User Manual

Wall Mounted Keypads

Version 01

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User Manual Wall Mounted Keypads
UM019_01, 01.04.2003

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1. Introduction

1.1. Overview

There simply isn't anything that compares with the beautiful, elegant and powerful wired keypadCUEs. The models are keypadCUE-1G, keyapadCUE-2G and keypadCUE-3G. These programmable wall mounted control panel devices are designed to be built into a standard 1-gang, 2-gang or 3-gang electrical boxes.

All buttons are supported with backlight, programmable indication and user changeable button labels that can be printed on a laser printer and inserted into the keypad. The full-function console keypads may be used as dedicated wired controllers for audio, video and environmental functions.

1.2. Models

This User Manual describes products itemized in table below.

Model	Product code	Description
keypadCUE-1G	CS0221	Wall mounted keypad, (8) buttons
keypadCUE-2G	CS0222	Wall mounted keypad, (16) buttons
keypadCUE-3G	CS0223	Wall mounted keypad, (24) buttons

1.3. Features

- Backlight buttons with programmable feedback indication
- 20-LEDs bar graphs
- User changeable button labels
- Stainless steel front panel
- Mounting to 1-gang, 2-gang or 3-gang standard electrical box
- System connection by CUEwire

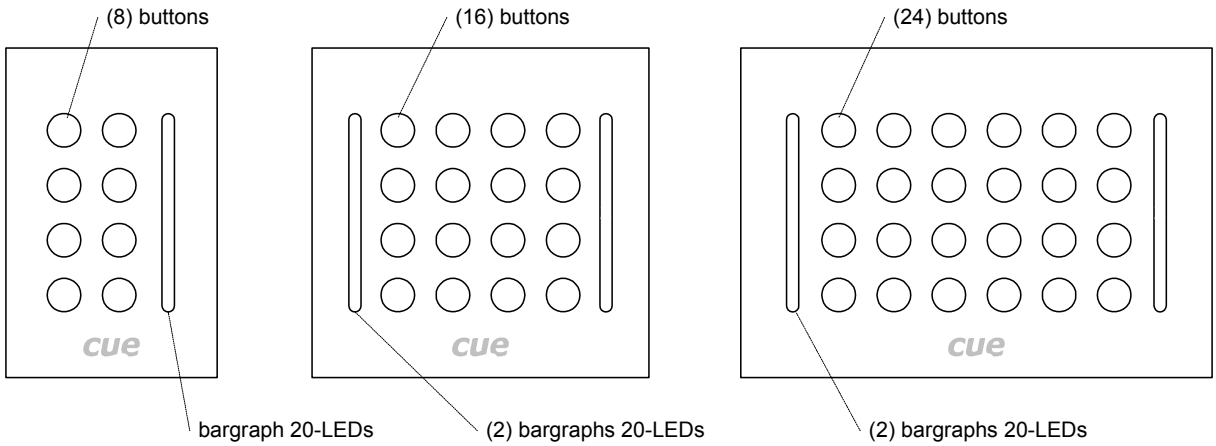
1.4. Programming

All keypads are programmed using **Cue Director** programming tool. Control commands are described in the **Programming Manual CPL References**, chapter Keyboards.

2. Front Panel

The front panel is equipped with buttons and bar graphs. The number of buttons and bar graphs depends on a type of keypad hereby

- keypadCUE-1G has (8) buttons and (1) bar graph
- keypadCUE-2G has (16) buttons and (2) bar graphs
- keypadCUE-3G has (248) buttons and (2) bar graphs



All buttons have low and high intensity levels of the red back light. All buttons are set to low back light intensity after keypad switch on. The back light intensity level can be changed for each button independently from a control unit by a program commands. High level is used for a status indication.

Bar graphs are equipped with (20) LEDs and they are controlled by special programming commands from a control unit.

3. Button Labels

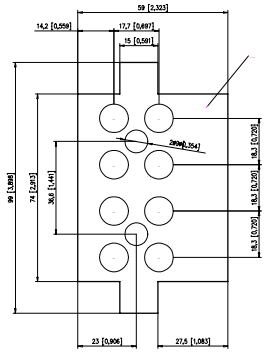
All models use one big label foil for all buttons.

Steps

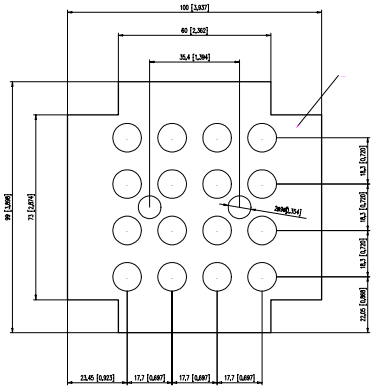
1. Prepare the foil using the layout AutoCAD files named
   - **CS0221.0011.2-Foil.dwg** for keypadCUE-1G
   - **CS0222.0011.2-Foil.dwg** for keypadCUE-2G
   - **CS0223.0011.2-Foil.dwg** for keypadCUE-2G

   These files are available on **www.cuesystem.com**.

