

User Manual

RPC-E2



Devices that can be controlled with RPC-E2, software v1.02:

- BARCO E2 (min. v1.2.355)

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These installation instructions must always be handed over to the installing person¹

Read these instructions carefully before installing the system.

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¹ Only a qualified person should install this product

1. SAFETY INSTRUCTIONS

Caution

Read Instructions: Read and understand all safety and operating instructions before using the equipment.

Retain Instructions: The safety instructions should be kept for future reference.

Follow Warnings: Follow all warnings and instructions marked on the equipment or in the user information.

Avoid Attachments: Do not use tools or attachments that are not recommended by the equipment manufacturer because they may be hazardous.

Warning

Power sources: This equipment should be operated only from the power source indicated on the product. This equipment is intended to be used with a main power system with a grounded (neutral) conductor. The third (grounding) pin is a safety feature, do not attempt to bypass or disable it.

Power disconnection: To remove power from the equipment safely, remove all power cords from the rear of the equipment, or the desktop power module (if detachable), or from the power source receptacle (wall plug).

Power cord protection: Power cords should be routed so that they are not likely to be stepped on or pinched by items placed upon or against them.

Servicing: Refer all servicing to qualified service personnel. There are no userserviceable parts inside. To prevent the risk of shock, do not attempt to service this equipment yourself because opening or removing covers may expose you to dangerous voltage or other hazards.

2. SUPPLIED WITH

- power supply, 100-240VAC/1A in, 12VDC/3.34A (40W max.) out
4pin-XLR female (p1:GND, p4:+12VDC)
use only the delivered power supply! (MEAN WELL, model no.: GS40A12-P1J)
- power cable, CEE7 → C13
- ethernet cable 5m (cross-over)
- USB-LED lamp (5VDC, 1W max., 10 LEDs)

3. HARDWARE OVERVIEW



1. LCD
2. menu navigation
3. function keys
4. preset recall keys
5. page selection
6. transitions "CUT" & "TAKE"

7. RJ-45, ethernet interface
8. config dipswitches
9. d-sub 9p, RS-232 interface
10. USB-A, 5V 0.5A, power-out only
11. 4pin-XLR male, 12VDC in (pin1:GND, pin4:+12V)

4. FEATURE LIST

- recall up to 40 presets
- “CUT” and “TAKE”
- visual feedback about available presets
- auto-sync presets (only when connected to remote IP)
- function keys (“F1”, “F2”, “F3”, “F4”)
 - recall multiviewer-layouts (default: “F1”, “F2”)
 - recall last available preset (default: “F3”)
 - recall next available preset (default: “F4”)
- adjust transition-time (0,0s - 25,0s for “TAKE”)
- adjust LED-backlight (0-63)

5. SET-UP AND INSTALLATION GUIDE

1. check dipswitches
 - a. 1+2 off, 3+4 on, 5-8 off (default)
2. connect XLR power supply
3. connect RJ-45 ethernet cable
 - a. RPC-E2 → BARCO E2 or
 - b. RPC-E2 → switch/hub → BARCO E2
4. check local IP to be unique in network
5. set up remote IP (BARCO E2)

6. MENU OVERVIEW

1. setup
 - a. local-IP (default: 192.168.0.23)
 - b. remote-IP (default: 192.168.0.201)
 - c. subnetmask (default: 255.255.255.0)
 - d. transition time (default: 1.5s)
 - i. min: 0.0s(like “CUT”), max: 25,0s
 - e. F-keys
 - i. “F1” (default: recall multiviewer-layout 1)
 - ii. “F2” (default: recall multiviewer-layout 2)
 - iii. “F3” (default: recall last preset)
 - iv. “F4” (default: recall next preset)
 - f. LED-brightness / backlight (default: 15)
 - i. min: 0(off), max: 63
 - g. factory reset
2. info
 - a. software version
 - b. serial number

7. OPERATION GUIDE

Menu navigation:

To enter the menu, press the "SEL" button.
Navigate with the "rotary knob" (Hardware overview 2.2)
Enter/escape sub-menus with "SEL"/"ESC".
Adjust variable values with the "rotary knob".

