



INSTRUCTION MANUAL

DAAB RADIO DB411

*For DAAB Automatic control unit
EP104 version 4.07 or higher
EP105*



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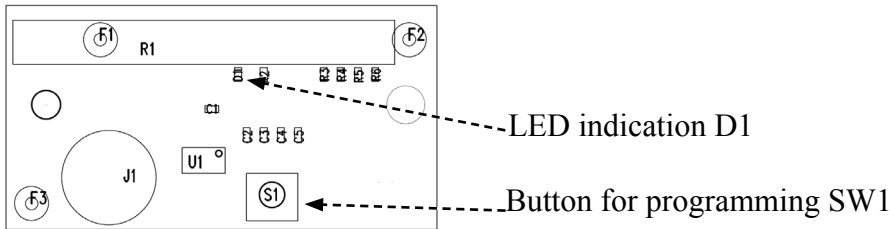
Technical data

Dimensions (WxHxD)	45 x 50 x 30
Temperature range	0 - 45 °C
Indications	5x LEDs
Outputs	4 internal signals
Number of transmitters/buttons	Max 85
Operating frequency	433.92 MHz
Degree of protection	Internal installation
Compatibility	The radio receiver is compatible with the DBR1 transmitter

Description

DB411 is an add-in card to the automatic control units EP104 and EP105. There is a button on both the radio receiver module and on the base card for programming hand transmitters. These buttons have the same function and are used to put the receiver into programming mode and to choose which of the receiver’s 4 outputs is to be programmed. The illustration below shows where the button is to be found on the receiver.

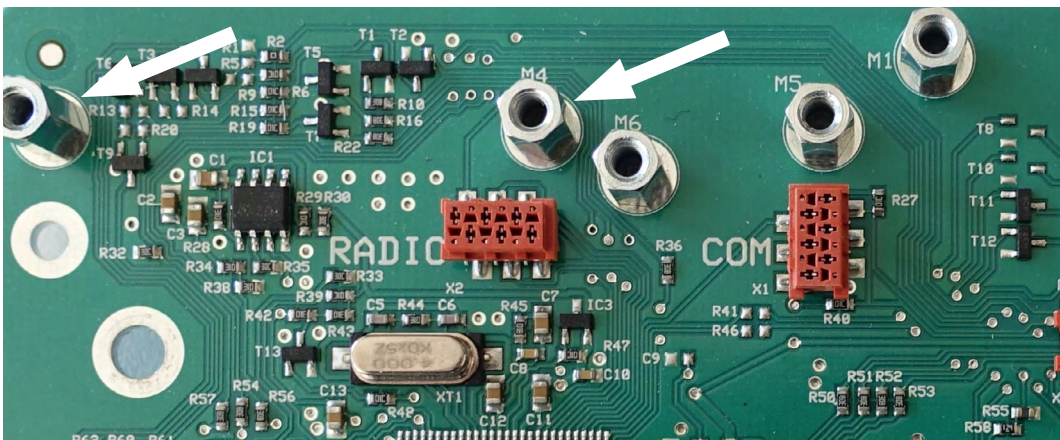
• DB411



Installation of DB411

1. Discharge any static charge in your body by touching an earthed connection before starting installation.
2. Disconnect the power to the automatic control unit.
3. Screw the DB411 circuit board into place on the spacers on the automatic control unit using two M3x5 screws.
4. Restore the power supply to the automatic control unit.

