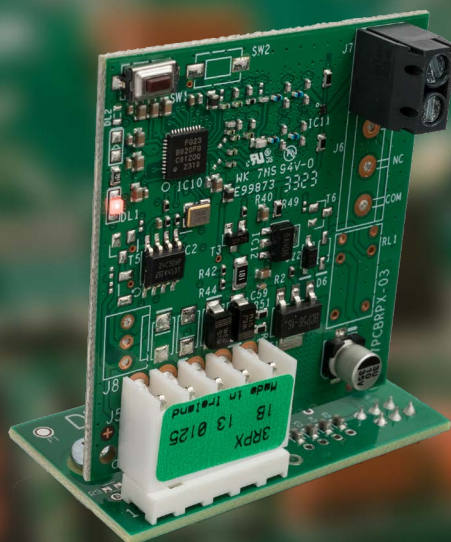




INSTRUCTION MANUAL

FAAC RADIO DB513

Technical data

Dimensions (WxHxD)	50 x 63 x 26 mm
Temperature range	0 - 45 °C
Number of transmitters/buttons	Max 255
Operating frequency	433 and 868 MHz
Degree of protection	Internal installation

Description

DB513 is an add-on board for the EP105 automatic control unit.

To get a working unit, a radio receiver must be mounted on the DB513.

There are two different radio receivers:

RP1 FDS with one radio channel.

RP2 FDS with two radio channels and with the option to turn off radio channel 2 with a jumper on J3.

RP2 FDS also has a relay, max 0.5 A at 30 VDC/AC. This relay function is independent of the jumper position on J3.

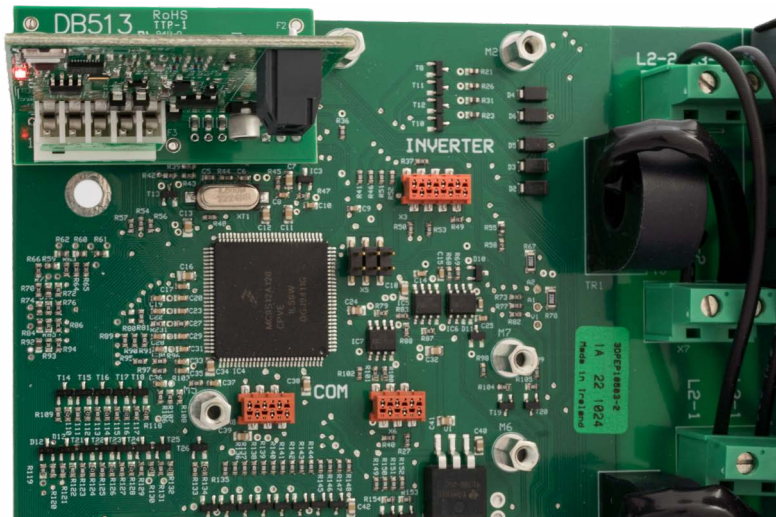
The picture below shows the RP1 FDS mounted on the DB513.



Installation of DB513

1. Discharge any static charge in your body by touching an earthed connection before starting installation.
2. Switch off the power to the automatic control unit, EP105.
3. Screw the DB513 circuit board into place on the spacers on the automatic control unit using two M3x5 screws.
4. Mount the radio receiver, RP1 or RP2, on the DB513 as shown in the picture above.
5. Switch on the power supply to the automatic control unit.