Recalling presets:

To recall a preset, just press the button with the desired preset number.
To recall presets between 21 and 40 go to page-2.
Available presets will light up, if connection to BARCO E2 is established.

Recall multiviewer layouts:

By default you can recall multiviewer layouts with the function keys "F1" - "F2".
"F1", "F3" → MV-layout 1, MV-layout 2

Recall last/next available preset:

Recall the last/next available preset with function key "F3"/"F4".

Perform transitions:

"CUT" will perform a hard transition. (0s)
"TAKE" will perform a transition within the time prescribed in menu 1.c.

8. TROUBLESHOOTING

- **RPC-E2 and BARCO E2 are out of synch**
 - to resynch the RPC-E2 press the selected page again

- **no connection between RPC-E2 and BARCO E2**
 - check ethernet connection
 - cable
 - switch (managed or configured?)
 - check dipswitches
 - correct position see → Set-up and installation guide 1.a.
 - check network settings
 - local IP has to be unique in network
 - remote IP has to match BARCO E2 IP
 - check subnet on BARCO E2
 - powercycle the RPC-E2
 - factory reset
 - will reconfigure the ethernet connection
 - settings must be applied again

- **connection, but no sync/presets available**
 - check Eventmaster GUI for available presets
 - recallable presets have to be written in Eventmaster GUI
 - check RPC-E2 LEDs
 - on restart all LEDs should blink → fade-out → fade-in (selftest)

9. FIRMWARE UPGRADE

1. needed hard- and software

- a. PC/Laptop with Win-XP, Win-7 (32/64 bit)
- b. d-sub 9p, RS-232 interface (PC)
- c. d-sub 9p null-modem adapter or cable
- d. bootloader software *
- e. hex file with firmware *

2. set-up RPC-E2

- a. unplug power
- b. set dipswitches: 1+2 on, 3-8 off
- c. connect PC/Laptop to RPC-E2 via D-sub 9p null-modem (RS-232)

3. bootloader

- a. run bootloader software "*LangUpdateTool.exe*"
- b. "File to be programmed in the Flash"
 - i. put the "*rpc-e2_upgrade_x-xx.hex*" file here
- c. "Com Setup"
 - i. "ComPort"
 1. set up the Comport to the RPC-E2
 - ii. "Speed"
 - iii. set "Speed" to 38400bps

4. start RPC-E2

- a. programming flash should start
- b. wait for "Programming Flash done!"
- c. unplug power, RS-232 connection
- d. set dipswitches: 1+2 off, 3+4 on, 5-8 off

5. factory reset

- a. power up the RPC-E2
- b. go to menu and perform a factory reset

6. done

* http://ftpserver.lang-ag.com/main.html?download&weblink=a968f9e3b29e42b7424a3ddeb4bf0cef&realfilename=RPC-E2_upgrade_1-02.zip

10. CHANGELOG

- **v1.00**
 - recall up to 40 presets
 - “CUT” and “TAKE”
 - visual feedback about available presets
 - auto-sync preset changes
 - function keys
 - recall multiviewer-layouts
 - recall next available preset
 - set local IP
 - set remote IP (E2)
 - adjust transition-time (0,0s - 25s for “TAKE”)
 - adjust LED-backlight (0-63)

- **v1.01**
 - rotary encoder optimizations
 - new function: recall last preset
 - function keys are programable now
 - set subnetmask

- **v1.02**
 - synch to new BARCE E-2 firmware 1.2.355
 - new feature: sort presets
 - last/next preset is not looping anymore

11. TECHNICAL SPECIFICATIONS

- **Selectable presets:** 40 user presets
- **Power input:** 12VDC, 300mA, 4pin male XLR connector
- **USB power out:** 5VDC, type-A for USB lamp only
- **Serial I/O:** RS-232C, 9pin male D-sub connector (service)
- **Ethernet:** RJ-45
- **Dimensions:** 345 x 190 x 60 mm
- **Weight:** 1.3kg
- **Standart accessories:** 1x USB lamp, 1x external power supply, power cable
- **Manufacturer:** LANG AG

12. DECLARATION OF CONFORMITY

- **FCC class B part 15**
This device complies with Part 15 of the Federal Communications Commission (FCC) Rules.

Made in Germany
by



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