User Manual

ipCUE Controllers

Version 02

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cue

1. Table of Contents

2. Introduction

2.1. Overview

CUE, a.s. unveils the ipCUE controllers as a new generation of Ethernet IP enabled controllers. These controllers are well suited for single-room applications as well as huge multi-room, multi-floor distributed control applications. The ipCUE controllers come with multiple control ports well suited for home applications as well as commercial. The control ports include bi-directional serial ports RS-232, bi-directional serial ports configurable as RS-232, RS-422, or RS-485, infrared outputs up to 1.2 MHz that can be configured to control up to three pieces of equipment, general I/O ports that can also be configured as analog inputs and 24 volts relay outputs. The Ethernet port allows for bi-directional IP control of any manufacturer IP enabled products. The ipCUE controllers are compatible with CUE's existing range of button panels and touch panels through and come equipped with a CUEwire port. For convenience there has also been a +5 VDC output added to the design for powering external low-voltage equipment. The units are equipped with internal IR sensor (except ipCUE-gamma). The sensor allows capture IR codes and links IR wireless control panels. Convenient for testing and troubleshooting the ipCUE controllers also come with indicator LEDs on the front panel that indicates the status of all of the control ports. The ipCUE controllers keep perfect time with its onboard real time clock (RTC) and thus allowing for a wide variety of distributed intelligence scheduling applications. The ipCUE controllers come complete with a web-server and allow for setup, configuration, and testing through a standard web browser. This web-based interface allows for the graphical monitoring and control of all ports, which provides a truly timesaving method for testing and troubleshooting.

2.2. Models and Accessories

Model	Product code	Description	Note
ipCUE-alpha	CS0251	IP based controller	
ipCUE-beta	CS0252	IP based controller	
ipCUE-gamma	CS0253	IP based controller, DIN rail mounting	
ipCUE-delta	CS0267	IP based controller	
ipCUE-epsilon	CS0268	IP based controller	
	CS0251-MR	Rack 19" mounting kit (sold separately)	

2.3. Features

The main features of the controllers are

- Based on the Motorola ColdFire® processor
- Ethernet IP enabled
- Fully compatible with current CUE communication buses – CUEnet, CUEwire, CUEring and PEbus
- Standard control ports - bi-directional serial, IR/serial, general I/O, analog and relay ports.
- Web server complete with Admin web pages for setup and diagnostics
- XPL Runtime inside, fully compatible with CUE programming tools
- Front panel indicators for each control port
- Unified enclosure design for desktop, rack, DIN rail and wall installation - no special models required
- DIN rail, wall installation and 19" rack installation available with accessories

2.4. Programming

The ipCUE controllers are programmed using **Cue Director** programming tools.

3. Box Contents

Item	ipCUE-alpha	ipCUE-beta	ipCUE-gamma	ipCUE-delta	ipCUE-epsilon
Controller	ipCUE-alpha	ipCUE-beta	ipCUE-gamma	ipCUE-delta	ipCUE-epsilon
Connector Set	1 set	1 set	1 set	1 set	1 set
IR Adapter /i	4	4	2	8	4
Ethernet cable	1	1	1	1	1
Ethernet cable cross	1	1	1	1	1
CUEadapter /30W	1	1	1	-	1
CUEadapter /65W	-	-	-	1	-
Power Cable	1	1	1	1	1
CE declaration	1	1	1	1	1
RoHS declaration	1	1	1	1	1
Controller data sheet	1	1	1	1	1
Cue System Connector Wiring	1	1	1	1	1
CD User Manuals	1	1	1	1	1

4. Specifications

Feature	ipCUE-alpha	ipCUE-beta	ipCUE-gamma	ipCUE-delta	ipCUE-epsilon
Ethernet connection					
10/100 BaseT LAN, RJ-45 connector	1				
System connection					
CUEwire (RS-485) for control panels, dedicated 4-pin connector 5 mm	1				
CUEring (RS-232) for interfaces, bi-directional serial channel	1				
PEbus (RS-485) for power and lighting control, bi-directional serial channel	1				
Control ports					
Bi-directional serial RS-232, 5-pin connector 3.5 mm	2				
Bi-directional serial RS-232/422/485, 5-pin connector 3.5 mm	4	-	-	4	-
IR/serial output, IR output up to 1.2 MHz, 2-pin connector 3.5 mm	8	8	2	8	8
General I/O input (analog 0 - 5 V) or output (open collector max. 80 mA), 2-pin connector 3.5 mm	8	-	8	8	8
Relay 24 V / 0.5 A, 3-pin connector 3.5 mm	2	-	2	16	8
Analog output 0 – 10 V, 2-pin connector 3.5 mm	-	-	-	4	4
Power output 5 VDC (max. 1 A), 2-pin connector 3.5 mm	1	1	-	1	1
Internal IR sensor for IR code capture and for IR wireless control panel link	1	1	-	1	1
LED indicators	Power, CUEnet, Data, All control ports				
Button Factory default settings	1				
Real time and date - RTC with battery backup	1				
Memory	Internal RAM 16 MB, Flash 4 MB (16 MB from 2007)				
Software	XPL Runtime, Admin web				
Power supply, 2-pin connector 5 mm	24 VDC (+/-20%)				
Power consumption	12 W	10 W	10 W	18 W	15 W
Enclosure	Metal	Metal	Plastic	Metal	Metal
Dimensions (WxHxD) in mm	210 x 43.5 x 92	210 x 43.5 x 92	106 x 90 x 58	422 x 43.5 x 92	210 x 43.5 x 92
Weight	0.6 kg	0.5 kg	0.4 kg	0.8 kg	0.6 kg

5. Quick Start

5.1. Powering Up

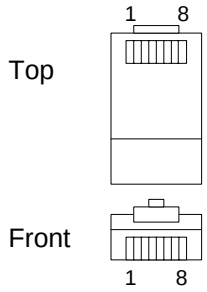
Every ipCUE controller requires a power from an external power supply. The standard CUEadapter /30W or CUEadapter /65W is delivered with the unit. Attach the 2-pin connector of the power supply unit to the PWR IN connector located on the rear panel of ipCUE controller and attach power cable to a power outlet. The LED labeled PWR will light up when the unit is powered on.

5.2. PC Connection

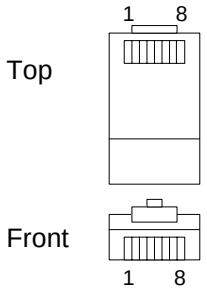
Using LAN Directly to PC

Attach one end of an RJ-45 Ethernet **cross-over cable** to the ipCUE controller CUEnet (LAN) port and attach the other end to the RJ-45 Ethernet cable to your computer.

Ethernet Cross-Over Cable
This cable can be used to cascade hubs, or for connecting two Ethernet stations back-to-back without a hub. It works with 10Base-T, 100Base-TX, 100Base-T4 and 1000Base-T. Use a good enough cable, if you are confused about categories of cables then use Category 5 (enhanced) and you'll be fine even at 1000Base-T.



To Network Interface Card 1 (NIC 1)
Computer
RJ45 Male Connector



To Network Interface Card 2 (NIC 2)
Touch panel
RJ45 Male Connector

Name	NIC 1	Color	NIC 2	Name
TX+ (BI_DA+)	1	White/Orange	3	RX+ (BI_DB+)
TX- (BI_DA-)	2	Orange	6	RX- (BI_DB-)
RX+ (BI_DB+)	3	White/Green	1	TX+ (BI_DA+)
- (BI_DC+)	4	Blue	7	- (BI_DD+)
- (BI_DC-)	5	White/Blue	8	- (BI_DD-)
RX- (BI_DB-)	6	Green	2	TX- (BI_DA-)
- (BI_DD+)	7	White/Brown	4	- (BI_DC+)
- (BI_DD-)	8	Brown	5	- (BI_DC-)

That means that the White/Orange cable connected to NIC 1 pin 1 should go to NIC 2 pin 3 and NIC 1 pin 2 to NIC 2 pin 6 etc.

Notes

1. 1000Base-T names are in parentheses.
2. It's important that each pair is kept as a pair. TX+ & TX- must be in the pair and RX+ & RX- must together in another pair. Just as the table above shows.
3. While 10Base-T and 100Base-TX only uses 2 pairs, please connect all four since 100Base-T4 and 1000Base-T needs them and save you some future debugging.
4. The colors originate from the numbering and name on NIC 1.
5. The connection is based on IEEE Standard 802.3, 2000 Edition.

Using LAN Network

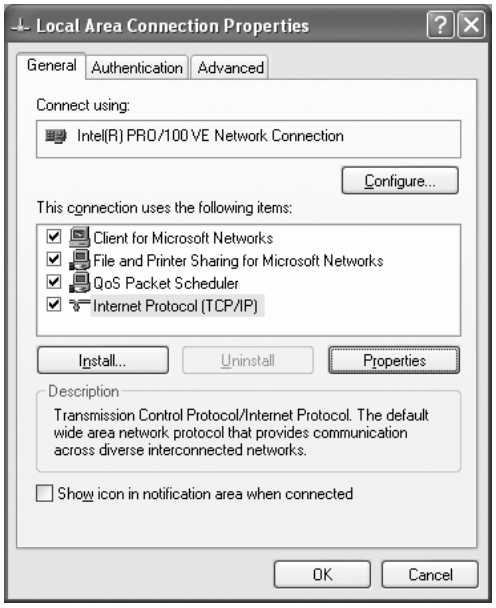
Attach one end of an RJ-45 Ethernet **straight through cable** to the ipCUE controller CUEnet (LAN) port and attach the other end to the RJ-45 Ethernet cable to your computer.

5.3. Windows XP Local Area Connection Settings

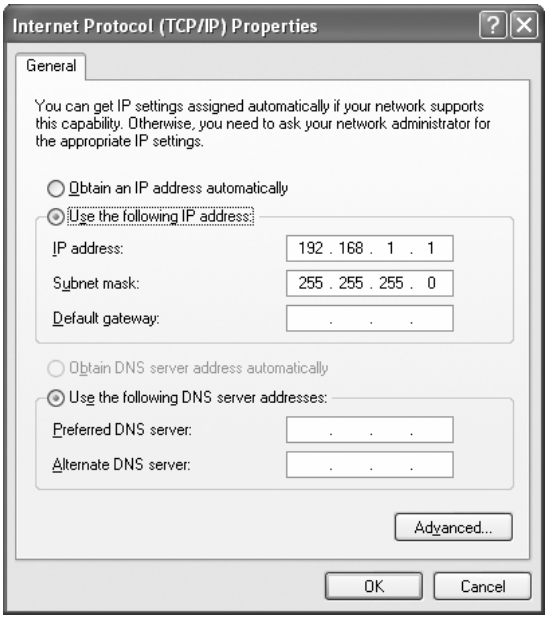
Steps are

1. Start Windows XP.
2. Click Start, then click Control Panel choose the option to switch to Classic View.
3. Double-click Network Connections, select the Local Area Connection and then right-click and select Properties.

