu>. Login or Create a new account to register your product by using "My Products" menu.

Or fill up the warranty card and send it by mail or by fax to your distributor or to the factory.

## Safety Inspection

Before using the monitor be sure that the product is not damaged, that the protective glass is not broken and that the connector do not have missing pins, foreign objects inside the housing.

The cables must be in good condition and adapted to the environment where you are working. A bad quality or wrong-wired cable may damage this equipment or other equipment attached to it and/or create interferences. Transvideo offers high quality cables for cameras, power supplies and other equipment. Contact Transvideo S.A. or its local representative in case of need.

This product must be used in a properly grounded electrical environment. Ground defects can create severe problems to the equipment and/or picture quality and may even cause danger for the user.

The video cable must be adapted for carrying HD SDI signals. Proper 75  $\Omega$  connectors must be used. Always check the connector before plugging a cable to your monitor.

The CineMonitorHD Evolution needs to be in a ventilated area for a proper cooling. Prolonged use in confined environment without ventilation can damage the monitor.

**IMPORTANT:**

Do not use damaged cables with this equipment.  
Damaged connectors may seriously damage this equipment.  
Never seal the monitor in a plastic bag.  
Never use the monitor in full sun with a Raincover.

## Product Overview

All connectors are on the back of the monitor. Depending on the size of the monitor, the connectors and their location may differ.

The CineMonitorHD Evolution family offers a user interface common to all sizes. Some functions are directly accessible from the "direct functions" keypad, others from the menu with use of the rotating knob.

The CineMonitorHD screen is partitioned in two areas:

- ① The picture zone displays the picture from the camera in 16/9 format
- ② The tools zone displays tools and measurements in the remaining area of the screen.

The CineMonitorHD Evolution family offers a video connector panel common to all sizes. 10" to 15" monitors also provide a power out connector and a battery plate (more details in chapter "SPECIFICATIONS").

Figure 1 to 3 show the front and back of a 8" HD monitor and the back of a 10" HD monitor.

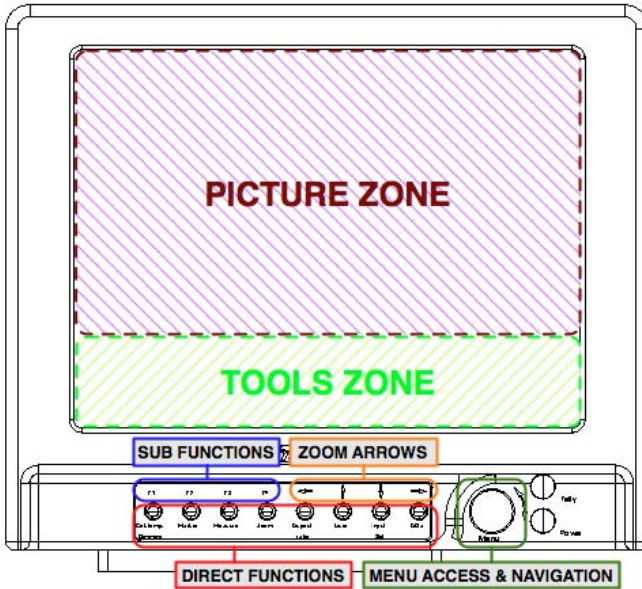


Figure 1: CineMonitorHD8 Evolution front

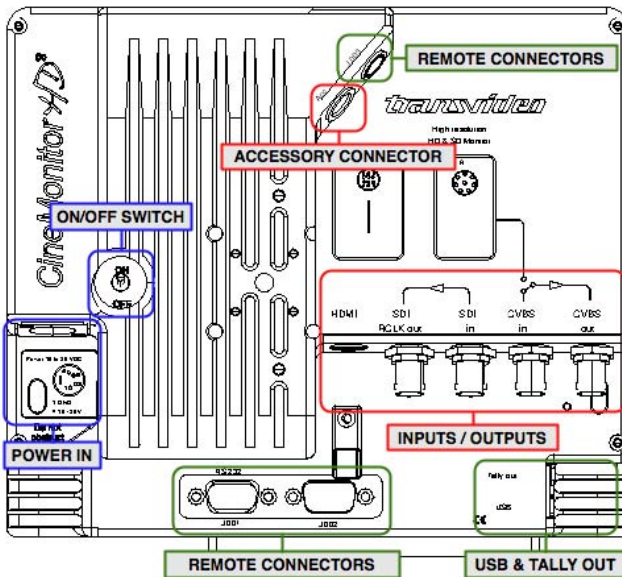


Figure 2: CineMonitorHD8 Evolution back

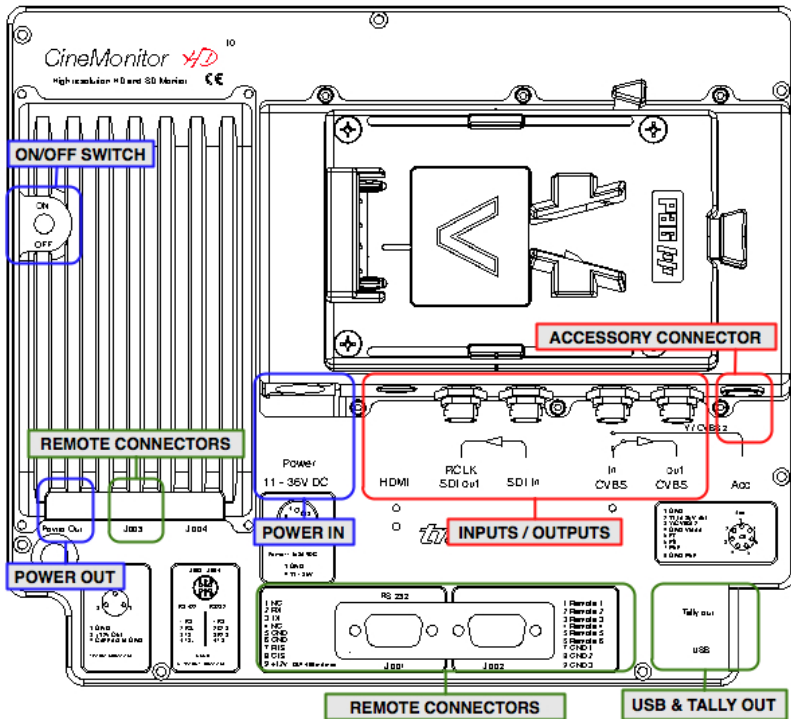


Figure 3: CineMonitorHD10 Evolution back

## Installation

The CineMonitorHD Evolution must be securely mounted on the camera or on its location of use. Transvideo manufactures high quality brackets and accessories for the comfort of use and security for the equipment and user. Please contact Transvideo S.A. or its local representative in case of need or visit [www.transvideo.eu](http://www.transvideo.eu).