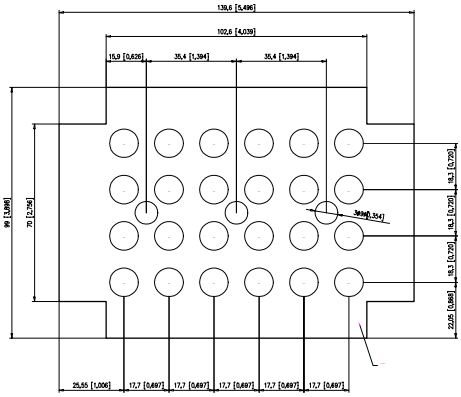
keypadCUE-1G



keypadCUE-3G

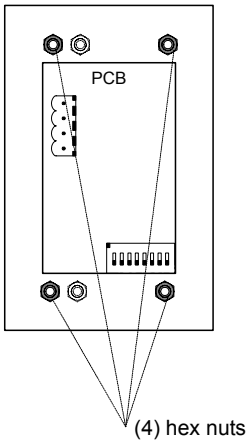


keypadCUE-3G

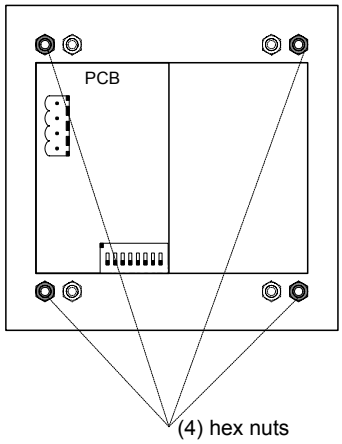


2. Print the foil on a standard printer.
3. Cut the foil into a shape according the picture (see above).
4. Put the keypad on a table face down.
5. Unscrew hex nuts marked on the picture below.

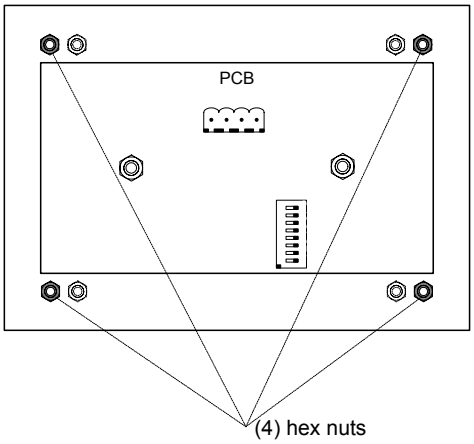
keypadCUE-1G rear view



keypadCUE-2G rear view



keypadCUE-3G rear view



6. Dismount the electronic boards.
7. Insert new label foil.
8. Insert the electronic board.
9. Screw hex nuts marked on the picture above.

4. Addressing

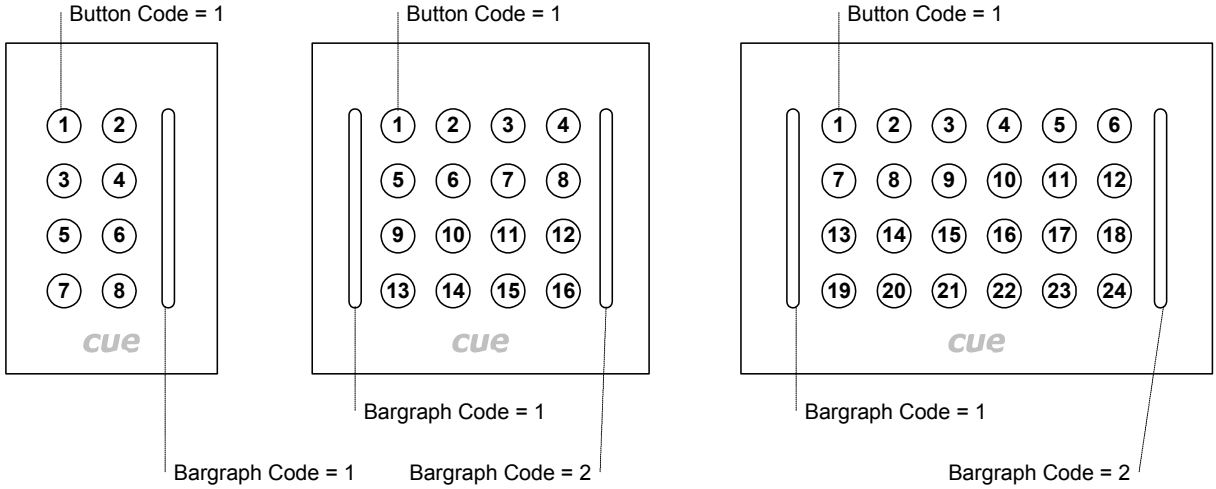
The BUTTON_ID transmitted by a keypad and BARGRAPH_ID are numbers used in the programming for button and bar graph identification. Both values depend on a button or bar graph position and it depends on a keypad ADDRESS too. Both values are calculated according formulas

BUTTON_ID = Offset + Button Code

BARGRAPH_ID = Offset + Bar Graph Code

Offset = 32 * ADDRESS

The lowest BUTTON_ID is generated by a button in the upper left corner the highest BUTTON_ID is generated by a button in the lower right corner. The left bar graph has lower BARGRAPH_ID the right bargraph has higher BARGRAPH_ID - see example for ADDRESS = 0 on the next picture.