4. Select Internet Protocol (TCP/IP) and click Properties button.



5. Select Use the following IP address option. Set IP address to 192.168.1.1 (or other address different from 192.168.1.128) and Subnet mask to 255.255.255.0. Leave other options unchanged and click OK.

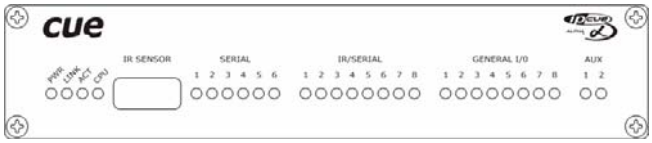


5.4. Access Admin Web Server

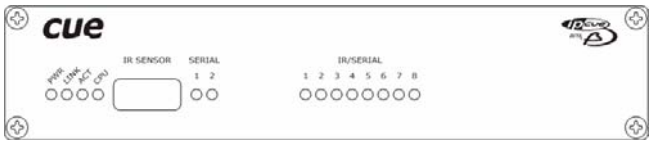
Run the Internet Explorer on your PC and type in the ipCUE factory default IP address **192.168.1.127**. The Admin login web page will be displayed. The password is set to default.

6. Front Panels

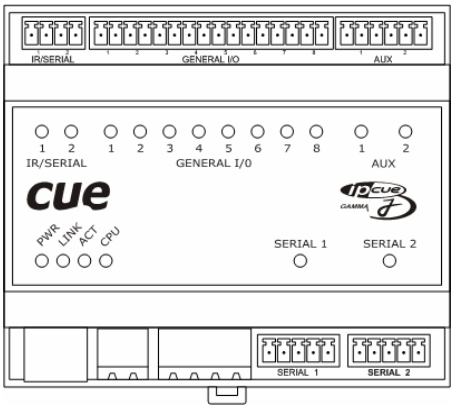
The ipCUE-alpha, ipCUE-beta, ipCUE-delta and ipCUE-epsilon front panels are made of aluminum plate. The ipCUE-beta front panel is made of plastic. It should be cleaned with a soft/non-abrasive cloth. The indication LEDs and infrared sensors are behind the front panel.



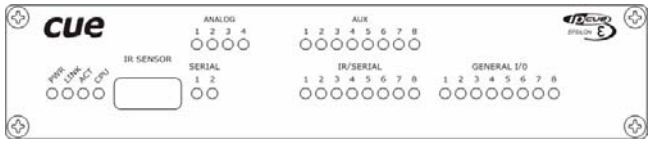
ipCUE-alpha



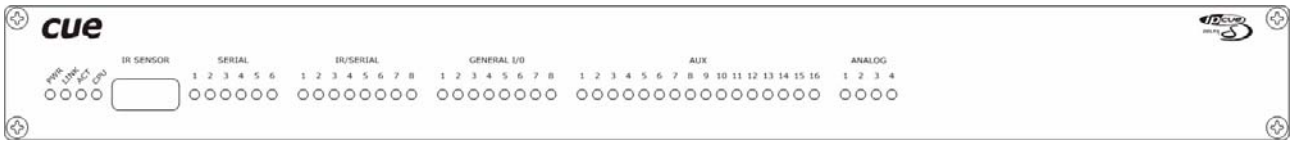
ipCUE-beta



ipCUE-gamma



ipCUE-epsilon



ipCUE-delta

7. Indicators

7.1. PWR Indicator

Off ..... No power presented.
On ..... Power 24 V is presented. The unit is ready.

7.2. LINK Indicator

Off ..... Network is not detected.
On ..... Network detected.

7.3. ACT Indicator

Off ..... No data transmitted or received through the CUEnet (LAN) port.
On or Flashing ..... Data is being transmitted or received through the CUEnet (LAN) port.

7.4. CPU Indicator

This LED indicates the end of the operating system boot up by flashing OK in Morse code. Operating system is booted after the unit has either been reset or switched on. The booting time is approx. 13 seconds.

7.5. IR SENSOR

The window marked by IR SENSOR (not applied in ipCUE-gamma), covers two IR sensors and one LED indication.

1. The first built-in IR sensor carries the same functionality as irCUE Receiver or irCUE Receiver 485. This means that ipCUE can receive IR signal from CUE wireless IR control panels without the need to use any external IR receiver.

2. The second built-in IR sensor allows IR codes capture directly by ipCUE unit. The flashing Yellow LED indicates the received infra-red signal and serves for optimum distance setup between the receiver and captured IR remoter.

7.6. SERIAL Port Indicator

Off ..... No data transmitted or received through the serial port.
Green On or Flashing..... Data is being transmitted through the serial port.
Red On or Flashing ..... Data is being received through the serial port.

Note: The S1 serial channel is used as **CUEring** port for interfaces and power and lighting control units.

7.7. IR/SERIAL Output Indicator

Off ..... No data or IR code transmitted through the IR/serial port.
On or Flashing ..... Data or IR code is being transmitted through the IR/serial port.

7.8. GENERAL I/O Indicator

Off ..... Output is switched OFF.
On ..... Output is switched ON.

7.9. AUX Indicator

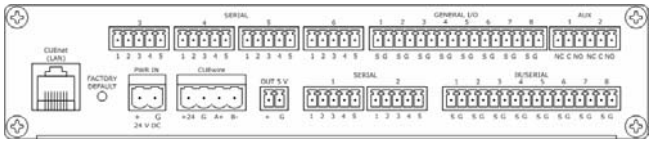
Off ..... AUX (relay) is switched OFF.
On ..... AUX (relay) is switched ON.

7.10. ANALOG Output Indicator

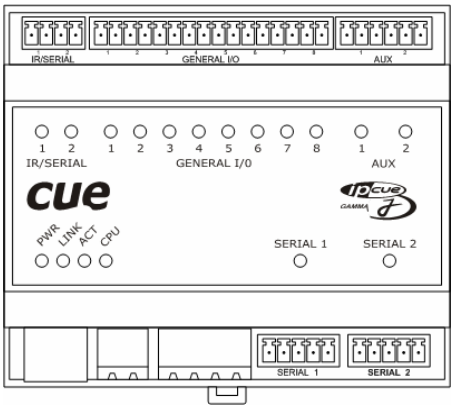
Off ..... Analog output is set to 0 V.
On ..... Analog output is set to 10 V.

8. Rear Panels

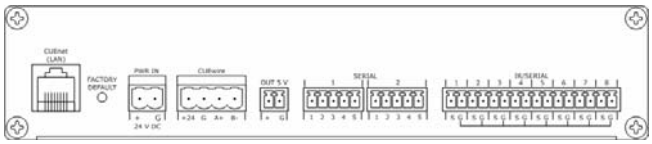
Connectors and button are located on the rear panel of the device. All connectors are labeled incl. pin out.



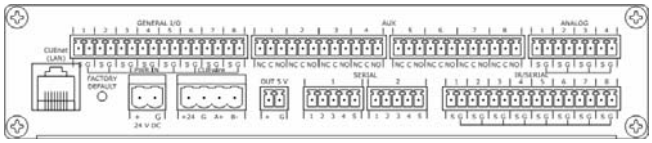
ipCUE-alpha



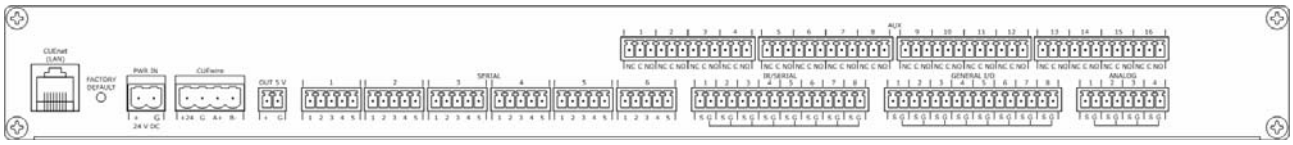
ipCUE-gamma



ipCUE-beta



ipCUE-epsilon



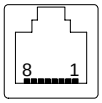
ipCUE-delta

9. Connection

9.1. CUEnet (LAN)

The CUEnet is a standard network connection 10/100 BaseT LAN using RJ-45 connector. There is no auto sense that means it does not recognize straight through cable to cross-over cable. For the direct PC connection it is necessary to use cross-over cable; for the connection to Ethernet switch straight through cable. The length of the Ethernet cable connecting ipCUE controller to the network must not exceed 100 meters.

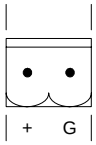
Connector pin out

CUEnet (LAN)				
RJ-45	**Pin**	**Signal**	**Description**	**Cat5 Cable Color**
	1	TX_D1+		White / Orange
	2	TX_D1-		Orange
	3	RX_D2+		White / Green
	4			Blue
	5			White / Blue
	6	RX-D2-		Green
	7	G	Ground	White / Brown
	8	G	Ground	Brown

9.2. PWR IN

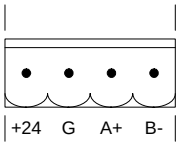
Warning: Use any ipCUE controller only with the power adapter supplied in the product package. Using another power supply may damage the unit.

Connector pin out

PWR IN		
2-pin 5 mm	**Pin**	**Description**
	+	Power +24 VDC
	G	Ground

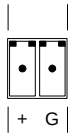
9.3. CUEwire

Connector pin out

CUEwire			
4-pin 5 mm	**Pin**	**Signal**	**Description**
	1	+24	Power +24 VDC
	2	G	Ground
	3	A+	RS-485 Data +
	4	B-	RS-485 Data -

9.4. OUT 5 V

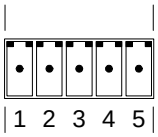
Connector pin out (not applied in ipCUE-gamma)

OUT 5 V		
2-pin 3.5 mm	**Pin**	**Description**
	+	Output +5 VDC, max. 1 A
	G	Ground

9.5. SERIAL 1 – 2

These two bi-directional serial channels are used for RS-232 communication. Maximum speed is 115 200 Bd (bps). Transmission levels for RS-232 output are in the -12 V to +12 V.

