cue

keypadCUE-55

User Manual

CONTENTS

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
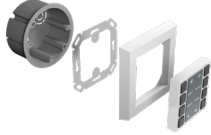
Keypad keypadCUE-55
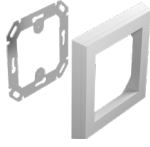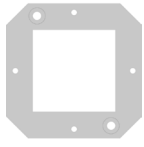
2x 6P4C cable connector

Mounting screws

Quick Start

Declaration of Conformity & Warranty Conditions

Order Information

Product codes

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

Available Accessories (has to be ordered separately)

	Tabletop Holder 55	Under Desk Holder 55	Wall Set 55	Pan Adapter 55
Product code	CS0586	CS0587	CS0583	CS0584
Description	Allows to install keypad on the top of the table. It attaches on the top side of the table desk.	This holder allows to install keypad under the table. It attaches to the under side of the table desk.	This set allows to install keypad on the wall. It is fully compatible with standard electrical wall boxes.	This adapter allows to install keypad into PANCONNECT boxes that are not prepared for CUE products.
Enclosure	Grey metal	Grey metal	Metal wall adapter White plastic frame	Metal
Dimensions	55 x 47 x 55 mm	55 x 100 x 34 mm	Frame 81 x 81 x 10.7 mm	49.5 x 49.5 x 2 mm
Weight	80 g	85 g	40 g	10 g
Application				

SPECIFICATIONS

Buttons
- 8x black plastic button
- Fully configurable functionality

Indication
- 8x programmable green LED in each button
- Variable brightness

Button's label
- White 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 connection
- Power supply 10 ÷ 30 VDC, max. 2 W
- RS-485 data communication
- 2x 6P6C modular jack connector

Physical
- Aluminium enclosure
- Enclosure colors: white aluminium RAL9006 or pure white RAL9003
- Protection IP30
- Dimensions 55 x 55 x 11 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
- 2x 6P4C cable connector

MECHANICAL DESCRIPTION

55 mm
55 mm
26.5 mm
11 mm

8x button with LED indicator

Indicator in each button

Cover for backlighted label

2x mounting hole

2x 6P6C modular jack connector RS-485 & power supply
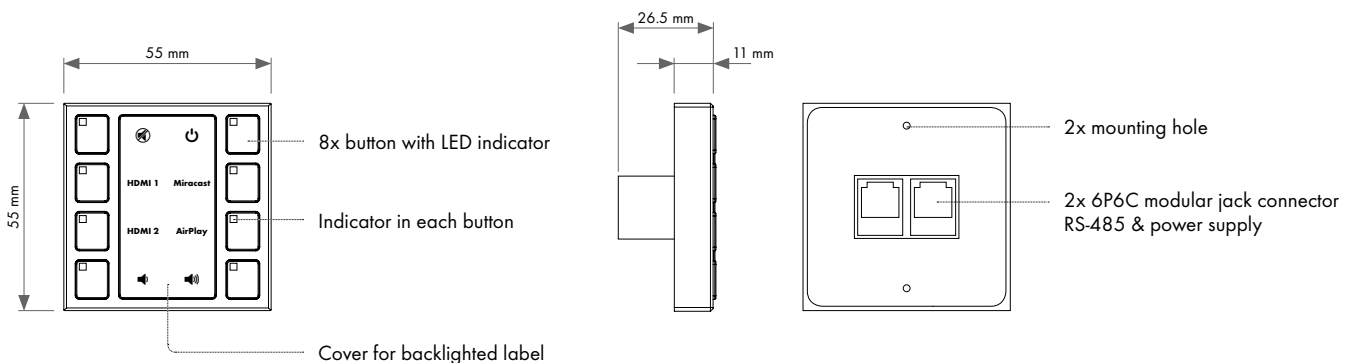
The front panel is equipped with 8 buttons, each with an indication LED, and a backlighted area for the label - see picture.

