

cue

keypadCUE-55

User Manual

CONTENTS

| | |
|-----------|---|
| 2 | CONTENTS |
| 3 | INTRODUCTION |
| 3 | Overview |
| 3 | Model |
| 3 | Main Features |
| 3 | Programming |
| 3 | Box Contents |
| 3 | Order Information |
| 4 | SPECIFICATIONS |
| 4 | MECHANICAL DESCRIPTION |
| 5 | CONNECTION |
| 5 | 4-pin connector RS-485 & power supply (CUEwire) |
| 5 | Example 1 - connection to controlCUE-versatile |
| 5 | Example 2 - connection of two keypads to controlCUE-two |
| 6 | BUTTON LABELS |
| 8 | ADDRESSING |
| 9 | MOUNTING |
| 9 | Wall installation |
| 9 | Interconnection Tabletop Box Installation |
| 10 | SOFTWARE AND FIRMWARE LICENSE |
| 11 | NOTES |

INTRODUCTION

Overview

keypadCUE-55 is a fully customizable button control panel compatible with all CUE controllers. This easy-to-use control interface connects to controllers to offer a wide variety of functions such as display on and off, input switching, volume and mute control, etc. The keypad provides eight buttons and programmable indication in each button. Each button can be configured for any function. User-defined button label can be printed on a printer and inserted into the keypad. Featuring a beautiful architectural finish, this keypad is an elegant and powerful wall-mounted control panel designed to be installed onto a standard European electrical wall box as well as into a cable enclosure.

Model

| Model | Product Code | Description | Note |
|--------------|--------------|---|------|
| keypadCUE-55 | CS0542-9006 | Keypad with white aluminium RAL9006 enclosure | |
| keypadCUE-55 | CS0542-9003 | Keypad with signal white RAL9003 enclosure | |

Main Features

- 8 buttons
- Programmable LED indication for each button
- User defined button's label with backlight
- Beautiful architectural finish
- On-wall installation
- Compatible with standard European wall boxes
- System connection by CUEwire (RS-485 + power)

Programming

keypadCUE-55 is programmed using the Cue Visual Composer (CVC) programming tool. Control commands are described in the CVC help, part CUEdevices, chapters Configuration/CUEwire and keypadCUE-55. This model is not compatible with older programming tool Cue System Director.

Box Contents

Keypad keypadCUE-55

4-pin cable connector

Wall mounting adapter

Plastic white frame

Data Sheet

Declaration of Conformity

Cue System Connector Wiring Sheet

Order Information

Product codes

- CS0542-9006 white aluminium RAL9006 enclosure
- CS0542-9003 signal white RAL9003 enclosure

SPECIFICATIONS

Buttons

- 8x black plastic button
- Fully configurable functionality

Indication

- 8x programmable red LED in each button
- Variable brightness

Button's label

- Red backlight with variable brightness
- Black background and white characters recommended
- Print on a printer or use 3M ScotchMark laser markable label stock 7847 - two-layer film designed for the production of labels in laser marking facilities.

System communication

- RS-485, 4-pin connector

Power supply

- 24 VDC (+/- 20%), 2 W

Physical

- Aluminium enclosure
- Enclosure colors: white aluminium RAL9006 or pure white RAL9003
- Protection IP30
- Dimensions 55 x 55 x 10.5 mm / 2.2" x 2.2" x 0.4"
- Weight 0.09 kg / 0.2 lb

