

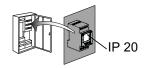
Safety notes

This product should be installed in line with installation rules, preferably by a qualified electrician. Incorrect installation and use can lead to risk of electric shock or fire. Before carrying out the installation read the instructions and take account of the product's specific mounting location. Do not open up, dismantle, alter or modify the device except where specifically required to do so by the instructions. All Legrand products must be opened and repaired exclusively by personnel trained and approved by Legrand. Any unauthorised opening or repair completely cancels all liabilities and the rights to replacement and guarantees. Use only Legrand brand accessories.

The device contains a LiMnO_o primary cell. When the product reaches the end of its life, this cell must be correctly removed and disposed of in accordance with national legislation and the requirements of environmental protection.

Technical data

Supply voltage:	230 V 50/60 Hz					
Power consumption:	ca. 1,5 W					
Relay outputs:	2 changeover contact	cts 16A 250V~µ c	os φ = 1			
Accuracy:	~ 0,1 s /day					
	single-strand	multi-strand		→		
Wire cross-sections:	1,54 mm ²	1,52,5 mm ²		max. 1,4 Nm		
Programs:	56 programs					
Local coordinates:	Resolution 1°/ 1' in E	XPERT-Mode				
Battery reserve:	5 years					
Storage temperature:	- 20 °C to +60 °C					
Operating temperature:	-20 °C to +55 °C					
Transmission frequency:	2400 MHz 2483,	5 MHz				
max. transmission power:	1,58 mW					



General information

- Start-up: after applying the supply voltage, the time switch starts automatically with the last selected function. The relay position is set by the current program.
- For saftety, when the time switch is connected to the mains supply the contact should not be used on an isolated low voltage supply and when the time switch is connected to the isolated voltage supply the contact should not be used on the mains supply.

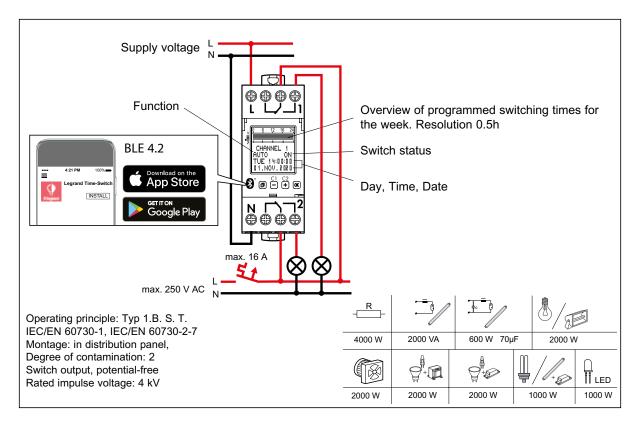
Select menu, back to main menu, Hold down > 1s = operating display

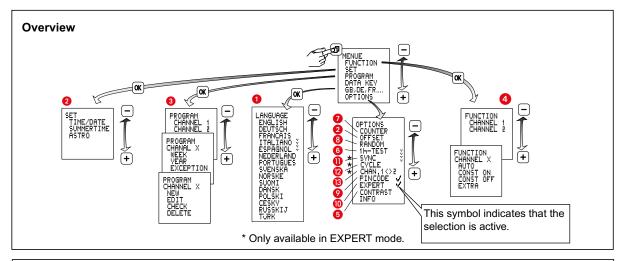
Confirm selection or load parameters

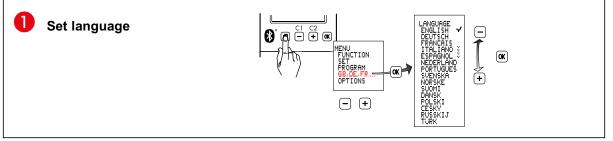
OK

C1 C2 • Select menu options or set parameters

(-) (+) • Channel selection



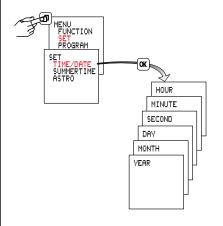








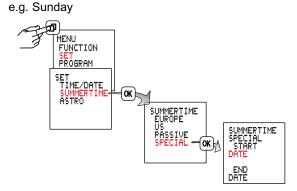
Set time/date



Summertime

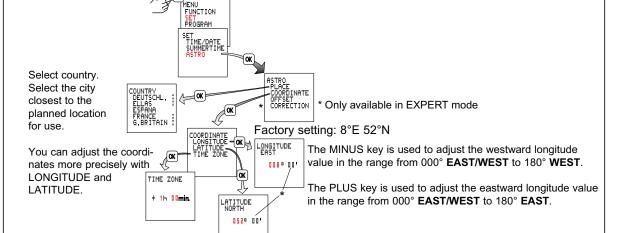
Summertime: ± 1 hour **Europe:** Factory set

SPECIAL: The switchover to/from summertime can be freely programmed by entering a start date and end date and is then executed each year on the same day of the week,





Astro



Use the enclosed **time-zone map** to set the correct time zone.