Connector pin out

RS-232				
5-pin 3.5 mm	**Pin**	**Signal**	**Description**	**Direction**
	1	TxD	RS-232 Transmitted Data	From ipCUE
	2	RTS	RS-232 Request to Send	From ipCUE
	3	GND	Ground	
	4	RxD	RS-232 Received Data	To ipCUE
	5	CTS	RS-232 Clear to Send	To ipCUE

Note: The S1 serial channel is used as **CUEring** port for interfaces and power and lighting control units.

9.6. SERIAL 3 – 6

Overview

These four bi-directional serial channels (ipCUE-alpha, ipCUE-delta only) are used for RS-232, RS-422 and RS-485 communication. Maximum speed is 115 200 Bd (bps). Default mode for all channels is RS-232, other modes must be set in programming application or by Admin Web. For more details about Admin Web see in the chapter **Admin Web Server**.

Channel Mode Setting

It is important to set channel mode in the programming application. The mode is selected by part of mode string in the command CommunicationSet.

Command example in XPL language for 9600 bd, non parity and 1 stop bit is as follows

- ipCUE_alpha.S3.CommunicationSet ("0096008n1**m232**") for RS-232 mode (default)
- ipCUE_alpha.S3.CommunicationSet ("0096008n1**m422**") for RS-422 mode
- ipCUE_alpha.S3.CommunicationSet ("0096008n1**m485**") for RS-485 mode

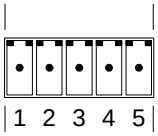
For more details see programming manuals.

RS-232 Mode

Transmission levels for RS-232 output are in the -10 V to +10 V.

This is default mode for all channels. If a channel was set to other mode, it is possible to use XPL command *ipCUE_alpha.S3.CommunicationSet ("0096008n1**m232**")*.

Connector pin out

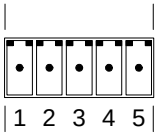
RS-232				
5-pin 3.5 mm	**Pin**	**Signal**	**Description**	**Direction**
	1	TxD	RS-232 Transmitted Data	From ipCUE
	2	RTS	RS-232 Request to Send	From ipCUE
	3	GND	Ground	
	4	RxD	RS-232 Received Data	To ipCUE
	5	CTS	RS-232 Clear to Send	To ipCUE

RS-422 Mode

Only channels S3 – S6 can be used in the RS-422 mode.

This mode must be set in the programming application or by Admin Web. The right command in XPL is *ipCUE_alpha.S3.CommunicationSet ("0096008n1**m422**")*.

Connector pin out

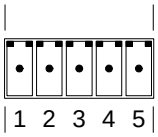
RS-422				
5-pin 3.5 mm	**Pin**	**Signal**	**Description**	**Direction**
	1	Tx A+	RS-422 Transmit Data (Idles High)	From ipCUE
	2	Tx B-	RS-422 Transmit Data (Idles Low)	From ipCUE
	3	GND	Ground	
	4	Rx A+	RS-422 Receive Data (Idles High)	To ipCUE
	5	Rx B-	RS-422 Receive Data (Idles Low)	To ipCUE

RS-485 Mode

Only channels S3 – S6 can be used in the RS-485 mode.

This mode must be set in the programming application or by Admin Web. The right command in XPL is *ipCUE_alpha.S3.CommunicationSet ("0096008n1**m485**")*.

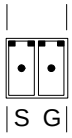
Connector pin out

RS-485			
5-pin 3.5 mm	**Pin**	**Signal**	**Description**
	1	A+	RS-485 Data +
	2	B-	RS-485 Data -
	3	GND	Ground
	4	N.C.	Not Connected
	5	N.C.	Not Connected

9.7. IR/SERIAL Output

IR/Serial output labeled **IR/SERIAL 1 – 8** (ipCUE-alpha, ipCUE-beta, ipCUE-delta, ipCUE-epsilon) or **IR/SERIAL 1 – 2** (ipCUE-gamma) provides output for infra-red emitters (IR Adapter /i) or eight RS-232 serial outputs (one way). Maximum IR output rate is 1.2 MHz, maximum serial data rate is 115 200 Bd (bps). Transmission levels for RS-232 output are in the -12 V to +12 V. The IR outputs and RS-232 outputs can be combined on independent outputs (for example three outputs can be used as IR, five outputs can be used as RS-232).

Connector pin out

IR/Serial		
2-pin 3.5 mm	**Pin**	**Description**
	S	IR/Serial Signal (Output)
	G	Ground

Note: All pins labeled G are connected together.

Note: Up to three original infra-red emitters IR Adapter /i can be connected to each output in parallel. Finally it allows to control up to 24 IR controlled devices.

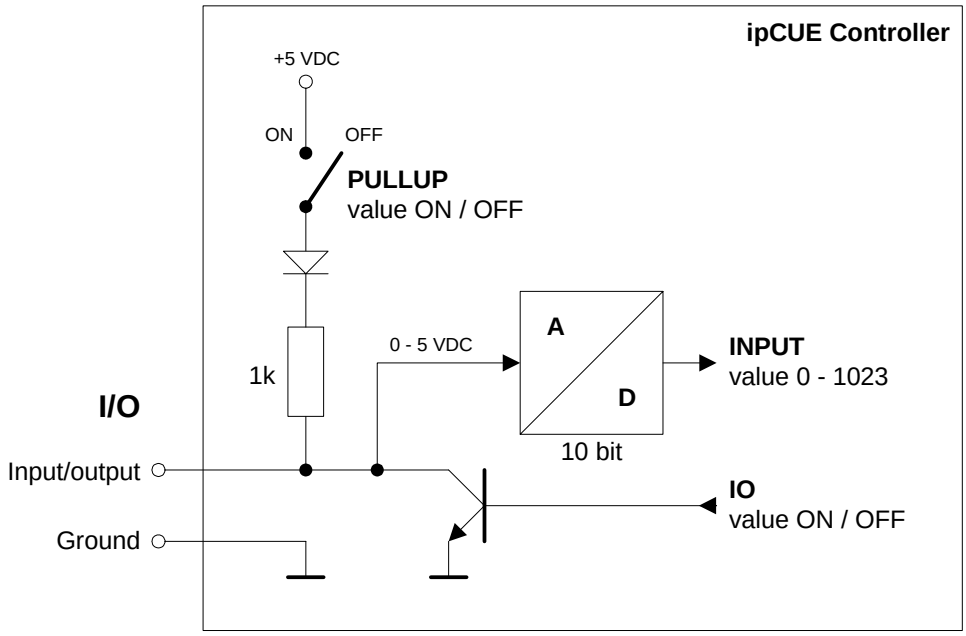
Note: It is not suggested to connect more infra-red emitters of various manufacturers in parallel because the output can be either overloaded or damaged.

9.8. GENERAL I / O

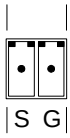
General IO labeled **GENERAL I/O 1 - 8** (not applied in ipCUE-beta) provide analog input as well as digital output. Each general I/O port can be used either as input or as output.

Analog input is rated 0 – 5 VDC, digital output offers 80 mA. Pull-up resistor 680 ohms connected to +5 VDC can be switched on and off for each IO independently. Input voltage with pull-up on is approx. 4.3 VDC, because protection diode is connected in series (0.7 V drop-down). Output voltage for output switch on is approx. 0.6 V. Analog to digital (A/D) converter has 10-bits precision (i.e. 1024 levels).

IO schematic diagram



Connector pin out

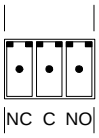
General IO		
2-pin 3.5 mm	**Pin**	**Description**
 S G	S	Input/Output Signal
	G	Ground

Note: All pins labeled G are connected together.

9.9. AUX (Low Voltage Relay)

This connector labeled **AUX 1 – 2** (ipCUE-alpha, ipCUE-gamma) or **AUX 1 – 8** (ipCUE-epsilon) or **AUX 1 – 16** (ipCUE-delta) provides one isolated low voltage relay. Normally Close and Normally Open contacts as well as Common contact of each relay can be used. The Normally Close position is the state of the relay when it is not turned on (energized). Each relay contact closure is rated 24 V / 0.5 A.

Connector pin out

Aux (Low Voltage Relay)		
3-pin 3.5 mm	**Pin**	**Description**
	NC	Aux Contact Normally Close
	C	Aux Contact Common
	NO	Aux Contact Normally Open

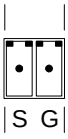
9.10. ANALOG Output

Analog output labeled **ANALOG 1 - 4** (ipCUE-delta and ipCUE-epsilon only) provides analog output 0 - 10 V. When connecting with another device (e.g. dimmer) it is essential to see to a perfect interconnection with earth. The output voltages generated by the analog output is mutually related to the reference level (ground) on pin labeled G.

Parameters of the analog output

- Range of the output voltage 0 - 10 V
- Max. output current (both source and sink) 10 mA
- Stepping regulation (LSB) 39 mV
- Min. set-up precision ± 0.08 V (± 2 LSB)

Connector pin out

Analog Output		
2-pin 3.5 mm	**Pin**	**Description**
	S	Analog Output Signal 0 - 10V
	G	Ground

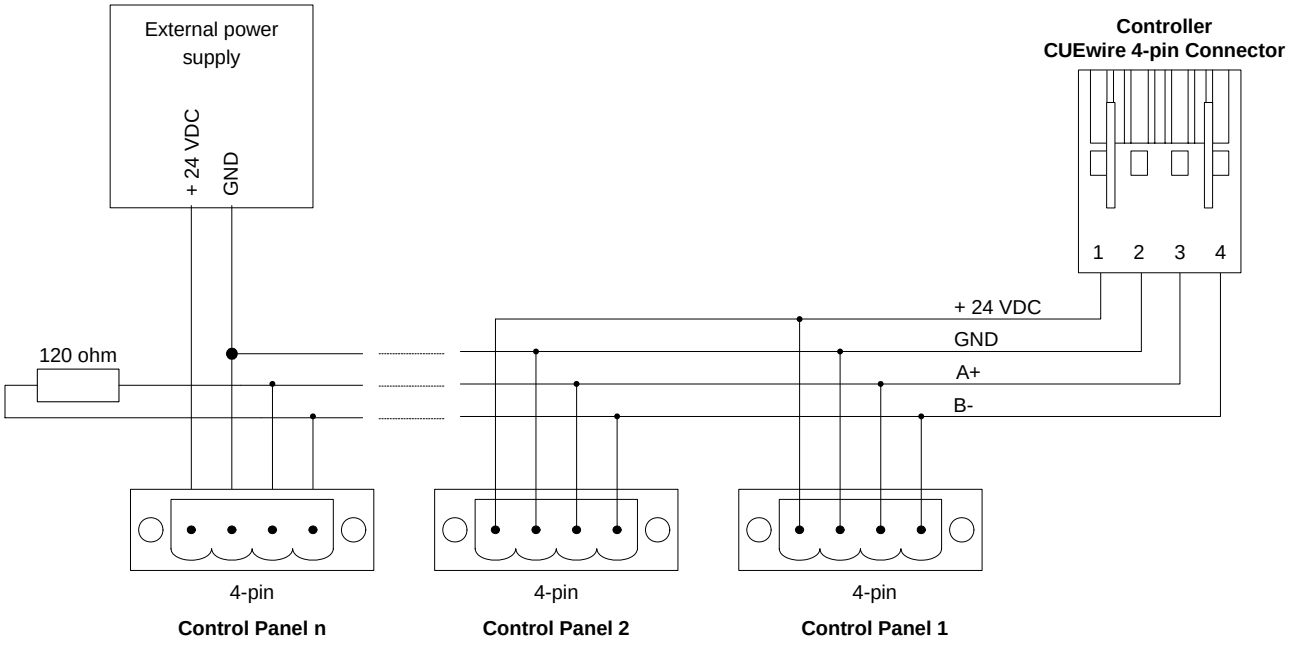
Note: All pins labeled G are connected together.

