



Installation and Operation Manual

Next Generation Talent Displays



22" and 24" Talent Monitors

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1 CueScript CSTM Talent Monitors

CueScript was created with a “clean slate” in order to design the most up to date prompting equipment in the industry. These new low profile prompters and monitors have all the state of the art features demanded by professional prompter users. A quick, no-tools required, mounting system instantly installs the prompter to the mount.

The CueScript CSTM talent monitors have High Brightness LED edge-lit screens and deliver superb picture quality.

2 CueScript CSTM Series Talent Monitor Features

- Unique quick mount system for simple installation.
- Aluminium case with scratch resistant powder coat finish.
- Powered by 12V DC.
- Designed for maximum performance with minimum power consumption.
- Instant two way picture rotate pushbutton switch.
- Backlit LED pushbuttons for ease of operation.

3 Display Technical Specifications

3.1 Model CSTMN – 22”

Screen Size	21.5 inch diagonal
Display Area	476(H) x 268 (V)mm
Native Resolution	1920x 1080 (WUXGA)
Brightness	1500 cd/m2 (Very High Brightness)
Contrast Ratio	1000:1
Viewing Angle	178°(H), 178°(V)
Backlight Technology	LED

3.2 Model CSTML – 24”

Screen Size	24 inch diagonal
Display Area	518.4 (H) x 324 (V)mm
Native Resolution	1920x 1080 (WUXGA)
Brightness	1500 cd/m2 (Very High Brightness)
Contrast Ratio	1000:1
Viewing Angle	174°(H), 174°(V)
Backlight Technology	LED

4 Signal Inputs

All CueScript CSTM series talent monitors are designed to accept the most common video signals used in prompting. The following signals are compatible. Please contact CueScript for any special requirements.

- Composite PAL or NTSC Video
- HD-SDI and SD-SDI Video
- VGA
- DVI
- HD Component

5 Power Requirements

CueScript CSTMN Talent monitors are powered with 12 VDC. The maximum power consumed is as follows:

DC 12V4.3 A (52W)

6 Dimensions

6.1 Model CSTMN – 22"

Outside Dimensions: 530 mm W x 346 mm H x 48 mm D (20.850" W X 13.625" H X 1.9" D)

Weight: 3.72 kg. 8.2 Lb.

6.2 Model CSTML – 24"

Outside Dimensions: 584 mm W x 404 mm H x 56 mm D (23.0" W X 15.92" H X 2.2" D)

Weight: 5 kg. 11.2 Lb

7 Environmental

All CueScript CSTM series talent monitors are designed to be operated within the environment specified below.

Temperature Range: Operating: 5 to 40 degrees C

Storage: 20 to 60 degrees C

Relative Humidity: 0-95% Non-condensing

8 Routine Maintenance

All CueScript CSTM series talent monitors are designed to be operated with limited maintenance. Recommended maintenance is as follows:

Remove dust from the cabinet when it accumulates. The front LCD panel may be cleaned with a soft cotton cloth. Use only a small amount of mild soap and water solution to dampen the cloth if necessary.

No routine checks or adjustments are required.

9 Installation

9.1 Inspecting New Talent Monitor and Accessories

Each item should be inspected as it is unpacked to see if any damage has occurred in shipping. If so, please file a claim with the shipping carrier. Please retain the original packaging in the event it is necessary to reship the unit.

Any missing items should be noted and brought to the attention of the shipper.

9.2 Installation Requirements

The following requirements should be observed when installing a CSTM Talent Monitor.