From this map, determine the difference between local time and UTC (**U**niversal **Time C**oordinated) and set this value.

The PLUS key is used to adjust the northward latitude value in the range from

00° NORTH/SOUTH to 90° NORTH.

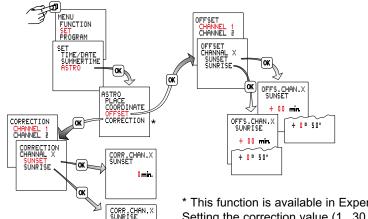
The MINUS key is used to adjust the southward latitude value in the range from 00° **NORTH/SOUTH** to 90° **SOUTH**.







Offset

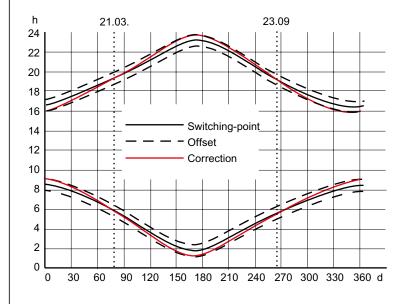


* This function is available in Expert mode.

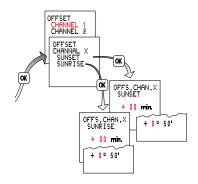
Setting the correction value (1...30 min.) extends the daily ON period in the middle of the winter season by up to 60 minutes (OFF up to 30 min. later in the morning, ON up to 30 min. earlier in the evening).

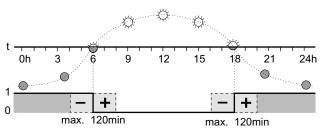
In the middle of the summer season, the correction setting reduces the daily ON period by up to 60 minutes (OFF up to 30 min. earlier in the morning, ON up to 30 min. later in the evening).





2 Offset



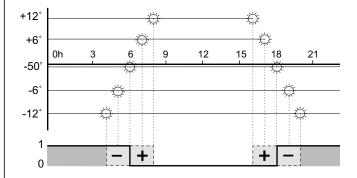


The time switch switches on at the calculated sunset time and off at the calculated sunrise time.

By setting an offset, you can shift the switching times by up to ±120 minutes with respect to the calculated sunrise and sunset times.

Example: If you set the offset to +30 minutes, the time switch will switch 30 minutes after sunrise and 30 minutes after sunset. If you set the offset to -30 minutes, the time switch will switch 30 minutes before sunrise and 30 minutes before sunset.





If the offset setting is in degrees the time switch switches on and off at times of equal brightness, despite the differences in twilight time lengths over the course of the year.

Sunrise and sunset correspond to -50' for the centre of the sun (the edge of the sun is visible on the horizon).



PROGRAM / WEEK

This menu item is provided for the simple input of programs which are to be repeated weekly (such as switching of lights and boilers).

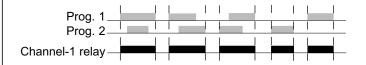
A weekly program consists of an ON time, an OFF time and the associated ON and OFF days.

- MON TO SUN: the days of the week are already assigned and you only need to set the ON and OFF times. This is used where the same program is to be executed on every day of the week.
- INDIVIDUAL: you can assign the ON and OFF times to any desired days. This is used where the same program is to be executed only on certain days of the week or different programs are to be executed on the various days.

OR function

The programs defined for each channel are ORed together. In other words, the output will be active if this is defined in any of the programs.

Example: channel 1





Sample WEEK program

The timer is to switch on at sunset on each day of the week and switch off at sunrise.

PLUS and MINUS keys: ♦ ↑ OFF at sunrise ON / OFF at programmed time WEEK CHANNEL 1 MON TO SUN INDIVIDUAL ð

Select the appropriate symbol with the









OK











3B PROGRAM / YEAR

This menu item permits the input of (additional) annual programs which are to be executed only during a specified period. These programs and the weekly programs of the same channel are ORed together as described above.