Do not use the monitor with loose fixation or damaged brackets for your own safety and that of others working with you.

Several mounting points are present on this equipment for a secured professional use.

- ① A slide with a ¼-20" nut is delivered as standard equipment with the product. This slide is mounted on the bottom of the monitor.

- ② One or several optional slides can be attached to the sides, back or top of the monitor. 2 x M4 screws attach the slides. Several Transvideo's accessories can be mounting on it; this mounting system is generic for Transvideo since 1990.
- ③ One square of 20mm accepts 4xM3 screws.

## Power Requirements

Only DC Voltage powers this product.

AC voltage can be used with an appropriate AC/DC converter

Recommended AC power adaptors:

<i>CineMonitorHD<sup>6</sup> SBL Evolution</i>	Transvideo AL30
<i>CineMonitorHD<sup>8</sup> Evolution</i>	Transvideo AL30
<i>CineMonitorHD<sup>8</sup> SBL Evolution</i>	Transvideo AL30
<i>CineMonitorHD<sup>10</sup> SB Evolution</i>	Transvideo AL63
<i>CineMonitorHD<sup>12</sup> SB Evolution</i>	Transvideo AL63
<i>CineMonitorHD<sup>15</sup> SBL Evolution</i>	Transvideo AL80
<i>CineMonitorHD<sup>15</sup> Studio Evolution</i>	Transvideo AL63

The input power voltage range is extremely wide from 10 to 36 V DC (except specified differently). The power consumption slightly varies with the input voltage, the operating temperature and the equipment configuration.

The internal power supply is protected against reverse polarity.

Over voltage may cause severe damages to the equipment and/or to other equipment connected to it.

For safety of use the CineMonitorHD Evolution family feature a galvanic insulation of the DC input. Do not connect the power ground to the chassis of the monitor or to the metallic body of the power connector in order to keep the galvanic insulation. The galvanic insulation is rated at 1000VDC. The chassis of the monitor is connected to the video ground.



## *Sart-Up & Power*

The ON/OFF Switch is on the back of the monitor.  
The product needs a certain time to reach its nominal brightness.  
This time can vary with the temperature.

When using the optional Battery Holder, the switch of the battery holder overpasses the switch of the monitor.

In OFF position, the power consumption is null.

### **WARNING RISK OF FIRE:**

It is always recommended to remove the power source from the monitor when you do not use it and/or when you travel. Especially if you place the monitor in a closed environment (bag, box, ...).

## *Using the direct functions*

Several direct functions are available from the keypad (chapter "INTRODUCTION" section "Product Overview")

One short press on a key gives access to the function.

One long press (more than 2 seconds) on a key gives access to the sub functions of the related function (if any). Pressing F1...F4 enables to adjust those sub functions.

## *Using the sub functions F1...F4*

Sub function keypad (F1...F4) is used to adjust optional functionalities of a direct function (if any).

Depending of the function, options and environment, the content of F1...F4 may differ. Pressing a key will activate or deactivate the sub function. An activated sub function is highlighted by an orange text while an inactivated function prompts in white.  
In some specific case, F4 may extend the selection to a second page of sub menu.

## **Using the rotating knob**

The menu knob is a rotating encoder with a push function. It is used to access and navigate in the menus, adjust some parameter values, validate and exit functions by turning or pushing it.

Pushing the knob gives access to the menu structure while rotating the knob enables to navigate between the menu items.

Pushing the knob gives access to the sub menu of the highlighted menu item.

Selecting EXIT exits from the current menu level to the previous (if any). A long push on the knob exits from the menu. Exiting the menu is also possible by automatic temporization, adjustable in MENU / TECHNICAL.

# DIRECT FUNCTIONS

## Colorimetry Temperature Dimming

Switches between 3 color calibration modes:

**FULL BRIGHT:** Maximum brightness and power consumption, the color calibration is deactivated.

**STANDARD CALIBRATED:** Standard mode, the brightness (100Nits) and white point are calibrated according to the settings of MENU / COLORIMETRY.

**USER SET:** Turning the rotating knob adjusts the brightness from 10 to 100% while color calibration is preserved. Allows having a reduced power mode between two takes.

Sub functions gives access to the settings of the Standard Calibration mode:

F1: D56

F2: D65

F3: MANUAL (Adjustable in MENU / COLORIMETRY)

It is necessary to wait a few seconds after pressing the key before loading of the correct lookup table.

## Markers

Displays the marker(s) selected in sub functions with F1...F4.

Not active when ZOOM or FORMAT 2.40:1 are selected.

This menu is contextual; some functions can be unavailable depending of the input format.

### *First page*

F1: 4:3

F2: 14:9

F3: 16:9

F4: > Go to next page

### *Second page*

F1: SAFE AREA

F2: n/a.

F3: n/a.

F4: < Go to previous page

When SAFE AREA is selected in the sub menu, one short press on the Marker key displays "TURN TO ADJUST SAFE AREA: XX%". Rotating the knob makes it possible to adjust the safe area on the picture from 10 to 99%. SAFE AREA is selected by default at start-up or after a reset and with a value of 90%.

## Measure (Waveform, Histogram, Vectorscope)

Displays the measurement tools selected in the sub functions F1...F3:

F1: WAVEFORM F2: HISTOGRAM F3: VECTORscope

The brightness of the reticule and of the spot as well as the background transparency in overlay mode (for waveform and vectoscope) can be adjusted in MENU / TOOLS / MEASUREMENT.

White and black clipping alert can be configured in MENU / TOOLS / LIMITS. The same limits are used for the waveform and the histogram. Setting these limits is useful to have a visual alert on the waveform and histogram representation of the video signal if there is a risk of overexposure or of loss of black details.

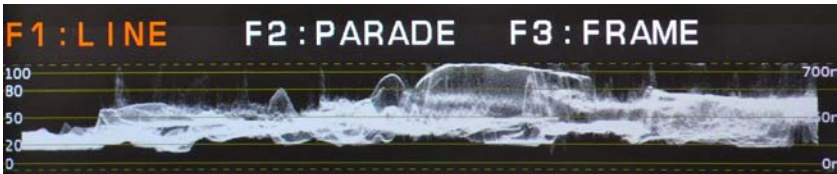
### Waveform

Selecting "F1: WAVEFORM" gives access to another sub menu.

Pressing F1...F3 selects waveform mode (line, parade or frame). One short press on the knob exits from measurement menu. Then pressing the Measure key switches between the different views of the selected waveform mode (if any).

