

# **Technical Description**

Special Software FG6870-83  
(for System 6870)



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## 1 General

This program upgrade can be used to move the pre-set DCF77-simulation and the serial data output into the past or the future by several days.

It is based on the standard description 6870.

- for the special program FG687083 from version 09.02



**Please note :** The changed settings for the output of the string and the DCF-sim are not taken over before the minute change. Set times (via remote software) are also taken over after a minute change. Also after every reset the time is not put out until a minute change has taken place (the time basis in the remote software starts up from 0 until then) .

## 2 Time Offset

### 2.1 Time Offset with Special Software FG687083

This special program can be used to offset the current time information by between  $\pm 0$  to  $\pm 14999$  days.

#### Entry of the difference days

Entry done in the "SET- menu"

The input is requested by **day offset**.

The picture displays the last chosen difference days between  $\pm 00000$  and up to  $\pm 14999$  days.

Enter the new data by using the scroll bar and click at the field for the desired direction of the offset. When the data are entered start the transmission to the clock by means of the "**send**" switch. On the next minute change the new offset is taken over into the clock. The maximum time offset is about  $\pm 41$  years.

## 3 System Settings

The time offset can be transferred to various data outputs by means of the system byte.

### 3.1 General Settings

Bit no.:	switched on	switched off
5	status standard time	status local time
4	time display with time offset	time display without time offset
3	DCF77-simulation with time offset	DCF77-simulation without time offset
2	serial interface 2 with time offset	serial interface 2 without time offset
1	serial interface 1 with time offset	serial interface1 without time offset

## **3.2 Settings Time Offset**

### **Settings by Bit 5**

The offset of days is calculated from the current date. Problems may arise in some data strings with the clock status during the serial transmission or during the DCF77 simulation. The status is taken over from the actual date (i.e. the date without offset).

Some data strings contain the daylight saving / standard time bit and the announcement of the changeover. In case of an offset of e.g. 500 days a standard time date is transmitted with the daylight saving time bit in the status, or in the offset standard time date a daylight saving time changeover takes place.

**Bit 5** serves to keep the daylight saving / standard time bit permanently to standard time. There is a time leap whenever there is one in the actual time information.

<b><u>Bit 5</u></b>	<b><u>Status</u></b>
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off	the daylight saving / standard time bit is adjusted to the current date in the status
on	standard time is always put out in the status

### **Settings by Bit 4**

This bit serves to request the offset time by menu. If bit 4 is activated the offset time information is shown in the local time or under UTC.

The display of the time difference is based on the local time.

### **Settings by Bit 3**

This bit is used to transfer the time offset to the DCF77 antenna simulation.

If the function "time offset" is activated an offset simulated antenna signal is put out via the BNC connector DCF-SIM in the DCF77 mode. The signal is not put out unless the clock has received with the GPS-signal via the antenna at least once.

If the simulated DCF77-signal is to be put out permanently the "Time out for DCF77-Simulation" is to be set to **255** .

### **Settings by Bit 2**

This bit is used to switch the time offset to the serial interface2.

### **Settings by Bit 1**

This bit is used to switch the time offset to the serial interface1.