The period during which a program is to be executed is defined by entering a start date and an end date.

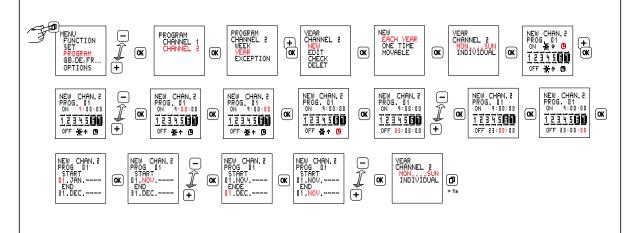
- The option EVERY YEAR should be selected if the additional program is to be executed during the same period of each year (e.g. Christmas, national holidays, birthdays, etc.).
- The option ONCE should be selected if the additional program is to be executed only during a single period (e.g. vacation period), but the start and end dates of this period are different in each year.
- The option MOVABLE should be selected if additional switching times are to be performed on movable public holidays/special days. (e.g. Easter, Whitsun, etc.). Entry is always for the current year. In the years that follow, the switch always takes place on the selected movable public holidays/special days. Default is Easter Sunday of the current year. →

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Sample YEAR program

Activate each year on at 09:00 hours on 01.11. and deactivate at 23:00 hours.



3C PROGRAM / **EXCEPTION**

The weekly and annual programs defined are not executed as long as an extra program is active. However, other exception programs will be executed while an exception program is active.

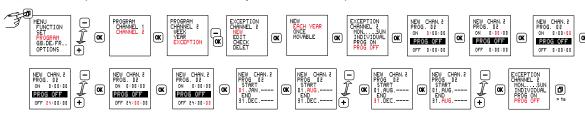
The various exception programs are ORed together as described above. (see OR function 3a)

- The option EVERY YEAR should be selected if the exception program is to be activated for the same period in each year (e.g. Christmas, national holidays, birthdays, etc.).
- The option ONCE should be selected if the exception program is to be activated only during a single period (e.g. vacation period), but the start and end dates of this period are different in each year. The option MOVABLE should be selected if additional switching times are to be performed on movable public holidays/special days. (e.g. Easter, Whitsun, etc.). Entry is always for the current year. In the years that follow, the switch always takes place on the selected movable public holidays/special days. Default is Easter Sunday of the current year. →

 ■
- Option MON TO SUN: the exception program is active from 00:00 hours on the start date to 24:00 hours on the end date. During this period, the time switch switches only as defined in the exception program.
- Option INDIVIDUAL: the exception program is active from 00:00 hours on the start date to 24:00 hours on the end date. During this period, the switching is only as only as defined in the exception program.
- Option PROG ON: the exception program is active from the ON time on the start date to OFF time on the end date. During this period, the output is permanently on.
- Option PROG OFF: the exception program is active from the ON time on the start date to OFF time on the end date. During this period, the output is permanently off.

3C PROGRAM / EXCEPTION

① The output is to be switched off each year for the entire period 01.08. to 31.08.

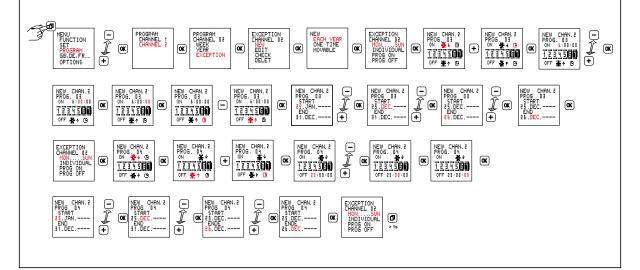


3C PROGRAM / EXCEPTION

② Each year from 25.12. to 26.12., the output is to be switched on at 6:00 hours, switched off at sunrise, switched on at sunset and switched off at 23:00 hours. For this, two programs are needed:

Program 1: ON at 6:00 and OFF at sunrise

Program 2: ON at sunset and OFF at 23:00





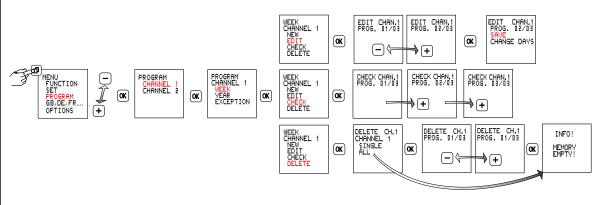
Movable public holidays/special days

The clock calculates movable public holidays which are dependent on the liturgical* Easter date according to the rule of Gauß and therefore takes into account the annual shift of the Easter date. The movable public holidays align with the shift; they are always realised with a certain number of differential days to Easter.