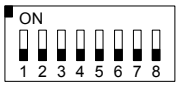


In the table below there are examples of BUTTON_ID range and BARGRAPH_ID range.

ADDRESS	keypadCUE-1G			keypadCUE-2G				keypadCUE-3G			
	BUTTON_ID range		BARGRAPH_ID range	BUTTON_ID range		BARGRAPH_ID range		BUTTON_ID range		BARGRAPH_ID range	
0	1	8	1	1	16	1	2	1	24	1	2
1	33	40	33	33	48	33	34	33	56	33	34
2	65	72	65	65	80	65	66	65	88	65	66
3	97	104	97	97	112	97	98	97	120	97	98
4	129	136	129	129	144	129	130	129	152	129	130
5	161	168	161	161	176	161	162	161	184	161	162
6	193	200	193	193	208	193	194	193	216	193	194
7	225	232	225	225	240	225	226	225	248	225	226
8	257	264	257	257	272	257	258	257	280	257	258
9	289	296	289	289	304	289	290	289	312	289	290
...											
255	8161	8168	8161	8161	8176	8161	8162	8161	8184	8161	8162

The ADDRESS of the keypad is binary coded by DIP switch located on the rear side of the keypad.

The ADDRESS can be set in the range **0** to **255**.

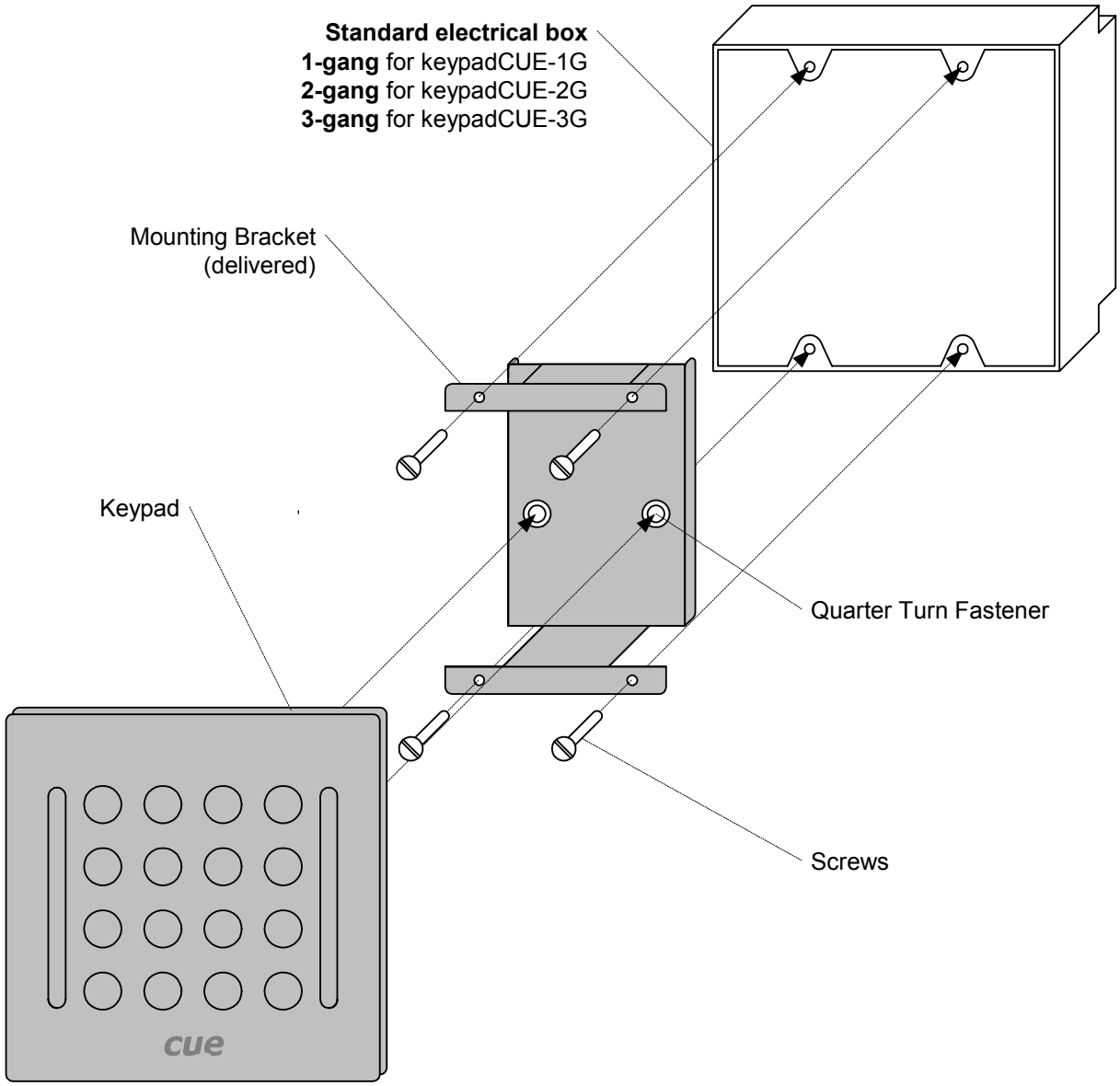
Switch view	Switch nr.	Function
	SW1	ADDRESS bit 0
	SW2	ADDRESS bit 1
	SW3	ADDRESS bit 2
	SW4	ADDRESS bit 3
	SW5	ADDRESS bit 4
	SW6	ADDRESS bit 5
	SW7	ADDRESS bit 6
	SW8	ADDRESS bit 7

