

## Universal+ 7WR 1PHAD

Astronomical time, programmable via Internet/Intranet

With one independent output relay and one dimmer

Easy, clear programming with programming file import and export function

Four independent time programmers:

- Astronomical daily/weekly
- Daily/ weekly (295 programs)
- Daily/monthly/yearly (1145 programs)
- Daily/monthly/yearly (vacations, holidays..., 285 programs)

Counter for ON hours, information and manual control

WebServer: programming, control and total monitoring in real time via Internet/Intranet



Image is merely illustrative

With software version V1.0

SAFE  LINE.SL

## User's installation manual - UNIVERSAL+ 7WR 1PHAD

It is imperative that the user/installer fully understand the present manual as also its pertinent accessories manuals prior to using the unit. Should any doubt arise, please refer to the Authorised Distributor or the Manufacturer.

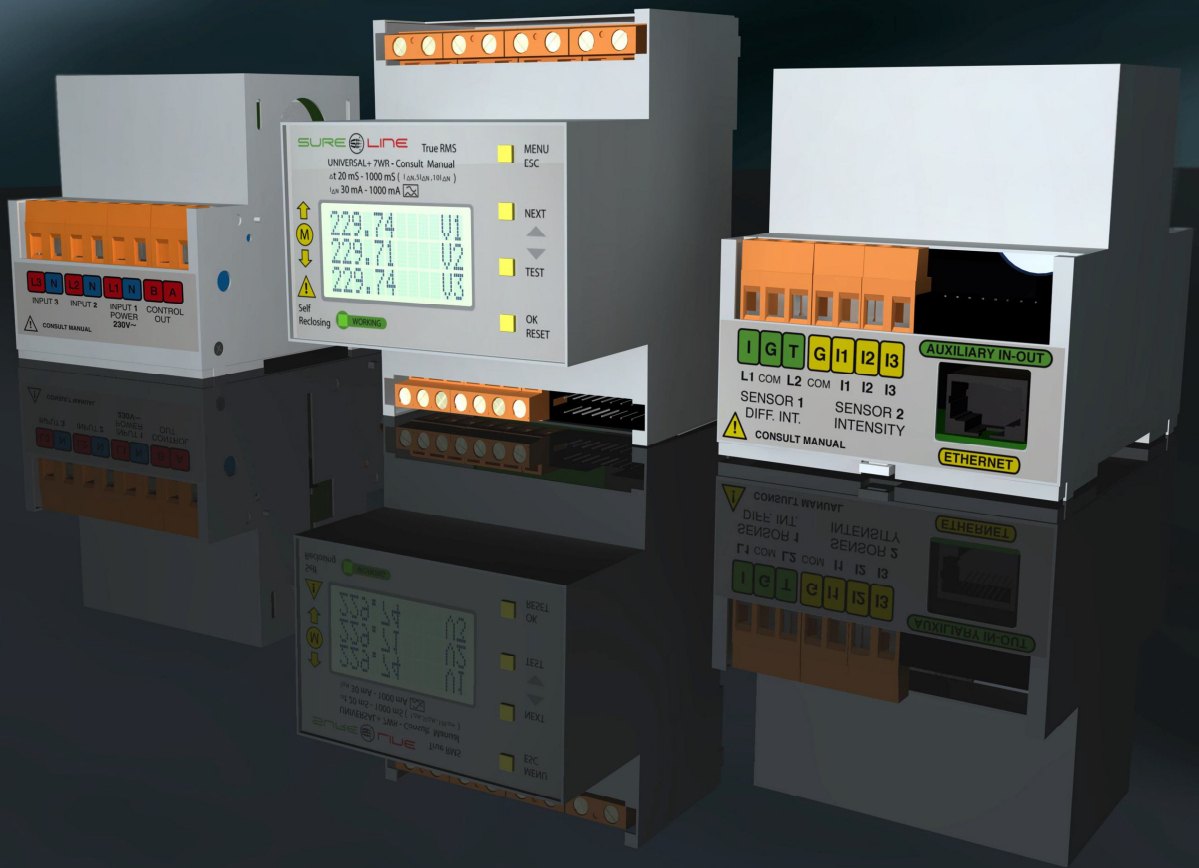
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## CHAPTER 1 – GENERAL DESCRIPTION

### Nomenclature UNIVERSAL+ 7WR 1PHAD

Four independent time programmers:

- Daily/weekly astronomical
- Daily/weekly (295 programs)
- Daily/monthly/yearly (1145 programs)
- Daily/monthly/yearly (vacations, holidays..., 285 programs)

**7WR 1PHAD**    [ ]    [ ]  
                           1        2

1 – Load intensity (output relay RA)

- [ **6A** ] = 6A Max AC1 (250V AC Max)
- [ **16A** ] = 16A Max AC1 (250V AC Max)

2 – Supply voltage (terminals line neutral)

- [ **230VU** ] = Universal AC and DC power supply: (85V – 265V AC 47-440HZ) and (130V – 370V DC)
- [ **12V** ] = 12V DC (9V – 18V DC)
- [ **24V** ] = 24V DC (18V – 36V DC)
- [ **48V** ] = 48V DC (36V – 72V DC)

**e.g UNIVERSAL+ 7WR 1PHAD 6A 230VU**

**Attention: please, consult identifying label on the side of the unit**

## Introduction

The **SURELINE UNIVERSAL+ 7WR 1PHAD** incorporates innovative, cutting-edge technology for time-programming and output relay and dimmer. It has four independent time programmers, is programmable, with built-in WebServer, and protected by user PIN.

This small, compact unit for 35mm DIN rail, comes sealed from origin and all ready to be installed in a standard enclosure and used in any installation or sector whatsoever.

Presentation: standard (EN 50 022) enclosure for 35mm DIN rail. This is a compact unit monitored by a **16-Bit Microcomputer** and is highly stable thanks to its built-in double process monitor (Watchdog)

The "UNIVERSAL+ 7WR" family is a series of units with WebServer, designed to provide electrical protection, control and monitoring in real time via Internet/Intranet, permitting electrical installations to be protected and any process whatsoever to be automatised with inputs/outputs. These units are totally autonomous and, once configured, can communicate with each other via Internet/Intranet to enable or disable relays/functions/processes.

## Outstanding characteristics - UNIVERSAL+ 7WR 1PHAD

- Digital time switch with 1 relay and 1 dimmer (Start – Stop – Speed).
  - Start: Initial value of dimmer (%).
  - Stop: Final value of dimmer (%).
  - Speed: Increase-decrease speed (s/%).
  - Programming “Start/Stop” from 0% - (0V) to 100% - (10V) in 1% steps
  - Programming “Speed” from 0.000 s/% - 999.9 s/%. (4 digits)
  - Maximum time from 0% - 100% or 100% - 0% with 999.9 s/% = 27.7 hours (resolution 0,001 s/%)
  - Minimum time from 0% - 100% or 100% - 0% with 0.000 s/% = instantaneous (resolution 0,001 s/%)
  - Resolution output dimmer 0,1% (0,01V)
- Daily/weekly astronomical time programmer.
- Daily/weekly time programmer. (295 programs).
- Daily/monthly/yearly time programmer. (1145 programs).
- Programador horario diario /mensual/yearly (excepciones/holidays/vacations, 285 programs).
- Counter for number of ON hours
- WebServer
  - Programming, control and total monitoring in real time via Internet/Intranet.
  - Information regarding status of relay and dimmer with number of ON hours, automatically refreshed every 2 secs.
  - Manual control via Internet/Intranet and through the unit itself
  - Easy, clear and simple programming with file.txt export/import function
  - Geographic location (latitude, longitude and GMT), manually or automatically via Internet
  - Programming of internal clock (date and time), manually or automatically
  - Automatic Summer/Winter time switchover
  - Complete annual sunrise/sunset hours table
  - Three customisable styles for viewing the web page
  - Editable relay and dimmer names (16 characters)
  - Editable unit name (16 characters)
- 4-digit protection PIN
- Green “Working” LED

## Functioning

The main aim of the UNIVERSAL+ 7WR 1PHAD is to give the user a clear and simple system to switch relay A on and off; to program "Start", "Stop" and "Speed" (percentage increase-decrease in s/%) of the dimmer (output 0-10V); to know the number of ON hours for relay and dimmer and to afford an easy import/export of programming to other 7WR 1PHAD units. To this end, it has four well-differentiated time programmers.