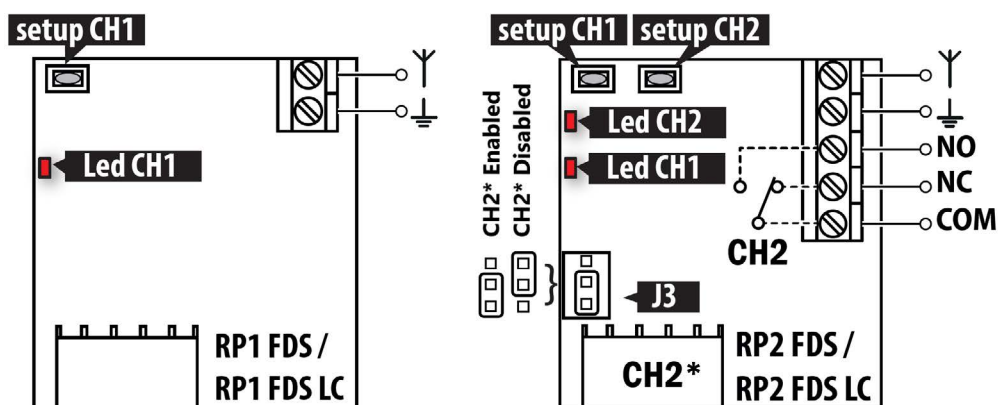
The illustration shows the location of the DB513, with RP1, on the EP105 upper left corner



Commissioning/Coding

To prevent all hand transmitters from affecting all radio receivers, the respective hand transmitter buttons and radio receiver must be paired. Each button on a hand transmitter has its own unique code.

- Pair a push button on a hand transmitter with a radio receivers radio channel 1
 1. On the radio receiver, press and release the self-learning button “setup CH1” so that the LED “Led CH1” starts flashing red.
 2. On the hand transmitter, press and release the button you want to register.
 3. When the hand transmitter is registered in the radio receiver, the “Led CH1” lights up steadily for 2 seconds and the hand transmitter flashes red and green.
 4. As long as the radio receiver is flashing red, more hand transmitters can be added. If no new button is added within 20 seconds, the radio receiver returns to normal mode.
 5. When the radio receiver is back in normal mode, check that “Led CH1” lights up when the corresponding button on the hand transmitter is pressed.



The picture shows the two different radio receivers

- Delete all paired hand transmitter buttons of the radio receivers radio channel 1
 1. Hold down the self-learning button “setup CH1” on the radio receiver until the LED lights up steadily.
 2. All paired hand transmitters are now deleted.

Description of operation of r-channels in automatic control EP105

With the DB513 add-on card, one or two programmable radio inputs are available in the control automation. The number of radio inputs is determined by which radio receiver is mounted.

The channel settings for the 2 programmable radio inputs are identical with a difference in channel number where input 1 has channel number r1nn, input 2 has channel number r2nn. The setting for radio input 1 is shown below.

Use channel r001 to read which radio channel is transmitting, the value shown indicates which radio input is used.

Note that the EP105 automatically detects if DB513 is mounted.

- **Control functions using radio inputs**

Use the following r channels to select the radio signal function.

r160 Control function

Change the value in the channel to give the input the desired function. The value 1 means open, 2 means close, etc. See the channel reference for all possible options.

r162 Motor selection

Use this channel to specify whether you want motors 1, 2 or both to operate when the input is activated. 1 = motor 1, 2 = motor 2 and 3 = both motors 1 and 2.

r163 Partial opening

If you want partial opening, set this channel to the value 1, the door will then open according to the set time in C216 and L226 when a limit switch is used or a specified number of degrees in L116 and L126 when an encoder is used.

r170 Block radio input from a programmable input

This channel is used to disable radio operation from a programmable input. Make sure that the programmable input is active and that all the options for the input have been disabled. The value 1 will disable the radio input if there is no signal at programmable input 1. Set the correct value for the programmable input you want to use.

r180 Park

Use this setting to allow the radio input to park the door. If the input is activated, the door opens, but before it can close a new control signal is required at another input – regardless of the setting for automatic closing.

r190 Interlock opening

In an interlocking system, this input is used to send a command for the local door to open, and to pass on the open command to the remote door.