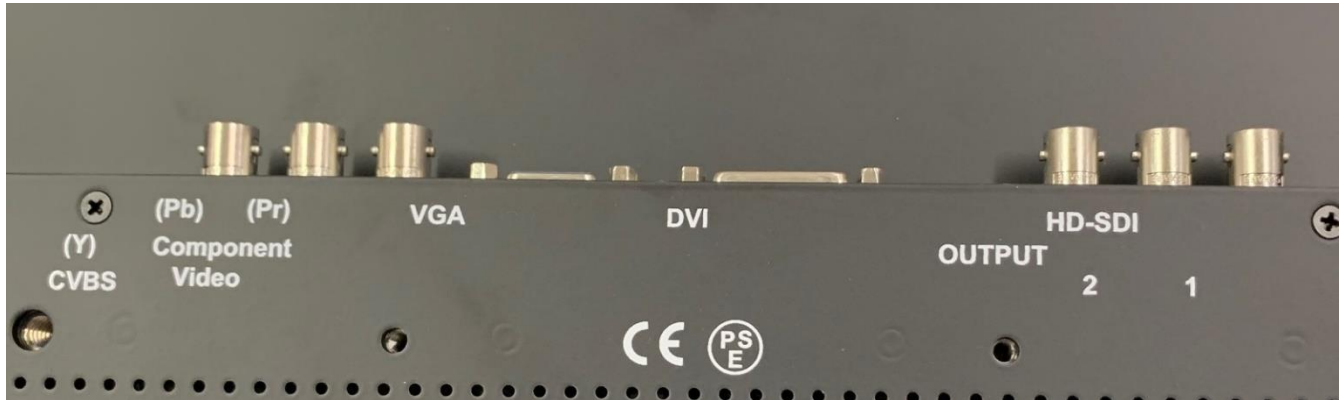
Do not exceed the maximum operating ambient temperature of +40°C .

Do not block any ventilation holes in the prompter cabinet. Free flow of air is required for proper operation.

Use the power supply and cord supplied with the unit. Connect the cord to a grounded AC mains outlet.

EMC and Safety Compliance: CSTM Talent Monitors have been designed for EMC and safety compliance. However, the installer or operator is responsible for compliance of the system as built and used under the regulations governing such use.

10 Connectors



10.1 DC Power

The CueScript CSTMN requires a regulated source of 12 VDC that should be capable of supplying approximately 5 amperes. Alternatively, a battery with sufficient capacity may be used.

Prompter Connector type: 4 Pin XLR Male plug

Mating (cable) connector: 4 Pin XLR Female socket

Pin	Description
1	GROUND
4	+12V DC

Power Consumption Table

Model CSTMN	Power Consumption @ 12 VDC
4.3 Amps	52 Watts

10.2 AC power

The CueScript CSTML requires an AC power source.

AC Mains Inlet: IEC socket with built in fuse holder and lighted ON/OFF switch

AC Mains Cord required: Three wire 18 Gauge conductors with IEC socket and country appropriate plug. Safety ratings such as UL or TUV are preferred.

10.3 Composite and Component Video In

Prompter Connector type: 75 Ohm BNC Female Socket

Mating (source) connector: 75 Ohm BNC Male Plug

Pin	Description
Center	Composite Video In (PAL,NTSC, or SECAM)
Outer	Ground

NOTE: The video input is terminated in 75 Ohms.

10.4 HD-SDI and SD-SDI Video In and Out

Prompter Connector type: 75 Ohm BNC Female Socket

Mating (source) connector: 75 Ohm BNC Male Plug

Pin	Description
Center	SD or HD SDI
Outer	Ground

NOTE: The video input is terminated in 75 Ohms. The output connector provides a re-generated SDI signal.

10.5 VGA In

Description: CueScript CSTM series prompters have a PC compatible VGA input. The prompter will automatically scale the input resolution to the screen native resolution.

Monitor Connector type: 15 pin High Density D socket
Pin connections are standard VGA.

11 Operation

Control Panel



There are 8 buttons on the right side of the monitor. All of these buttons are illuminated and all of them increase brightness when touched. After a short period of time when no buttons have been pushed, they will revert to their low brightness level.

11.1 Power Button

Pressing the power button will turn the monitor on. To turn the monitor off, you must press and hold the power button until the monitor turns off.

11.2 Input Button

Pressing the Input button will sequence through the available input options. The selection is stored in memory so when power is removed and re-applied, the same configuration is in place.

11.3 Rotate Button

Pressing the rotate button will cause the screen to “flip” in the horizontal way for a total of two possible ways. Successively pressing the rotate button while watching the monitor, allows for a quick set up for proper operation. The rotate button is depicted as a circular arrow to the right. The selection is stored in memory so when power is removed and re-applied, the same configuration is in place.

11.4 Menu keys

There is a group of buttons marked as Up and Down, and Left and Right, with one button marked as Menu. The operation of these buttons for the on-screen display is as follows:

11.4.1 MENU

- Activates or deactivates the OSD (On-Screen-Display) menu
- Reverts to one higher level menu page

11.4.2 DOWN ARROW

- Moves the OSD selection DOWN one item

11.4.3 UP ARROW

- Moves the OSD selection UP one item

11.4.4 RIGHT ARROW (+)

- Increments the OSD item value
- Enters into a OSD sub menu
- Stores the new value entered on the OSD

11.4.5 LEFT ARROW (-)

- Decrements the OSD item value

See the Section below for more information on the LCD OSD control functions.