10. System Connection

10.1. CUEwire

CUEwire Installation

On the picture you can see a typical connection of CUEwire.



The cable consists of 4 wires. The first pair serves as a signal line. The second pair of wires serves for power distribution. The signal conductors can have minimal 0,25 mm^2, capacity maximal 100 pF/m.
The power distribution cable design depends on number of control panels to be connected and on the required length of the cable. The maximum voltage loss on the whole power distribution conductors should not exceed 4 V on the ground wire and 4 V on the +24 V wire.
To supply power distribution line the output **OUT** of the controller can be used. In this case the whole consumption should not exceed 2 A. In case of using more than 2 touchCUEs units or for longer distances it is necessary to use external power supply +24 V for remote panels (see example of the **Panel n** in the picture above).

Approximate consumption of control panels is

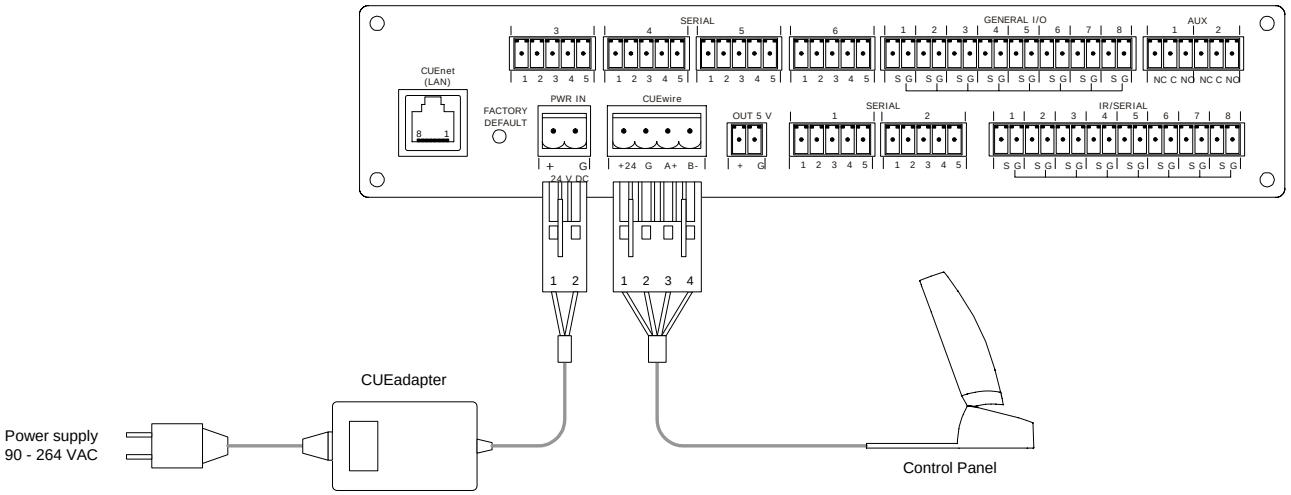
touchCUE ..... 1.0 A
keyboardCUE ..... 0.3 A
keyboardCUE-S..... 0.1 A

For the power consumption you can calculate **1 touchCUE = 3 keyboardCUE = 10 keyboardCUE-S**.

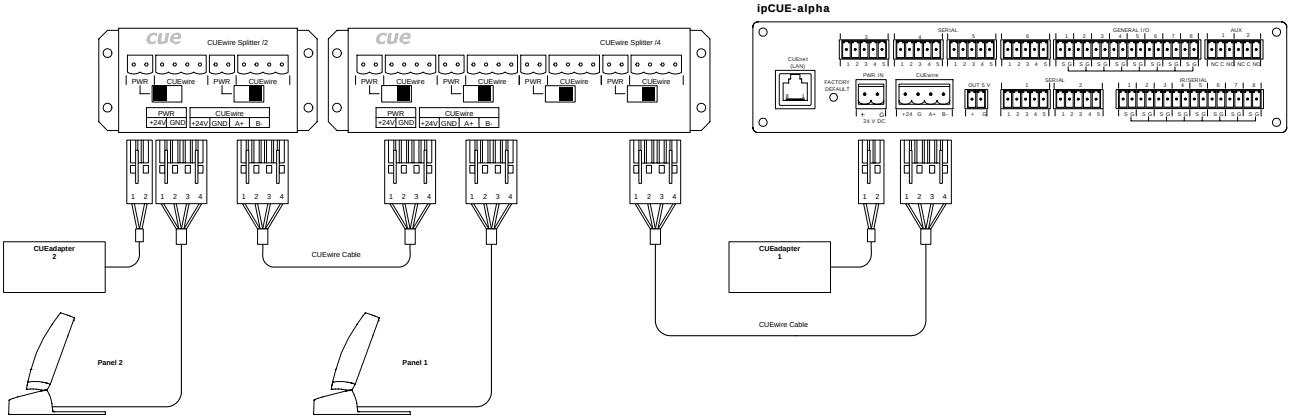
Table of maximum cable lengths

Number of touchCUE	Cable 1 mm^2	Cable 2 mm^2	Cable 3 mm^2	Cable 4 mm^2
1	200 m	400 m	600 m	800 m
2	100 m	200 m	300 m	400 m
3	60 m	130 m	200 m	260 m
4	50 m	100 m	150 m	200 m
5	40 m	80 m	120 m	160 m

Simple control panel connection

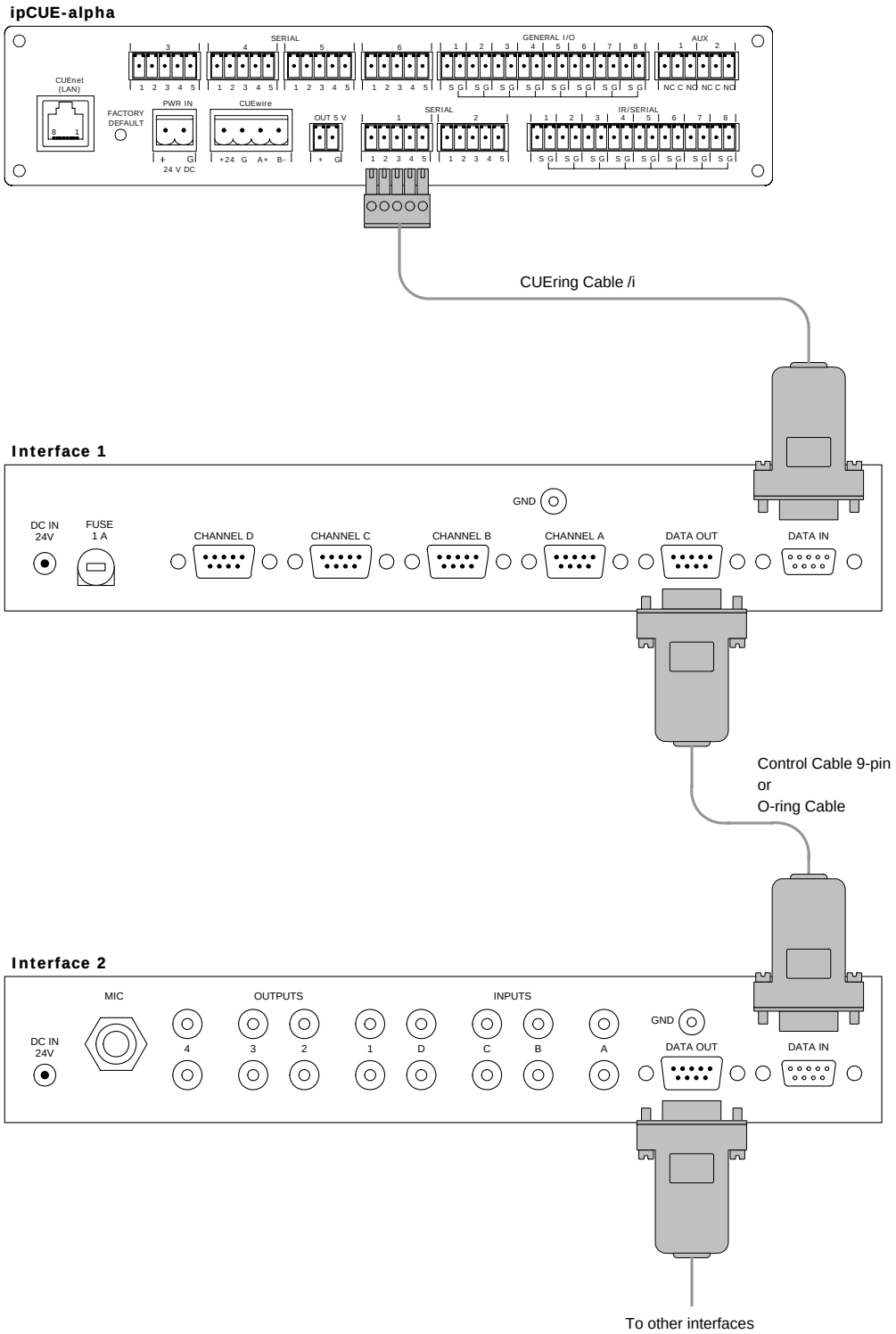


Multiple control panels connected to a CUEwire Splitter



10.2. CUEring

The S1 serial channel is used as CUEring port for interfaces and power and lighting control units.