* Note: In some years, there is a difference between the liturgical and orthodox Easter date.

Name of public holiday	Time to Easter Sunday
Maundy Thursday	- 3 days
Good Friday	- 2 days
Easter Sunday	0
Easter Monday	+1 day
Ascension Day	+ 39 days
Whit Sunday	+ 49 days
Whit Monday	+ 50 days
Corpus Christi	+ 60 days

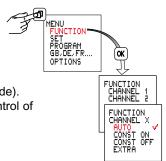
PROGRAM Edit/Check/Delete



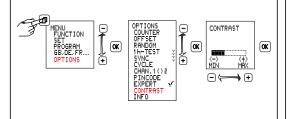


- Auto Automatic operation
- Constant ON
- Constant OFF
- Extra

The switch status imposed by the program is inverted (manual override). With the next effective switch command, the time switch resumes control of on/off switching.



5 Contrast adjustment



6 1 h-Test

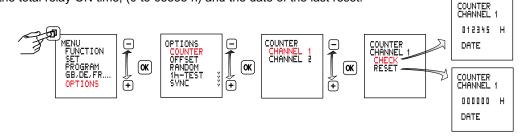
When this function is activated, the output is switched on for one hour.



After one hour, the time switch returns automatically to the programmed mode.



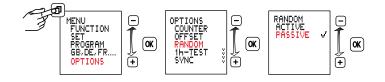
Displays the total relay ON time, (0 to 65535 h) and the date of the last reset.



8 Random function

Function to simulate presence.

Function active: the programmed switching cycles are shifted at random within the range of ± 15 minutes.





The factory setting for pin code entry is PASSIVE. If the pin code is set to ACTIVE, the access code is preset to 123123. This is unless the pin code was changed in the Legrand Time-Switch app.

- The Legrand Time-Switch app can be used to change the access code.
- A maximum of 8 smartphones/tablets can be simultaneously paired with a timer. If more smartphones/tablets need to be paired, the oldest pairing will be deleted.
- The standard time switch name (AlphaRex) can be changed using the Legrand Time-Switch app.

If PASSIVE is selected, or after a reset, the access lock is removed. The access code set remains unchanged.



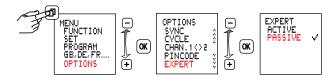


Expert mode

Some additional functions are available in Expert mode:

- Power grid synchronisation to improve the accuracy
- Cycle function
- Summer / winter seasonal correction
- · Automatic channel switching

Note: Upon switching from ACTIVE to PASSIVE the additional menu items are hidden again and all the Expert mode settings are cancelled. After re-activating, Expert mode will operate again with the basic settings.





Activating and deactivating grid synchronisation

Only available in EXPERT mode.

The default setting is PASSIVE. In order to improve the long-term accuracy, it is advisable to activate synchronisation if the time switch is supplied from a on 50/60 Hz grid with frequency adjustment.

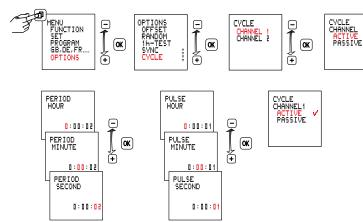




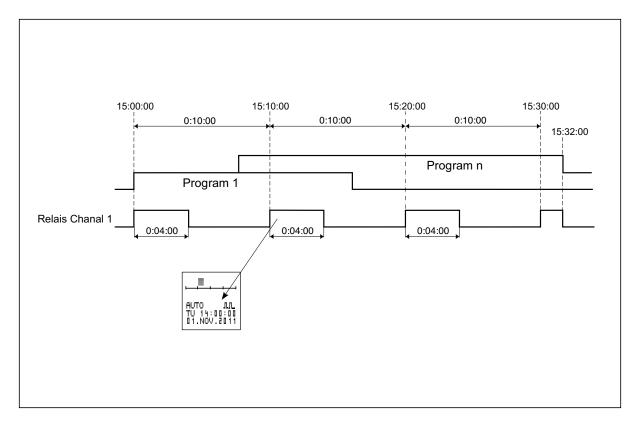
Cycle function

Only available in EXPERT mode

For cyclical switch commands the switching on time is set by logical "OR" of programs of all types. A fixed cycle of ON and OFF time then operates within those limits. The cycle always starts with the ON time. The cycle duration and the ON time within the cycle are the same length for all switching times. The cycle duration and the ON time can be set independently in one-second increments. If the switching time is shorter than the cycle duration, the cycle will be shortened accordingly. The ON time will remain unchanged. If the switching time is actually shorter than the ON time, the ON time will be shortened accordingly.



