DFRC-SE

Decorative Fire Remote Control Service

MANUAL

FEATURES

- RF-communication
- Simple check of correct operation of decorative fire
- Fault indication on default display
- Fault history available
- Fault frequency available
- Applicable for all decorative fires with DFGT
- Transmit power adjustable
- Simple checking and adjusting settings

INTRODUCTION

The DFRC-SE remote control is especially developed for service purposes.

The DFRC-SE remote control can be used for:
- Checking and possibly adjusting the settings of the decorative fire
- Examining the fault history
- Examining the fault counters
- Examining the operating counters
- Examining the OEM-settings

In this manual a short explanation of the above mentioned possibilities of the DFRC-SE remote control is given.

The DFRC-SE remote control can also be used for a simple check of the working of the decorative fire. Dependent on the possibilities of the decorative fire, the pilot flame and the burner can be ignited and switched off and the flame height can be adjusted.
Standard functionality is not described in this manual.

The displays as shown in this manual are only meant to be illustrative. This displays may differ in practice.

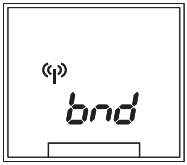
Used Abbreviations

- SEt : Decorative Fire Settings
- FHIS : Fault History
- FCnt : Fault Counters
- OCnt : Operating Counters
- CuSt : OEM-settings (custom settings)
- RSSI : Received Signal Strength Indicator

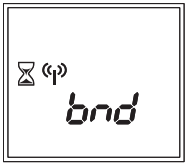
OPERATION

Binding

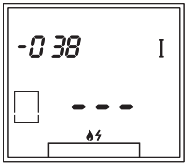
The DFRC-SE remote control can only communicate with a decorative fire after the DFRC-SE remote control has been bound with that decorative fire. Press any key to switch on the DFRC-SE remote control. The display below is shown. Hold the DFRC-SE remote control as close as possible to the decorative fire.



This display indicates the DFRC-SE remote control has not been bound with the decorative fire.
Press keys ⌃ and ⌄ simultaneously to bind the DFRC-SE remote control. The display below is shown.



This display indicates the DFRC-SE remote control is being bound to the the decorative fire.
When the DFRC-SE remote control is bound with the decorative fire the default display is shown.

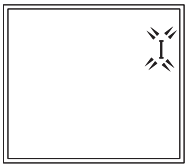


The strength of the received signal (RSSI) is indicated by a 3-digit number (-0 38 in this example). The more negative the number, the lower the strength of the received signal. The transmit power is indicated by roman numerals (I in this example).

Transmit Power

Increase the transmit power only in case the transmit power is not enough to ignite the burner. Keep the transmit power as low as possible to prevent other decorative fires in the near vicinity to be ignited. The transmit power can only be increased after the DFRC-SE remote control has been bound.

Press key ☰ for at least three seconds.



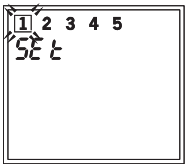
This display is shown. The flashing roman numeral indicates the current transmit power. Press key ⌃ or ⌄ to set the required transmit power (I, II, III, IV, V, VI, VII or VIII). I is low and VIII is high.

Press key ☰ to return to the default display.

Decorative Fire Settings (choice SEt)

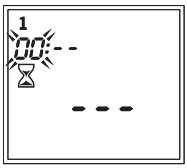
The factory settings of the decorative fire can be read or changed if required.

Step 1: Press key ☰ when the default display is shown.
The display below is shown.



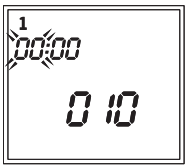
Select number 1 by pressing key ^ or v. This number represents the decorative fire settings.

Step 2: Press key ☰. The display below is shown.



The flashing digits indicate the index of the decorative fire setting list, the stripes and the hourglass indicate the value of the selected setting is been read at the decorative fire.

After the value has been read, the display below is shown.



The number (2-digit) of the current setting flashes.
The three digits below on the display (010 in this example) represent the current set value. The two digits beside the index (00 in this example) are only used in case the set value exceeds 999.

Press key ^ or v to select the required index. The set value can be changed as follows.

Step 3: Press key ☰. The display below is shown.

The current value of the setting flashes. Press key ^ or v to set the required value of the setting. It is not always possible to change a set value. In this case the original value is shown again.