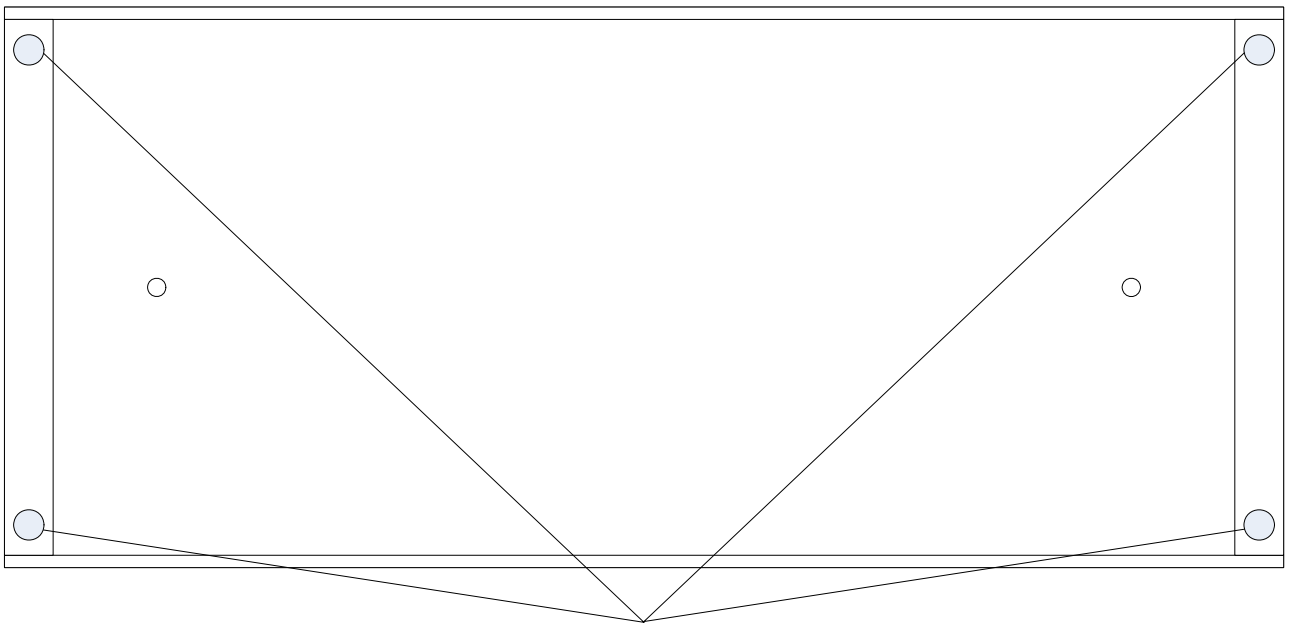


11. Mounting

11.1. Shelf Placement or Stacking

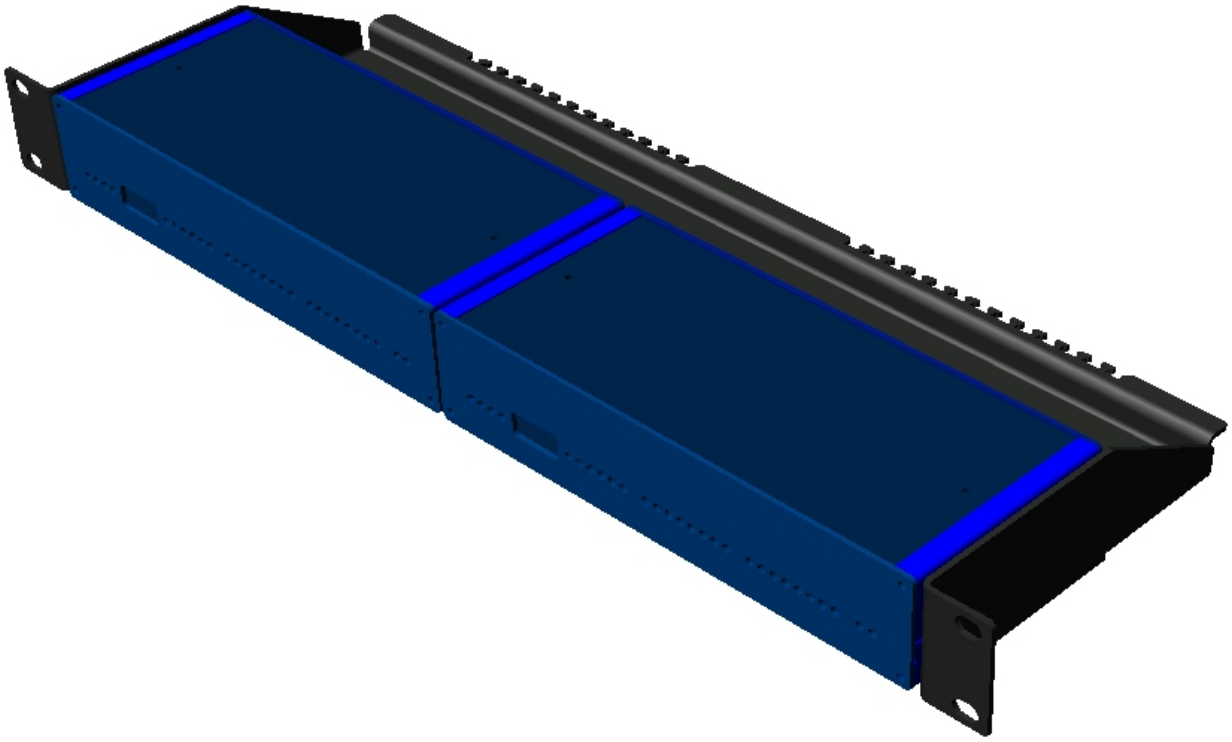
Rubber feet are provided for shelf placement or stacking. Stick the feet near the corner edges on the bottom side of the ipCUE Controller.

ipCUE-alpha Bottom Side



Four Rubber Feet

11.2. Rack Mounting



12. FACTORY DEFAULT Button

This button carries two functions

1. When pressed shortly (< 2 seconds) the **reset** of the unit is performed followed by operating system boot taking approx. 13 seconds.

2. When pressed longer for approx. 5 seconds the **factory default** function is performed. The CPU LED indicator will three times shortly flash to confirm the factory default function. The factory default is setup as follows

   Identification
   - Name..... Empty

   Internet Clock ..... Empty

   Date and Time
   - Time zone ..... GMT + 0
   - Date and time... Unchanged

   IP Connection
   - Host name..... Empty
   - IP address..... 192.168.1.127
   - Subnet mask 255.255.255.0
   - Default gateway Empty
   - DNS..... Empty

   Applications..... Unchanged, stopped

   Diagnostics
   - Serial ..... Mode RS-232
   - IR/Serial ..... Unchanged
   - IO..... All off, pull-up off
   - AUX..... All off

   Firmware ..... Unchanged

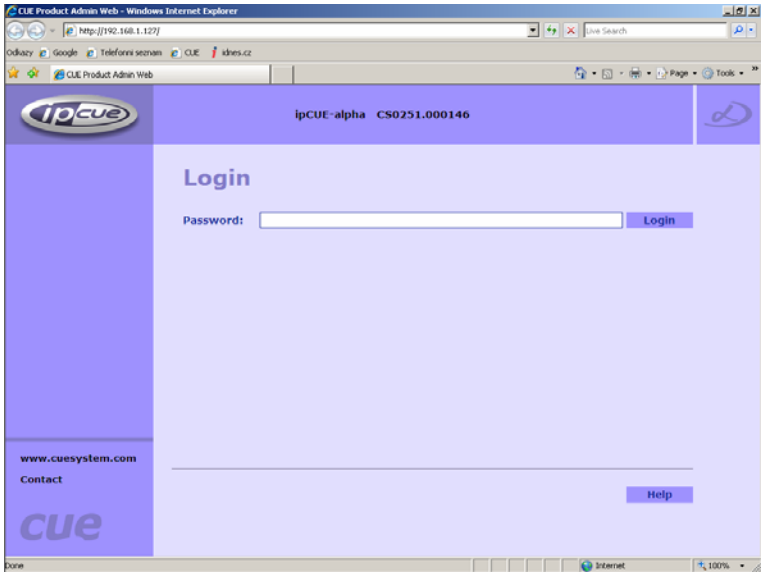
   Password ..... Set to empty

   Other settings are cleared (see Admin web).

   Saved applications and files are not deleted.

13. Admin Web Server

13.1. Login



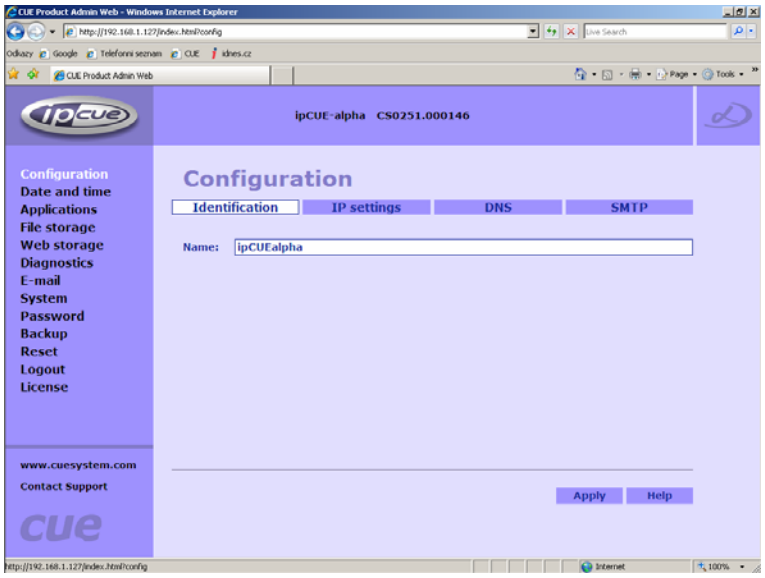
You have to login at first for operating with your ipCUE via these web pages.

Enter your password into the Password box and click the Login button to enter the ipCUE web pages.

Remember that the password is case sensitive.

Note: For changing your password use the Password menu after you are logged in.

13.2. Configuration



Identification

Each ipCUE controller can be identified by a unique identification name. Unique names are most useful in applications requiring more than one ipCUE. This enables programmers and installers to reference controllers with a logical, user friendly name, like “boardroom,” “lobby,” etc. To set the ipCUE controller identity, enter the unique name you wish to use in the Name box.

Be sure to click the Apply button for changes to the identification to become effective!