	min	max	
Period	2s	2h	
Pulse	1s	1h 59min 59s	





Automatic channel switching

Only available in EXPERT mode

On two-channel time switches a cyclic switch between channels can be set to conserve and/or ensure even use of connected equipment such as lamps and lights.

For example, with two sets of lights, one can be used all night long and the other for part of the night only. However, cyclical inversion of the outputs ensures that the lamps are on for the same length of time on average.

The outputs are automatically swapped over once a day (12 noon) or once a week (Sunday at 12 noon).





Connecting smartphones and AlphaRex³ BLE

Below are the basic instructions for pairing a smartphone with an AlphaRex³ BLE timer.

- 1. First install the Legrand Time-Switch app.
- Go to the Bluetooth section of your smartphone; this is usually under Settings. Make sure Bluetooth is switched on.
- 3. Location services on the smartphone must be enabled; GPS does not have to be activated.
- 4. The AlphaRex³ BLE timer must be supplied with mains voltage.
- 5. Devices are now displayed within the Legrand Time-Switch app, both when uploading and when importing.
- 6. Select the AlphaRex³ BLE timer from the list of devices.
- 7. The access code is 123123.
- 8. Enter the access code.
- 9. The AlphaRex³ BLE is now paired.



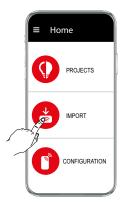
Importing projects



⚠ Note!

At the start of and during Bluetooth communication, the relay outputs are put into an idle state.

- Select the AlphaRex³ model from which the project is to be imported.
- The transfer will start automatically









Uploading projects



⚠ Note!

At the start of and during Bluetooth communication, the relay outputs are put into an idle state.

- Make sure your smartphone has Bluetooth and positioning turned on.
- 2. Select a project.
- Press the key 3.
- 4. Select the AlphaRex type to which the project is to be transferred.
- 5. The transfer starts automatically.







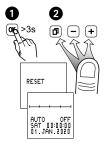
Reset

Warning!

The memory is deleted and all saved data is lost. Pin code entry is set to PASSIVE. The access code set remains unchanged.

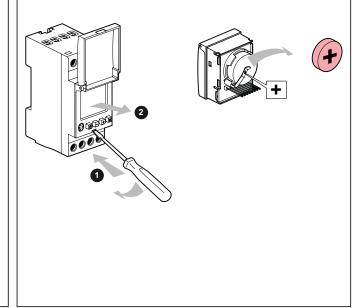
Hold down OK for more than 3 seconds and at the same time press and release D - +.

The language, time, date, summertime/ wintertime and switching times will have to be reentered.



Warning: Elektrical shock - Disconnect all power from the device before dismantling the module and replacing the battery.

Always use a Li cell type battery (LiMnO₂) CR2477, 3V high temperature type min +85 °C



Required inputs, depending on the program type and menu options.