11.5 Control Pushbuttons Brightness Setup Menu:

You may set the two brightness levels on the pushbutton control panel by following the procedure below.

1. Turn the monitor off with the on/off pushbutton.
2. Press the Rotate and Left button simultaneously and press the on-off pushbutton.
3. All the buttons will illuminate to the higher brightness mode.
4. Use the up or down buttons to set the desired higher brightness.
5. Press the right button when ready to store high brightness level.
6. All the buttons will illuminate to the lower brightness mode.
7. Use the up or down buttons to set the desired lower brightness.
8. Press the right button when ready to store low brightness level.
9. All buttons will flash 3 times to indicate a successful storage.
10. The unit will turn off. Press the on-off power button to turn the monitor on.

11.6 LCD Controller Menu

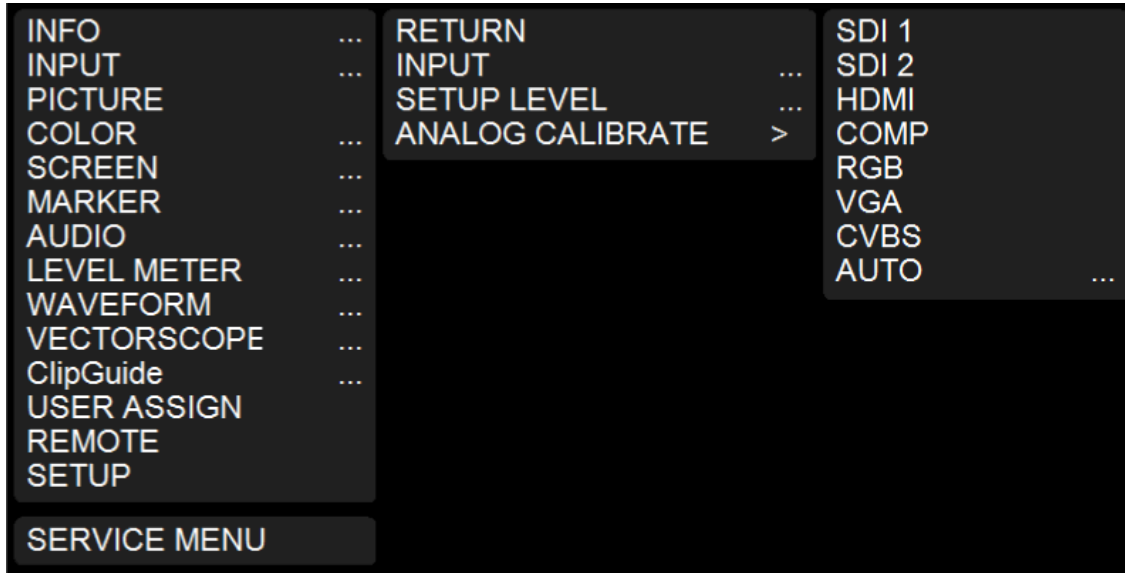
To make adjustments to the LCD display, pressing the MENU button and quickly releasing it will bring up the LCD On-Screen-Display (OSD) menu.

Pressing the Right or Left arrows and the Up or Down arrows allows you to highlight available changes in the LCD controller menu. Generally, once you have navigated to the item you want to change, and enter in a new value, the Right arrow button will select the change.

12 LCD Controller Menu

12.1 OSD Menu Layout

Menu consists of 3 level as below from left to right for deeper level.



12.1.1 To enter next level

Choose Level1 item and press SELECT key to enter Level2 items.

12.1.2 To exit from current level

Press MENU key or Choose RETURN menu.

12.2 INFO Menu

12.2.1 MODEL

Shows product model name “Venus2 Pro” as default

12.2.2 INPUT

Shows current selected video input port such as SDI 1 or HDMI

12.2.3 FORMAT

Shows current detected video format such as 1080/60i

12.2.4 COLOR TEMP

Shows current selected color temperature such as D65

12.2.5 RANGE

Shows current digital representation range such as LIMITED or FULL

- LIMITED uses 16-235 in 8 bits representation.
- FULL uses 0-255 in 8 bits representation.
- VERSION Shows current firmware version information.

12.3 INPUT Menu

RETURN

Return to Level 1 menu

INPUT

Selects an input port.