Operating environment

- Temperature 10° ÷ 40° C
- Humidity 10% ÷ 90% non-condensing

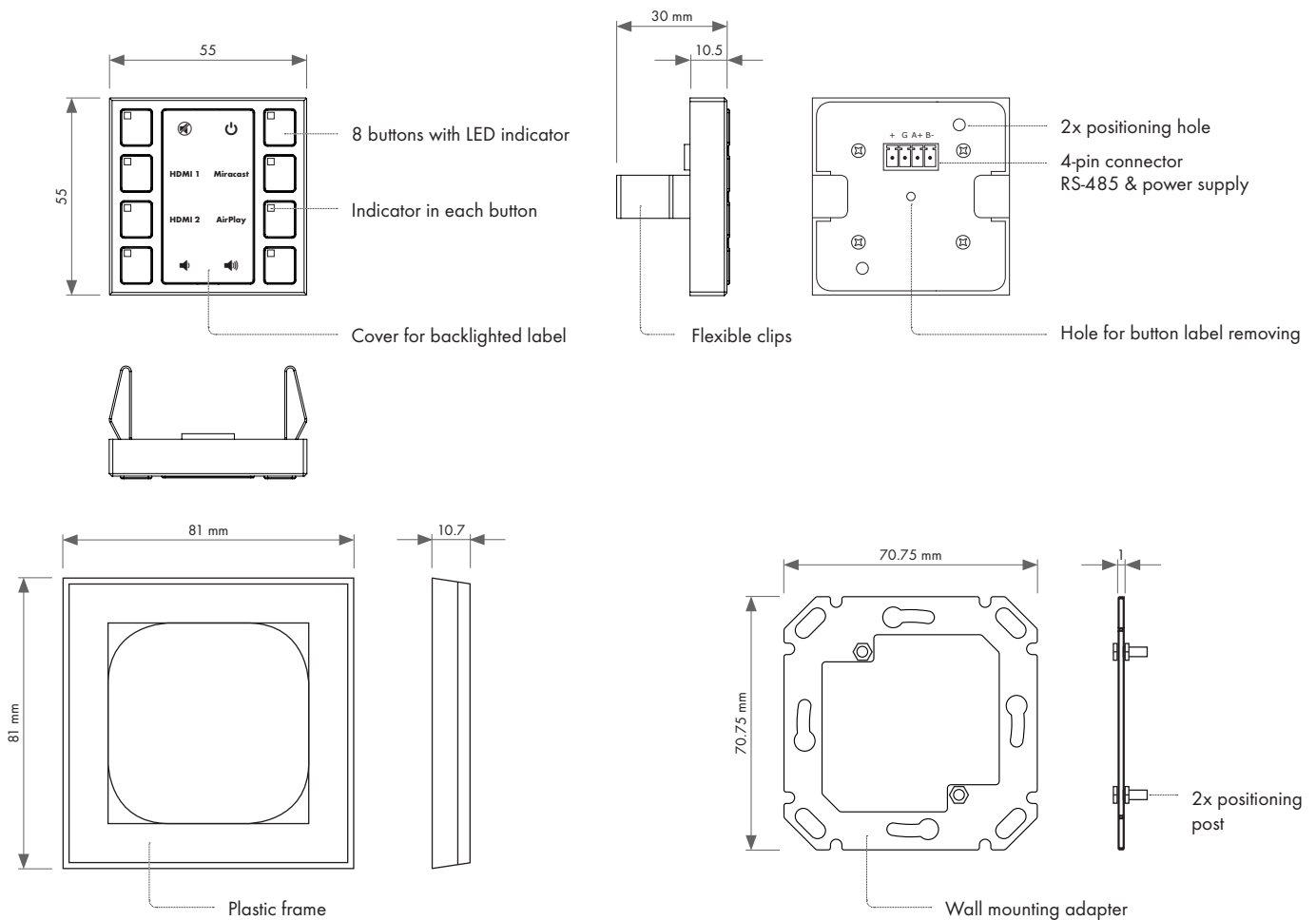
Environment conditions

- Operating temperature 10° ÷ 40° C
- Storage temperature 0° ÷ 60° C
- Relative humidity 10% ÷ 90% non-condensing

Supplied accessories

- 4-pin, 3.5 mm cable connector
- Wall mounting adapter
- Plastic frame, white color

MECHANICAL DESCRIPTION



The front panel is equipped with 8 buttons, each with an indication LED, and a backlitged area for the label - see picture.