ADDRESS	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8
0	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
2	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
3	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
4	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
5	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
6	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
7	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
8	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
9	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
...								
255	ON	ON	ON	ON	ON	ON	ON	ON

5. Mounting

Steps are

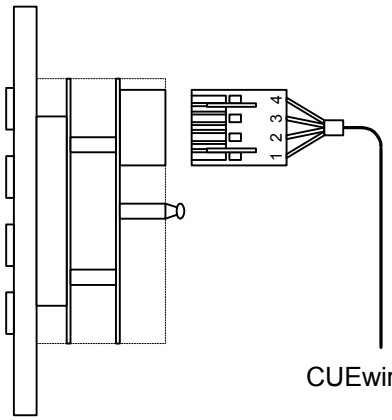
1. Fix the Mounting Bracket (**delivered**) to the Standard electrical box (**not delivered**) using screws (not delivered). You need
   - (2) screws for keypadCUE-1G
   - (4) screws for keypadCUE-2G
   - (4) screws for keypadCUE-3G.
2. Clap carefully the keypad to the Quarter Turn Fasteners located on the Keypad Holder.
3. Push the front panel of the keypad. The Quarter Turn Fasteners must clap accurately.



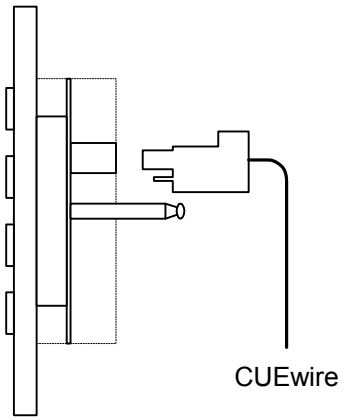
6. Connecting

All models of the keypad are connected to the system by CUEwire. The 4-pin connector is located on the rear side of the keypad.

keypadCUE-1G, keypadCUE-2G

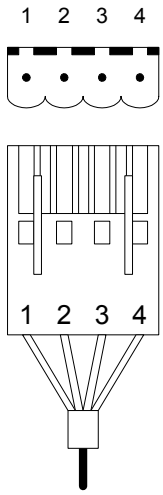


keypadCUE-3G



Pin connection of the CUEwire connector is described in the following table.

CUEwire, 4-pin connector



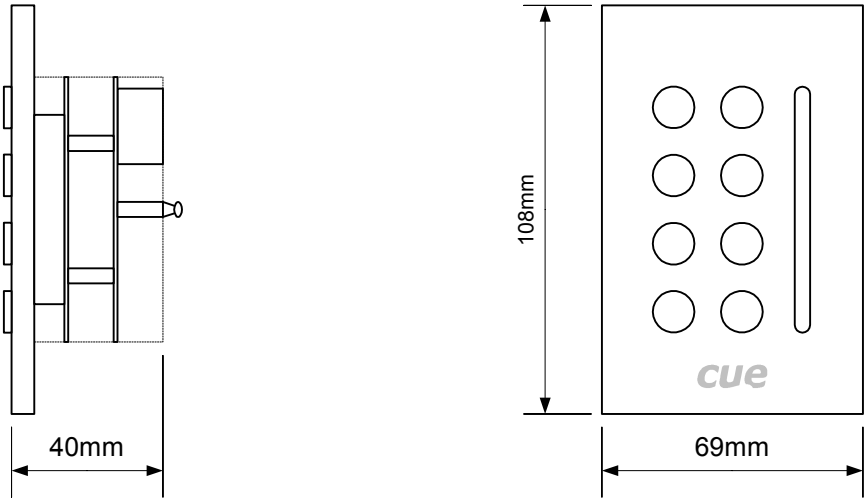
Pin 1	+24 VDC
Pin 2	GND
Pin 3	A+
Pin 4	B-