#### F1: LINE

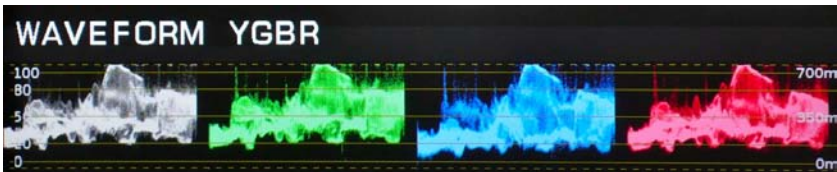
Displays one single spot (Y, Red, Green or Blue)

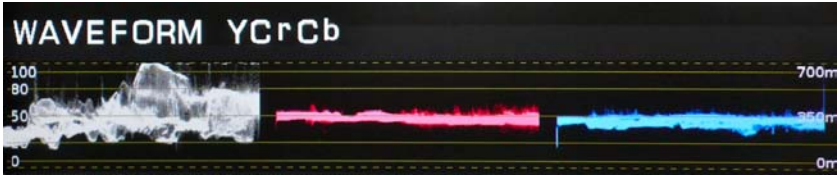


#### F2: PARADE

Displays Y, R, G, B, Cr & Cb in parade mode.

Available modes: YRGB / YGBR / RGB / GBR / YCrCb

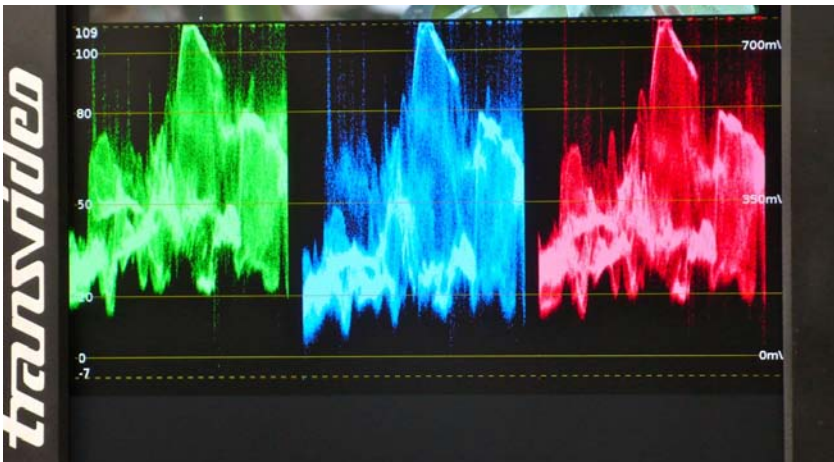


**F3: FRAME**

Displays Y, R, G, B in frame mode (or sweep mode).  
The content of one frame/picture is displayed.

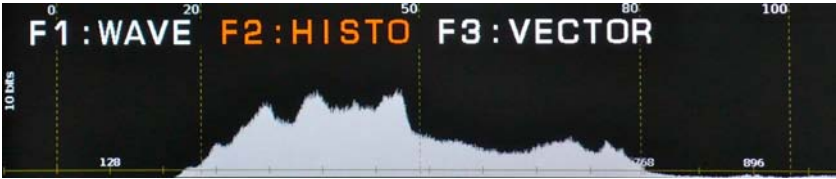


Pressing the Measure key gives the possibility to adjust the size of the waveform by using the rotating knob (3 sizes available).

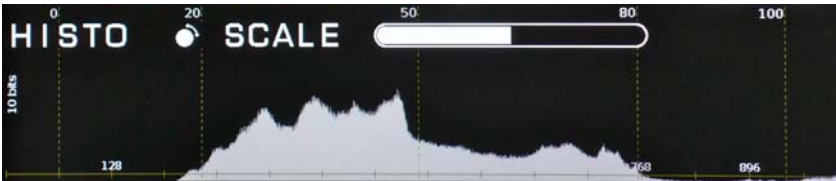


## Histogram

Selecting "F2: HISTOGRAM" displays directly the representation.



One short press on the knob exits measurement menu. Then press Measure key gives the possibility to adjust the scale of the histogram by using the rotating knob.



## Vectorscope

Selecting "F3: VECTOR" displays directly the representation in overlay mode.



## Zoom

Displays the HD picture in full resolution mode (pixel to pixel). Depending of the input format, the magnification ratio can be different.

Displays the SD picture in full screen. In this case there is an important magnification ratio applied to the original picture. The resultant picture includes created pixels and lines and cannot be considered as a proof. In this mode the waveform will be superimposed to the picture.

Arrows move the picture on Top/Bottom, Left/Right positions. Moving increments are proportional to 1/8 of the video standard. Fine adjustment can be made by rotating the rotating knob.

A long push on the Zoom key centers the picture, the next push sends back to the full picture display.

During the zoom mode a pictogram is displayed in the right side of the tool zone. This pictogram indicates the relative position of the magnified zone in the original picture.



## Aspect Ratio

Allows the change of aspect ratio between:

1.33:1	4/3	SD only
1.78:1	16/9	HD & SD
2.40:1		HD & SD
3.20:1		HD & SD (2.40 anamorphic lens on a 1.78 sensor)

No sub functions in Aspect Ratio

## User

User configurable input. This key gives access to the function pre-selected in the following sub menus:

*First page:*

**F1: STATUS**

Displays the status of the monitor and the input voltage from the power supply or the battery.

**F2: FOCUS \***

Activates the Focus Helper function as programmed in MENU / TOOLS / FOCUS HELPER.

**F3: EXPO \***

Gives access to the OverExposure Control as configured in MENU / TOOLS / LIMITS

**F4: ->**

Jump to next page.

*Second page:*

**F1: MEM**

Gives access to the memory menu.

**F2: HORIZON \*\***

**F3: ZONE**

Adjusts the acquisition zone for the waveform and vectorscope.

Active when "1 LINE" or "12 LINE" are selected in MENU / TOOLS / MEASUREMENT

**F4: <-**

Jump to previous page.

\* *FOCUS and EXPO can be selected simultaneously. If both are activated, pressing User key set up:*

- a) *FOCUS + EXPO*
- b) *FOCUS*
- c) *EXPO*
- d) *Nothing*

\*\* *The horizon is optional. In case it is not implemented, this menu will not appear.*

## Input Selection (Input Sel)

Switches between video inputs.

At selection, the video standard is displayed. When no signal is detected, displays "NO SYNC".

Sub menu allows the selection of the active inputs.

Pressing F1...F4 activates or not the selected input. An active input is highlighted in orange, an inactive in white. An inactivated input cannot be selected by the Input Sel key.

F1: SDI (HD or SD)

F2: CVBS

F3: ACC (YPrPb or RGB or CVBS)

F4: HDMI

Inactivating the accessory input reduces the power consumption of the CineMonitorHD of about 4 Watts.