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

6P6C modular jack connector RS-485 & power supply (CUEwire)

6P6C connector RS-485 & power supply

Pin	Description
1	+10 ÷ +30 V DC
2	+10 ÷ +30 V DC
3	A+
4	B-
5	Ground
6	Ground

rear-side view
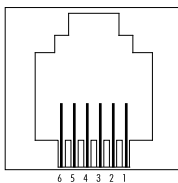
Example 1 - connection to controlCUE-basic

6P4C to 6P4C (atl. 6P6C to 6P6C) straight cable

max. 5 keypads
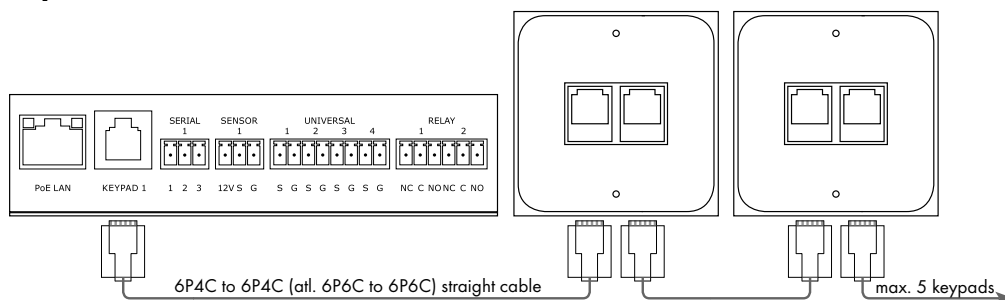
Example 2 - connection to controlCUE-one
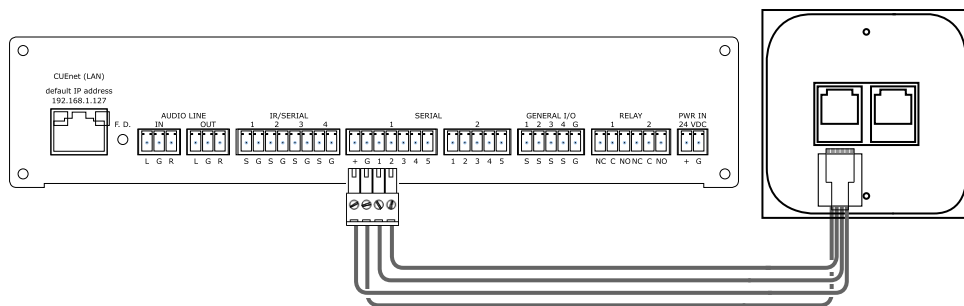
Example 3 - connection to controlCUE-versatile
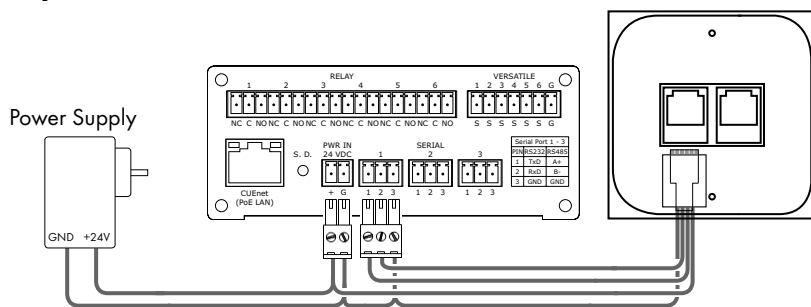
Power Supply

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. controlCUE-basic allows a maximum of 5 keypads to be connected.