SDI1: Selects SDI1 Input, SDI Out will be copy of SDI 1

SDI2: Selects SDI2 Input, SDI Out will be copy of SDI 2

HDMI: Selects HDMI

COMP: Use 3 BNC Input as Component input (Y/Pb/Pr)

RGB: Use 3 BNC Input as RGB input (R/Gs/B)

VGA: Selects VGA port

CVBS: Use 1 BNC input as CVBS (NTSC/PAL)

AUTO: Scans for valid video format on selected ports

SETUP LEVEL

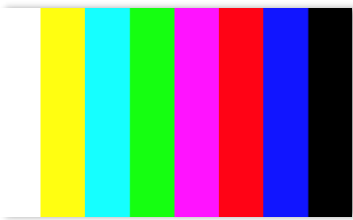
Choose setup level for CVBS input.

7.5 IRE: **Default** value for NTSC-M SMPTE 170M Standard

0 IRE: Japanese black level

ANALOG CALIBRATE

Calibrate ADC with 8 COLOR BARS.



IMPORTANT 8 ColorBars must contain 8th color as BLACK.

Dual confirmation is required to start calibration.

Selects CALIBRATE then move up(or down) and selects for final confirm.

12.4 PICTURE

RETURN: Return to Level 1 menu

BRIGHT: Changes black level at range of 0 to 100.

Default value is **50** for even black level to LCD panel's black.

CONTRAST: Changes video gain at range of 0 to 100.

Default value is **80** for unity gain and maximum dynamic range.

Minimum value 0 shows no video because of gain value at 0.

Maximum value 100 boosts video up with approx. 20% saturation.

CHROMA: Changes Chroma level at range of 0 to 100.

Default value is 50 for standard color representation.

Minimum value 0 shows video in grayscale.

Maximum value 100 shows boosted color approx. 6dB.

SHARPNESS: Changes sharpness level at range of 0 to 100.

Default value is 0 for neutral image processing.

GAMMA: Changes gamma curve at range of 0.45 to 3.00 with 0.05 steps.

Default value is 2.20.

Typical value is between 2.20 and 2.40.

Lower range helps enhancing dark area for easier view.

RESET TO DEFAULT: Resets only picture related values back to default values.

Other values will not be changed.

12.5 COLOR

RETURN: Return to Level 1 menu

COLOR TEMP: Selects color temperature for CIE D65 and Japanese D93.

D65 offers preset 6500K for white balance.

D93 offers preset 9300K for white balance.

USER allows manual adjustment for gain and bias.

Default value is **CIE D65**.

BIAS: Adjusts black level of LCD panels at range of -50 to +50.

Often used to calibrate lower luminance white balance points.

However, leave it as 0 on all channels are recommended for general practice.

Default value is **0** on all channels.

GAIN: Adjusts post processing video gain at range of 0 to 255.

Often used to calibrate higher luminance white balance points.

In general, any channels should not exceed 128.

Use only lower than 128 to avoid unnecessary saturation.

E.g. 120/128/124 for R/G/B

Default value is **128** on all channels.

12.6 SCREEN

RETURN: Return to Level 1 menu

SCAN:

- **NORMAL**
Displays all valid video region.
Also known as JUST SCAN or ZERO SCAN.
- **OVERSCAN**
Crop and zoom approx. 5%
- **ZOOM**
Crop and zoom at the center of video input for magnification.

12.7 ASPECT

AUTO: Maintains original aspect ratio.

Border may appear according to panel's native aspect ratio.

4:3: Forces any video input to 4:3 ratio.

16:9: Forces any video input to 16:9 ratio

FILL: Forces any video stretch to panel's all valid area.

12.8 MONO/COLOR

RGB: Displays all three(RGB) channels for normal operation.

MONO: Displays video in grayscale.

RED/GREEN/BLUE: Displays only one channel at a time for channel verification.

12.9 FLIP H/FLIP V

Flips image horizontally and vertically.

12.10 MARKER

Marker is a utility which helps to find center, perpendicular and aspect ratio.

Marker is hidden when OSD menu is displayed.

Marker is hidden when there is no valid input signal.

RETURN: Return to Level 1 menu

MARKER: Enables/Disables marker lines.

CENTER: Enables/Disables center cross marker.

ASPECT: Enables/Disables marker for aspect ratio guide line.

- OFF
- 4:3
- 16:9
- 1.85:1
- 2.35:1
- 4:3&1.85:1
- 4:3&2.35:1

SAFETY: Adjusts margin for safety marker at range from 80% to OFF.