The format of the ACC input can be configured in MENU / TECHNICAL when ACC input is selected. It is possible to select between component YPrPb, component RGB or CVBS.

## Adjust (ADJ)

Adjusts Hue (NTSC only), Brightness, Contrast and Saturation.

Select the parameter by pressing the key and adjust the value by rotating the knob. Validate by pushing the knob.

### **IMPORTANT:**

The settings are different for each input. All settings are stored in setup memories. There is one memory per input. That means you can setup the ACC input differently of the SDI input. It is useful with some specific cameras offering a viewfinder menu and a HD SDI output.



# MENU FUNCTIONS

## HELP

Gives access to maintenance menu.

## MONITOR INFO

Gives software (SW) and firmware (FW) versions of all electronic boards of the monitor.

Main Board soft1:	main board main SW version
Main Board soft2:	main board secondary SW version
Main Board firm1:	main board FW version
HDMI soft:	input board SW version
HDMI firm:	input board FW version

## UPDATE

Allows the SW and FW updates of all electronic boards of the monitor.

To update a CineMonitorHD Evolution, refer to chapter "SERVICE & MAINTENANCE", section "Updating your CineMonitorHD Evolution".

## ADVANCED UPDATE

Gives access to advanced functions for monitor updates.  
For experts only.

## DISPLAY MODE

Gives access to 3 display modes: COLOR, GREEN and B/W

## COLOR

Standard mode, displays the picture with 16 million colors, 256 gray levels.

## GREEN \*

Display the picture in green color only.  
TINT and SATURATION are not working in this mode.

*\* This mode has been invented by Transvideo in 1990 and is used since this time in Film & Night Vision systems.*

## B/W

Displays the picture with 256 gray levels.  
TINT and SATURATION are not working in this mode.

## BLUE CHECK

Sets the monitor in BLUE ONLY mode.  
This mode is used to calibrate the monitor with an incident color bar.

## COLORIMETRY

### MANUAL

Allows the manual adjustment of RGB gain (from 0 to 2, nominal 1.00) and offset of the black (-127mV to + 126mV, nominal 0 mV).  
The nominal value in manual mode corresponds to the D65 setup.

**IMPORTANT:**

In MANUAL there is a risk of displaying wrong colors; this option must be used carefully.

### D56 CALIBRATED

Sets the monitor for a white point DAYLIGHT 5600  
CIE 1931 Coordinates:           x:       0.3310  
  y:       0.3460

### D65 CALIBRATED

Sets the monitor for a white point DAYLIGHT 6500  
CIE 1931 Coordinates:           x:       0.3127  
  y:       0.3290

## CURVES

### LOG C

Adjusts the response of the monitor to a LOG C signal.  
The standard EI (Exposure Index) is set to 200. It is possible to adjust the EI to 100, 125, 160, 200, 250, 320, 400, 500, 640, 800.

## LOG F

Adjusts the response of the monitor to a LOG F signal.

The standard EI (Exposure Index) is set to 200. It is possible to adjust the EI to 100, 125, 160, 200, 250, 320, 400, 500, 640, 800.

## PANALOG

Adjusts the response of the monitor to a PANALOG signal.

## GAMMA ADJUST

Adjusts the grey point of the monitor according to the formula

$$V_c = V_s \left( \frac{1}{\gamma} \right)$$

Where  $V_c$  represents the displayed signal and  $V_s$  is the incident signal.

The correction is applied with a simulated response of CRT.

Allows continuous adjustment  $0.3 < \gamma < 2.5$

The indicated value is for the corrected signal ( $V_c$ ) and does not indicate the monitor's gamma.

### **IMPORTANT:**

When LOG C, LOG F or PANALOG are selected, the Gamma Correction (GAMMA ADJUST) is automatically set to LINEAR. The limits must be adjusted to the camera range (MENU / TOOLS / LIMITS)

## STANDARD 0.45

Set the monitor to reproduce a signal corrected by a  $\gamma$  of 0.45

## LOCK

The lock function prevents errors after configuration and calibration of the monitor.

When the function is activated, "LOCK" is displayed on the screen at each attempt to enter in the menu or to access a direct function.

Pressing the rotating knob for more than 5 seconds gives the user access to the menu where she/he will be able to deselect LOCK.

### **IMPORTANT:**

Input Sel key is never locked.

## TOOLS

The tools make the richness of the CineMonitorHD Evolution.

### AUDIO

Displays the SDI embedded audio presence and a bargraph showing one audio pair on the 8 possible pairs.



#### AUDIO: ON/OFF

Activates or deactivates the function

#### CHANNEL PAIR: X

Selection of the pair displayed on the bargraph with the rotating knob.

#### POSITION

Allows the user to place the tool in different position of the screen by using arrows and the rotating knob when USER is selected in POSITION sub menu. DEFAULT replaces the tool at the factory preset.

### TIMECODE

Displays the embedded VITC 1 or 2 or LTC Timecode.



#### TIMECODE: ON/OFF

Activates or deactivates the function

#### ATC: AUTO, LTC, VITC1, VITC2

Selection of the displayed ATC. When AUTO is selected the first time code present is displayed (1: LTC, 2: VITC1, 3: VITC2)

#### POSITION

Allows the user to place the tool in different position of the screen by using arrows and the rotating knob when USER is selected in POSITION sub menu. DEFAULT replaces the tool at the factory preset.

### I/ LENS

Displays the datas of a I/lense.

Accepted lenses: COOKE S4/I, COOKE 5/I

**MODULE: ON/OFF**

Activates or deactivates the function

**ZONE: OP+ASSIT / ASSIST / OFF \***

The COOKE 5/I is able to light the focus and iris scales on the operator and/or the assistant side.

Selection of the lighted zones OPERATOR + ASSISTANT or ASSISTANT ONLY

**BRIGHTNESS \***

Adjusts the brightness of the LEDs on a COOKE 5/I lens

**UNIT**

Selection of METRIC or IMPERIAL

**FILM**

Selection of 16mm or 35mm

*\* Available only if a Cooke 5/I is connected to the monitor*

**FOCUS HELPER**

Activates a precise focus helper displaying in-focus zones with colored dots. The focus helper is based on a complex multidimensional digital filter.

The focus helper can be removed by the User key. The settings must have been previously configured (Press long time User key, then set the function with F1...F4).

**COLOR**

Selection of the in-focus zone color.

Red, Green, Blue, Yellow, Magenta, Cyan, Black or White.

**LEVEL**

Adjustment of the selectivity of the filter.

OFF, 1 to 9 (9 gives the highest effect)

## FRAMELINE

Enables to displays one locating cross and up to 3 programmable frames with or without center marker and a matting generator.