Program type	Execution	Charac- teristics	ON/OFF times	Weekday assignments	Active period START date	Active period END date	Application, objectives, examples
WEEK Repeated	MON TO SUN	•	0	0	0	The same switching cycle is to be executed on every day of each week. Example: switch lights on at sunset and off at 22:30:00 hours each day.	
WEEK	weekly	INDI- VIDUAL	•	•	0	0	A switching cycle is to be executed only on specific days of each week. Example: switch lights on at sunset and off at 22:30:00 hours on Monday to Friday of each week.
EVERY YEAR	FVFRY	MON TO SUN	•	0	Day, month,	Day, month,	 A switching cycle is to be executed on each day within a specified period of each year. Example: switch on the outside lights of a church from 17:00:00 to 24:00:00 in the period 1 December to 31 December. An existing weekly program is to be supplemented with additional switching times on each day during a specific period of each year.
	INDI- VIDUAL	•	•	Day, month,	Day, month, 	 A switching cycle is to be executed on certain days of the week within a specified period of each year. Example: switch on the outside lights of a church from 17:00:00 to 24:00:00 on each Sunday in the period 1 December to 31 December. An existing weekly program is to be supplemented with additional switching times on certain days of the week during a specific period of each year. 	
YEAR	MON TO SUN	•	0	Day, month, year	Day, month, year	 A switching cycle is to be executed on each day of a specified period in a specified year. Example: in the year 2012, the heating in a holiday chalet is to be switched on from 07:30:00 to 23:00:00 on each day during the Easter holidays (25 March to 28 March 2012). An existing weekly program is to be supplemented with additional switching times on each day during a specific period of a specific year. 	
	ONCE	INDI- VIDUAL	•	•	Day, month, year	Day, month, year	A switching cycle is to be executed on certain days of a specified period in a specified year. Example: in the current year, the lights in a sports hall are to be switched on from 19:00:00 to 22:00:00 on each Tuesday and Friday during the period from 10 .January to 23 March. An existing weekly program is to be supplemented with additional switching times on certain days of the week during a specific period of a specific each year.
MOVABLE	MOVARI E	MON TO SUN	•	0	Day, month, year	Day, month, year	Et årsprogram skal hvert år til påske udføre en omskiftningscyklus. f.eks. skal varmen i et sommerhus i 2014 og i de efterfølgende år dagligt tændes fra kl. 07:30:00 til kl. 23:00:00 i ugen før og ugen efter påske.
	MOVABLE	NDI- VIDUAL	•	•	Day, month, year	Day, month, year	Et årsprogram skal hvert år på Kristi Himmelfartsdag udføre en omskiftningscyklus. f.eks. skal et bageris udvendige belysning tændes hvert år på Kristi Himmelfartsdag fra kl. 07:00:00 til kl. 11:00:00.

Program- type	Execution	Charac- teris- tics	ON/OFF times	Weekday assignments	Active period START date	Active period END date	Application, objectives, examples
		MON TO SUN	•	0	Day, month, from 0:00:00 hours	Day, month, to 24:00:00 hours	An exception program is to completely replace any existing weekly or annual program on each day during a specific period of each year. Example: the irrigation pump of an orchard is to be switched on from 17:00:00 to 18:00:00 on each day in the period from 20 March to 10 April
		INDI- VIDUAL	•	•	Day, month, from 0:00:00 hours	Day, month, to 24:00:00 hours	An exception program is to completely replace any existing weekly or annual program on certain days during a specific period of each year. Example: the irrigation pump of an orchard is to be switched on from 17:00:00 to 18:00:00 on each Monday and Friday in the period from 11 April to 15 May
	EVERY YEAR	PROG ON	•	0	Day, month, from ON time	Day, month, to OFF time	A channel is to be switched on continuously from the ON time on the START date to the OFF time on the END date every year. This exception program is to completely replace any existing weekly or annual program for this channel. Example: instead of the normal times for illumination of a public building, the illumination is to be switched on from 17:00:00 on the national holiday until 07:00:00 the next morning 4 October
		PROG OFF	•	0	Day, month, from ON time	Day, month, to OFF time	An output is to be switched off continuously from the ON time on the START date to the OFF time on the END date every year. This exception program is to completely replace any existing weekly or annual program for this channel. Example: in order to save power, certain equipment in a factory is to be switched off during the Christmas holiday period of each year. i.e. from 18:00:00 on 23 December to 6:00:00 on 27 December
EX- CEP- TION		MON TO SUN	•	0	Day, month, year from 0:00:00 hours	Day, month, year to 24:00:00 hours	On each day during a specific period of a specified year, an exception program is to completely replace any existing weekly or annual program. Example: during the Christmas holidays of the year 2012, the heating in an apartment is to be switched each day from 7:00:00 to 23:00:00, instead of in the normal cycle. This exception period is to begin on 24 December 2012 and end on 06 January 2013.
	ONCE	INDI- VIDUAL	•	•	Day, month, year from 0:00:00 hours	Day, month, year to 24:00:00 hours	On certain weekdays during a specific period of a specific year, an exception program is to completely replace any existing weekly or annual program. Example: in December 2012, the heating system of a department store is to be switched on from 8:00:00 to 18:00:00 each Sunday, because the store opens on Sundays in the period 4 December 2012 to 18 December 2012.
		PROG ON	•	0	Day, month, year from ON time	Day, month, year to OFF time	A channel is to be switched on continuously from the ON time on the START date to the OFF time on the END date of a specific year. This exception program is to completely replace any existing weekly or annual program for this channel. Example: the alarm system of an office building is to be switched on continuously during the vacation period 19:00:00 on 15 July 2012 to 06:00:00 on 7 August 2012.
		PROG OFF	•	0	Day, month, year from ON time	Day, month, year to OFF time	A channel is to be switched off continuously from the ON time on the START date to the OFF time on the END date of a specific year. This exception program is to completely replace any existing weekly or annual program for this channel. Example: in 2012, the normal recess gong in a school is to be switched off during the summer holidays 00:00:00 on 28 July 2012 to 24:00:00 on 10 September 2012.