- The cable cross section must be designed according to length and consumption in individual locations. For shorter cables and a limited number of devices 4 conductor flat phone line cord or 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 <u>white</u> texts / icons on <u>black background</u> and print it. **Don't use black texts / icons on white background.**
   The size and label layout is pictured below. Recommended fonts are Nimbus, Trebuchet, Verdana, SegoeUI or Arial, size 6 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.
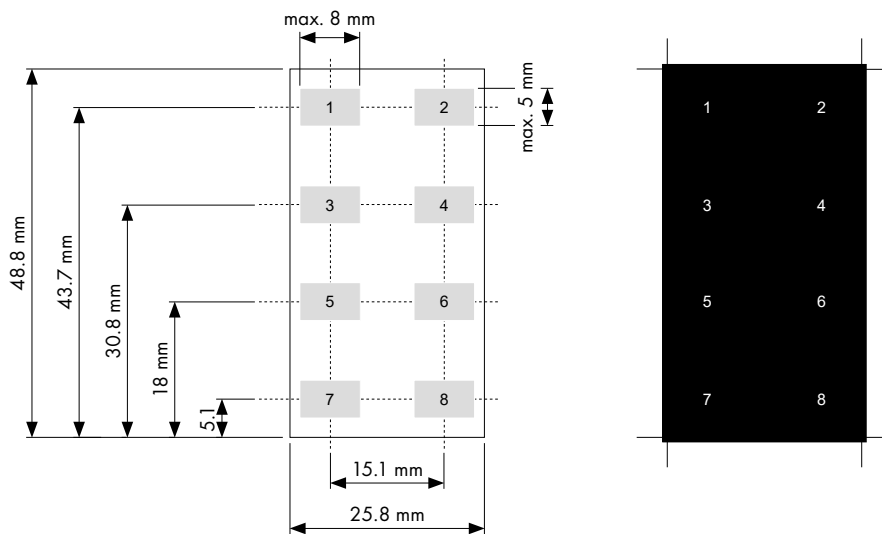
2. Using small flat screwdriver remove the transparent cover.
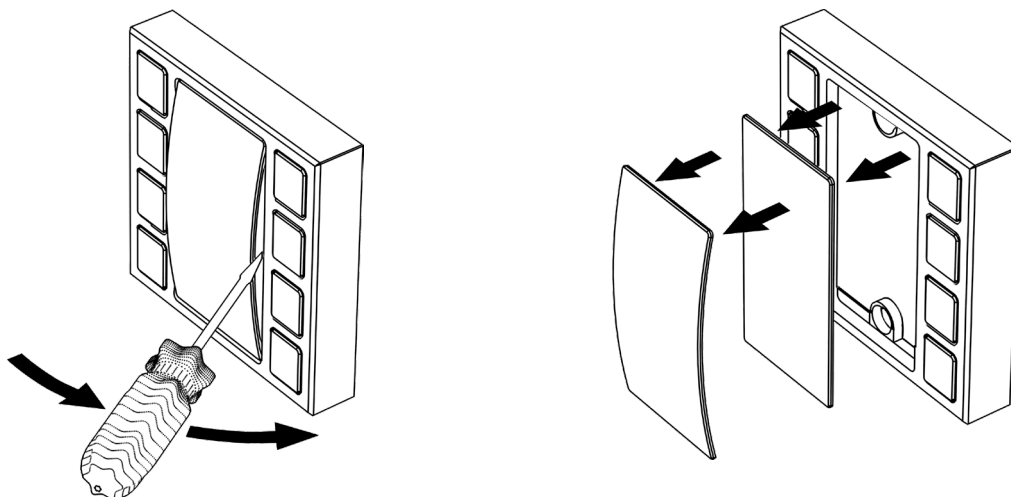
3. Place the diffusor and printed label into the keypad. Then put the transparent cover over them. In doing that, insert the transparent cover under one side of the keypad and bend it slightly until it is possible to insert the other side of the cover as well.
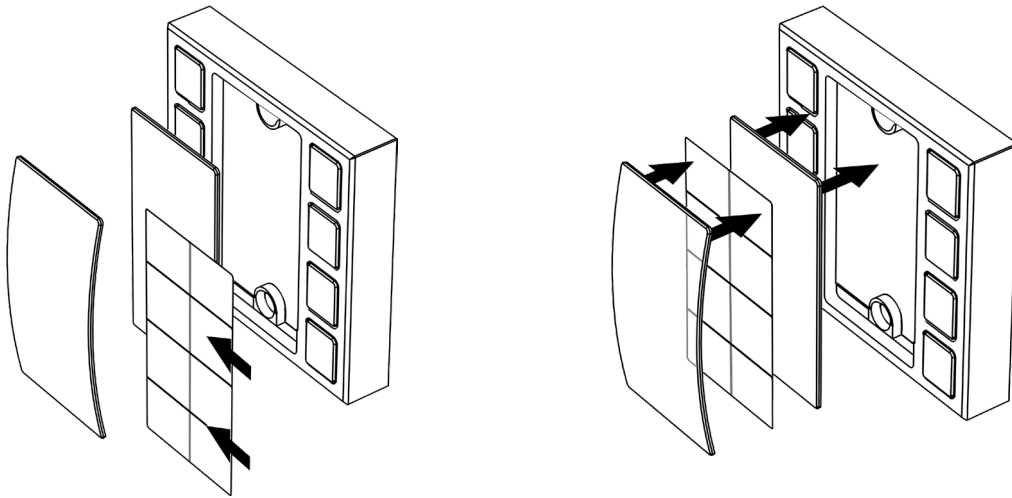
ADDRESSING