7. Specifications and Mechanical Drawings

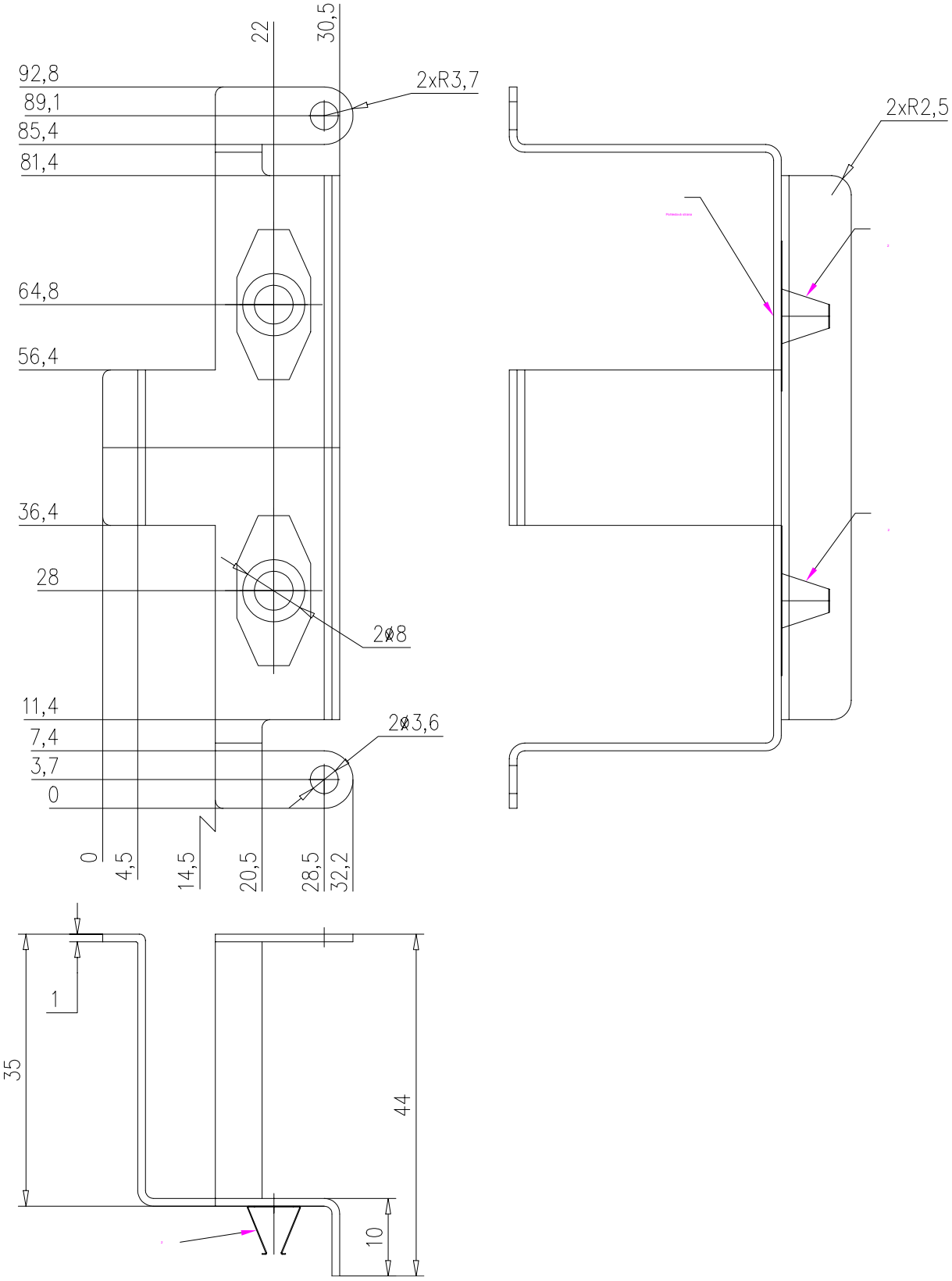
7.1. keypadCUE-1G

Buttons layout ..... (8) buttons
Buttons back-light ..... Red, programmable indication
Bar graphs ..... (1) 20-LEDs
System connection ..... CUEwire (RS-485), 4-pin connector
Power supply ..... 24 VDC (+/- 20%), 3 W
Enclosure ..... Metal
Dimensions (WxHxD) ..... 69 mm (3”) x 108 mm (4.5”) x 49 mm (1.9”)
Weight ..... 0.2 kg / 0.4 lb

All dimensions are in mm.