### Daily/weekly astronomical time programmer

Permits the user to program daily switching on and off of relay A and to program "Start", "Stop" and "Speed" (percentage increase-decrease in s/%) of the dimmer (output 0-10V) by means of a high-precision algorithm which calculates sunrise and sunset for every day.

### Daily/weekly time programmer

Permits the user to program daily switching on and off of relay A and to program "Start", "Stop" and "Speed" (percentage increase-decrease in s/%) of the dimmer (output 0-10V) depending on day/s of the week.

### Daily/monthly/yearly time programmer

Permits the user to program daily switching on and off of relay A and to program "Start", "Stop" and "Speed" (percentage increase-decrease in s/%) of the dimmer (output 0-10V) for a day/month/year.

### Daily/monthly/yearly time programmer (exceptions/holidays/vacations).

Permits the user to program daily switching on and off of relay A and to program "Start", "Stop" and "Speed" (percentage increase-decrease in s/%) of the dimmer (output 0-10V) for a day/month/year.



Simultaneous execution. These time programmers operate in parallel so that all programs run without delay, except in the event of one of them having been programmed for holiday/vacation, in which case only the actions assigned to this programmer would be carried out.



Normally, programming time programmers is a laborious business. Safeline has designed its software focussing the utmost effort on ease of use. The flat, low-profile interface contributes to this as do also the automatic geolocation detection (latitude, longitude and GMT) and internal clock (date and time).



Only needs to be configured once. An important aspect is its capacity of self-sufficiency. The automatic time changeover by default and the daily calculations carried out by the unit to determine sunrise and sunset, all guarantee that, once configured, no further action is needed.



Export/Import: Should the user wish to have the same configuration in different units or, simply, to have a copy of the configuration, this is possible simply by exporting/importing files to/from the unit and the computer.



## Functioning of daily/weekly astronomical time programmer

### How does it work?

Thanks to the high-precision algorithm which the unit automatically calculates daily, the astronomical time-programmer allows the user to control one relay and one dimmer at sunrise and sunset. An example of usage would be in the management of street lighting.

Relay A has two positions, ON and OFF. The dimmer has "Start" (initial value in %), "Stop" (final value in %) and "Speed" (increase - decrease in s/%) . In each program, the dimmer will initiate the process with the "Start" value and will transition to "Stop" at "Speed". Relay A can be omitted by indicating "None" in the relay selector.



**Geographical location:** The user must specify the location where the unit is to calculate the sunrise and sunset. This device's process of acquisition of coordinates is automatic if "Automatic" is pressed. They can, however, also be entered manually.

Location geography. Manual / Automatic (via internet):		
Latitude ( $\pm 90.00000$ d°)	Longitude ( $\pm 180.0000$ d°)	GMT ( $\pm 12$ h)
41.56230 d°	2.4497 d°	1 h
Automatic		



**Adjustment of relay and dimmer according to days of the week:** These are adjusted as per user's requirements on days of the week. All that is required is to select the days of the week for the activity, enable relay A on the minimalist panel, program the dimmer's "Start", "Stop" and "Speed" (increase-decrease in s/%, output 0-10V) and assign a status to relay A, viz. switching on or off at sunrise and sunset. Lastly, an offset (delay/advance) of up to 240 minutes can also be added to adjust more precisely in cases of valley and mountain locations.

Settings:						
Mo	Tu	We	Th	Fr	Sa	Su
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prog.	Status	Offset ( $\pm 240$ min)		Dimmer: Start - Stop - Speed		
1 <input type="checkbox"/>	RA <input type="button" value="↑Sunrise(OFF)"/> - <input type="button" value="↓Sunset(ON)"/>	↑ 0 min	↓ 0 min	↑ 100 % - 0 % - 100 ms/%	↓ 0 % - 100 % - 100 ms/%	
Programmer astronomical with vacation?: <input type="radio"/> Yes <input checked="" type="radio"/> No						



**Vacations:** Finally, it is necessary to define whether the astronomical programmer is to operate in vacations or not. In other words, should one require it not to come into operation on a holiday. Holidays are configured in the vacations time programmer.



**Results:** The astronomical programmer is now configured. All that remains is to indicate whether automatic Summer or Winter switchover time is required. The unit will calculate sunrise and sunset daily every year from this point on.

Result for today:

Automatic time change:  Yes  No

Prog.1: Sunrise 07:44 - Sunset 17:27

PIN  Save

Show / Hide annual full table

\* Winter schedule ☀ Summer schedule ↑ Sunup ↓ Sunrise

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:17 ↑ 17:31 ↓ ☀	08:03 ↑ 18:06 ↓ ☀	07:26 ↑ 18:40 ↓ ☀	07:34 ↑ 20:15 ↓ ☀	06:48 ↑ 20:48 ↓ ☀	06:19 ↑ 21:18 ↓ ☀	06:20 ↑ 21:08 ↓ ☀	06:44 ↑ 21:08 ↓ ☀	07:16 ↑ 20:24 ↓ ☀	07:46 ↑ 19:33 ↓ ☀	07:22 ↑ 17:46 ↓ ☀	07:57 ↑ 17:21 ↓ ☀
2	08:17 ↑ 17:32 ↓ ☀	08:02 ↑ 18:07 ↓ ☀	07:24 ↑ 18:41 ↓ ☀	07:32 ↑ 20:16 ↓ ☀	06:46 ↑ 20:49 ↓ ☀	06:18 ↑ 21:18 ↓ ☀	06:20 ↑ 21:28 ↓ ☀	06:45 ↑ 21:07 ↓ ☀	07:17 ↑ 20:22 ↓ ☀	07:48 ↑ 19:31 ↓ ☀	07:23 ↑ 17:44 ↓ ☀	07:58 ↑ 17:21 ↓ ☀
3	08:17 ↑ 17:32 ↓ ☀	08:01 ↑ 18:08 ↓ ☀	07:23 ↑ 18:43 ↓ ☀	07:31 ↑ 20:17 ↓ ☀	06:45 ↑ 20:50 ↓ ☀	06:18 ↑ 21:19 ↓ ☀	06:21 ↑ 21:28 ↓ ☀	06:46 ↑ 21:06 ↓ ☀	07:18 ↑ 20:21 ↓ ☀	07:49 ↑ 19:29 ↓ ☀	07:24 ↑ 17:43 ↓ ☀	07:59 ↑ 17:21 ↓ ☀
4	08:17 ↑ 17:32 ↓ ☀	07:60 ↑ 18:09 ↓ ☀	07:21 ↑ 18:44 ↓ ☀	07:29 ↑ 20:18 ↓ ☀	06:44 ↑ 20:51 ↓ ☀	06:17 ↑ 21:20 ↓ ☀	06:21 ↑ 21:28 ↓ ☀	06:47 ↑ 21:05 ↓ ☀	07:19 ↑ 20:19 ↓ ☀	07:50 ↑ 19:28 ↓ ☀	07:25 ↑ 17:42 ↓ ☀	07:60 ↑ 17:20 ↓ ☀
5	08:17 ↑ 17:34 ↓ ☀	07:58 ↑ 18:11 ↓ ☀	07:19 ↑ 18:45 ↓ ☀	07:27 ↑ 20:19 ↓ ☀	06:43 ↑ 20:52 ↓ ☀	06:17 ↑ 21:20 ↓ ☀	06:22 ↑ 21:27 ↓ ☀	06:48 ↑ 21:04 ↓ ☀	07:20 ↑ 20:17 ↓ ☀	07:51 ↑ 19:26 ↓ ☀	07:26 ↑ 17:41 ↓ ☀	08:01 ↑ 17:20 ↓ ☀
6	08:17 ↑ 17:35 ↓ ☀	07:57 ↑ 18:12 ↓ ☀	07:18 ↑ 18:46 ↓ ☀	07:26 ↑ 20:21 ↓ ☀	06:41 ↑ 20:53 ↓ ☀	06:17 ↑ 21:21 ↓ ☀	06:22 ↑ 21:27 ↓ ☀	06:49 ↑ 21:02 ↓ ☀	07:21 ↑ 20:16 ↓ ☀	07:52 ↑ 19:24 ↓ ☀	07:28 ↑ 17:40 ↓ ☀	08:02 ↑ 17:20 ↓ ☀
7	08:17 ↑ 17:36 ↓ ☀	07:56 ↑ 18:13 ↓ ☀	07:16 ↑ 18:47 ↓ ☀	07:24 ↑ 20:22 ↓ ☀	06:40 ↑ 20:54 ↓ ☀	06:17 ↑ 21:22 ↓ ☀	06:23 ↑ 21:27 ↓ ☀	06:50 ↑ 21:01 ↓ ☀	07:22 ↑ 20:14 ↓ ☀	07:53 ↑ 19:23 ↓ ☀	07:29 ↑ 17:38 ↓ ☀	08:03 ↑ 17:20 ↓ ☀
8	08:17 ↑ 17:37 ↓ ☀	07:55 ↑ 18:15 ↓ ☀	07:15 ↑ 18:48 ↓ ☀	07:22 ↑ 20:23 ↓ ☀	06:39 ↑ 20:55 ↓ ☀	06:16 ↑ 21:22 ↓ ☀	06:24 ↑ 21:26 ↓ ☀	06:51 ↑ 20:60 ↓ ☀	07:23 ↑ 20:12 ↓ ☀	07:54 ↑ 19:21 ↓ ☀	07:30 ↑ 17:37 ↓ ☀	08:04 ↑ 17:20 ↓ ☀
9	08:17 ↑ 17:38 ↓ ☀	07:54 ↑ 18:16 ↓ ☀	07:13 ↑ 18:50 ↓ ☀	07:21 ↑ 20:24 ↓ ☀	06:38 ↑ 20:56 ↓ ☀	06:16 ↑ 21:23 ↓ ☀	06:24 ↑ 21:26 ↓ ☀	06:52 ↑ 20:59 ↓ ☀	07:24 ↑ 20:11 ↓ ☀	07:55 ↑ 19:19 ↓ ☀	07:31 ↑ 17:36 ↓ ☀	08:05 ↑ 17:20 ↓ ☀
10	08:16 ↑ 17:39 ↓ ☀	07:53 ↑ 18:17 ↓ ☀	07:11 ↑ 18:51 ↓ ☀	07:19 ↑ 20:25 ↓ ☀	06:37 ↑ 20:57 ↓ ☀	06:16 ↑ 21:23 ↓ ☀	06:25 ↑ 21:26 ↓ ☀	06:53 ↑ 20:57 ↓ ☀	07:25 ↑ 20:09 ↓ ☀	07:56 ↑ 19:18 ↓ ☀	07:32 ↑ 17:35 ↓ ☀	08:06 ↑ 17:20 ↓ ☀