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.

Button 1 (bit 0, weight 1)	Button 2 (bit 1, weight 2, this LED is on when the default ADDRESS 2 is set)
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)	Indicator flashing in address setting mode
	Button to exit the address setting mode
	Buttons to enter the address setting mode

- 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 optional accessory. Wall Set 55 (wall adapter & plastic frame, CS0583) has to be ordered separately.

Installation steps are as follows:

1. Install the wall adapter on the electrical wall box using appropriate fasteners. Keep maximum screw dimensions as described below.
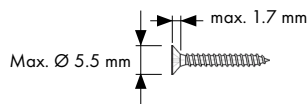
    max. 1.7 mm

    Max. Ø 5.5 mm

2. Using small flat screwdriver remove the transparent cover and diffusor.
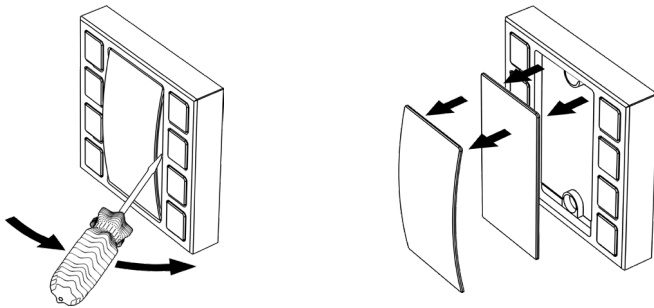
3. Plug the connection cable and insert the keypad with plastic frame into the wall adapter.

4. Attach the keypad using the mounting screws M 2.5 x 12.
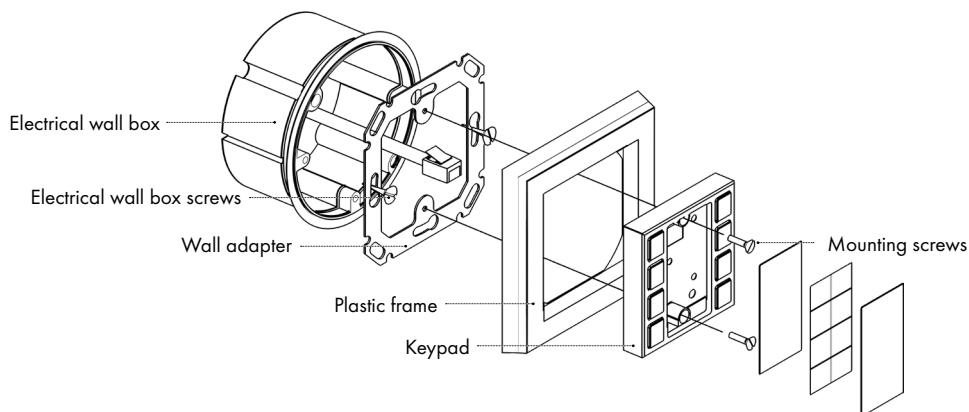
    Electrical wall box

