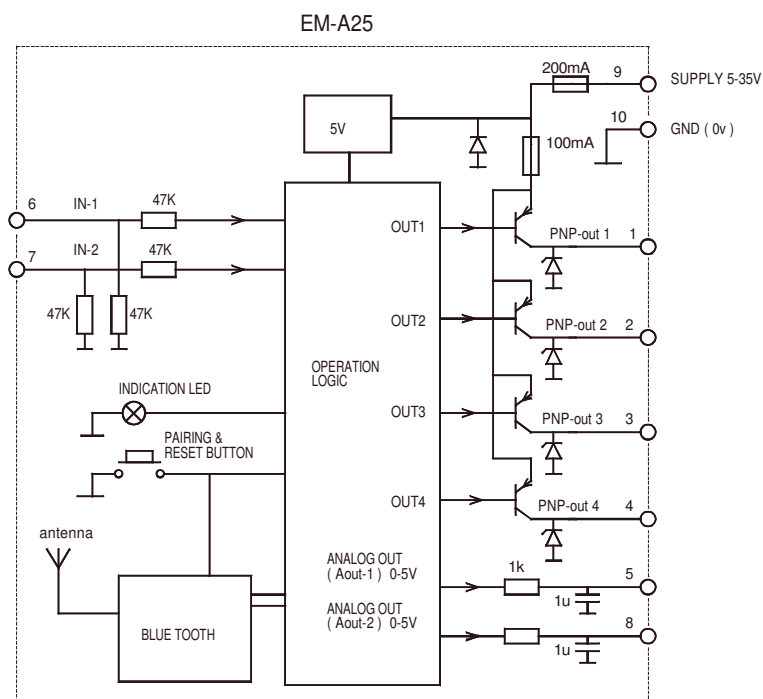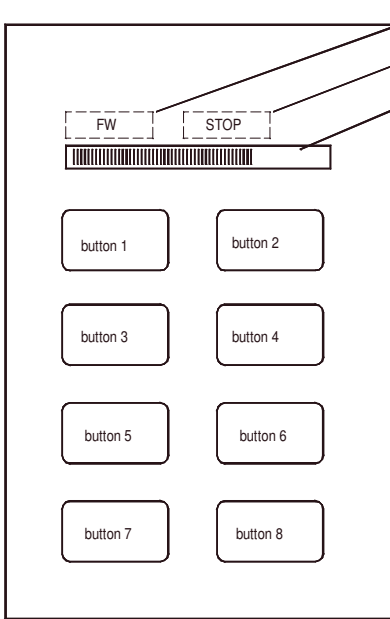# EM-A25 BLUETOOTH REMOTE CONTROL RECEIVER

- Remote control with smart phone
- made for Android operating system
- Free download app. from Play Store
  "Emen BT Remote controller"
- Four digital outputs
- Two analog outputs
- Two digital inputs
- Two operating modes

EM-A25 is receiver unit for bluetooth remote controller. Android smart phone with Blue Tooth can work as remote control transmitter.
The "Emen BT Remote Controller" remote control App. can be downloaded from Google Play Store. This application is free. Receiver
unit can be paired with smart phone and receiver unit can be set to have an user selected PIN-code to ensure safety operation.
The device has two operating modes, basic and motor control. In Basic mode output works as latched. In motor control mode the output
works in momentary mode and there is also a special direction/speed control option. In smart phone application there can be max. eight
buttons. User can give names for every button and useless buttons can be blocked out from display. Same time the application scales the
button arrangement automatically to be as compact as possible. Analog outputs can be adjusted with resolution of one percent and there is
a number and bar display for indicating the set level.
The digital outputs of the receiver card have a protection diode, so also small relays can be controlled directly. Analog output has an 1kohm
output impedance and it can be used to control the speed input of a motor driver card.

TEHNICAL DATA

Operating voltage	5-35V
Idle current	typ 30mA
Max. current	150mA
PNP output current	100mA (total)
Analog output	0-5V (8bit) step 20mV
Digital input level	< 1= "off" / >4V ="on"
Response time	10ms
Max. operating range	typ. 10m
Operating frequency	2.4GHz (bluetooth)

EM-A25

A-out text. (when adjusting)

command text (when pressing button) or feedback

Aout level (when adjusting)

FW   STOP

button 1   button 2
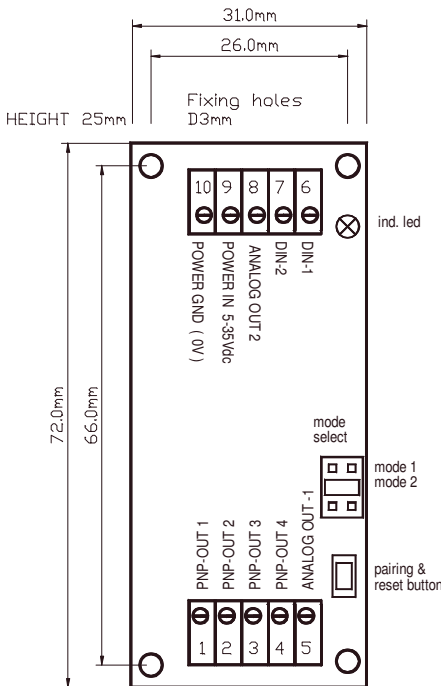
button 3   button 4

button 5   button 6

button 7   button 8

MODE 1 " latched"

button 1 set output 1 to ON
button 2 set output 1 to OFF
button 3 set output 1 to ON
button 4 set output 1 to OFF
button 5 set output 1 to ON / increase Aout-1
button 6 set output 1 to OFF / decrease Aout-1
button 7 set output 1 to ON / increase Aout-2
button 8 set output 1 to OFF / decrease Aout-2

MODE 2 "motor control"

button 1 set output 1 to ON (momentary) / reset Aout 1
button 2 set output 2 to ON (momentary) / reset Aout 1
button 3 set output 3 to ON (momentary)
button 4 set output 4 to ON (momentary) / reset Aout-1 with ramp
button 5 Aout-1 output fw / set output 1
button 6 Aout-1 output bw / set output 2
button 7 decrease Aout-2 output
button 8 increase Aout-2 output

When one button has been selected, then command frame
shows function. The comand text can be defined with
smart phone. For example 1 = closing, 2 opening etc.
The digital inputs 1 and 2 can also be set to give a feedback
message. This feedback message will over run command text.
For example: button 1 is pushed and command text is
"closing", if same time input 1 is activated, then it can give text
"closed" into feedback frame.

Dir / Speed application example

Button 5 and 6 for Aout-1 adjust (can be used as speed control)
Output 1 and 2 are synhronised with Aout-1 (can be used as direction control)
Button 3 resets Out1 and Out2 and Aout-1 with ramp
Button 4 is Out4 control (but not in use)
Button 1,2,7 and 8 are disabled on display

31.0mm

26.0mm

HEIGHT 25mm

Fixing holes
D3mm

72.0mm

66.0mm

10 9 8 7 6

POWER GND (0V)   POWER IN 5-35Vdc   ANALOG OUT 2   DIN-2   DIN-1

ind. led

mode select

mode 1
mode 2

PNP-OUT 1   PNP-OUT 2   PNP-OUT 3   PNP-OUT 4   ANALOG OUT-1

1 2 3 4 5

pairing &
reset button

A-out text. (when adjusting)

command text (when press button)

Aout level (when adjusting)

FW   STOP

button 3   STOP

button 4

button 5   BW

FW   button 6

Aout-1 = speed control

button 6   button 5

5V

Ramp time of Aout-1
0 to 5V is 1s.

out1 = start and direction

out2 = start and direction