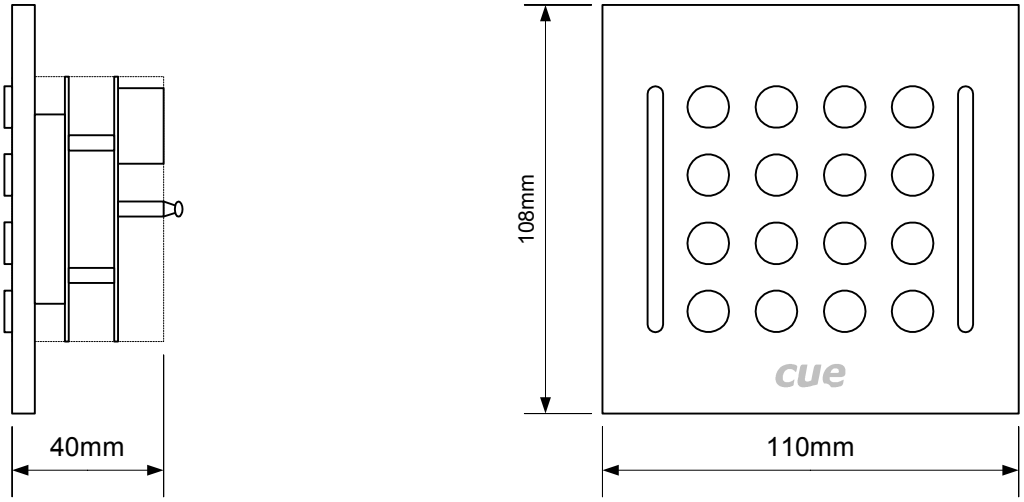
Mounting Bracket



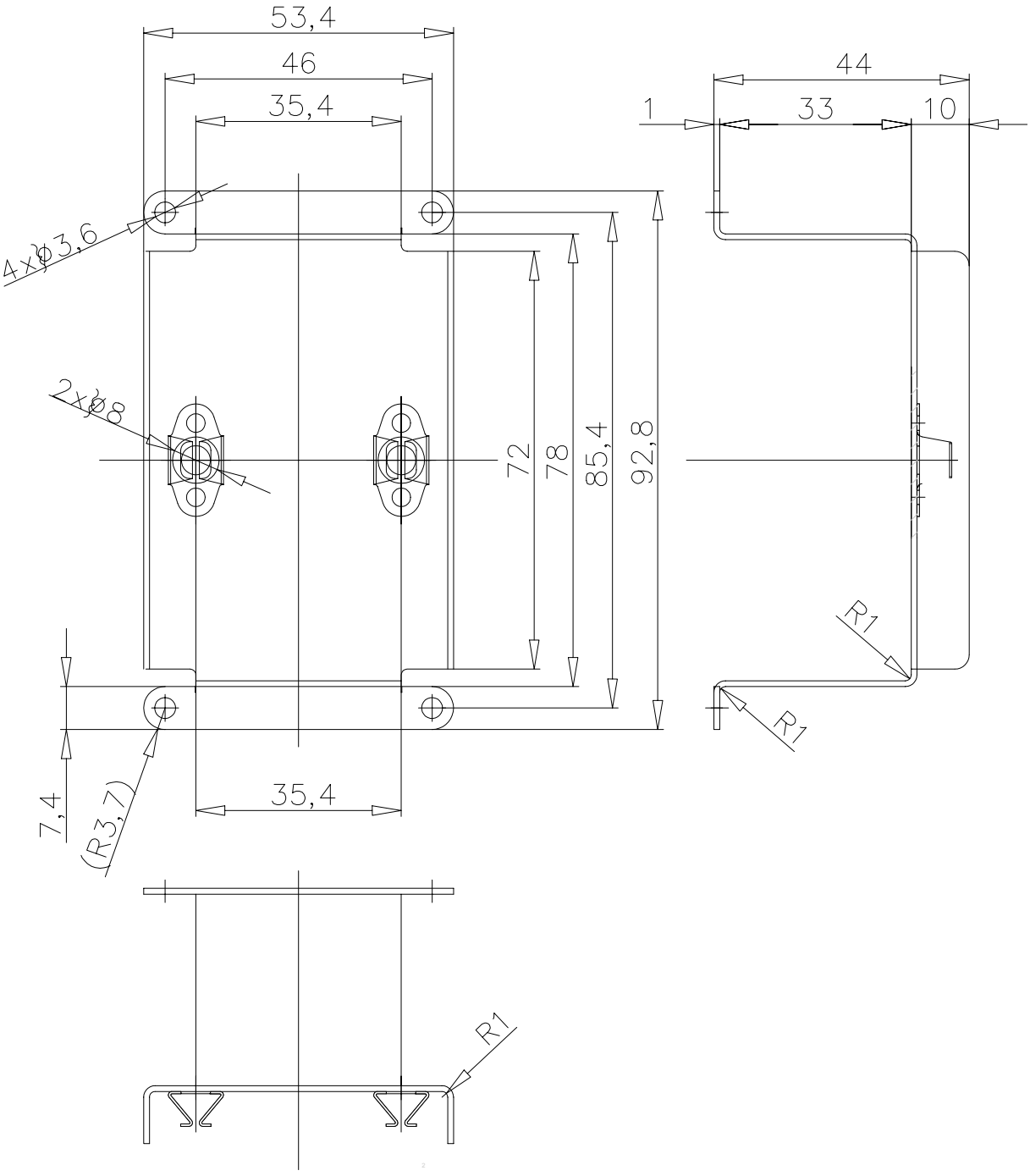
7.2. keypadCUE-2G.....