Default value is **80**.

CROSSHATCH: Enables/Disables crosshatch type markers. Crosshatch marker is used for perpendicular guide.

OFF(DEFAULT)

SMALL

MEDIUM

LARGE

MARKER MAT: Choose background type when marker is enabled.

CLEAR(DEFAULT) background is clear

HALFTONE background is half transparent.

BLACK background is opaque black.

LINE THICKNESS: Controls thickness of markers at range from 1 to 3.

[Thin] 1 to 3 [Thick]

Default value is **1** [Thinnest].

12.11 AUDIO

Controls volume for an external speaker if available.

RETURN: Return to Level 1 menu

FRONT VOLUME: Default Volume is **50**.

REAR VOLUME(Optional): Default Volume is **50**.

LEVEL METER: What is Audio a Level Meter?

SDI signal can carry embedded audio along video signal.

Often confirmation of audio signal presence is required for various reasons.

Audio level meter offers not only the presence of audio signal but it also displays precisely measured level in dBFS (Decibel in Full Scale).

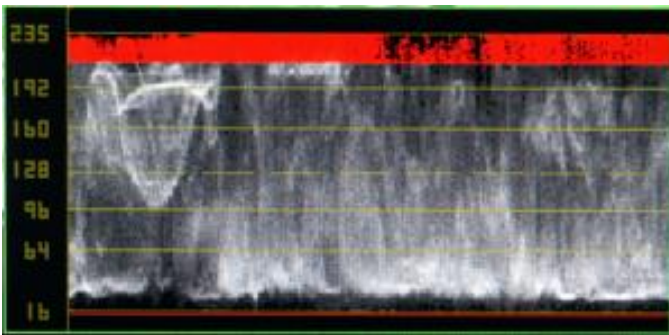
Venus2 Pro displays audio channel 1 on left and channel 2 on right.

LEVEL METER: Enables/Disables Audio Level Meter for embedded audio from SDI inputs.

13 WAVEFORM

What is a Waveform Monitor?

To prevent accidental over exposure (or saturation), engineers need to verify valid range of dynamic range. Waveform monitor helps engineer to determine dynamic range of input signal. It also helps to adjust optical focus on camera shooting.



RETURN: Return to Level 1 menu

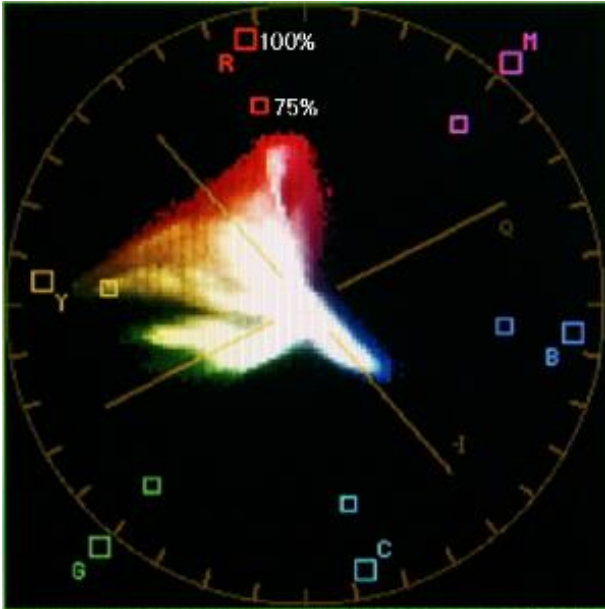
WAVEFORM: Enables/Disables Waveform monitor for video analysis from SDI inputs.

14 VECTORSCOPE

What is a Vector Scope?

Conventional TV system limits color reproduction range due to limitation of technical reasons like bandwidth and interference over RF transmit.

VectorScope is designed to verify chrominance range over the content in real time.



RETURN: Return to Level 1 menu

VECTORSCOPE: Enables/Disables VectorScope for video analysis from SDI inputs.

15 ClipGuide

Monitor input video range on luminance and chrominance to avoid accidental clipping or saturation. This feature is also known as Zebra but ClipGuide is more enhanced with color and lower/upper thresholds.

RETURN: Return to Level 1 menu

CLIPGUIDE: Enables/Disables ClipGuide feature.