## Functioning of daily/weekly time programmer

### How does it work?

Relay A has two positions, ON and OFF. The dimmer has “Start” (initial value in %), “Stop” (final value in %) and “Speed” (increase - decrease in s/%). In each program, the dimmer will initiate the process with the “Start” value and will transition to “Stop” at “Speed”. Relay A can be omitted by indicating “None” in the relay selector.



**Import/export:** If a program has already been exported and one wishes to import it, one must first import a configuration file by pressing “Select file” and selecting one. Thus, one can easily program diverse units or, simply make backup copies.



**Programming:** . Programming is simple as can be seen in the example below where relay A switches on during 5 minutes every day of the week. Say, for example, it is an irrigation system with lighting. Let's assume that a new plant is put in which requires more frequent watering. In this case, all days of the week are selected, relay A is set to ON for example at 19:00. After this the process is repeated but at 19:05, relay A switches to OFF, thus avoiding the irrigation being left on all night. The dimmer controls a light which will switch on at 11:05, going from 0% to 100% in 60 secs., It will then remain at 100% until 19:05 at which time it will decrease to 0% in 60 secs.

Program 001: Every day of the week at 11:05, relay A in ON position and dimmer goes from 0% to 100% in 60secs.

Program 002: Every day of the week at 11:10, relay A in OFF position and dimmer remains at 100%.

Program 003: Monday, Wednesday, Friday and Sunday at 19:00, relay A in ON position and dimmer remains at 100%.

Program 004: Monday, Wednesday, Friday and Sunday at 19:05, relay A in OFF position and dimmer goes from 0% to 100% in 60secs

• Daily/weekly time programmer Minimalist ▾

Import file:  Examinar...

Mo	Tu	We	Th	Fr	Sa	Su	Hour	Relay - ON/OFF	Dimmer: Start - Stop - Speed
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	19 : 05	RA ▾ - OFF ▾	100 % - 0 % - 60.00 s/%

Add program

Programs:

001:	Mo	Tu	We	Th	Fr	Sa	Su	11:05	RA	ON	000 %	100 %	60.00 s/%
002:	Mo	Tu	We	Th	Fr	Sa	Su	11:10	RA	OFF	100 %	100 %	0.000 s/%
003:	Mo	We	Fr	Su				19:00	RA	ON	100 %	100 %	0.000 s/%
004:	Mo	We	Fr	Su				19:05	RA	OFF	100 %	000 %	60.00 s/%

Remove program
Change program
Export file

PIN  Save changes



**Configuration management:** At any time whatsoever, the lines in each program can be deleted or modified and program files exported using the lower buttons.

## Functioning of daily/monthly/yearly time programmer:

### How does it work?

En el daily/monthly/yearly time programmer es donde van las acciones más específicas. Este programador permite el encendido y el apagado del relay A y el control de un dimmer según el día, el mes y el año en una hora específica.

Relay A has two positions, ON and OFF. The dimmer has "Start" (initial value in %), "Stop" (final value in %) and "Speed" (increase - decrease in s/%). In each program, the dimmer will initiate the process with the "Start" value and will transition to "Stop" at "Speed". Relay A can be omitted by indicating "None" in the relay selector.



**Import/export:** If a program has already been exported and one wishes to import it, one must first import a configuration file by pressing "Select file" and selecting one. Thus, one can easily program diverse units or, simply make backup copies.



**Programming:** Programming is simple. For example, in the hottest months (June, July and August), the irrigation system starts up every day at 15:00 and lasts 5 minutes. Then, should September be forecast as hot, it can be added. It is important to ensure that relay is set back to OFF to avoid the irrigation being left on throughout the whole period.

• Daily/monthly/yearly time programmer Minimalist ▾

Import file:  Examinar...

Day	Month	Year	Hour	Relay - ON/OFF	Dimmer: Start - Stop - Speed
All ▾	All ▾	All ▾	00 : 00	None ▾ - ON ▾	0 % - 100 % - 0.100 s/%

Add program

Programs:

```

0001: A1/06/A1 15:00 RA ON 000 % 000 % 0.000 s/%
0002: A1/06/A1 15:05 RA OFF 000 % 000 % 0.000 s/%
0003: A1/07/A1 15:00 RA ON 000 % 000 % 0.000 s/%
0004: A1/07/A1 15:05 RA OFF 000 % 000 % 0.000 s/%
0005: A1/08/A1 15:00 RA ON 000 % 000 % 0.000 s/%
0006: A1/08/A1 15:05 RA OFF 000 % 100 % 0.100 s/%
0007: A1/09/17 15:00 RA ON 000 % 100 % 0.100 s/%
0008: A1/09/17 15:05 RA OFF 000 % 100 % 0.100 s/%

```

Remove program
Change program
Export file

PIN  Save changes



**Configuration management:** At any time whatsoever, the lines in each program can be deleted or modified and program files exported using the lower buttons.

## Functioning daily/monthly/yearly time programmer (exceptions/holidays/vacations)

### How does it work?

The daily/monthly/yearly programmer is for those more specific actions such as those to be executed on holidays. One must bear in mind that, in the case of other time programmers, the programmed actions will not be carried out when falling on a holiday. Nevertheless, the user can decide whether the astronomical timer comes into play in vacational periods. This is explained in the corresponding section regarding this programmer.

Relay A has two positions, ON and OFF. The dimmer has "Start" (initial value in %), "Stop" (final value in %) and "Speed" (increase - decrease in s/%). In each program, the dimmer will initiate the process with the "Start" value and will transition to "Stop" at "Speed". Relay A can be omitted by indicating "None" in the relay selector.