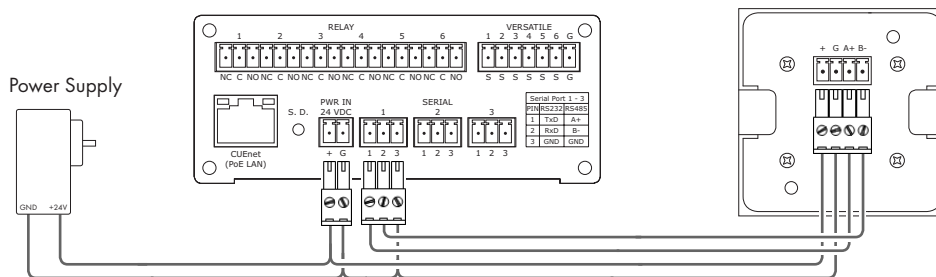
Button LEDs brightness and their ON or OFF state are controlled by special programming commands from the controller.
Brightness of backlight can be also set by special programming commands from the controller.

CONNECTION

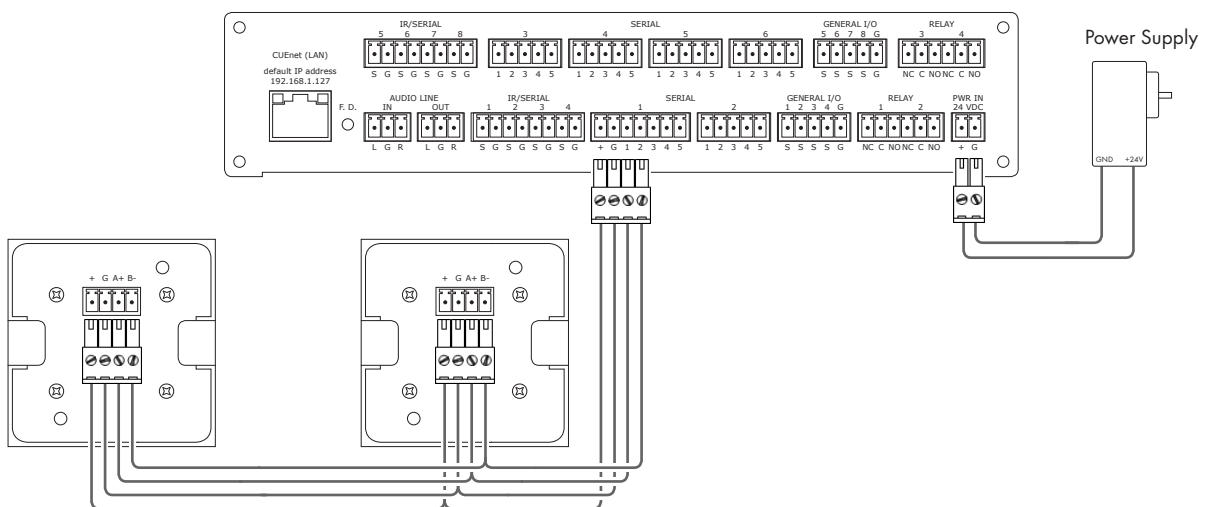
4-pin connector RS-485 & power supply (CUEwire)

| Pin | Description |
|-----|-------------|
| 1 | +24 V DC |
| 2 | Ground |
| 3 | A+ |
| 4 | B- |

Example 1 - connection to controlCUE-versatile



Example 2 - connection of two keypads to controlCUE-two



Multiple keypads or other CUEwire devices can be connected in parallel. In this case the following conditions must be met:

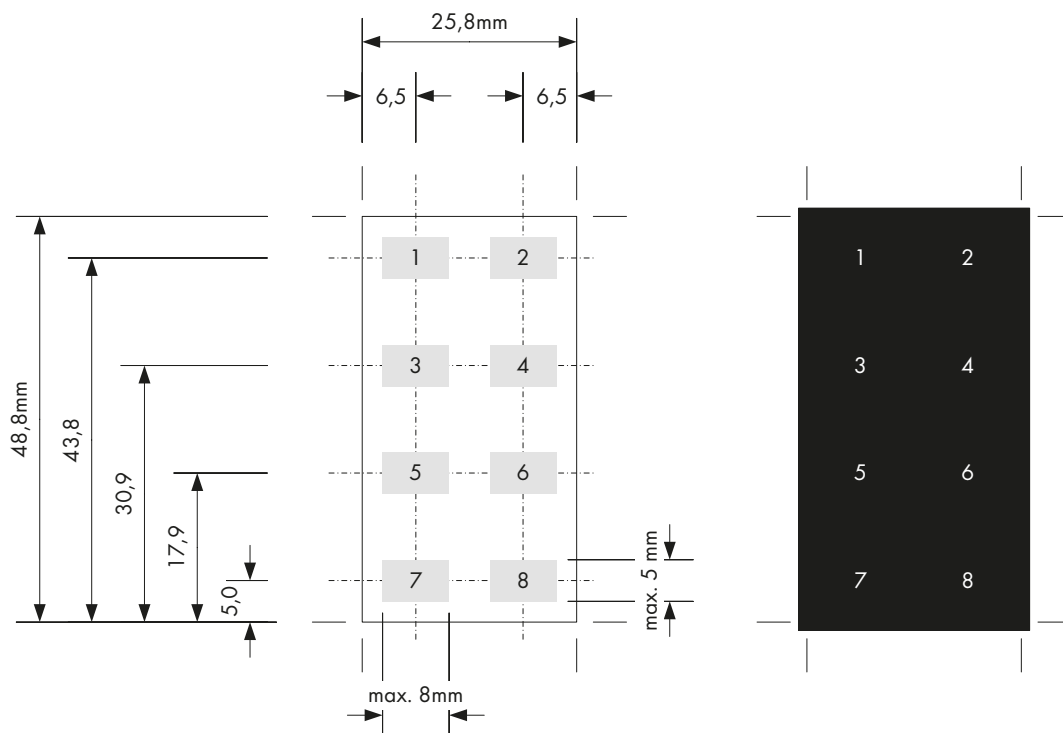
- Each keypad (or other device) has a unique ADDRESS.
- The power supply should be properly selected to have sufficient power for all keypads and other devices powered by it, incl. the controller. Each keypadCUE-55 requires 2W. For other devices, the consumption is stated in the datasheets.
- The cable cross section must be designed according to length and consumption in individual locations. For shorter cables and a limited number of devices CATx cable can be used.
- Maximum of 30 devices can be connected to the one CUEwire (RS-485 + power) line.
- For wiring it is recommended to use the bus topology. The maximum length of all cables should not exceed 900 m.
- As there may be voltage drops due to wire resistance on the cable, check whether the supply voltage measured by the individual devices is within their permitted range.

BUTTON LABELS

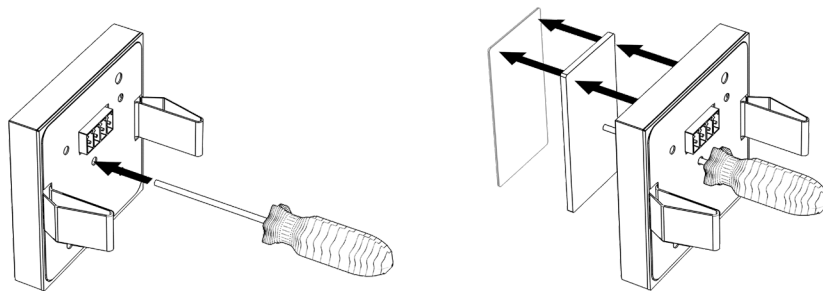
For keypadCUE-55, custom label for button description can be used. The label can be printed on paper or transparent foil. Great results can be obtained using 3M ScotchMark laser markable label stock 7847 - a two-layer film designed for the production of labels in laser marking facilities.