Program- type	Execution	Charac- teris- tics	ON/OFF times	Weekday assignments	Active period START date	Active period END date	Application, objectives, examples
		MON TO SUN	•	0	Day, month, from 0:00:00 hours	Day, month, to 24:00:00 hours	Et undtagelsesprogram skal hvert år erstatte et allerede eksisterende årsprogram på en forskydelig helligdag. F.eks. i en kirke skal belysningen tændes og slukkes anderledes på de liturgiske helligdage end med det daglige omskiftningsprogram.
		INDI- VIDUAL	•	•	Day, month, from 0:00:00 hours	Day, month, to 24:00:00 hours	Et undtagelsesprogram skal hvert år på tirsdagen efter pinse udføre en omskiftningscyklus. f.eks. skal porten til et fabriksområde ikke åbnes hvert år på tirsdagen efter pinse.
EX- CEP- TION	MOVABLE	PROG ON	•	0	Day, month, from ON time	Day, month, to OFF time	Hvert år skal der være tændt permanent til påske. Dette undtagelsesprogram skal helt erstatte andre eventuelt eksisterende uge- eller årsprogrammer. Eksempel: I modsætning til en kirkes normale, daglige belysningstider skal lyses tændes hvert år til påske fra kl. 17:00:00 til kl. 24:00:00.
		PROG OFF	•	0	Day, month, from ON time	Day, month, to OFF time	Hvert år skal der permanent slukkes fra tændingstidspunktet på startdatoen til slukningstidspunktet på slutdatoen. Dette undtagelsesprogram skal inden for datointervallet helt erstatte andre eventuelt eksisterende uge- eller årsprogrammer. Eksempel: Energiforsyningen til bestemte anlæg i en virksomhed skal i stedet for det normale forløb slukkes kl. 6:00:00 i påskeferien hvert år.

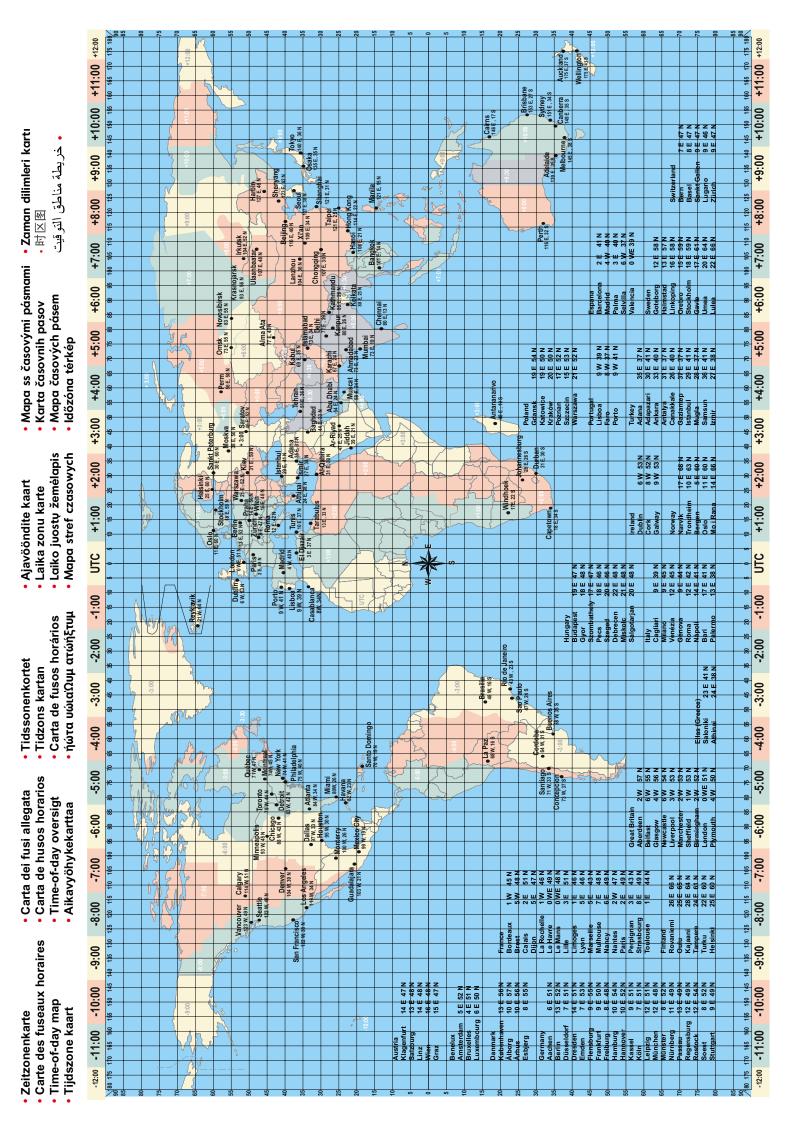
Select the option PROGRAM / WEEK for a program which is to be executed a on specific days of the week and is to be repeated weekly.