**Import/export:** If a program has already been exported and one wishes to import it, one must first import a configuration file by pressing "Select file" and selecting one. Thus, one can easily program diverse units or, simply make backup copies.



**A la hora de programar:** Programación muy sencilla. Por ejemplo, Si durante los días de vacaciones de una empresa se desea hacer un control del relay y el dimmer diferente, lo único que tendrá que hacerse es seleccionar el periodo de vacaciones y configurar los nuevos programs. De este modo, el equipo no ejecutará las acciones programadas en los otros programadores y sólo ejecutará estas acciones hasta que finalice dicho periodo.

**Programming:** For example, if a company wishes to effect a different control of relay and dimmer during the vacation period, the user must select the vacation period and configure the new programs. In this way, the unit will not execute those actions programmed in other programmers and will only execute this action until the end of the period.

• Vacation/holiday time programmer Minimalist ▾

Import file:  Examinar...

Day	Month	Year	Hour	Relay - ON/OFF	Dimmer: Start - Stop - Speed
All ▾	All ▾	All ▾	00 : 00	None ▾ - ON ▾	0 % - 100 % - 0.100 s/%

Add program

Programs:

```
0001: A1/08/A1 00:00 RA OFF 000 % 000 % 0.000 s/%
```

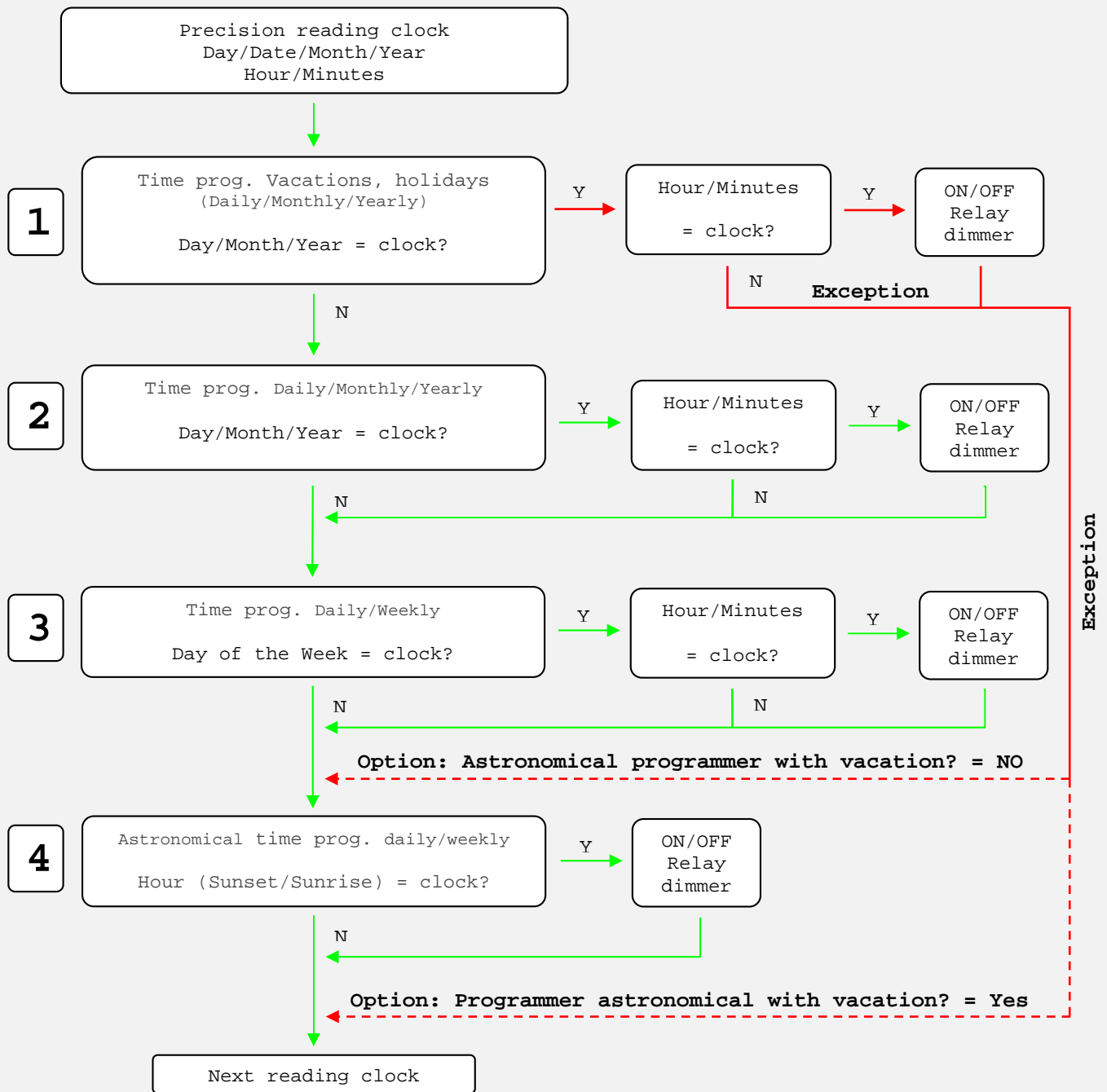
Remove program
Change program
Export file

PIN  Save changes



**Configuration management:** At any time whatsoever, the lines in each program can be deleted or modified and program files exported using the lower buttons.

**Functioning chart**



Option: Astronomical programmer with vacations = NO (the exceptions for vacations/holidays **DO NOT** affect)  
 Option: Astronomical programmer with vacations = YES (the exceptions for vacations/holidays **DO** affect)

**Normal program flow (GREEN)**

Time programmers 2, 3 and 4 are always executed (as shown on the chart), except when there is a vacations program (time programmer 1 – RED flow).

**Program flow when there is an exception for vacations (RED)**

When there is a vacations program (time programmer 1), time programmers 2, 3 and 4 are omitted. This latter (4), however, does have a programmable option whereby it can avoid being omitted.

## CHAPTER 2 – SURFING INTERNET/INTRANET

### Introduction

The WebServer permits all the unit's parameters to be displayed and configured via Internet/Intranet on any PC, laptop, smartphone, tablet or PDA conveniently, easily and clearly.

In order for the data dispatch and command reception of the WebServer to function correctly, a good quality Internet connection or an Internet line connection (optic fibre or similar) is imperative.

**It has three customizable styles for its display on the website.** These styles are memorised in each browser through the use of cookies.

### Safeline

Information Manual control Device configuration  
 Daily/weekly prog. Daily/monthly/yearly prog. Vacations/holiday prog.  
 Astronomical prog. Close session

Consult manual

• Information Safeline

Friday 01/12/17 12:32:49

Name of relay	Status	Nbr. of hours
RA: Luminary	Enabled - ON	1.0 h

Name of dimmer	Actual (Start - Stop - Speed)	Nbr. of hours (≥5%)
Dimmer: Power	100.0 % (0 % - 100 % - 0.100 s/%)	1.1 h

### Minimalist

Information Manual control Device configuration  
 Daily/weekly prog. Daily/monthly/yearly prog. Vacations/holiday prog.  
 Astronomical prog. Close session

Consult manual

• Information Minimalist

Friday 01/12/17 12:31:53

Name of relay	Status	Nbr. of hours
RA: Luminary	Enabled - ON	1.0 h

Name of dimmer	Actual (Start - Stop - Speed)	Nbr. of hours (≥5%)
Dimmer: Power	100.0 % (0 % - 100 % - 0.100 s/%)	1.1 h

### Classic

Information Manual control Device configuration  
 Daily/weekly prog. Daily/monthly/yearly prog. Vacations/holiday prog.  
 Astronomical prog. Close session

Consult manual

• Information Classic

Friday 01/12/17 12:33:35

Name of relay	Status	Nbr. of hours
RA: Luminary	Enabled - ON	1.0 h

Name of dimmer	Actual (Start - Stop - Speed)	Nbr. of hours (≥5%)
Dimmer: Power	100.0 % (0 % - 100 % - 0.100 s/%)	1.1 h

## Welcome page and PIN request / “Close session”

The first page displayed upon accessing the unit is the welcome page where the user’s PIN is requested. The default PIN enabled at the factory is “1, 2, 3, 4”. Once said PIN has been entered, the main page is accessed. Surfing with the WebServer UNIVERSAL+ 7WR 1PHAD is simple and intuitive:

In order to change any value, one must always enter the current PIN in the box next to “Save”

The purpose of the “Close session” button is to impede any unauthorised person from surfing the unit at will. If the button is not pressed and one only closes the browser, the next time the user accesses the content, the access PIN will not be requested and the session can be resumed as from the last page visited. . If the session is not closed, an automatic session closure is generated after one hour.