### CROSS

CROSS ON/OFF	Activation of the cross
COLOR	Selection of the color of the lines
WIDTH	Selection of the width of the lines
V POS	Vertical position of the cross
H POS	Horizontal position of the cross

### FRAME 1...3

FRAME 1...3 ON/OFF	Activation of the frame
CENTER ON/OFF	Activation of the center cross
COLOR	Modification of the color of the frame
DOT	Modification of the structure of the frame
SEND TO CENTER	Sends the frame to the center of the screen.
V SIZE	Size of the frame (bottom part is moving)
H SIZE	Size of the frame (right part is moving)
V POS	Vertical position of the frame
H POS	Horizontal position of the frame
V ZOOM	Vertical homothetic modification of the frame
H ZOOM	Horizontal homothetic modification of the frame

### SEND ALL TO CENTER

Sends all frames to the center of the screen.

### BCKGND COLOR (Matting Generator)

Selects the background color outside of the frames.

## HORIZON

This option enables to display a virtual horizon on the screen.

### **IMPORTANT:**

HORIZON is an optional function. It must be ordered with the product or can be implemented by return to Transvideo headquarters. Contact Transvideo S.A. or its local representative in case of need.

### SENSOR

Toggles between INTERNAL and BETZ virtual horizons.

INTERNAL	Uses embedded virtual horizon
BETZ *	Uses external electronic bubble designed by BETZ Tools

**NORMAL / REVERSE**

Toggles the action of the horizon, normal or reversed.

**SENSITIVITY**

Adjusts the sensitivity of the virtual horizon (True, X2, X4, X8, X16).

**STYLE**

Displays the Horizon on the monitor and selects the style of the virtual horizon (6 different models).

**0 CAL**

Sets the horizon to 0.

A temporization of 5 seconds allows the user to stabilize the position of the system.

Pushing the rotating knob during calibration exits from the timing.

**POSITION**

Allows the user to place the tool in different position of the screen by using arrows and the rotating knob when USER is selected in POSITION sub menu. DEFAULT replaces the tool at the factory preset.

*\* In BETZ position the user must connect an external electronic bubble designed by Betz Tools. A specific cable is needed to power and remote the bubble through J001 connector. Transvideo do not support this third party equipment.  
[http://www.betz-tools.com/monitor\\_electronic-bubble.php](http://www.betz-tools.com/monitor_electronic-bubble.php)*

**LIMITS**

The limits menu is a very important item of the CineMonitorHD Evolution family.

It is used to setup the characteristics of the camera you are using and some safety levels which will be used in different tools.

**MAX LEVEL**

Sets the maximum level (White).

Adjustment goes from 100 IRE to 109 IRE

All information over the limit will be displayed in red on the waveform and the overexposed zone on the picture (if the Overexposure control is activated).

Default value: 109 IRE

**WHITE CLIPPING**

Sets the top clipping level (White).

Adjustment goes from 70 IRE to 109 IRE

The upper value is limited by the MAX LEVEL setting.

All information over the limit will be displayed in orange on the waveform and the overexposed zone on the picture (if the Overexposure control is activated).

Default value: 100 IRE

### **BLACK CLIPPING**

Sets the low clipping level (Black).

Adjustment goes from -6.9 IRE to 36 IRE

The lower value is limited by the MIN LEVEL setting.

All information below the limit will be displayed blue on the waveform and dark blue on the underexposed zone on the picture (if the Black Limits are activated).

Default value: 10 IRE

### **MIN LEVEL**

Sets up the minimum level (Black).

Adjustment goes from -6.9 IRE to 36 IRE

All information below the limit will be displayed violet on the waveform and medium blue on the underexposed zone on the picture (if the Black Limits are activated).

Default value: 0 IRE

### **SORIN'S MARKER \***

Adjusts the central value of the marker in IRE.

Default value: 50 IRE

### **SORIN'S MARKER WIDTH \***

Adjusts symmetrically the thickness of the marker within the limits of the white and black clipping values.

All information within the Sorin's marker limits will be displayed in green on the waveform and the overexposed zone on the picture (if the Sorin's Markers are activated).

Default value: 10 IRE

### **OVEREXPOSURE: ON/OFF**

Activates or deactivates the overexposure control on the picture.

The MAX LEVEL and the WHITE CLIPPING are displayed in false colors when activated.

### **SORIN'S MARKER: ON/OFF**

Activates or deactivates the Sorin's Marker on the picture.

The Sorin's area is displayed in false colors when activated.

### **BLACK LIMITS: ON/OFF**

Activates or deactivates the black limits control on the picture.

The MIN LEVEL and the BLACK CLIPPING are displayed in false colors when activated.

*\* About the Sorin's marker: Sorin Dragoi RSC is a famous Romanian Director of Photography. He suggested this tool, which he is using mainly to check the exposure on skin tone. The Sorin's marker is used to see all light equivalent zones, i.e. to see the 0 stop zone of the picture.*

## MEASUREMENTS

Allows different settings for the video measurement tools.

The settings apply to all video measurement tools except the histogram, which represents always the full picture.

### SIGNAL UNIT

Selects the signal measurement unit.

IRE (default unit) or BINARY

### SIGNAL ANALYSIS

Selects 8 bits if the SIGNAL is 8 bits.

Default value: 10 bits

### OVEREXPOSURE: ON/OFF

Activates or deactivates the overexposure zoning on the measurement tools.

### SORIN: ON/OFF

Activates or deactivates the Sorin's Marker zoning on the measurement tools.

### BLACK LIMITS: ON/OFF

Activates or deactivates the black limits zoning on the measurement tools.

### 1 LINE

Displays the measurement of one line selected with the rotating knob.

### 12 LINES

Displays the measurement of a group of 12 lines.

The first line is selected with the rotating knob.

### ALL LINES

Displays the measurement of the whole picture.

### BACKGROUND INTENSITY

Adjusts the overlay transparency behind the measurement tools (when displayed in front of the picture).

### SPOT INTENSITY

Adjusts the brightness of the waveform spot.

### RETICULE INTENSITY

Adjusts the brightness of the waveform reticule.

## TALLY

The Tally is activated via the GPI connector J002 (pins 1 to 4, adjustable in MENU / TECHNICAL / GPI) or through the ACCessory LEMO8 connector.

### LEMO ACTIVE LOW/HIGH

Sets the state for TALLY ON through the Lemo8.

### LED ON/OFF

Activates or deactivates the TALLY LED on the front panel.

### TALLY BLINKING/FIX

Sets the active mode in TALLY ON

### STYLE

Selects the style of the TALLY

Includes the TALLY FRAME which is active on FRAME3 of the frameline.