Channel list, r-channels

Programmable radio input 1

No.	Name	Range	Factory	Setting
r001	Display of received radio input	0 - 4		
	0	No radio reception		
	1	Radio input 1 is receiving a radio signal		
	2	Radio input 2 is receiving a radio signal		
	3	Radio input 3 is receiving a radio signal		
	4	Radio input 4 is receiving a radio signal		
r160	Control function	0 - 5	0	
	0	Disabled		
	1	Open		
	2	Close		
	3	Stop		
	4	Open/close		
	5	Open/stop/close		
r162	Motor selection	1 - 3	3	
	1	Motor 1		
	2	Motor 2		
	3	Motor 1 and Motor 2		
r163	Partial opening	0 - 1	0	
	0	Disabled		
	1	Opening with limit switch according to set time in channel L216/L226 or number of degrees in L116/L126 if encoder is used. During partial opening, closing and opening manoeuvres will be paused until the time in C500 has expired.		
r170	Disable operation at radio input 1.	0 - 6	0	
	0	Disabled, normal operation. (Programmable input has no function for radio input 1)		
	1	Operation only if there is a signal at programmable input 1		
	2	Operation only if there is a signal at programmable input 2		
	3	Operation only if there is a signal at programmable input 3		
	4	Operation only if there is a signal at programmable input 4		
	5	Operation only if there is a signal at programmable input 5		
	6	Operation only if there is a signal at programmable input 6		
r180	Park	0 - 1	0	
	0	Disabled		
	1	Park without automatic closing. Reset by another control signal		
r190	Interlock opening	0 - 1	0	
	0	Disabled		
	1	Sends open signal to remote door, if r160 is set to 1, "Open"		

Programmable radio input 2

No.	Name	Range	Factory	Setting
r001	Display of received radio input	0 - 4		
	0	No radio reception		
	1	Radio input 1 is receiving a radio signal		
	2	Radio input 2 is receiving a radio signal		
	3	Radio input 3 is receiving a radio signal		
	4	Radio input 4 is receiving a radio signal		
r260	Control function	0 - 5	0	
	0	Disabled		
	1	Open		
	2	Close		
	3	Stop		
	4	Open/close		
	5	Open/stop/close		
r262	Motor selection	1 - 3	3	
	1	Motor 1		
	2	Motor 2		
	3	Motor 1 and Motor 2		
r263	Partial opening	0 - 1	0	
	0	Disabled		
	1	Opening with limit switch according to set time in channel L216/L226 or number of degrees in L116/L126 if encoder is used. During partial opening, closing and opening manoeuvres will be paused until the time in C500 has expired.		
r270	Disable operation at radio input 2.	0 - 6	0	
	0	Disabled, normal operation. (Programmable input has no function for radio input 2)		
	1	Operation only if there is a signal at programmable input 1		
	2	Operation only if there is a signal at programmable input 2		
	3	Operation only if there is a signal at programmable input 3		
	4	Operation only if there is a signal at programmable input 4		
	5	Operation only if there is a signal at programmable input 5		
	6	Operation only if there is a signal at programmable input 6		
r280	Park	0 - 1	0	
	0	Disabled		
	1	Park without automatic closing Reset by another control signal		
r290	Interlock opening	0 - 1	0	
	0	Disabled		
	1	Sends open signal to remote door, if r260 is set to 1, "Open"		

Troubleshooting

Description	Possible cause, tip
The receiver does not work when the transmitter button is pressed.	The radio receiver is not connected correctly. Check the connection of the receiver. Is the transmitter button paired with the receiver? If more than one transmitter is paired to the receiver, check if another transmitter is working.
The green LED on the hand transmitter does not light up when the transmitter button is pressed.	The battery in the hand transmitter is empty. Replace the battery.
The range is too short.	Bad battery, replace the battery. Check antenna connection.
The red LED on the hand transmitter flashes.	Bad battery, replace the battery
The hand transmitter lights up red when the transmitter button is pressed.	The handheld transmitter needs to be converted from SLH to FDS radio.
Radio channel 2 does not work for an RP2 radio receiver.	Is the jumper on J3 in the correct position?

Does the radio system still not work satisfactorily?
Contact FAAC Nordic AB for support.

Accessories

			
Hand transmitter 2 buttons Art no: 016111	Hand transmitter 4 buttons Art no: 016112	Colored rubber cover Art no: 016299	

[illegible]