On pressing “Close session”, the welcome page opens up and the user PIN is requested.

The user PIN represents a high degree of security for the owner since this is the sole means whereby the programmed parameters can be validated. Any changes in programmed values only come into effect once said PIN has been entered.

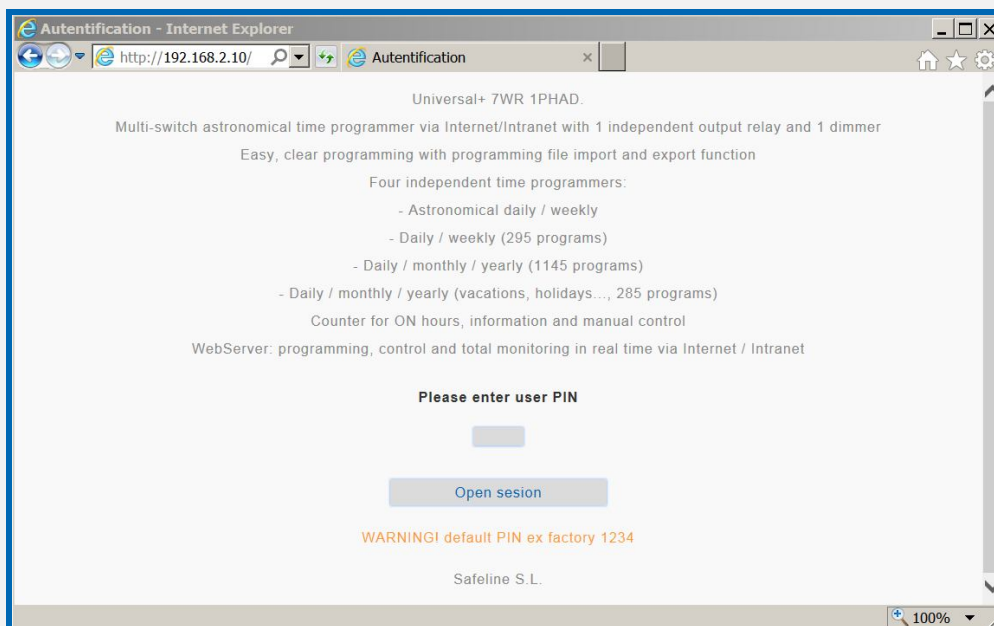
Made up of 4 digits, each one from 0 to 9

- Default PIN enabled at factory: **1,2,3,4**
- The user PIN can be changed if one is in possession of the current one
- The PIN is one and the same for surfing Internet/Intranet

**ATTENCIÓN:** For security reasons, no master code exists. In case of loss, the user must contact the manufacturer to have the unit re-programmed and thoroughly verified. It is recommended that this PIN be noted down and kept in a safe place.

Close session. The WebServer will request the PIN anew the next time the unit is accessed.

The session having been closed, the next time the user attempts to access the content, the access PIN will be requested. For security reasons, an automatic session closure is generated every hour should the session have been quitted without “close session ”having been pressed.





## Surfing

The first page displayed upon accessing the unit is the welcome page where the user's PIN is requested. The default PIN enabled at the factory is "1, 2, 3, 4". Once said PIN has been entered, the main page is accessed. Surfing with the WebServer is simple and intuitive since it is organized with the following 8 main buttons:



### WEB page: Box "information"

Displayed here are the date and time of the internal clock; name, status and number of ON hours of relay A; name, status, programming and ON hours ( $\geq 5\%$ ) of the dimmer. The green background is refreshed every 1 sec.

• Information Minimalist ▾

Friday 01/12/17 12:29:59

Name of relay	Status	Nbr. of hours
RA: Luminary	Enabled - ON	1.0 h

Name of dimmer	Actual (Start - Stop - Speed)	Nbr. of hours ( $\geq 5\%$ )
Dimmer: Power	100.0 % (0 % - 100 % - 0.100 s/%)	1.0 h

### WEB page: Box "Manual control"

Permits the user to switch relay A ON or OFF and also to program all the dimmer's parameters manually. It also permits him to reset the selected hour counter to zero.

• Manual control relay Minimalist ▾

Relay status	Reset counter hours
RA: <input checked="" type="radio"/> ON <input type="radio"/> OFF	RA: <input type="checkbox"/> Reset to zero
PIN <input type="text"/>	<input type="button" value="Save"/>

• Manual control dimmer

Start - Stop - Speed	Reset counter hours
DIMMER: <input type="text" value="10"/> % - <input type="text" value="90"/> % - <input type="text" value="1.000"/> s/%	DIMMER: <input type="checkbox"/> Reset to zero
PIN <input type="text"/>	<input type="button" value="Save"/>

## WEB page: Box “Daily/weekly astronomical time programmer”

Once the page has been loaded, the unit's current saved settings are displayed.

The geographical location is indicated by the latitude, longitude and GMT selectors. If the programming is effected at this location, the coordinates can be obtained automatically. Select the days of the week, enable prog 1's general box, configure status, offset and dimmer, enter user PIN and press “save changes” in order to send and save settings.

• Astronomical daily/weekly time programmer
Minimalist

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Location geography. Manual / Automatic (via internet):

Latitude ( $\pm 90.00000$ d°)	Longitude ( $\pm 180.0000$ d°)	GMT ( $\pm 12$ h)
41.56230 d°	2.4497 d°	1 h

---

Settings:

Mo	Tu	We	Th	Fr	Sa	Su
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Prog.	Status	Offset ( $\pm 240$ min)	Dimmer: Start - Stop - Speed
1 <input checked="" type="checkbox"/>	RA <input type="button" value="↑Sunrise(OFF) - ↓Sunset(ON)"/> <input type="button" value="↓"/>	↑ 0 min ↓ 0 min	↑ 100 % - 0 % - 0.100 s/% ↓ 0 % - 100 % - 0.100 s/%

Programmer astronomical with vacation?:  Yes  No

---

Result for today:

Automatic time change:  Yes  No

Prog.1: Sunrise 07:56 - Sunset 17:21

PIN

[Show / Hide annual full table](#)

NOTE: The internal calculation effected by the unit can differ by  $\pm 1$  or 2 mins from the result shown on the web page.