Select the option PROGRAM / YEAR for a program which is to be executed each year or only in a specific year. The execution period within the year can be defined by entering start and end dates.

Select the option PROGRAM / EXCEPTION for a program which is to completely replace existing weekly or annual programs during a specified period.

Priorities of the various program types within the same channel:

	WEEK program	YEAR program	EXCEPTION program
WEEK program	The various weekly programs are ORed together	The various weekly and annual programs are ORed together	The exception program is overriding within its defined period of activity.
YEAR program	The various weekly and annual programs are ORed together	The various annual programs are ORed together	The exception program is overriding within its defined period of activity.
EXCEPTION program	The exception program is overriding within its defined period of activity.	The exception program is overriding within its defined period of activity.	The various exception programs are ORed together





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Wir

Legrand GmbH

We

Am Silberg 14, D-59494 Soest

erklären in alleiniger Verantwortung, daß unser(e) Produkt(e):

Schaltuhr

declare under our sole responsibility that the product(s):

Time-switch

Typenbezeichnung: Type description:

AlphaRex³ BLE

See list of reference numbers on page 2/2

mit den grundlegenden Anforderungen folgender Europäischen Richtlinien übereinstimmen satisfy the provisions of Council Directives

"Funkanlagen-Richtlinie"/"Radio Equipment Directive (RED)" 2014/53/EU

"EMV-Richtlinie"/"EMC-Directive" 2014/30/EU

und/and

"RoHS2-Richtlinie"/"RoHS2-Directive" 2011/65/EU

sofern sie bestimmungsgemäß und normgerecht nach den Herstellerempfehlungen installiert und benutzt werden.

on condition that they are used in the manner intended and in accordance with the current installation standards and with the manufacturer's recommandations.

Die Übereinstimmung des bezeichneten Produktes mit den wesentlichen Schutzforderungen der gültigen Richtlinien wird nachgewiesen durch die Einhaltung folgender Normen:

These provisions are ensured for the valid Directives by conformity to the following standards:

EN 60730-1:2016 EN 60730-2-7:2010

EN 300 220-2 V3.2.1:2018 in conjunction with EN 300 220-1 V3.1.1: 2017

EN 301 489-1 V2.1.1:2017 EN 301 489-3 V2.1.1:2019 EN 301 489-17 V3.1.1:2017

EN 300 328 V2.2.2: 2019

Legrand Antibes

16.12.2019 Datum/date:

Marcello Re - Product Development & Technologies Director -



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Referenz / Reference:	
Typ/Type:	
412721 AlphaRex³ D21s BLE	230 V / 50-60 Hz
412722 AlphaRex³ D22 BLE	230 V / 50-60 Hz
412723 AlphaRex³ D21 astro BLE	230 V / 50-60 Hz
412724 AlphaRex³ D22 astro BLE	230 V / 50-60 Hz
412725 AlphaRex³ DY21 BLE	230 V / 50-60 Hz
412726 AlphaRex³ DY22 BLE	230 V / 50-60 Hz