IP Settings

This page is used for establishing the communication parameters for your ipCUE. The ipCUE uses standard internet protocol (IP) communication parameters. Certain parameters can be reset by the user. On start up, this page will display the ipCUE’s given Physical address (MAC), Current IP address. Carefully note this addressing information (and any changes you elect to make to the IP address, subnet mask, or default gateway). This information must be entered into the CUE System Director® program written for your specific application. For control systems with more than one ipCUE controllers, a unique IP address must be given to each ipCUE.

Some control systems are “stand alone” and not part of a larger network. For such “stand alone” systems, the Host name is optional. However, for control systems that are connected to a larger network, please obtain the Host name from the network administrator, and enter it into the corresponding box. DHCP is not supported in this release. Be sure to click the Apply button for any changes to the IP settings to become effective!

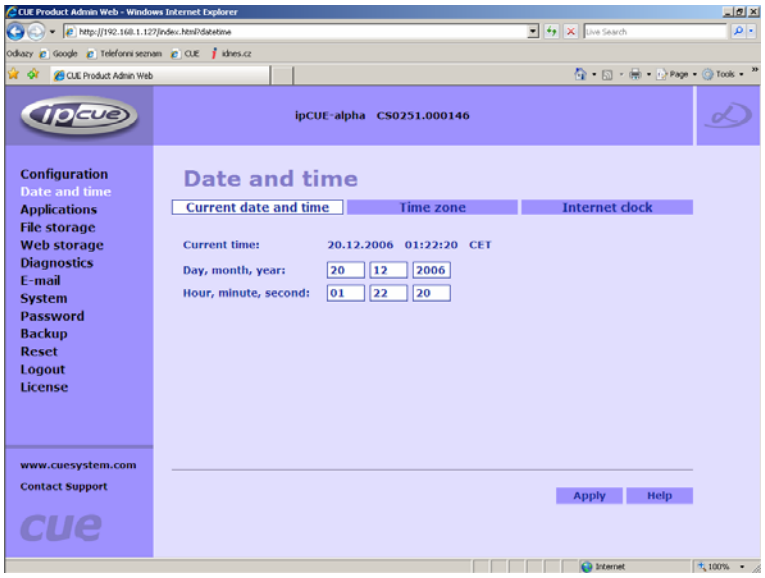
DNS

This page is used for setting parameters of your ipCUE’s DNS server. On start up, this page will display the ipCUE’s given Current primary DNS server, Current secondary DNS server. You can reset the primary DNS server and secondary DNS server manually by entering your changes into the appropriate boxes. DHCP is not supported in this release. Be sure to click the Apply button for any changes to the DNS to become effective!

SMTP

This page is used for setting parameters of SMTP server. Set a name or an address and the port of your SMTP server. The SMTP server and port are used by the XPL commands EmailSend and PresetEmailSend.

13.3. Date and Time



Current date and time

This page is used for setting the time clock on your ipCUE. The current date, time, and time zone are shown on the Current time line. The applicable boxes can be selected to enter changes to the: date: day/month/year, time: hour/minute/second. Be sure to click the Apply button for any changes to the date and time to become effective!

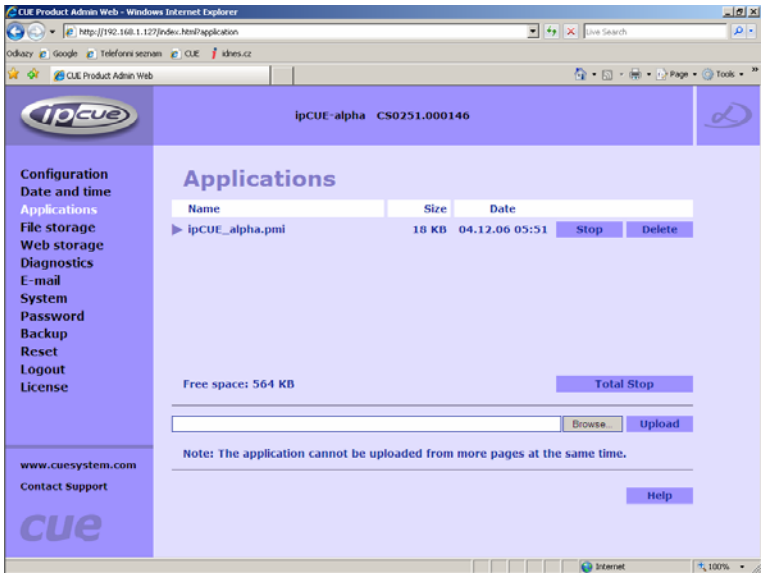
Time zone

This page is used for setting the time zone on your ipCUE. The current date, time, and time zone, are shown on the Current time line. The time zone box can be selected to enter changes to the Time zone. Be sure to click the Apply button for any changes to the time zone to become effective!

Internet clock

This page is used for synchronization of the ipCUE's date and time to an internet clock. Begin by selecting the check box for Use Internet clock. Next, enter the IP addresses (or complete address name) of the primary and secondary NTP servers. Use the Primary NTP server and Secondary NTP server boxes for this purpose. Be sure to click the Apply button for any changes to the internet clock to become effective!

13.4. Applications



This page is used for uploading compiled CUE System Director® programs to your controller. All uploaded applications are listed on this page, along with their file properties: file name/file size/date. The controller has a generous memory; unused free space is shown at the bottom of this page.

Controller also permits other service functions like deleting files, downloading programs back to a personal computer, and starting/stopping specific applications.

A “running flag” denotes the active application. The running application can be stopped via the Start/Stop button. Likewise, a stopped application can be restarted with the Start/Stop button.

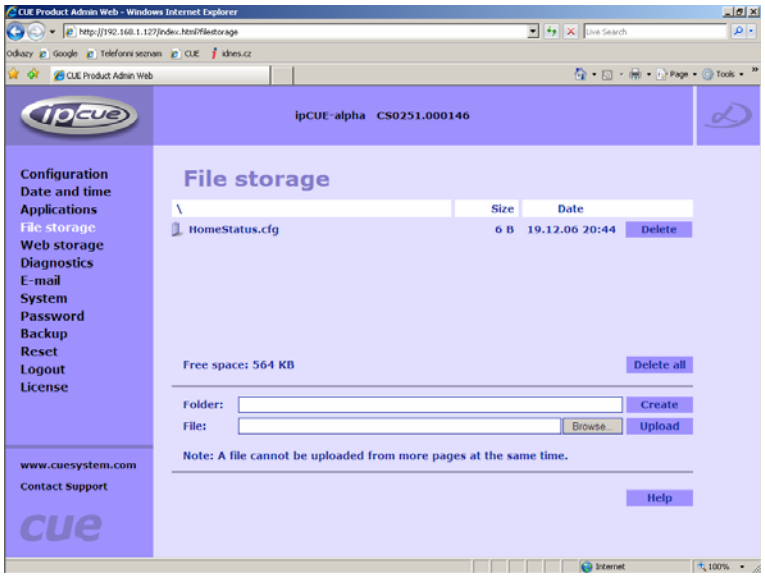
Files are uploaded from a personal computer to the controller by selecting the desired application program, and clicking the Upload button.

Files are downloaded from the controller to a personal computer by clicking the File name.

Files are easily deleted with the Delete button.

The button Total stop stops a running application. This application will not be automatically started after reset.

13.5. File Storage



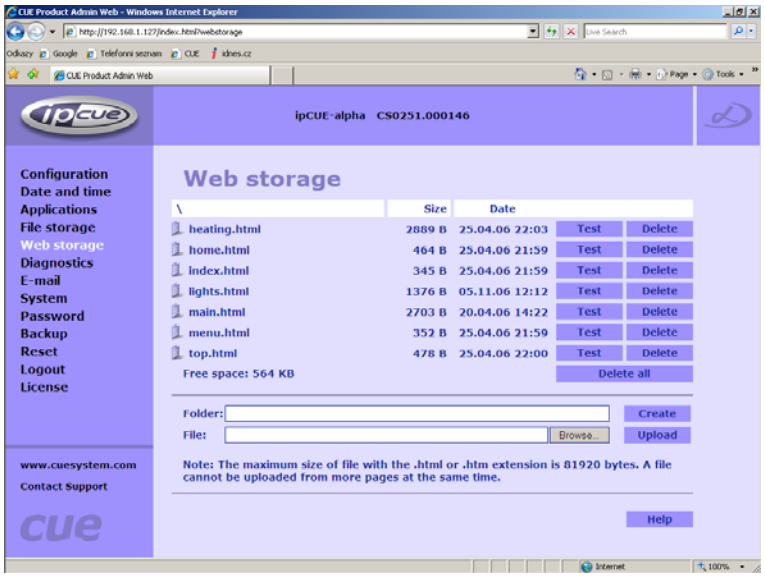
The ipCUE's generous memory can be used as an auxiliary file storage device. This is helpful in archiving electronic manuals, pdf files, and other support documentation. File storage is managed via the file storage page.

A list of existing files, folders, and their properties are shown. To delete a file or a folder, click the Delete button on the corresponding line. To delete all files and folders from the current folder, click the Delete All button.

To create a new folder, enter a name for the new folder, and click the Create button. To upload a file, select the desired file, and click the Upload button.

Note: Files are automatically compressed for the ipCUE's internal file system. Accordingly, the size of your uncompressed file before storing may not match the decrease of free space shown on the ipCUE.

13.6. Web Storage



The ipCUE's generous memory can be used as an user web pages file storage device. Web storage is managed via the web storage page.

The maximum size of single file with the *.html or *.htm extension is 81 920 bytes. The maximum size of file with another extension s is unlimited.

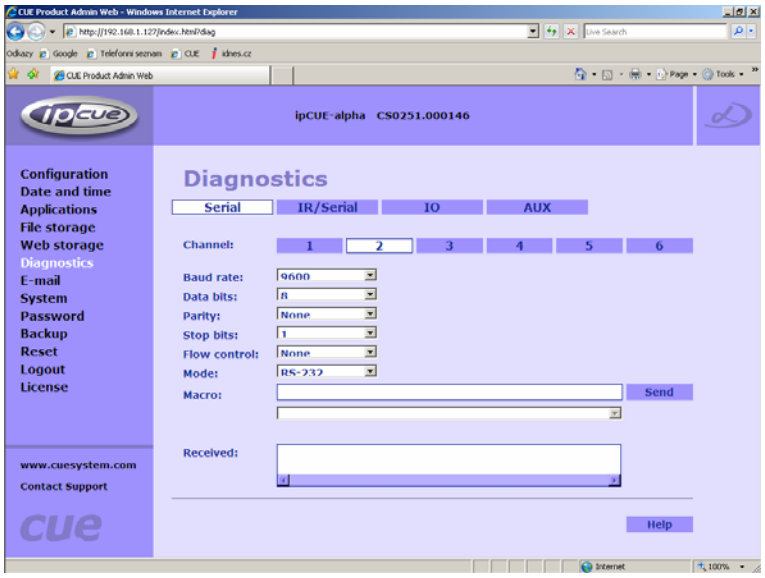
Click the button Test if you want to show web page in an explorer.