❄ Winter schedule ☀ Summer schedule ↑ Sunup ↓ Sunrise												
	January	February	March	April	May	June	July	August	September	October	November	December
1	08:17 ↑ 17:31 ↓ ❄	08:03 ↑ 18:06 ↓ ❄	07:26 ↑ 18:40 ↓ ❄	07:34 ↑ 20:15 ↓ ☀	06:48 ↑ 20:48 ↓ ☀	06:19 ↑ 21:18 ↓ ☀	06:20 ↑ 21:28 ↓ ☀	06:44 ↑ 21:08 ↓ ☀	07:16 ↑ 20:24 ↓ ☀	07:46 ↑ 19:33 ↓ ☀	07:22 ↑ 17:46 ↓ ❄	07:57 ↑ 17:21 ↓ ❄
2	08:17 ↑ 17:32 ↓ ❄	08:02 ↑ 18:07 ↓ ❄	07:24 ↑ 18:41 ↓ ❄	07:32 ↑ 20:16 ↓ ☀	06:46 ↑ 20:49 ↓ ☀	06:18 ↑ 21:18 ↓ ☀	06:20 ↑ 21:28 ↓ ☀	06:45 ↑ 21:07 ↓ ☀	07:17 ↑ 20:22 ↓ ☀	07:48 ↑ 19:31 ↓ ☀	07:23 ↑ 17:44 ↓ ❄	07:58 ↑ 17:21 ↓ ❄
3	08:17 ↑ 17:32 ↓ ❄	08:01 ↑ 18:08 ↓ ❄	07:23 ↑ 18:43 ↓ ❄	07:31 ↑ 20:17 ↓ ☀	06:45 ↑ 20:50 ↓ ☀	06:18 ↑ 21:19 ↓ ☀	06:21 ↑ 21:28 ↓ ☀	06:46 ↑ 21:06 ↓ ☀	07:18 ↑ 20:21 ↓ ☀	07:49 ↑ 19:29 ↓ ☀	07:24 ↑ 17:43 ↓ ❄	07:59 ↑ 17:21 ↓ ❄
4	08:17 ↑ 17:33 ↓ ❄	07:60 ↑ 18:09 ↓ ❄	07:21 ↑ 18:44 ↓ ❄	07:29 ↑ 20:18 ↓ ☀	06:44 ↑ 20:51 ↓ ☀	06:17 ↑ 21:20 ↓ ☀	06:21 ↑ 21:28 ↓ ☀	06:47 ↑ 21:05 ↓ ☀	07:19 ↑ 20:19 ↓ ☀	07:50 ↑ 19:28 ↓ ☀	07:25 ↑ 17:42 ↓ ❄	07:60 ↑ 17:20 ↓ ❄
5	08:17 ↑ 17:34 ↓ ❄	07:58 ↑ 18:11 ↓ ❄	07:19 ↑ 18:45 ↓ ❄	07:27 ↑ 20:19 ↓ ☀	06:43 ↑ 20:52 ↓ ☀	06:17 ↑ 21:20 ↓ ☀	06:22 ↑ 21:27 ↓ ☀	06:48 ↑ 21:04 ↓ ☀	07:20 ↑ 20:17 ↓ ☀	07:51 ↑ 19:26 ↓ ☀	07:26 ↑ 17:41 ↓ ❄	08:01 ↑ 17:20 ↓ ❄
6	08:17 ↑ 17:35 ↓ ❄	07:57 ↑ 18:12 ↓ ❄	07:18 ↑ 18:46 ↓ ❄	07:26 ↑ 20:21 ↓ ☀	06:41 ↑ 20:53 ↓ ☀	06:17 ↑ 21:21 ↓ ☀	06:22 ↑ 21:27 ↓ ☀	06:49 ↑ 21:02 ↓ ☀	07:21 ↑ 20:16 ↓ ☀	07:52 ↑ 19:24 ↓ ☀	07:28 ↑ 17:40 ↓ ❄	08:02 ↑ 17:20 ↓ ❄
7	08:17 ↑ 17:36 ↓ ❄	07:56 ↑ 18:13 ↓ ❄	07:16 ↑ 18:47 ↓ ❄	07:24 ↑ 20:22 ↓ ☀	06:40 ↑ 20:54 ↓ ☀	06:17 ↑ 21:22 ↓ ☀	06:23 ↑ 21:27 ↓ ☀	06:50 ↑ 21:01 ↓ ☀	07:22 ↑ 20:14 ↓ ☀	07:53 ↑ 19:23 ↓ ☀	07:29 ↑ 17:38 ↓ ❄	08:03 ↑ 17:20 ↓ ❄
8	08:17 ↑ 17:37 ↓ ❄	07:55 ↑ 18:15 ↓ ❄	07:15 ↑ 18:48 ↓ ❄	07:22 ↑ 20:23 ↓ ☀	06:39 ↑ 20:55 ↓ ☀	06:16 ↑ 21:22 ↓ ☀	06:24 ↑ 21:26 ↓ ☀	06:51 ↑ 20:60 ↓ ☀	07:23 ↑ 20:12 ↓ ☀	07:54 ↑ 19:21 ↓ ☀	07:30 ↑ 17:37 ↓ ❄	08:04 ↑ 17:20 ↓ ❄
9	08:17 ↑ 17:38 ↓ ❄	07:54 ↑ 18:16 ↓ ❄	07:13 ↑ 18:50 ↓ ❄	07:21 ↑ 20:24 ↓ ☀	06:38 ↑ 20:56 ↓ ☀	06:16 ↑ 21:23 ↓ ☀	06:24 ↑ 21:26 ↓ ☀	06:52 ↑ 20:59 ↓ ☀	07:24 ↑ 20:11 ↓ ☀	07:55 ↑ 19:19 ↓ ☀	07:31 ↑ 17:36 ↓ ❄	08:05 ↑ 17:20 ↓ ❄
10	08:16 ↑ 17:39 ↓ ❄	07:53 ↑ 18:17 ↓ ❄	07:11 ↑ 18:51 ↓ ❄	07:19 ↑ 20:25 ↓ ☀	06:37 ↑ 20:57 ↓ ☀	06:16 ↑ 21:23 ↓ ☀	06:25 ↑ 21:26 ↓ ☀	06:53 ↑ 20:57 ↓ ☀	07:25 ↑ 20:09 ↓ ☀	07:56 ↑ 19:18 ↓ ☀	07:32 ↑ 17:35 ↓ ❄	08:06 ↑ 17:20 ↓ ❄
11	08:16 ↑ 17:40 ↓ ❄	07:51 ↑ 18:18 ↓ ❄	07:10 ↑ 18:52 ↓ ❄	07:18 ↑ 20:26 ↓ ☀	06:36 ↑ 20:58 ↓ ☀	06:16 ↑ 21:24 ↓ ☀	06:26 ↑ 21:25 ↓ ☀	06:54 ↑ 20:56 ↓ ☀	07:26 ↑ 20:07 ↓ ☀	07:57 ↑ 19:16 ↓ ☀	07:34 ↑ 17:34 ↓ ❄	08:06 ↑ 17:20 ↓ ❄
12	08:16 ↑ 17:41 ↓ ❄	07:50 ↑ 18:20 ↓ ❄	07:08 ↑ 18:53 ↓ ❄	07:16 ↑ 20:27 ↓ ☀	06:34 ↑ 20:59 ↓ ☀	06:16 ↑ 21:24 ↓ ☀	06:27 ↑ 21:25 ↓ ☀	06:55 ↑ 20:55 ↓ ☀	07:27 ↑ 20:06 ↓ ☀	07:58 ↑ 19:15 ↓ ☀	07:35 ↑ 17:33 ↓ ❄	08:07 ↑ 17:20 ↓ ❄
13	08:16 ↑ 17:43 ↓ ❄	07:49 ↑ 18:21 ↓ ❄	07:06 ↑ 18:54 ↓ ❄	07:14 ↑ 20:28 ↓ ☀	06:33 ↑ 21:00 ↓ ☀	06:16 ↑ 21:25 ↓ ☀	06:27 ↑ 21:24 ↓ ☀	06:56 ↑ 20:53 ↓ ☀	07:28 ↑ 20:04 ↓ ☀	07:59 ↑ 19:13 ↓ ☀	07:36 ↑ 17:32 ↓ ❄	08:08 ↑ 17:20 ↓ ❄