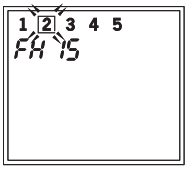
Step 4: Repeat **Step 2** to read another setting or repeat **Step 2** and **Step 3** to change another setting.

Press key ⏻ to return to **Step 1**. If required, select another number or press key ⏻ once more to stop and return to the default display.

Fault history (choice FHIS)

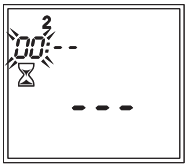
The fault history is a list of error codes of the most recently occurred faults. The most recent error code is at the begin of the list (index 0). The least recent error code is at the end of the list. The list can contain twenty recent error codes at most.

Step 1: Press key ▤ when the default display is shown.
The display below is shown.



Select number 2 by pressing key ⌃ or ⌄. This number represents the fault history.

Step 2: Press key ▤. The display below is shown.



The flashing digits represent the index of the list of error codes, the dashes and the hourglass indicate the list of error codes is fetched from the decorative fire.

The display below is shown if the list with error codes has been fetched.

The number (2-digit) of the current index flashes.
The three digits below on the display (006 in this example) represent the error code. The two digits next to the index (00 in this example) have no meaning.

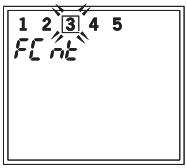
By pressing key ⌃ or ⌄, the index of the list with error codes can be changed. This way the complete list of error codes can be examined.

Step 3: Press key ⏻ to return to **Step 1**. If required, select another number or press key ⏻ once more to stop and return to the default display.

Fault Counters (choice FCnt)

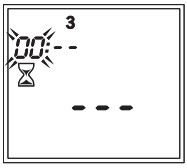
The number of occurrences of each fault is stored. The index of the list of fault counters is equal to the error code. The value in the list indicates the number of occurrences of this specific fault.

Step 1: Press key ☰ if the default display is shown.
The display below is shown.



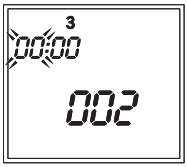
Select number 3 by pressing key ⌃ or ⌄. This number represents the fault counters.

Step 2: Press key ☰. The display below is shown.



The flashing digits represent the index (error code) of the list of fault counters, the dashes and the hourglass indicate the list of fault counters is fetched from the decorative fire.

The display below is shown when the list of fault counters has been fetched.



The number of the current index (error code) flashes. The three digits below on the display (002 in this example) indicate how many times the fault with error code 0 did occur. The two digits next to index (00 in this example) have no meaning.

By pressing key ⌃ or ⌄, the index of the list of fault counters can be changed. This way the complete list of fault counters can be examined.

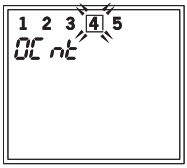
Step 3: Press key ⏻ to return to **Step 1**. If required, select another number or press key ⏻ once more to stop and return to the default display.

Note: The maximum value of a fault counter is 255. If a specific fault occurs more times, the value will stay equal to 255.

Operating Counters (choice OCnt)

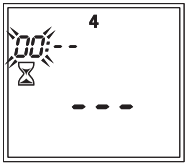
For several important states and events operating counters are kept.

Step 1: Press key ▤ if the default display is shown.
The display below is shown.



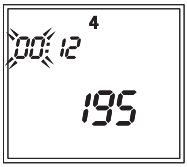
Select number 4 by pressing key ⌃ or ⌄. This number represents the operating hours.

Step 2: Press key ▤. The display below is shown.



The flashing digits represent the index of the list of operating counters, the dashes and the hourglass indicate the list of operating counters is fetched from the decorative fire.

The display below is shown when the list of operating counters has been fetched.



The number (2-digit) of the current index flashes.
The five digits (two next to the index number and three below on the display, 12195 in this example) represent the value of the operating counter.

By pressing key ⌃ or ⌄ the index of the list of operating counters can be changed. This way the complete list of operating counters can be examined.

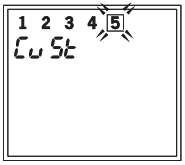
Step 3: Press key ⏻ to return to **Step 1**. If required, select another number or press key ⏻ once more to stop and return to the default display.