## PICTURE FX

### NORMAL

Restores the standard display



### VERTICAL FLIP

Returns the picture vertically



### HORIZONTAL FLIP

Returns the picture horizontally



### PICTURE REVERSE

Returns the picture horizontally and vertically (180° rotation of the picture)

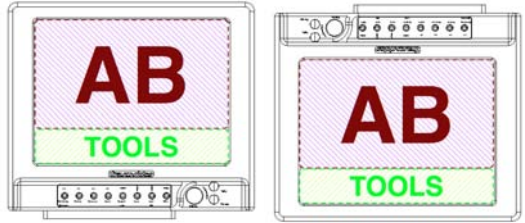


**MONITOR REVERSE**

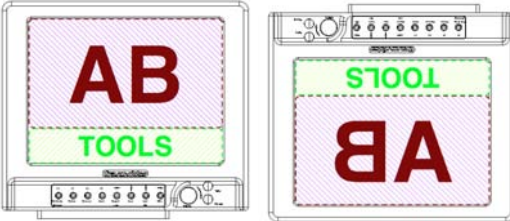
Returns the picture, tools and menus horizontally and vertically

**AUTO REVERSE**

Makes a MONITOR REVERSE automatically if the monitor is up side down

**AUTO FLIP REVERSE**

Returns the picture automatically (vertical axis only) if the monitor is up side down

**RANGE: STANDARD / EXTENDED**

Selects the range depending of the camera.

STANDARD: from 0 to 109 IRE

EXTENDED: from -7 to 109 IRE

**SCAN**

FULL SCAN as default and only value.

## TECHNICAL

### CVBS STD SELECT \*

Sets the video composite standard detection.

AUTO DETECT            default value  
PAL BGHID  
NTSC 3.58

### NTSC \*

Sets NTSC standards:

NTSC Japan (black 0 IRE)  
NTSC US (black 7.5 IRE)

### ACCESSORY \*

Sets the accessory input:

COMPONENT RGB (HD/SD RGB signal with composite synchronization on G)  
COMPONENT YPrPb (HD/SD YPrPb signal with composite synchronization on Y)  
CVBS (Composite)

### HDMI MODE: CANON/NORMAL \*\*

Improves the video standard switching when shooting with a Canon DSLR.

\* Available when CVBS or ACC input are selected

\*\* Available when HDMI input is selected

## GPI

Assigns functions and trigger conditions to 4 GPIs.

### FUNCTION #

Assigns a function to the pin # of the GPI connector (J002)

Available functions: TALLY RED, TALLY GREEN, ZOOM, HORIZON, SWITCH INPUT, FOCUS HELPER, EXPOSURE

### CONDITION #

Sets the trigger condition of the function #

Available conditions (depending on the function): NOT ACTIVE, FALLING EDGE, RISING EDGE, LOW STATE, HIGH STATE

## VOLTAGE ALARM

### VOLTAGE DISPLAY: ON/OFF

Displays constantly the input voltage from the power supply or the battery.

### VOLTAGE ALARM LEVEL

Sets the threshold voltage from 10VDC to 36VDC.

Under this voltage an alert can be displayed on screen.

### VOLATAGE ALARM DISPLAY

When activated the battery pictogram is displayed in red if the voltage of the power supply goes under the threshold setting.

### POSITION

Allows the user to place the tool in different position of the screen by using arrows and the rotating knob when USER is selected in POSITION sub menu. DEFAULT replaces the tool at the factory preset.

## REVERSE SCROLLING

Reverses the scrolling direction in the menus.

## EXIT TEMPO

Sets of the automatic exit temporization from SLOW to FAST

## LED DIMMER

Dimming of the brightness of the "POWER" Led

It is possible to switch of completely the "POWER" Led.

## MEMORY

### MEM 1 ... MEM 4

4 user memories per input are available to save user's configurations.

### SAVE

Saves the current user set-up in the memory.

All configuration except INPUT SEL is stored in the memory, including picture and tools settings.

### RECALL

Recalls the settings stored in the memory.

The standard settings a factory loaded in this memory, they will be replaced at the first SAVE from the user.

## **PRESET**

Sets the default values in the setting registers.  
PRESET does not erase the user presets.

### **PRESET ALL INPUTS**

Presets the active input and other inputs of the monitor.

### **PRESET SELECTED INPUT**

Presets the active input only

# SERVICE & MAINTENANCE

## General

Please read carefully the chapter "TRANSVIDEO EQUIPMENT LIMITED WARRANTY" about the Transvideo S.A. warranty on the equipment described in this manual.

For repairs contact Transvideo S.A. or its local representative or use the RAN procedure in the chapter "SERVICE & MAINTENANCE", section "Product Return".

## Useful tips

### Cleaning

The painting of the CineMonitorHD is resistant to general cleaners and solvents. Do not use abrasive products to clean your product.

The front glass is a high quality optical part. A metallic multi-layers vacuum deposit makes the anti-reflection coating. Do not use abrasive or acid cleaners. The microfiber cloth delivered with the CineMonitorHD is strongly recommended to clean the glass. Remove dust and particles of the glass before using the cloth. No liquid is normally necessary. If there is some dirt on the screen, it is possible to remove it with clean warm water.

The microfiber cloth collects grease particle in its structure. It is necessary to wash it when necessary with water and soap.

The microfiber cloth is orderable as spare part (refer to your local Transvideo dealer in case of need).

### Full reset

If needed, a full reset of the monitor may be performed as follows:

- ① Connect the monitor to a power source (monitor off).
- ② Press the adjust (ADJ) key
- ③ Switch on the monitor while keeping pressed the "adjust" key until the display shows "FULL RESET"

The monitor is back to its factory default settings. This procedure totally erases all user setup in the memories.

## Hardware, Software and Firmware

Basic monitor information is indicated during the startup on the display:

SOFT	main board software version (microcontroller #1)
FIRMWARE	main board firmware version
HARDAWARE	main board hardware version
LOGO	graphical user interface version
LOAD MATRIX	colorimetry version

This information is useful to write down if trouble-shooting becomes necessary.

The complete list of software and firmware versions of all electronic boards may be found in MENU / HELP / MONITOR INFO.

## Updating your CineMonitorHD Evolution

All software and firmware updates are possible by the sole use of a USB key. The following procedure sets how to proceed to update your monitor.

*For CineMonitorHD Evolution with Hardware 3.xx and Software 6.xx only.*

### Step 1

Get the last software update package for your CineMonitorHD 3DView Evolution. An update package is a .zip file that contains softwares and firmwares that are compatible each other. It can be downloaded on our website for registered users by visiting [www.transvideo.eu/support](http://www.transvideo.eu/support). You can also ask it directly to your local Transvideo representative.