17	08:14 ↑ 17:47 ↓ ☼	07:43 ↑ 18:26 ↓ ☼	06:60 ↑ 18:59 ↓ ☼	07:08 ↑ 20:32 ↓ ☼	06:29 ↑ 21:04 ↓ ☼	06:16 ↑ 21:27 ↓ ☼	06:30 ↑ 21:22 ↓ ☼	07:00 ↑ 20:48 ↓ ☼	07:32 ↑ 19:57 ↓ ☼	08:04 ↑ 19:07 ↓ ☼	07:41 ↑ 17:29 ↓ ☼	08:11 ↑ 17:21 ↓ ☼
18	08:13 ↑ 17:48 ↓ ☼	07:42 ↑ 18:27 ↓ ☼	06:58 ↑ 18:60 ↓ ☼	07:06 ↑ 20:34 ↓ ☼	06:28 ↑ 21:05 ↓ ☼	06:16 ↑ 21:27 ↓ ☼	06:31 ↑ 21:21 ↓ ☼	07:01 ↑ 20:46 ↓ ☼	07:33 ↑ 19:55 ↓ ☼	08:05 ↑ 19:05 ↓ ☼	07:42 ↑ 17:28 ↓ ☼	08:12 ↑ 17:22 ↓ ☼
19	08:13 ↑ 17:49 ↓ ☼	07:41 ↑ 18:28 ↓ ☼	06:56 ↑ 19:01 ↓ ☼	07:05 ↑ 20:35 ↓ ☼	06:28 ↑ 21:06 ↓ ☼	06:16 ↑ 21:27 ↓ ☼	06:32 ↑ 21:20 ↓ ☼	07:02 ↑ 20:45 ↓ ☼	07:34 ↑ 19:53 ↓ ☼	08:06 ↑ 19:04 ↓ ☼	07:43 ↑ 17:27 ↓ ☼	08:12 ↑ 17:22 ↓ ☼
20	08:12 ↑ 17:51 ↓ ☼	07:39 ↑ 18:29 ↓ ☼	06:54 ↑ 19:02 ↓ ☼	07:03 ↑ 20:36 ↓ ☼	06:27 ↑ 21:07 ↓ ☼	06:16 ↑ 21:27 ↓ ☼	06:33 ↑ 21:20 ↓ ☼	07:03 ↑ 20:43 ↓ ☼	07:35 ↑ 19:52 ↓ ☼	08:07 ↑ 19:02 ↓ ☼	07:44 ↑ 17:27 ↓ ☼	08:13 ↑ 17:23 ↓ ☼
21	08:12 ↑ 17:52 ↓ ☼	07:38 ↑ 18:31 ↓ ☼	06:53 ↑ 19:03 ↓ ☼	07:02 ↑ 20:37 ↓ ☼	06:26 ↑ 21:08 ↓ ☼	06:16 ↑ 21:28 ↓ ☼	06:34 ↑ 21:19 ↓ ☼	07:04 ↑ 20:42 ↓ ☼	07:36 ↑ 19:50 ↓ ☼	08:09 ↑ 19:01 ↓ ☼	07:46 ↑ 17:26 ↓ ☼	08:13 ↑ 17:23 ↓ ☼
22	08:11 ↑ 17:53 ↓ ☼	07:36 ↑ 18:32 ↓ ☼	06:51 ↑ 19:04 ↓ ☼	07:00 ↑ 20:38 ↓ ☼	06:25 ↑ 21:09 ↓ ☼	06:16 ↑ 21:28 ↓ ☼	06:35 ↑ 21:18 ↓ ☼	07:06 ↑ 20:40 ↓ ☼	07:37 ↑ 19:48 ↓ ☼	08:10 ↑ 18:59 ↓ ☼	07:47 ↑ 17:25 ↓ ☼	08:14 ↑ 17:24 ↓ ☼
23	08:10 ↑ 17:54 ↓ ☼	07:35 ↑ 18:33 ↓ ☼	06:49 ↑ 19:05 ↓ ☼	06:59 ↑ 20:39 ↓ ☼	06:24 ↑ 21:10 ↓ ☼	06:17 ↑ 21:28 ↓ ☼	06:36 ↑ 21:17 ↓ ☼	07:07 ↑ 20:39 ↓ ☼	07:38 ↑ 19:47 ↓ ☼	08:11 ↑ 18:58 ↓ ☼	07:48 ↑ 17:25 ↓ ☼	08:14 ↑ 17:24 ↓ ☼
24	08:10 ↑ 17:56 ↓ ☼	07:33 ↑ 18:34 ↓ ☼	06:48 ↑ 19:06 ↓ ☼	06:57 ↑ 20:40 ↓ ☼	06:24 ↑ 21:11 ↓ ☼	06:17 ↑ 21:28 ↓ ☼	06:37 ↑ 21:16 ↓ ☼	07:08 ↑ 20:37 ↓ ☼	07:39 ↑ 19:45 ↓ ☼	08:12 ↑ 18:56 ↓ ☼	07:49 ↑ 17:24 ↓ ☼	08:15 ↑ 17:25 ↓ ☼
25	08:09 ↑ 17:57 ↓ ☼	07:32 ↑ 18:36 ↓ ☼	06:46 ↑ 19:07 ↓ ☼	06:56 ↑ 20:41 ↓ ☼	06:23 ↑ 21:12 ↓ ☼	06:17 ↑ 21:28 ↓ ☼	06:38 ↑ 21:15 ↓ ☼	07:09 ↑ 20:35 ↓ ☼	07:40 ↑ 19:43 ↓ ☼	08:13 ↑ 18:55 ↓ ☼	07:50 ↑ 17:24 ↓ ☼	08:15 ↑ 17:25 ↓ ☼
26	08:08 ↑ 17:58 ↓ ☼	07:30 ↑ 18:37 ↓ ☼	07:44 ↑ 20:09 ↓ ☼	06:55 ↑ 20:42 ↓ ☼	06:22 ↑ 21:13 ↓ ☼	06:17 ↑ 21:28 ↓ ☼	06:38 ↑ 21:14 ↓ ☼	07:10 ↑ 20:34 ↓ ☼	07:41 ↑ 19:41 ↓ ☼	08:14 ↑ 18:53 ↓ ☼	07:51 ↑ 17:23 ↓ ☼	08:15 ↑ 17:26 ↓ ☼
27	08:07 ↑ 17:59 ↓ ☼	07:29 ↑ 18:38 ↓ ☼	07:43 ↑ 20:10 ↓ ☼	06:53 ↑ 20:43 ↓ ☼	06:22 ↑ 21:13 ↓ ☼	06:18 ↑ 21:28 ↓ ☼	06:39 ↑ 21:13 ↓ ☼	07:11 ↑ 20:32 ↓ ☼	07:42 ↑ 19:40 ↓ ☼	08:16 ↑ 18:52 ↓ ☼	07:53 ↑ 17:23 ↓ ☼	08:16 ↑ 17:27 ↓ ☼
28	08:06 ↑ 18:01 ↓ ☼	07:27 ↑ 18:39 ↓ ☼	07:41 ↑ 20:11 ↓ ☼	06:52 ↑ 20:44 ↓ ☼	06:21 ↑ 21:14 ↓ ☼	06:18 ↑ 21:28 ↓ ☼	06:40 ↑ 21:12 ↓ ☼	07:12 ↑ 20:31 ↓ ☼	07:43 ↑ 19:38 ↓ ☼	08:17 ↑ 18:51 ↓ ☼	07:54 ↑ 17:22 ↓ ☼	08:16 ↑ 17:27 ↓ ☼
29	08:05 ↑ 18:02 ↓ ☼		07:39 ↑ 20:12 ↓ ☼	06:50 ↑ 20:45 ↓ ☼	06:20 ↑ 21:15 ↓ ☼	06:19 ↑ 21:28 ↓ ☼	06:41 ↑ 21:11 ↓ ☼	07:13 ↑ 20:29 ↓ ☼	07:44 ↑ 19:36 ↓ ☼	07:18 ↑ 17:49 ↓ ☼	07:55 ↑ 17:22 ↓ ☼	08:16 ↑ 17:28 ↓ ☼
30	08:05 ↑ 18:03 ↓ ☼		07:37 ↑ 20:13 ↓ ☼	06:49 ↑ 20:47 ↓ ☼	06:20 ↑ 21:16 ↓ ☼	06:19 ↑ 21:28 ↓ ☼	06:42 ↑ 21:10 ↓ ☼	07:14 ↑ 20:27 ↓ ☼	07:45 ↑ 19:34 ↓ ☼	07:19 ↑ 17:48 ↓ ☼	07:56 ↑ 17:21 ↓ ☼	08:17 ↑ 17:29 ↓ ☼
31	08:04 ↑ 18:04 ↓ ☼		07:36 ↑ 20:14 ↓ ☼		06:19 ↑ 21:17 ↓ ☼		06:43 ↑ 21:09 ↓ ☼	07:15 ↑ 20:26 ↓ ☼		07:20 ↑ 17:47 ↓ ☼		08:17 ↑ 17:30 ↓ ☼

☼ Winter schedule ☼ Summer schedule ↑ Sunup ↓ Sunrise

### WEB page: Box “Daily/weekly time programmer”

Once the page has been loaded, the “Programs” listing shows current programming saved in the unit.

By means of the selectors for weekday, hour, relay, ON/OFF and Dimmer: Start - Stop - Speed, the desired program can be constructed. By pressing “Add program”, “Delete program” and “Modify program”, the user interacts with said “Programs” listing. Enter user PIN and press “Save changes” to send and save the program listing in the unit. The “export program” button is used to save the programming on file. This .txt file can be imported to the same unit or exported to others..

• Daily/weekly time programmer Minimalist ▾

Import file:  Examinar...