MODE:

- LUMA[Y]
Apply ClipGuide on luminance(Y) channel only
- Y ON MONO
Apply ClipGuide on luminance(Y) channel only
Displays original video content in grayscale for better identification.
- CHROMA
Apply ClipGuide on chrominance channel only
- C ON MONO
Apply ClipGuide on chrominance channel only
Displays original video content in grayscale for better identification.
- Y & C
Use both Luminance and Chrominance.
- Y & C ON MONO
Use both Luminance and Chrominance.
Displays original video content in grayscale for better identification.

Y UPPER LIMIT: Sets threshold at range of -7.3 to 109.1 in IRE representation.

Default value is **103.2** in IRE representation.

Y LOWER LIMIT: Sets threshold at range of -7.3 to 109.1 in IRE representation.

Default value is **-0.9** in IRE representation.

C UPPER LIMIT: Sets upper threshold at range of 0 to 255 in 8 bits digital representation.

Default value is **240** in 8bpp representation.

C LOWER LIMIT: Sets lower threshold at range of 0 to 255 in 8 bits digital representation.

Default value is **16** in 8bpp representation.

16 USER ASSIGN

Sets user selected feature as a hotkey for specific features.

RETURN: Return to Level 1 menu

Available Options

INPUTS

SDI1/SDI2/CVBS/HDMI/RGB/VGA/COMPONENT

Screen Modes

Rotates available options of each feature.

MONO

COLOR

CHANNEL

Screen Modes

Rotates available options of each feature.

SCAN

ASPECT

ZOOM

Utility

Enables/Disables each feature.

MARKER

AUDIO METER

WAVEFORM MON

VECTORSCOPE

ClipGuide

TIMECODE

Audio

Mutes/Unmutes audio output

AUDIO MUTE

17 SETUP

RETURN: Return to Level 1 menu

FORMAT DISPLAY: Default value is AUTO.

AUTO – Displays detected video format approx. 5 sec.

ON – Displays detected video format always.

OFF- Does not display detected video format.

TIMECODE: Enables/Disables TIMECODE from SDI signal.

OFF – Does not display timecode from SDI.

LTC – Displays LTC from SDI ANC.

VITC1/VITC2 - Displays VITC1 or VITC2 from SDI ANC.

Default value is OFF.

USERBIT: Enables/Disables Userbit from SDI

PICTURE DELAY: Default value is NORMAL.

NORMAL – Enables all video enhancement processing for optimum quality.

FAST – Reduces some video processing for faster picture response.

POWER SAVE: Enables/Disables power consumption control when there is no valid video signal.

ALWAYS ON – Does not control power saving.

OTHER – Waits for selected period until it goes to sleep.

Default value is ALWAYS ON.

Wakes up at any key input or valid video input signal.

KEY LOCK: Prohibits OSD key operation except MENU key.

BACKLIGHT: Controls backlight at range from 0 to 100%.

Default value is 80%.

OSD ALPHA: Controls transparency of OSD menu at rage from 0 to 6.

[Opaque] 0 ~ 6 [Transparent]

Default value is **0**.

RESET TO DEFAULT: Restores all setting back to factory standard.

Requires dual confirmation.

BACKUP USER CONFIG: Backs up current setting at where it can be retrieved later.

RESTORE USER CONFIG: Restores backed up setting from where user saved for the last time

18 EMC Compliance:

The CueScript CSTM series” talent monitors have been tested by TUV Rhineland and are compliant with the following standards:

Guidance Documents:

Emissions: EN55103-1:1996

Immunity: EN55103-2:1996

Test Methods:

Emissions: EN55022:2010 & FCC Part 15

EN61000-3-2:2006 +A1:2009 +A2:2009, EN61000-3-3:2013

Immunity: EN55024:2010,

EN61000-4-2:2009, EN61000-4-3:2006 + A2:2010,

EN61000-4-4:2012, EN61000-4-5:2006, EN61000-4-6:2009,

EN61000-4-8:2010, EN61000-4-11:2004

Meet requirements for VCCI 2010. (Japan)

19 CE Declaration:



The CueScript CSTM series” prompter monitors and are compliant with all applicable directives necessary for declaration of conformity. All models are RoHS compliant and all models are have the CE mark affixed.

14 SAFETY INFORMATION

The CSTM series” talent monitors are not user serviceable. Please return to CueScript in the event that servicing is required. After any servicing, the CueScript service center will re-test each prompter to ensure product safety is intact.

In no event should any modification be made to any CueScript prompter without authorization from CueScript. Doing so without authorization will void the warranty and possibly affect the safety of the product.