Buttons layout.....(16) buttons
Buttons back-light.....Red, programmable indication
Bar graphs.....(2) 20-LEDs
System connection.....CUEwire (RS-485), 4-pin connector
Power supply.....24 VDC (+/- 20%), 4 W
Enclosure.....Metal
Dimensions (WxHxD).....110 mm (4.6”) x 108 mm (4.5”) x 49 mm (1.9”)
Weight.....0.35 kg / 0.8 lb

All dimensions are in mm.



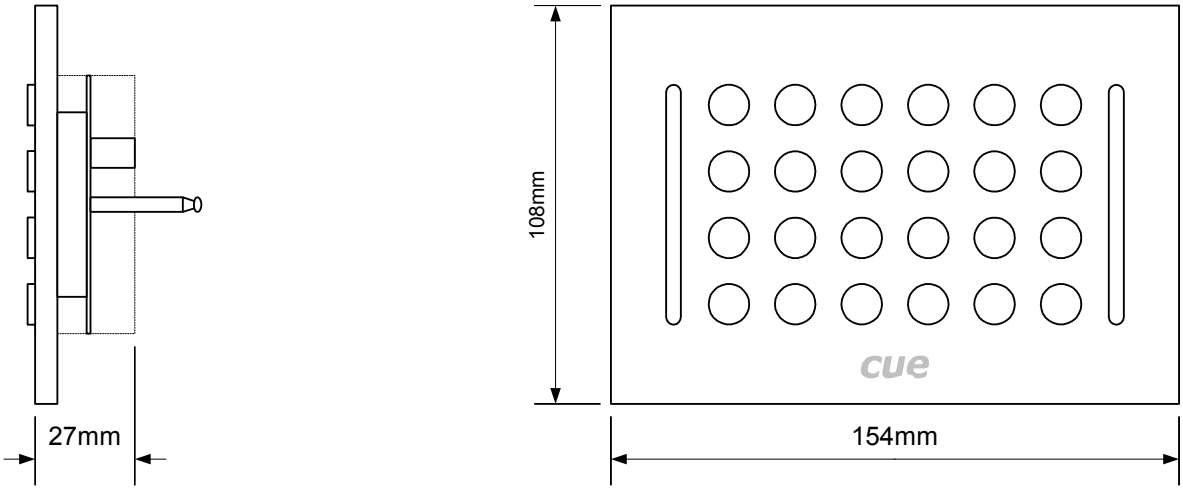
Mounting Bracket



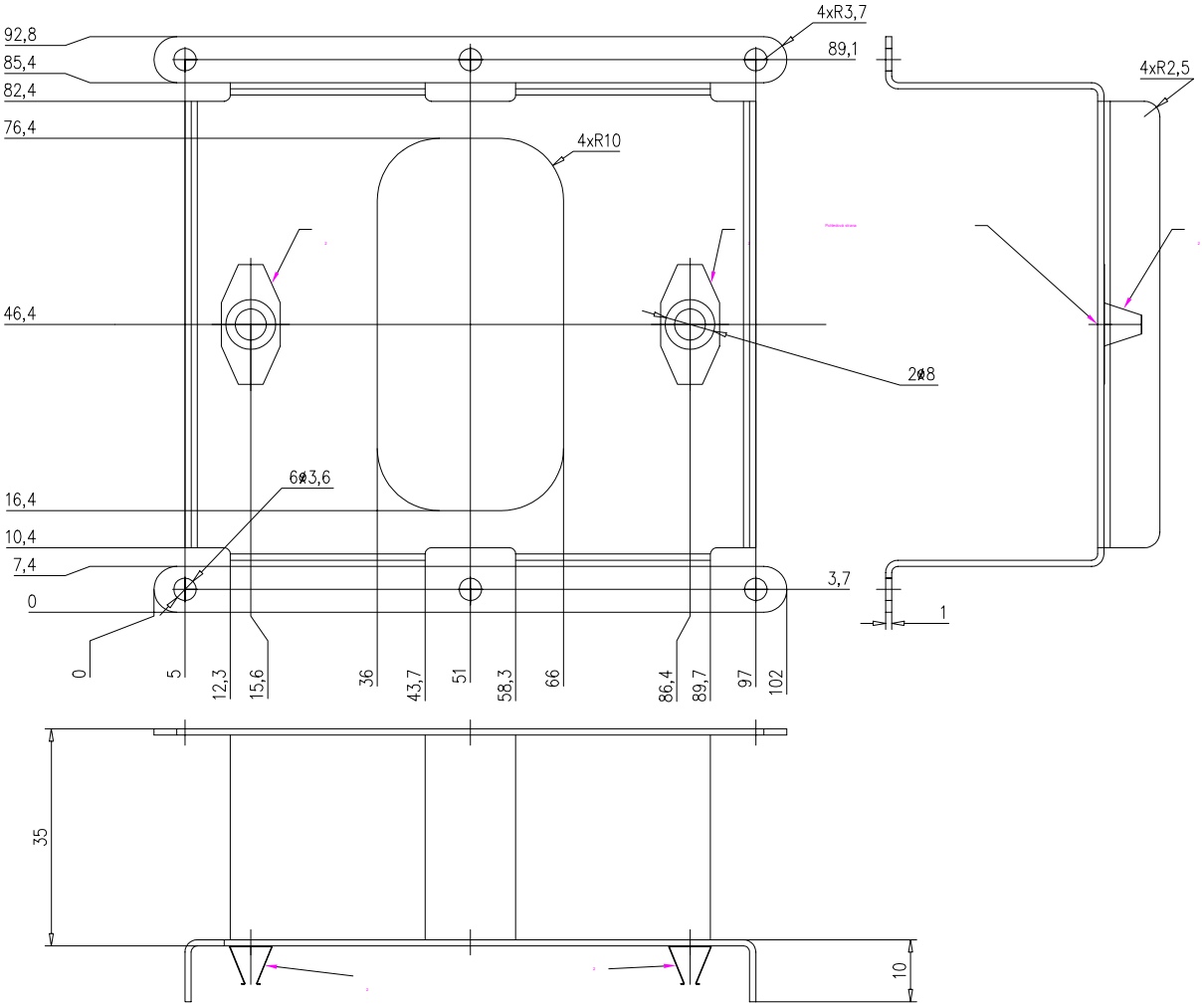
7.3. keypadCUE-3G.....