    Electrical wall box screws

    Wall adapter

    Plastic frame

    Keypad

    Mounting screws

5. Place the diffusor 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.
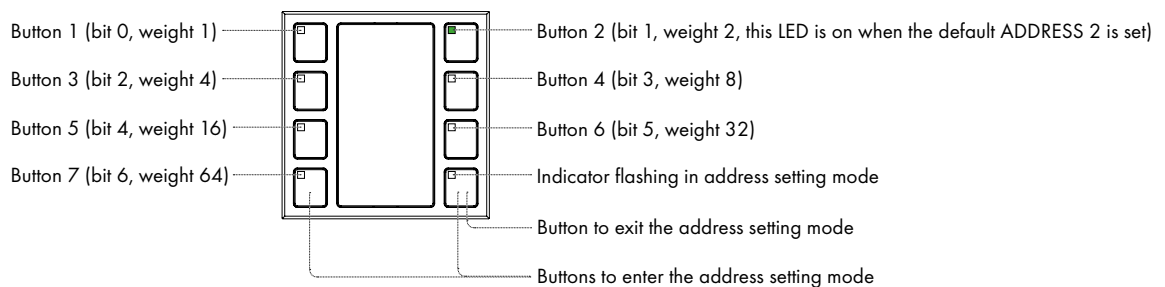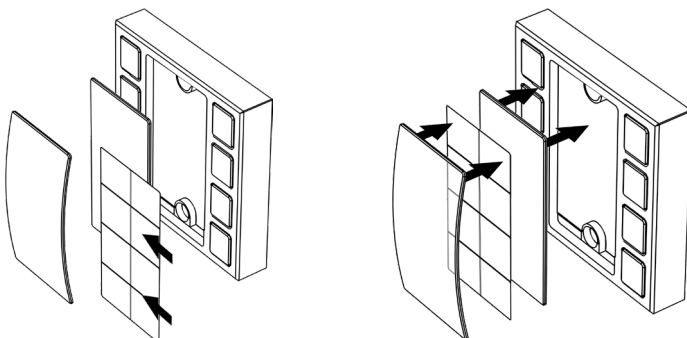
Interconnection Tabletop Box Installation

keypadCUE-55 is fully compatible with PANCONNECT interconnection tabletop boxes. This type of installation is suitable for simple room control systems. The PANCONNECT interconnection box must be equipped with an Pan Adapter 55 for 55x55 mm module mounting. Pan Adapter 55 (CS0584) has to be ordered separately.
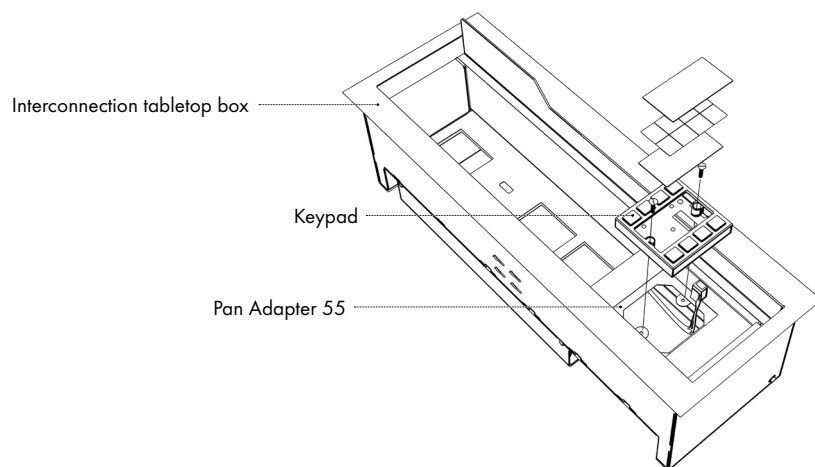
For installation, remove transparent cover and diffusor as described abobe. Then plug the connection cable and attach the keypad into the Pan Adapter 55 using the mounting screws M 2.5. Finally, place back diffusor, printed label and transparent cover.

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