Steps:

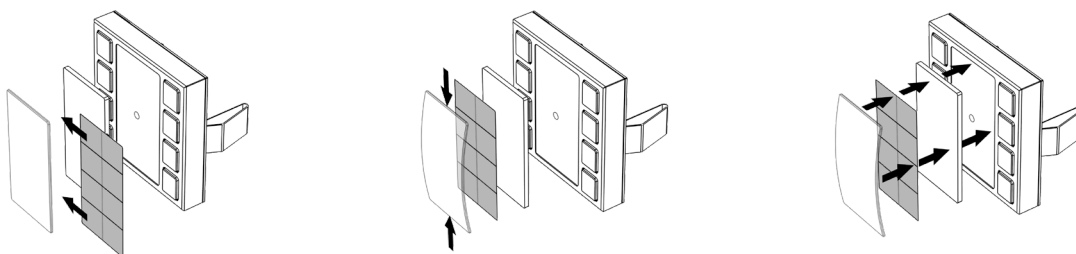
1. Create the label in your favorite graphic program, place the required legend / icons on them and print it. The size and label layout is pictured below. Recommended fonts are Nimbus, Trebuchet, Verdana, SegoeUI or Arial, size 8 points, bold. You can use templates in various formats available on the product webpage. We strongly recommend placing the labels in the area marked with a gray rectangle because that is where backlight LEDs are placed.



2. In the middle of the back panel of the keypad there is a mounting hole for removing the transparent cover. Insert a suitable tool (e.g. allen key with size up to 1,5 mm) into the hole and gently push out the transparent cover and backlight diffuser.



3. Place the diffuser and printed label into the keypad. Then put the transparent cover over them. In doing that, insert the transparent cover under one side of the keypad and bend it slightly until it is possible to insert the other side of the cover as well.



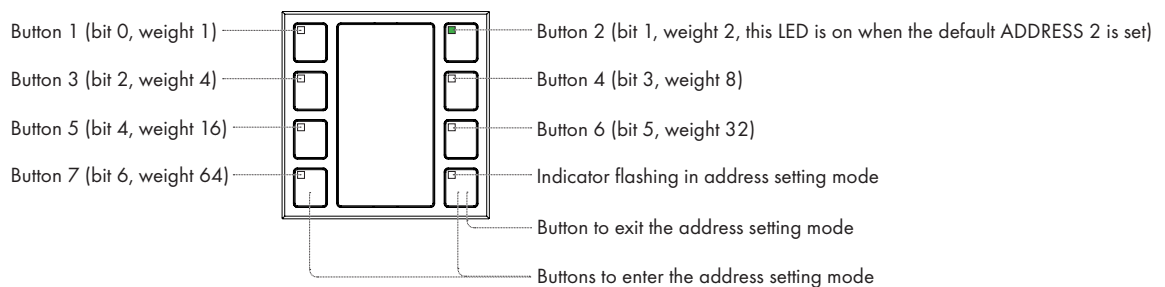
ADDRESSING

Each keypadCUE-55 is identified by an ADDRESS. This ADDRESS must be unique within the units connected to one RS-485 (CUEwire) line.

- The ADDRESS can be set in the range 2 to 30.
- Default ADDRESS is 2.
- The address set in the keypad must match the address in the Cue Visual Composer project configuration.

The address of the keypadCUE-55 is stored in the internal flash memory. For modification of the address do the following:

- Unplug the connection cable.
- Press and hold the left and right bottom buttons and plug the connection cable. This will bring the keypad into the address setting mode. The right bottom LED will blink. You can now release both buttons.