### Step 2

Uncompress the .zip using your archive utility software. Then paste **all** the files **at the root** of the USB key.

### Step 3

Plug in the USB key in the monitor by using the mini USB adapter (included with your product) and turn on the monitor.

### Step 4

Go to MENU / HELP and select UPDATE

### Step 5

The update starts. Do not turn off the monitor neither remove the USB key until the update ends. Follow the instructions on the screen.

**Step 6**

Wait for 2 green leds and restart the monitor.

**Step 7**

Go to MENU / HELP / MONITOR INFO and verify that the software and firmware versions match with the update package.

**Comments**

The update duration may vary between 3 minutes and 6 minutes depending of your hardware and files present on the USB key.

During the first startup following an update, the monitor automatically performs a backup of all firmwares and a full reset. It can take several seconds before your monitor reach its normal operation.

You can visit our support section on our website for more information regarding monitor updates (registered users only).

**Precaution**

We advise you to format your USB key before an update to avoid hidden files problems. Do not rename files on the USB key.

## Calibration

The white point of the monitor is individually calibrated in factory for D65 and D56.

The calibration doesn't need to be performed except after some specific service operation as the replacement of the backlight unit or if you need to match a large inventory of your CineMonitorHD Evolution after hundreds hours of use.

To perform the calibration, you need to send the product to the factory.

## Product Return

For repairs and technical operation you may return the product to the factory. Please use the following procedure:

① Ask for a RAN (Return Authorization Number)

Log in to our website using your user account and visit the Support section [www.transvideo.eu/support](http://www.transvideo.eu/support)

Or contact us by:

Email [service@transvideo.eu](mailto:service@transvideo.eu)

Fax +33 2 3260 1479

Tel +33 2 3232 2761

You will need to provide part number & serial number (found on the back of your product) and to briefly describe the reason for the return.

② Then send the product to the following address:

TRANSVIDEO  
RAN # \_\_\_\_\_  
ZI - Rue Francois Arago  
27130 Verneuil sur Avre  
France

User is responsible for shipping and insurance of the equipment as well as for any damage that may occur during transit.

It is strongly recommended to inform us of the Tracking Number of your shipment and the RAN so we may track your return while in transit.

# SPECIFICATIONS

## Common Characteristics

<b>Supported HD standards *</b>	480p / 576p 720p 1080p, 1080i, 1080psf
<b>Supported SD standards *</b>	NTSC-M / NTSC-J / NTSC-443 PAL-M / PAL-BG / PAL-N SECAM SD SDI 525 / 625
<b>Display mode</b>	Color
<b>Picture resolution</b>	Depends of the standard
<b>Display type</b>	AMLCD
<b>Color calibration</b>	D65 ITU-R BT.709-5 D56
<b>Color space</b>	Rec. ITU-R BT.709-5
<b>Latency</b>	Less than 1 frame in 1080i and psf, SD. Less than 1 image in 720p and 1080p
<b>Storage temperature</b>	-40°C +80°C
<b>Operating temperature</b>	-20°C + 55°C

\* *HD and SD standards may differ with video input. Refer to the following complete list of standards per input*

## Connections

<b>Video inputs &amp; outputs</b>	1 x HD/SD SDI in (BNC) 1 x HD/SD SDI Rclk out (BNC) 1 x CVBS in (BNC) 1 x CVBS out (BNC) 1 x ACC (Lemo8) 1 x mini HDMI in	
<b>Power In / XLR4</b>	XLR4 connector (-1, +4) 10 – 36 VDC	
<b>Power Out / Phoenix 3pts</b> (except 6" and 8" monitors)	1 GND	3 +12V out (500mA max) 4 Connect to GND
<b>ACCessory / Lemo8</b>	1 GND 2 11 to 36V in/out 3 Y/CVBS2/G 4 GND Video	5 Pr/R 6 Pb/B 7 Run 8 GND Run
<b>J001 / RS232</b>	1 NC 2 RX 3 TX 4 NC 5 GND	6 GND 7 RTS 8 CTS 9 +12V out
<b>J002 / GPIO</b>	1 to 4 Remote 5 NC 6 to 9 GND for pins 1 to 4	
<b>J003 / Hirose HR25</b>	1 RX+ (RS422) / RX (RS232) 2 RX- / CTS 3 TX+ / RTS 4 TX- / TX	5 GND 6 +12V out

## List of Standards per Input

<b>HD SDI</b> (SMPTE 292M)	1280x720p @ 24, 25, 29.97, 30 Hz (SMPTE 296M) 1280x720p @ 50, 59.94, 60 Hz (SMPTE 296M) 1920x1080i @ 50, 59.94, 60 Hz (SMPTE 274M) 1920x1080psf @ 23.98, 24, 25, 29.97, 30 Hz (SMPTE 274M) 1920x1080p @ 23.97, 24, 25, 29.94, 30 Hz (SMPTE 274M)
<b>SD SDI</b> (SMPTE 259M-C)	720x487i @ 60 Hz (SD SDI 525 - SMPTE 125M) 720x576i @ 50 Hz (SD SDI 625 - ITU-R BT.601)
<b>CVBS</b>	NTSC-M, NTSC-J, NTSC 4.43 PAL B/G H I D, PAL M, PAL N SECAM
<b>ACC YPrPb / RGB</b>	720x480i @ 60 Hz (SMPTE 253M) 720x576i @ 50Hz 1280x720p @ 50, 59.94, 60 Hz 1920x1080i @ 50, 59.94, 60 Hz (SMPTE 240M) 1920x1080psf @ 25, 29.97, 30 Hz 1920x1080p @ 23.97, 24, 25, 29.94, 30 Hz
<b>HDMI</b>	720x480i @ 59.94, 60 Hz 720x576i @ 50Hz 720x480p @ 59.94, 60 Hz 720x576p @ 50Hz 1280x720p @ 50, 59.94, 60 Hz 1920x1080i @ 50, 59.94, 60 Hz 1920x1080psf @ 25, 29.97, 30 Hz 1920x1080p @ 23.97, 24, 25, 29.94, 30 Hz

## Specific Characteristics

### 6" HD Monitor SuperBright

<b>Dimensions</b> (l x h x d)	195 x 160 x 58 mm 7.7 x 6.3 x 2.3 inches
<b>Weight</b>	1410g, 3.1lbs
<b>Power Consumption</b>	16W
<b>Contrast ration</b>	Max 600:1
<b>Viewing angle</b>	±80° H, +60/-80° V
<b>Brightness</b>	1000Nits