A list of existing files, folders, and their properties are shown. To delete a file or a folder, click the Delete button on the corresponding line. To delete all files and folders from the current folder, click the Delete All button.

To create a new folder, enter a name for the new folder, and click the Create button. To upload a file, select the desired file, and click the Upload button.

Note: Files are automatically compressed for the ipCUEs internal file system. Accordingly, the size of your uncompressed file before storing may not match the decrease of free space shown on the ipCUE.

13.7. Diagnostics



Serial

The page is used for sending strings to the ipCUE outputs and showing its answers. Select the desired Channel and other communication parameters: a Baud rate, a number of Data bits, a Parity, a number of Stop bits and a Flow control. Select a serial communication port Mode. Enter a string to the Macro box and click the Send button. The Received data box will show the answer in the ASCII format on the first line and in the hexadecimal format on the second line.

Important notes

- Remember all channel parameters keep their values which you set via these web pages even if you exit them.
- The channel S1 is by default used as the CUEring.
- The channels S1 and S2 can be operated only in RS-232 mode.
- RS-422 and RS-485 can be operated only with the None or Delay flow control modes.
- The answer shown in the Received data box is captured only during the first 2 seconds after pressing the Send button.

IR/Serial

The page is used for sending strings to the ipCUE's outputs. Select the desired Channel and other communication parameters: a Baud rate, a number of Data bits, a Parity and a number of Stop bits. Enter a string to the Macro box and click the Send button. Important note: Remember all channel parameters keep their values which you set via these web pages even if you exit them.

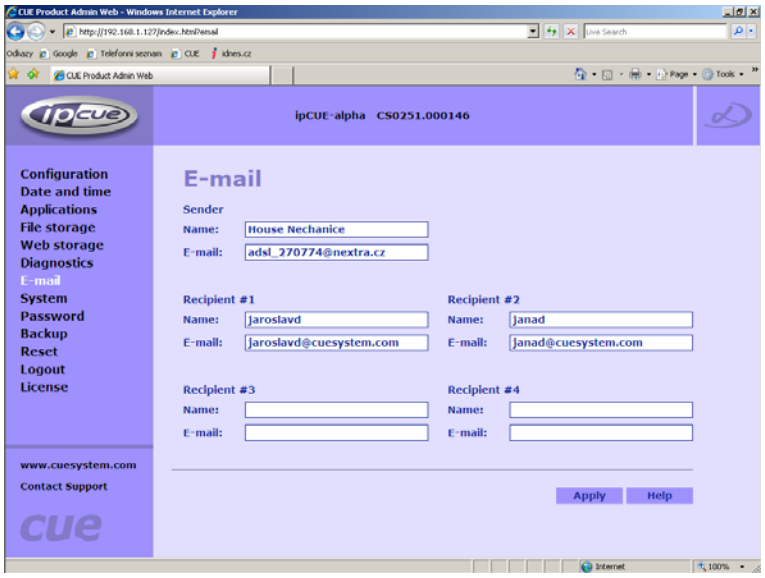
IO

The page shows a status of ipCUE's IO channels and enables to set up them. An input voltage of the channels is shown in volts and in a number value. Pull-up resistors and outputs can be set via this page. To do it click the On/Off button. Important note: Remember all channel parameters keep their values which you set via these web pages even if you exit them.

AUX

The page shows a status of ipCUE's AUX channels and enables to set up them. A status of the channels is shown. To change it click the Close/Open button. Important note: Remember all channel parameters keep their values which you set via these web pages even if you exit them.

13.8. E-mail



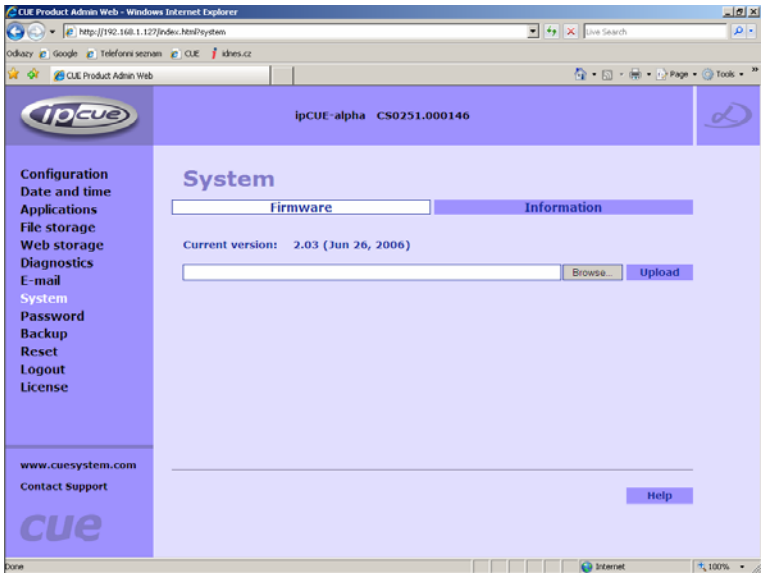
This page is used for setting parameters of email parameters and recipients addresses.

The SMTP server must be set. See the Configuration/SMTP setting.

The sender Name and E-mail are addresses of your ipCUE. The sender Name and E-mail are used by the XPL commands EmailSend and PresetEmailSend.

The recipient Names and E-mails are addresses of recipients, where emails will be sent using the XPL command PresetEmailSend.

13.9. System



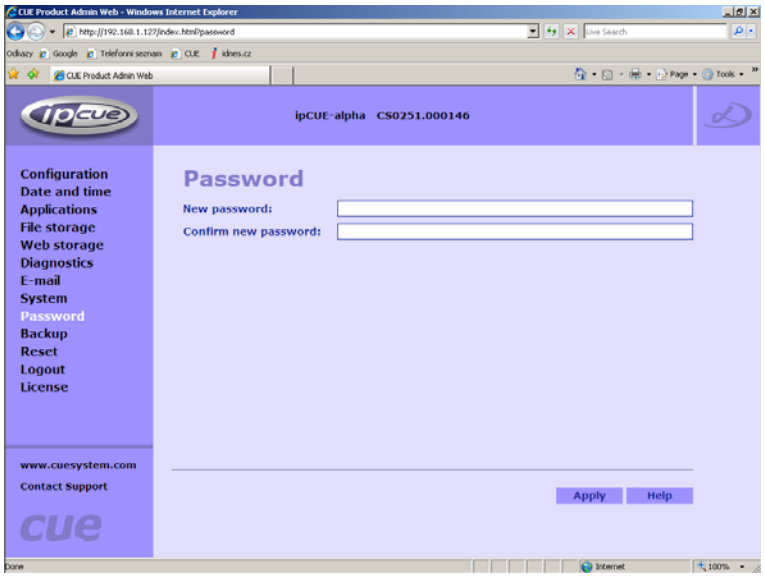
Firmware

This page is used for updating the ipCUE firmware. The Current version of firmware is shown. To upload new firmware, select the desired version, and click the Upload button.

Information

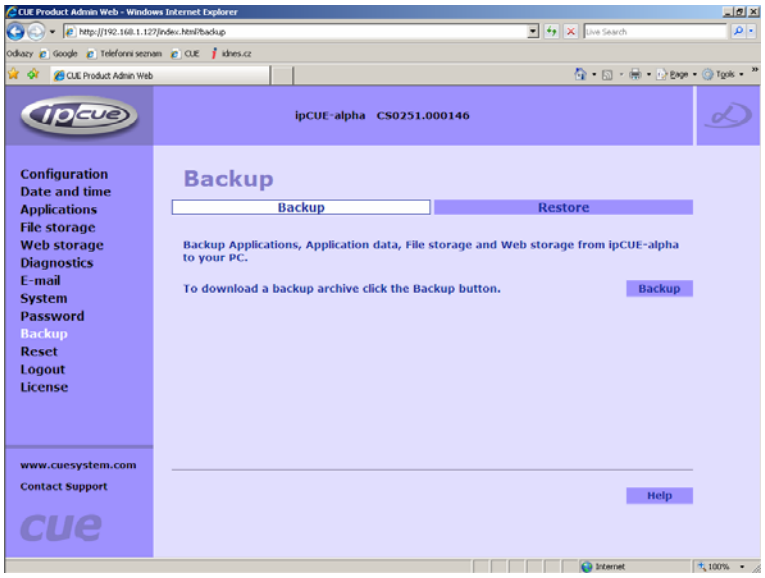
The page shows basic information about your ipCUE's hardware. The CPU type, CPU frequency, and the flash and RAM memory sizes, are shown.

13.10. Password



A case sensitive password is necessary to login to the web pages. Set a new password via the New password box. You must reenter the password in the Confirm new password box (an error message will generate if the confirmation does not match, in which case you should reenter your password again in both boxes). Finally, the new password is implemented by clicking the Apply button.

13.11. Backup



Backup

The page is used for the backup applications, files and folders. The Backup copies all Applications, Application data, File storage and Web storage to the one archive. This archive is saved to the PC. To start the backup process, click the Backup button.

Note: To see the backed-up/restored applications, click the Applications menu. To see backed-up/restored files and folders, click the File Storage menu. The page is used for the backup all applications, files and folders.

Note: To see the backed-up/restored applications, click the Applications menu. To see backed-up/restored files and folders, click the File Storage menu.

Restore

READ ALL IMPORTANT NOTES THAT FOLLOW BEFORE USING THIS OPERATION!

The page is used for the restoring all applications, files and folders. Restore copies all applications, files, and folders from a backup archive on the PC to their corresponding locations on the ipCUE. To start the restore process, select the desired backup archive, then click the Restore button. The restore process can take up to 10 minutes, depending on the size of the files being restored.