- The LEDs for button 1 - 7 indicate ADDRESS in binary code – Button 1 bit 0, Button 2 bit 1 etc... Push buttons to toggle address bits to the requested value of ADDRESS (see table below).

| ADDRESS | Button LEDs (0 = Off, 1 = On) | | | | | | |
|-------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------------|--------------------------------|--------------------------------|
| | Button 1 Bit 0 Weight 1 | Button 2 Bit 1 Weight 2 | Button 3 Bit 2 Weight 4 | Button 4 Bit 3 Weight 8 | Button 5 Bit 4 Weight 16 | Button 6 Bit 5 Weight 32 | Button 7 Bit 6 Weight 64 |
| 2 (default) | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| 4 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 5 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| 6 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| 7 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| 8 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 9 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 10 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| 11 | 1 | 1 | 0 | 1 | 0 | 0 | 0 |
| 12 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| 13 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| 14 | 0 | 1 | 1 | 1 | 0 | 0 | 0 |
| 15 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| 16 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 17 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| 18 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |
| 19 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |
| 20 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| 21 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| 22 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| 23 | 1 | 1 | 1 | 0 | 1 | 0 | 0 |
| 24 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| 25 | 1 | 0 | 0 | 1 | 1 | 0 | 0 |
| 26 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| 27 | 1 | 1 | 0 | 1 | 1 | 0 | 0 |
| 28 | 0 | 0 | 1 | 1 | 1 | 0 | 0 |
| 29 | 1 | 0 | 1 | 1 | 1 | 0 | 0 |
| 30 | 0 | 1 | 1 | 1 | 1 | 0 | 0 |

- After setting the address, press the right bottom key. This saves the address and the keyboard enters the normal operating mode.

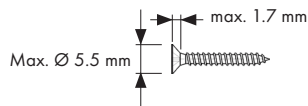
MOUNTING

Wall installation

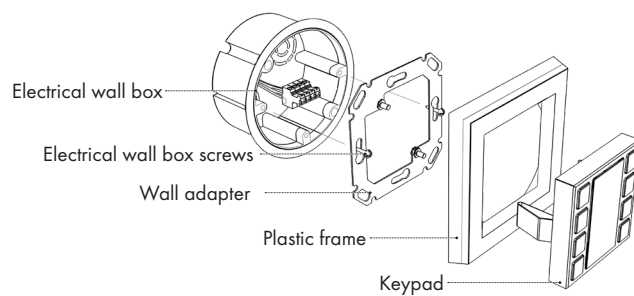
keypadCUE-55 is fully compatible with standard electrical wall boxes. Wall adapter for simple and quick installation and white plastic frame are supplied as an accessory.

Installation steps are as follows:

1. Install the wall adapter on the electrical wall box using appropriate fasteners. The guiding pins must be directed outwards. Keep maximum screw dimensions as described below.

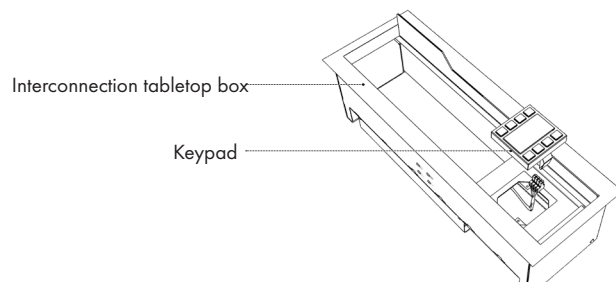


2. Plug the connection cable and insert the keypad with plastic frame into the wall adapter.



Interconnection Tabletop Box Installation

keypadCUE-55 is fully compatible with PANCONNECT interconnection tabletop boxes. This type of installation is suitable for simple room control systems. Flexible clips are used for installation, no screws are required. The PANCONNECT interconnection box must be equipped with an adapter for 55x55 mm module mounting.



For installation, plug the connection cable and insert the keypad into the adapter for 55x55 mm module mounting.

SOFTWARE AND FIRMWARE LICENSE

END-USER NOTICE AND LICENSE AGREEMENT FROM CUE, a.s.

NOTICE TO END-USER: CAREFULLY READ THE FOLLOWING LEGAL AGREEMENT (THIS "LICENSE").