**8" HD Monitor / 8" HD Monitor SuperBright**

<b>Dimensions</b> (l x h x d)	215 x 183 x 62 mm 8.46 x 7.20 x 2.44 inches
<b>Weight</b>	1710g, 3.8lbs / 1690g, 3.7lbs
<b>Power Consumption</b>	20W / 22W
<b>Contrast ration</b>	Max 500:1 / 900:1
<b>Viewing angle</b>	±85° H&V / ±80° H, +60/-80° V
<b>Brightness</b>	450Nits / 1000Nits

**10" HD Monitor SuperBright**

<b>Dimensions</b> (l x h x d)	268 x 226 x 90 mm 10.55 x 8.89 x 3.54 inches
<b>Weight</b>	2710g, 6.0lbs
<b>Power Consumption</b>	31W
<b>Contrast ration</b>	Max 600:1
<b>Viewing angle</b>	±80° H, ±65° V
<b>Brightness</b>	1000Nits

**12" HD Monitor SuperBright**

<b>Dimensions</b> (l x h x d)	297 x 255 x 90 mm 11.7 x 10.04 x 3.54 inches
<b>Weight</b>	3500g, 7.72lbs
<b>Power Consumption</b>	34W
<b>Contrast ration</b>	Max 600:1
<b>Viewing angle</b>	±80° H, +60/-80° V
<b>Brightness</b>	1000Nits

**15" HD Monitor SuperBright / 15" HD Monitor Studio**

<b>Dimensions</b> (l x h x d)	343 x 303 x 90 mm 13.5 x 11.93 x 3.54 inches
<b>Weight</b>	4150g, 9.1lbs / 4290g, 9.44lbs
<b>Power Consumption</b>	52W / 44W
<b>Contrast ration</b>	Max 650:1 / 700:1
<b>Viewing angle</b>	±80° H&V / ±85° H&V
<b>Brightness</b>	1000Nits / 350Nits

# TRANSVIDEO EQUIPMENT LIMITED WARRANTY

Transvideo S.A gives the warranty set forward below.

The limited warranty is only effective upon presentation of your Bill of Sale or other proof of purchase.

Transvideo equipment is warranted under normal use, against defective materials or workmanship as follows:

Parts: Defective parts will be exchanged for new parts or comparable rebuilt parts for a period of TWO YEARS from the date of original purchase.

Labor: For a period of TWO YEARS from the date of original purchase, labor will be provided free of charge by our factory service centers or designated service facilities located in country where the product have been purchased, or by the factory.

When returning equipment under this warranty, you must pre-pay the shipping charges, and you must enclose the Bill of Sale or other proof of purchase with a complete explanation of the problem. During your TWO-YEAR warranty period, repairs will be made and the equipment return-shipped to you free of charge. After your warranty period is over, you will be given an estimate of the cost of repair and an opportunity to approve or disapprove of the repair expense before it is incurred. If you approve, repairs will be made and the equipment return shipped to you. (shipping charges apply). If you disapprove, we will return-ship the equipment at no charge to you. (shipping charges apply). Non-Transvideo brand peripheral equipment and software which may be distributed with Transvideo products are sold "AS IS" without warranty of any kind by Transvideo, including any implied warranty regarding merchantability or fitness for a particular purpose. The manufacturer or producer gives the sole warranty with respect to such non-transvideo brand items

Thereof :

Transvideo shall have no responsibility under this limited warranty for use of Transvideo product in conjunction with incompatible equipment or peripheral equipment.

In order to obtain warranty service, contact the authorized Transvideo retail dealer from whom you purchased the product or contact the factory :

By phone +33 2 3232 2761

By fax +33 2 3260 1479

By email [service@transvideo.eu](mailto:service@transvideo.eu)

You will be directed to the nearest service facility for your product.

If there is no service facility in your region, you will receive a RAN (Return Authorization Number) and instruction to return your product to the factory.

This Limited Warranty covers all defects encountered in normal use of the equipment and does not apply in the following cases:

Loss or damage to the equipment due to abuse, mishandling, accident, improper maintenance, or failure to follow operating instructions;

If the equipment is defective as a result of leaking batteries, sand, dirt or water damage; if defects or damages are caused by the use of unauthorized parts or by service other than our authorized agent.

This Limited Warranty does not cover cabinet (exterior finish).

This warranty does not cover units sold to military operations or avionics. These uses are covered only by such specific warranty as Transvideo may issue with such sales.

This Limited Warranty does not apply to accessories or consumables for the product, which are sold "AS IS", without warranty of any kind by Transvideo.

Please retain this warranty card and your Bill of Sale as a permanent record of your purchase. This card is most important in order to be sure you are contacted right away should there be a safety inspection, modification or product recall under applicable laws or regulations.

NO IMPLIED WARRANTY, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE APPLIES TO THIS EQUIPMENT AFTER THE APPLICABLE PERIOD OF EXPRESS WARRANTY OR GUARANTY, EXCEPT AS MENTIONED ABOVE, GIVEN BY ANY PERSON, FIRM OR CORPORATION WITH RESPECT TO THIS EQUIPMENT SHALL BIND THE UNDERSIGNED.. TRANSVIDEO SHALL NOT BE LIABLE FOR LOSS OF REVENUES OR PROFITS, EXPENSE FOR SUBSTITUTE EQUIPMENT OR SERVICE, STORAGE CHARGES, LOSS OF DATA, OR ANY OTHER SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES CAUSED BY THE USE, MISUSE OR INABILITY TO USE THE PRODUCT, REGARDLESS OF THE LEGAL THEORY ON WHICH THE CLAIM IS BASED, AND EVEN IF TRANSVIDEO HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NOR SHALL RECOVERY OF ANY KIND AGAINST TRANSVIDEO BE GREATER THAN THE PURCHASE PRICE OF THE P>RODUCT SOLD BY TRANSVIDEO AND CAUSING THE ALLEGED DAMAGE. WITHOUT LIMITING THE FOREGOING, YOU ASSUME ALL RISK AND LIABILITY FOR LOSS, DAMAGE OR INJURY TO YOU AND YOUR PROPERTY AND TO OTHERS AND THEIR PROPERTY ARISING OUT OF USE, MISUSE OR INABILITY TO USE THE PRODUCT NOT CAUSED DIRECTLY BY THE NEGLIGENCE OF TRANSVIDEO. THIS WARRANTY SHALL NOT EXTEND TO ANYONE OTHER THAN THE ORIGINAL PURCHASER OF THIS EQUIPMENT.





TRANSVIDEO S.A.  
Zone Industrielle  
F-27135 Verneuil sur Avre  
Tel +33 2 3232 2761  
Fax +33 2 32 601479  
Email info@transvideo.fr

<http://www.transvideo.eu>  
<http://www.transvideointl.com>