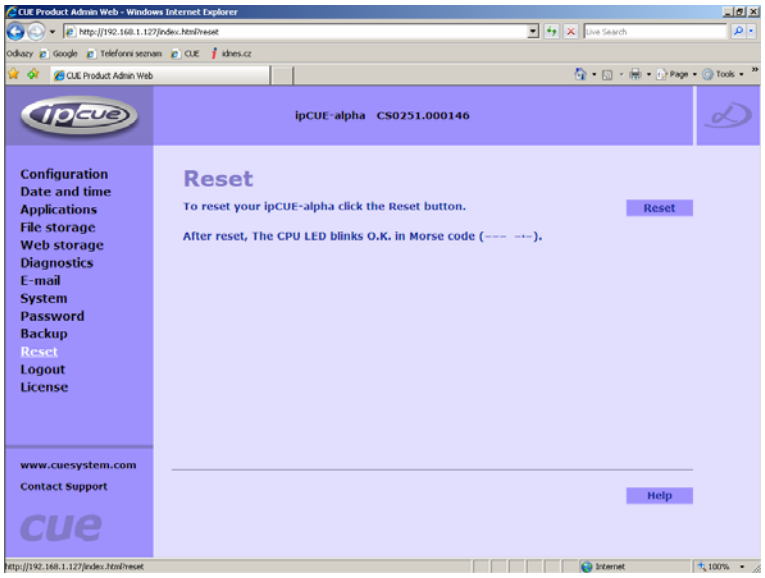
If you want ipCUE's settings will be restored too, check the "Restore configuration" box. The ipCUE's settings are accessible via the Configuration, Date and time and Password menus. Important note: actual password and IP settings will be restored too.

The restore process takes from 1 to 10 minutes. It depends on sizes of restored files.

Important note: When restoring files, the running application will be stopped and all applications, files, and folders currently stored in the ipCUE will be deleted! If you want to retain them, use the Backup command before the Restore command.

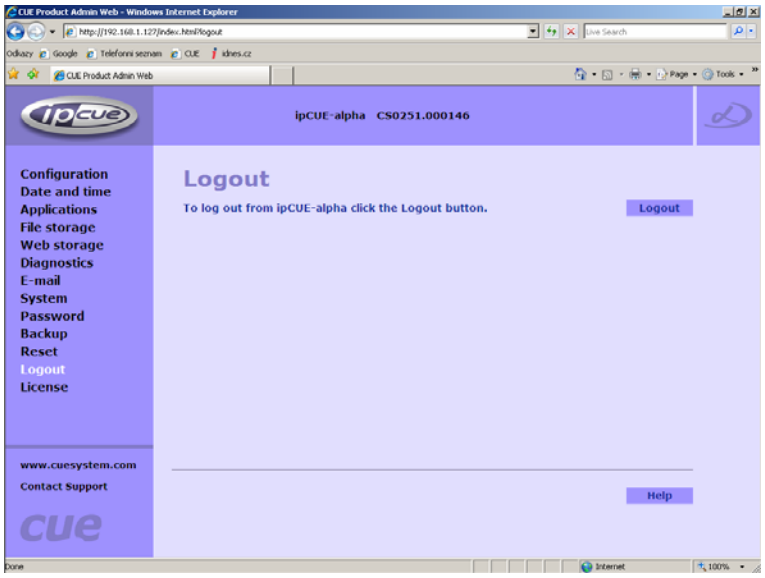
Note: To see the backed-up/restored applications, click the Applications menu. To see backed-up/restored files and folders, click the File Storage menu.

13.12. Reset



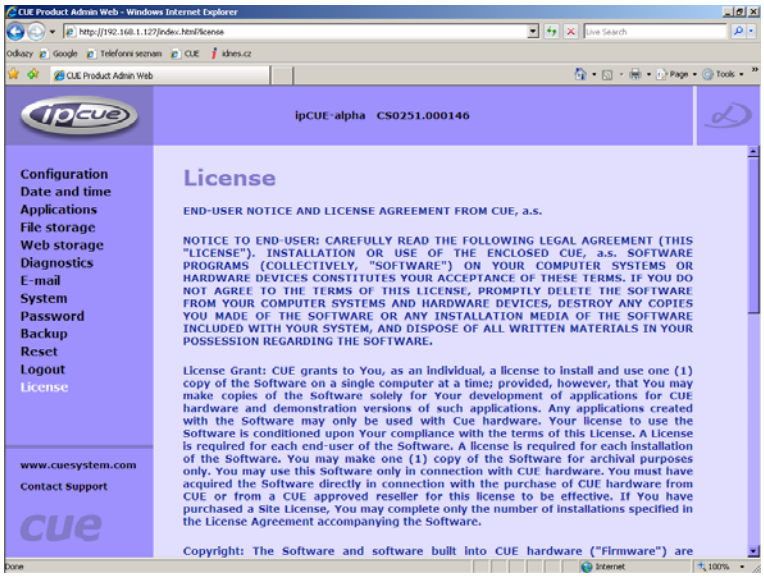
To restart your ipCUE click the Reset button.

13.13. Logout



When you are finished working with the ipCUE, click Logout to exit.

13.14. License



14. 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.

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15. Warranty Conditions

Warranty Duration

CUE, a.s. provides warranty for all CUE products for a period of 3 years from the day of purchase. The provided warranty for touch screens is 2 years from the day of purchase. CUE accepts reclamation of 5 not properly working dots and more (2 dots join – 1 counts). The warranty provided for rechargeable accumulators is 6 months from the day of purchase

Liability

CUE is not liable for any consequential damage caused by CUE products including any loss of profits, incidental or consequential damages or any claims made by a third parties.

General Warranty Terms

a) CUE warrants that its products are without defects in material and are fully functional for the duration of the warranty.
b) Warranty repairs are free of charge. The customer will send the damaged device to CUE at his cost.
c) All warranty repairs and after warranty services are made at CUE premises. It is strictly prohibited to repair CUE products or to change any accessory parts, except those parts with limited service life. CUE is not liable for consumables or parts with limited service life (lamps, batteries etc.)
d) The warranty further does not apply to the following cases
    - Damages caused by operating the system not according to the conditions defined in user manual or instruction (wrong power supply voltage, operation outside deferred temperature range, operation in humid environment and mechanical damages).
    - Damages caused by faulty service, maintenance, connection, and use of other than original connection cable.
    - Damage caused by agencies i.e. incidental or unpredictable impacts (fire, earthquake, flood, thunder, strong electric induction, water, strong wind, theft, vandalism etc.)

After Warranty Services

a) All warranty repairs are normally on a ‘back to base’ basis, as defined in 3 c)
b) All out warranty repair costs will be fully charged to the customer.
c) In cases where our staff are called out to assist, cost of transport and time will be at customer cost

16. CE Declaration of Conformity

CE Declaration of Conformity

We, the producer **CUE, a.s.**, K Nouzovu 6, Praha 4, Czech Republic
acknowledge our sole responsibility, that the product including accessories

Kind of equipment: Remote Control System

Type designation
(in alphabetical order)

airCUE-XM8	CS0254-W, CS0254-O, CS0254-M		PED202	CS0165-1, CS0165-2
airCUE-XM8 Docking Station	CS0260-W, CS0260-O, CS0260-M		PEF150	CS0249-1, CS0249-2
analogCUE	CS0004		PEF200	CS0166-1, CS0166-2
auxCUE	CS0005		PER610	CS0167-1, CS0167-2
Back box L	CS0238-MB		PES03	CS0168
Back box M	CS0239-MB		PET102	CS0244-1, CS0244-2
Back box S	CS0241-MB		PET105	CS0245-1, CS0245-2
CUEadapter /10W	CS0184-E, CS0184-U		powerAUX	CS0016
CUEadapter /20W	CS0226-E, CS0226-U		PowerPacket	ST0026-1, ST0026-2
CUEadapter /50W	CS0185-E, CS0185-U		Rack mount panel L	CS0238-MR
CUEadapter /80W	CS0186-E, CS0186-U		Rack mount panel M	CS0239-MR
CUEwire Converter 232/422/485	CS0233		Rack mount panel S	CS0241-MR
eCUE	CS0173		rfbaseCUE	CS0171-4, CS0171-8, CS0171-9
Elite-A-M	ST0019		rfCUE 99	CS0170-*4A, CS0170-*8A, CS0170-*9A
Elite-A-XM8	ST0018-W, ST0018-O, ST0018-M		sbiCUE-DMX	CS0201
Elite-B-S	ST0020		sensorCUE	CS0265
Elite-B-SRF	ST0021-4, ST0021-8, ST0021-9		smartCUE	CS0008-R, CS0008-M
Elite-D-LV	ST0025		soundCUE	CS0009
Elite-D-M	ST0024		touchCUE-L	CS0236
Elite-G-S /b	ST0022		touchCUE-L /b	CS0238
Elite-G-SX /b	ST0023		touchCUE-L 99	CS0234-W, CS0234-O, CS0234-M
inputCUE	CS0191		touchCUE-LV	CS0236-V
ipCUE-alpha	CS0251		touchCUE-LV /b	CS0238-V
ipCUE-beta	CS0252		touchCUE-LV 99	CS0234-W-V, , S0234-O-V, CS0234-M-V
ipCUE-delta	CS0267		touchCUE-M	CS0237
ipCUE-epsilon	CS0268		touchCUE-M /b	CS0239
ipCUE-gamma	CS0253		touchCUE-M 99	CS0235-W, CS0235-O, CS0235-M
irCUE 99	CS0149-WA, CS0149-OA, CS0149-MA		touchCUE-MV	CS0237-V
irCUE Receiver 485	CS0169-C		touchCUE-MV /b	CS0239-V
keyboardCUE 99	CS0145-W, CS0145-O, CS0145-M		touchCUE-MV 99	CS0235-W-V, CS0235-O-V, CS0235-M-V
keyboardCUE-S	CS0174-W, CS0174-O, CS0174-M		touchCUE-S	CS0247
keypadCUE-1G	CS0221		touchCUE-S /b	CS0241
keypadCUE-2G	CS0222		touchCUE-S 99	CS0248-W, CS0248-O, CS0248-M
keypadCUE-3G	CS0223		touchCUE-SRF	CS0188-4, CS0188-8, CS0188-9
monitorCUE	CS0203-W, CS0203-O, CS0203-M		touchCUE-SX /b	CS0266
PEA208	CS0225-1, CS0225-2		touchCUE-V /i	CS0190
PEC25	CS0163		touchCUE-XL 99	CS0261-W, CS0261-O, CS0261-M
PED108	CS0164-1, CS0164-2		touchCUE-XLV 99	CS0261-W-V, CS0261-O-V, CS0261-M-V

in accordance with EMC Directive 89/336/EEC,
is in compliance with the following norms or documents:
EN50082-1 (IEC801-2), IEC65(CO)39, DIN VDE 0839 part 82-1, DIN VDE 0843 part 4, IEC801-4, EN50081-1, EN55022 class B, DIN VDE 0839 part 81-1, EN55014, EN55011.

1.1.2007

Jaroslav Dibitanzl
Member of Board of Directors

17. FCC

Caution

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

18. Notes