The illustration shows the location of the spacers on the EP104



Installation of antenna

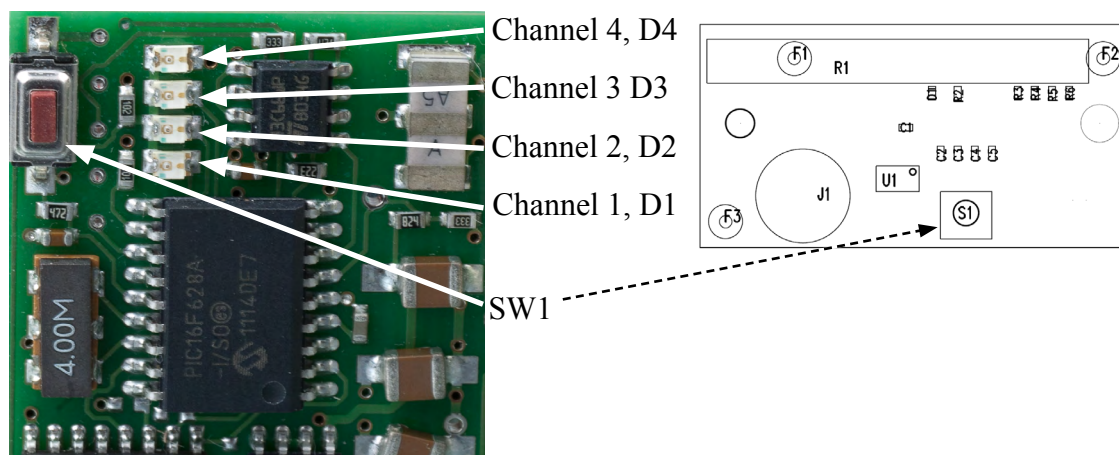
The DB411 is normally supplied with an internal antenna that is installed directly on the BNC connector. In cases where the range is not satisfactory, an external antenna can be fitted instead. Note the following points regarding how the antenna is to be located.

- Locate the antenna high above the ground.
- The antenna must not be located close to other metal objects such as joists, electric cables or other antennas.

Commissioning/Coding

To prevent all hand transmitters from affecting all receivers, the hand transmitter and receiver concerned are coded together. Each transmitter has a unique code that cannot be changed. The receiver is programmed with the hand transmitter's code by pressing the auto-programming button (SW1) on the receiver. Each configuration is confirmed by the LEDs on the receiver. The receiver can handle 85 different transmitter buttons.

- Code transmitter and receiver together.
 1. Hold down the auto-programming button (SW1) until the yellow LED (D1) lights.
 2. Press the auto-programming button (SW1) until the correct LED lights depending on which channel is to be used. (See explanation below).
 3. Now transmit using the appropriate transmitter button while the LED is lit. As long as the LED is lit, more transmitters can be programmed.



The receiver has now registered the hand transmitter's code and the LED on the receiver flashes. When the LED has turned off, repeat the above if more hand transmitters or other buttons are to be able to control the receiver. Check that the output is activated in channel r001 and that the LED lights when the transmitter button is pressed. In the case of EP105, channel C711 must be set to 1 for the r-channels to be shown.

• Clear individual transmitter buttons

1. Hold down the auto-programming button until the LED lights.
2. Now transmit with the transmitter button to be cleared. Repeat for all hand transmitters to be cleared.
3. -D3 and D4 on the radio module flash twice to show that the button has been cleared

• All programmed transmitters are cleared from the memory.

1. Hold down the auto-programming button until the LED lights. See illustration above.
2. Release the button and press it again until LED D1 flashes 3 times.
3. All programmed transmitters are now cleared.

• Memory full

If the receiver's memory is full, that is, if 85 hand transmitters have already been programmed, LEDs D3 and D4 flash 3 times and programming is discontinued. Any hand transmitter must be cleared before it can be programmed again.

DB411, Description of operation of r-channels in automatic control units EP104 and EP105

You can use the DB411 add-in card to access four programmable radio inputs in the automatic control unit.

The instructions are identical for all four radio inputs, apart from the channel number – input 1 has channel number r1nn, input 2 has channel number r2nn, etc. The settings below are for output 1.

Use channel r001 for a readout showing which radio channel is receiving a signal – the value displayed indicates the radio input that is in use. **In the case of EP105, channel C711 must be set to 1 for the r-channels to be shown.**

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 Half operation

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 Limited opening

EP104-1:

If you want limited opening, set this channel to the value 1, the door will then open according to the set time in C412 and C414 when a limit switch is used or a specified number of degrees in L116 and L126 when an encoder is used.

EP105:

If you want limited 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.