Buttons layout.....(24) buttons
Buttons back-light.....Red, programmable indication
Bar graphs.....(2) 20-LEDs
System connection.....CUEwire (RS-485), 4-pin connector
Power supply.....24 VDC (+/- 20%), 5 W
Enclosure.....Metal
Dimensions (WxHxD).....154 mm (6.3”) x 108 mm (4.5”) x 49 mm (1.9”)
Weight.....0.95 kg / 2.1 lb

All dimensions are in mm.



Mounting Bracket



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9. Warranty Conditions

Warranty Duration

CUE 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

10. CE Declaration of Conformity

We, the producer
CUE spol. s r. o., Na Dolinách 6, Praha 4, Czech Republic
acknowledge our sole responsibility, that the product incl. accessories

Kind of equipment
Remote Control System

Type designation
CS0197 touchCUE-L 99, CS0159 touchCUE 99, CS0157 touchCUE-S 99,
CS0183 touchCUE-V, CS0198 touchCUE-L, CS0200 touchCUE-M, CS0176 touchCUE-MM, CS0122 touchCUE,
CS0142 touchCUE-S,
CS0178 touchCUE-V /t, CS0199 touchCUE-L /t, CS0204 touchCUE-M /t, CS0143 touchCUE-S /t,
CS0158 touchCUE-S /w,
CS0224 touchCUE-S /d,
CS0205 touchCUE-M /r, CS0144 touchCUE-S /r
ST0007 Guide, CS0188 touchCUE-SRF, CS0171 rfbaseCUE,
ST0013 monitorCUE-V, CS0203 monitorCUE, CS0190 touchCUE-V /i, CS0151 PC Interface 485
CS0170 rfCUE 99, CS0170 rfCUE 99, CS0149 irCUE 99, CS0133 irCUE, CS0080 irCUE Receiver,
CS0169 irCUE Receiver 485,
CS0221 keypadCUE-1G, CS0222 keypadCUE-2G, CS0223 keypadCUE-3G,
CS0145 keyboardCUE 99, CS0128 keyboardCUE, CS0174 keyboardCUE-S, CS0129 keyboardCUE /t,
CS0146 keyboardCUE-S /w, CS0130 keyboardCUE /r, CS0191 inputCUE,
CS0173 eCUE
CS0051 Assistant, CS0150 Assistant-S, CS0100 PC Card, CS0227 CUEwire Splitter,
CS0008 smartCUE, CS0201 sbiCUE-DMX, CS0009 soundCUE, CS0004 analogCUE, CS0005 auxCUE,
CS0165 PED202, CS0166 PEF200, CS0167 PER610, CS0163 PEC25, CS0225 PEA208, CS0164 PED108,
CS0184 CUEadapter /10W, CS0226 CUEadapter /20W, CS0185 CUEadapter /50W, CS0186 CUEadapter /80W,
CS0168 PES03, CS0016 powerAUX,
PT0005 Cue Director, PT0004 Teach-In, PT0006 WinKit

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.

Jaroslav Dibitanzl
Member of Board of Directors

11. 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.

Notes

Notes