Note: The maximum value of an operating counter is 65535. If a specific event occurs more times, the value will stay equal to 65535.

OEM-Settings (choice CuSt)

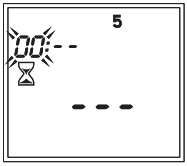
If required, the OEM-settings of the decorative fire can be examined.

Step 1: Press key ☰ if the default display is shown.
The display below is shown.



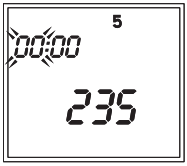
Select number 5 by pressing key ⌃ or ⌄. This number represents the OEM-settings.

Step 2: Press key ☰. The display below is shown.



The flashing digits represent the index of the list of OEM-settings, the dashes and the hourglass indicate the list of OEM-settings is fetched from the decorative fire.

The display below is shown when the list of OEM-settings has been fetched.



The number (2-digit) of the current index flashes.
The three digits below on the display (235 in this example) represent the value of the OEM-setting. The 2 digits next to the index (00 in this example) have no meaning.

By pressing key ⌃ or ⌄ the required index of the list of OEM-settings can be selected. The value can not be changed. The meaning of the OEM-settings is known to the manufacturer.

Step 3: Press key ⏻ to return to **Step 1**. If required, select another number or press key ⏻ once more to stop and return to the default display.

APPENDIX 1

Error Codes

In total 15 different error codes can be shown.

Code	Meanings
0	Number of times the main voltage of the decorative fire has been switched on
1	The main plug is plugged in the other way round.
2	The temperature in the decorative fire is too high.
3	The internal sensor of the decorative fire, measures an invalid temperature.
4	The external room sensor of the decorative fire, measures an invalid temperature.
5	The internal safety control detects a failure.
6	Communication is lost.
7	Flame not detected in time.
8	The burner control reports a failure and the flame could not be detected in time.
9	Not used.
10	The burner control reports a failure when the the pilot flame has been switched on for less than 30 minutes (type SP only).
11	The burner control reports a failure. The pilot flame has been switched on for more than 30 minutes (type SP only).
12	The burner control reports a failure, while the burner control is not switched on.
13	The burner control reports a failure, while the burner control is switched on.
14	Reserved.

APPENDIX 2

Settings Decorative Fire

Nr	Concerns	Unit	Step	Min	Max
0	Software version of DFGT (read-only)	-	-	-	-
1	reserved				
2	Minimum current. This value is according to flame height value 1 on the user remote control.	mA	1	0	250
3	Maximum current. This value is according to flame height value 15 on the user remote control.	mA	1	45	250
4	reserved				
5	Required current immediately after ignition.	mA	1	0	250
6	Gas valve is kept in the set position during the set time (see 5).	s	1	0	240
7	Decorative fire: [1)] 0: The type is not set yet. The decorative fire won't operate as long as the type is not set. 1: Open decorative fire 2: Closed decorative fire	-	1	0	2
8	Analogue input: 0: Input is not used. 1: External room temperature sensor connected. 2: Potentiometer connected.	-	1	0	2
9	Burner control: [1)] 0: Type is not set yet. 1: reserved 2: type IP / DBI 3: type SP	-	1	0	3
10	Phase detection: 0: Disabled (in case phase detection is not possible, for instance in Belgium) 1: Enabled. A failure is reported in case the main plug is plugged in the other way round.	-	1	0	1
11	After ignition, the flame must be detected within the set time (type SP only)	s	1	0	240

Nr	Concerns	Unit	Step	Min	Max
12	Second relay: 0: The second relay is not used 1: The switch contact of the second relay is closed if the burner control is switched on.	-	1	0	1
13	Minimum RSSI value necessary to ignite the CVI.	-dB	1	30	120
14	An RF failure is only reported as a fault when there is no communication during the set time period. Each step enhances the time period with 5 minutes. 0 : 5 minutes 1 : 10 minutes . . 239 : 1200 minutes (= 20 hours)	min	1	0	239

[1)] Wrong settings may result in malfunctioning of the decorative fire.

APPENDIX 3

Operating Counters

Nr	Concerns	Unit
0	Total time main burner has been switched on	hour
1	Number of times CVI has been released	-
2	Number of times main burner has been switched on	-
3	Number of times second relay has been switched on	-