DB411, Channel list, r-channels

Programmable radio input 1

Note that the display of the r-channels is determined by the setting in C711 for EP105

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	Half operation	1 - 3	3	
	1	Motor 1		
	2	Motor 2		
	3	Motor 1 and Motor 2		
r163	Limited opening	0 - 1	0	
	0	Disabled		
	1	Opening with limit switch according to set time in channel C412/C414 with EP104, L216/L226 with EP105 or number of degrees in L116/L126 if encoder is used.		
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 a normal open signal to the remote door		

Programmable radio input 2

Note that the display of the r-channels is determined by the setting in C711 for EP105

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	Half operation	1 - 3	3	
	1	Motor 1		
	2	Motor 2		
	3	Motor 1 and Motor 2		
r263	Limited opening	0 - 1	0	
	0	Disabled		
	1	Opening with limit switch according to set time in channel C412/C414 with EP104, L216/L226 with EP105 or number of degrees in L116/L126 if encoder is used.		
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 a normal open signal to the remote door		

Programmable radio input 3

Note that the display of the r-channels is determined by the setting in C711 for EP105

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		
r360	Control function	0 - 5	0	
	0	Disabled		
	1	Open		
	2	Close		
	3	Stop		
	4	Open/close		
	5	Open/stop/close		
r362	Half operation	1 - 3	3	
	1	Motor 1		
	2	Motor 2		
	3	Motor 1 and Motor 2		
r363	Limited opening	0 - 1	0	
	0	Disabled		
	1	Opening with limit switch according to set time in channel C412/C414 with EP104, L216/L226 with EP105 or number of degrees in L116/L126 if encoder is used.		
r370	Disable operation at radio input 3.	0 - 6	0	
	0	Disabled, normal operation. (Programmable input has no function for radio input 3)		
	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		
r380	Park	0 - 1	0	
	0	Disabled		
	1	Park without automatic closing. Reset by another control signal		
r390	Interlock opening	0 - 1	0	
	0	Disabled		
	1	Sends a normal open signal to the remote door		

Programmable radio input 4

Note that the display of the r-channels is determined by the setting in C711 for EP105

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		
r460	Control function	0 - 5	0	
	0	Disabled		
	1	Open		
	2	Close		
	3	Stop		
	4	Open/close		
	5	Open/stop/close		
r462	Half operation	1 - 3	3	
	1	Motor 1		
	2	Motor 2		
	3	Motor 1 and Motor 2		
r463	Limited opening	0 - 1	0	
	0	Disabled		
	1	Opening with limit switch according to set time in channel C412/C414 with EP104, L216/L226 with EP105 or number of degrees in L116/L126 if encoder is used.		
r470	Disable operation at radio input 4.	0 - 6	0	
	0	Disabled, normal operation. (Programmable input has no function for radio input 4)		
	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		
r480	Park	0 - 1	0	
	0	Disabled		
	1	Park without automatic closing. Reset by another control signal		
r490	Interlock opening	0 - 1	0	
	0	Disabled		
	1	Sends a normal open signal to the remote door		

Troubleshooting

Description	Possible cause, tip
The receiver does not work when the transmitter button is pressed.	The transmitter is connected incorrectly. Check the receiver's connections. What does r001 show when any of the transmitter buttons is held down? If more than one hand transmitter is coded for the receiver, check whether any other transmitter is working and what is shown in channel r001.
The hand transmitter's red LED does not light when the transmitter button is pressed.	The battery in the hand transmitter is dead. Replace the battery. The hand transmitter is defective. Contact FAAC Nordic
The range is too short.	Bad battery, replace battery. Antenna cables are damaged or installed incorrectly. Check antenna connection.
The hand transmitter's red LED flashes	Bad battery, replace battery.

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

Accessories

			
<p>Hand transmitter Type DBR1-HS2-Blue Blue with two buttons Art no: 002610</p>	<p>Hand transmitter Type DBR1-HS2- RED Red with two buttons Art no: 002612</p>	<p>Hand transmitter Type DBR1-HS2- GREY Grey with two buttons Art no: 002608</p>	<p>Hand transmitter Type DBR1-HS2- BUR- GUNDY Burgundy with two buttons Art no: 002609</p>
			
<p>Hand transmitter Type DBR1-HS4 Yellow with four buttons Art no: 002611</p>	<p>Holder for 4-button Hand transmitter type DBR1-HS4 Art no: 002663</p>		<p>Transmitter with four but- tons for fixed installation Art no: 002666</p>
			
		<p>Dipole antenna Art no: 001572</p>	<p>Antenna HX Art no: 004966</p>



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