INSTALLATION OR USE OF THE ENCLOSED CUE, a.s. SOFTWARE PROGRAMS (COLLECTIVELY, "SOFTWARE") ON YOUR COMPUTER SYSTEMS OR HARDWARE DEVICES CONSTITUTES YOUR ACCEPTANCE OF THESE TERMS. IF YOU DO NOT AGREE TO THE TERMS OF THIS LICENSE, PROMPTLY DELETE THE SOFTWARE FROM YOUR COMPUTER SYSTEMS AND HARDWARE DEVICES, DESTROY ANY COPIES YOU MADE OF THE SOFTWARE OR ANY INSTALLATION MEDIA OF THE SOFTWARE INCLUDED WITH YOUR SYSTEM, AND DISPOSE OF ALL WRITTEN MATERIALS IN YOUR POSSESSION REGARDING THE SOFTWARE.

License Grant: CUE grants to You, as an individual, a license to install and use one (1) copy of the Software on a single computer at a time; provided, however, that You may make copies of the Software solely for Your development of applications for CUE hardware and demonstration versions of such applications. Any applications created with the Software may only be used with Cue hardware. Your license to use the Software is conditioned upon Your compliance with the terms of this License. A License is required for each end-user of the Software. A license is required for each installation of the Software. You may make one (1) copy of the Software for archival purposes only. You may use this Software only in connection with CUE hardware. You must have acquired the Software directly in connection with the purchase of CUE hardware from CUE or from a CUE approved reseller for this license to be effective. If You have purchased a Site License, You may complete only the number of installations specified in the License Agreement accompanying the Software.

Copyright: The Software and software built into CUE hardware ("Firmware") are protected by copyright law and international treaty provisions. You acknowledge that no title to the intellectual property in the Software and Firmware is transferred to You. You further acknowledge that title and full ownership rights to the Software and Firmware will remain the exclusive property of CUE, and You will not acquire any rights to the Software and Firmware except as expressly set forth in this License. You agree that any copies of the Software will contain the same proprietary notices which appear on and in the Software.

Prohibited Uses: Without obtaining prior written permission from CUE, You may not (a.) use, copy, modify, alter, or transfer the Software or documentation except as expressly provided in this License; (b.) translate, disassemble, decompile, reverse program or otherwise reverse engineer the Software and Firmware; (c.) sublicense or lease the Software or its documentation (d.) use this Software with any hardware other than products produced by CUE or in connection with applications being developed for CUE hardware; or (e.) use the Software in a multi-user, network, or multiple computer environment or in a rental, time sharing or computer service business. Without prejudice to any other rights, CUE may terminate this License if You fail to comply with its terms and conditions. In such event, You must immediately destroy all copies of the Software.

AVC Video Restrictions: THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL USE OF A CONSUMER OR OTHER USES IN WHICH IT DOES NOT RECEIVE REMUNERATION TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE <http://www.mpegla.com>.

No Other Warranties: CUE DOES NOT WARRANT THAT THE SOFTWARE AND FIRMWARE IS ERROR FREE. CUE DISCLAIMS ALL WARRANTIES WITH RESPECT TO THE SOFTWARE AND FIRMWARE, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT OF THIRD PARTY RIGHTS. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES OR LIMITATIONS OF HOW LONG AN IMPLIED WARRANTY MAY LAST, OR THE EXCLUSION OF LIMITATION OF INCIDENTAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION.

No Liability for Consequential Damages: IN NO EVENT SHALL CUE BE LIABLE TO YOU FOR ANY CONSEQUENTIAL, SPECIAL, INCIDENTAL, OR INDIRECT DAMAGES OF ANY KIND ARISING OUT OF THE PERFORMANCE OR USE OF THE SOFTWARE, EVEN IF CUE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Label on Hardware: Use of this hardware and the software programs controlling this hardware is subject to the terms of the Software and Hardware License Agreements (the "License Agreements"). You should not use the software and hardware until you have read the License Agreements. By using the software and hardware, you signify that you have read the Licenses Agreements and accept their terms. The "License Agreement" is available at www.cuesystem.com.

Trademark Notice: CUE and the CUE logo are trademarks of CUE, a.s. in the United States and in other countries.