Mo	Tu	We	Th	Fr	Sa	Su	Hour	Relay - ON/OFF	Dimmer: Start - Stop - Speed
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	19 : 05	RA ▾ - OFF ▾	100 % - 0 % - 60.00 s/%

Programs:

```

001: Mo Tu We Th Fr Sa Su 11:05 RA ON 000 % 100 % 60.00 s/%
002: Mo Tu We Th Fr Sa Su 11:10 RA OFF 100 % 100 % 0.000 s/%
003: Mo We Fr Su 19:00 RA ON 100 % 100 % 0.000 s/%
004: Mo We Fr Su 19:05 RA OFF 100 % 000 % 60.00 s/%

```

PIN

### WEB page: Box “Daily/monthly/yearly time programmer”

Once the page has been loaded, the “Programs” listing shows current programming saved in the unit.

By means of the selectors for day, month, year, hour, relay, ON/OFF and Dimmer: Start - Stop – Speed, the desired program can be constructed. By pressing “Add program”, “Delete program” and “Modify program”, the user interacts with said “Programs” listing. Enter user PIN and press “Save changes” to send and save the program listing in the unit. The “export program” button is used to save the programming on file. This .txt file can be imported to the same unit or exported to others.

• Daily/monthly/yearly time programmer Minimalist ▾

Import file:  Examinar...

Day	Month	Year	Hour	Relay - ON/OFF	Dimmer: Start - Stop - Speed
All ▾	All ▾	All ▾	00 : 00	None ▾ - ON ▾	0 % - 100 % - 0.100 s/%

Programs:

```

0001: A1/06/A1 15:00 RA ON 000 % 000 % 0.000 s/%
0002: A1/06/A1 15:05 RA OFF 000 % 000 % 0.000 s/%
0003: A1/07/A1 15:00 RA ON 000 % 000 % 0.000 s/%
0004: A1/07/A1 15:05 RA OFF 000 % 000 % 0.000 s/%
0005: A1/08/A1 15:00 RA ON 000 % 000 % 0.000 s/%
0006: A1/08/A1 15:05 RA OFF 000 % 100 % 0.100 s/%
0007: A1/09/17 15:00 RA ON 000 % 100 % 0.100 s/%
0008: A1/09/17 15:05 RA OFF 000 % 100 % 0.100 s/%

```

PIN

## WEB page: Box “Exceptions/vacations/holidays time programmer”

Once the page has been loaded, the “Programs” listing shows current programming saved in the unit.

By means of the selectors for day, month, year, hour, relay and ON/OFF and Dimmer: Start - Stop - Speed, the desired program can be constructed. By pressing “Add program”, “Delete program” and “Modify program”, the user interacts with said “Programs” listing. Enter user PIN and press “Save changes” to send and save the program listing in the unit. The “export program” button is used to save the programming on file. This .txt file can be imported to the same unit or exported to others..

• Vacation/holiday time programmer
Minimalist ▾

Import file:

Day	Month	Year	Hour	Relay - ON/OFF	Dimmer: Start - Stop - Speed
All ▾	All ▾	All ▾	00 : 00	None ▾ - ON ▾	0 % - 100 % - 100 ms/%

**Programs:**

0001:	25/12/A1	19:00	RA	ON	000 %	100 %	00100 ms/%
0002:	25/12/A1	23:00	RA	OFF	100 %	000 %	00100 ms/%

PIN

## WEB page: Box “Unit configuration”

General programming of the unit. Configuration of language, unit name, relay name, dimmer name, TCP/IP, and user PIN. Manual or automatic programming of internal clock, synchronizing the date and time with those of the user's PC, laptop, etc.). Automatic Winter/Summer switchover time can be enabled or disabled manually.

Enter current user PIN and press “Save” to send and save changes to unit.

• Device configuration
Minimalist

---

Language

Spanish  English

---

Name of this unit

Num: 9-11

---

Name of relay

RA: Luminaria 9-11

---

Name of dimmer

DIMMER: Luminaria 9-11

---

TCP/IP configuration

IP	192.168.2.10
Subnet mask	255.255.255.0
Gateway	192.168.2.1
Port	80
MAC	00.50.C2.62.30.80

---

Change PIN

New PIN	<input type="text"/>
Repeat new PIN	<input type="text"/>

---

Clock configuration

Date: 20 / 11 / 17	Day: Monday <input type="button" value="v"/>	Hour: 17:10
--------------------	--	-------------

Automatic time change:  Yes  No

## CHAPTER 3 – USER’S GUIDE (front panel and LCD screen)

### Functions of the keys

The contextual keys permit the user to surf the menu and follow on-screen, cursor and flashing figure indications. These intuitive, user-friendly keys have different logical values depending on the context.

#### MENU/ESC

Outside the menu:

- enters menu mode

Within the menu:

- returns to previous level or quits menu mode
- in process of modification of values (flashing), quits without modifying data

#### UP

Outside the menu:

-

Within the menu:

- goes to next level
- increases a flashing value

#### DOWN

Outside the menu:

-

Within the menu:

- Goes down one level
- decreases a flashing value

#### RESET/OK

Outside the menu

- Finalizes the current delay manually

Within the menu:

- enters submenus and confirms changes

**General reset: Hold RESET/OK key down for more than 10 seconds.**

**Very important - The general reset restores the TCP/IP parameters to default factory values  
The user PIN is not reset.**

Default factory configuration:

IP	192.168.2.10
Gateway	192.168.2.1
Mask	255.255.255.0
Port	80

### User PIN

The user PIN represents a high degree of security for the owner since this is the sole means whereby the programmed parameters can be validated. Any changes in programmed values only come into effect once said PIN has been entered.

Made up of 4 digits, each one from 0 to 9

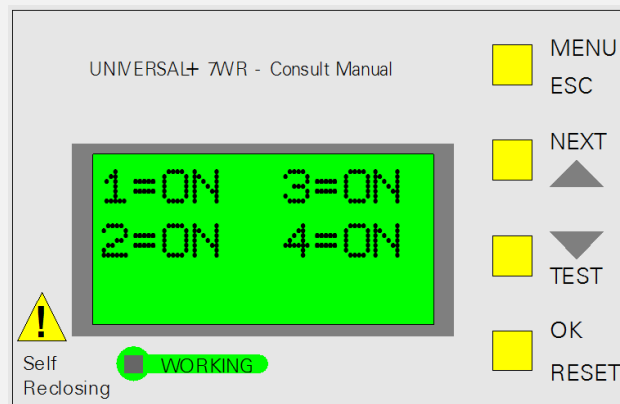
- Default PIN enabled at factory: **1,2,3,4**
- The user PIN can be changed if one is in possession of the current one
- The PIN is one and the same for surfing Internet/Intranet.

**ATTENTION: For security reasons, no master code exists. In case of loss, the user must contact the manufacturer to have the unit reprogrammed and thoroughly verified. It is recommended that this PIN be noted down and kept in a safe place.**



## LCD screen, 12x3 characters

1. Upon energy being supplied to the unit, the manufacturer's name comes up on the screen
2. The start-up sequence begins immediately with its informative messages.
3. Finally displayed are the actual statuses of the output relays RA, RB, RC and RD in ON or OFF.



- 1 = ON corresponds to output relay RA
- 2 = ON corresponds to output relay RB (Relay not installed)
- 3 = ON corresponds to output relay RC (Relay not installed)
- 4 = ON corresponds to output relay RD (Relay not installed)

## LCD screen menu

To enter the menu, click "MENU". Once inside the menu, the user can select a submenu by moving the main cursor up or down. To enter this submenu, press "OK". The "ESC" key permits the user to quit the submenu or menu. In order to confirm the modification of a flashing value, press "OK".

### NOTE:

To save all changes in memory, press "ESC" until all submenus and the menu have been quitted. When "ESC" is pressed this last time, the unit asks whether one wishes to save the changes and requests the PIN. If the current PIN is not entered, the changes will not be saved. By defect, certain relevant menus, request the PIN immediately.

### NOTE:

If more than 3 minutes elapse without any key having been pressed, the auto-quit from menu is activated. This means that the unit automatically quits the menu mode and returns to the main screen, displaying the statuses of the output relays in ON or OFF.

The following submenus are found in the menu:

- Manual control
- TCP/IP configuration
- Language
- Changer PIN
- Beep
- Screen backlighting
- Version.

## Manual control of output relays

This submenu permits the user to act on the status( "ON" or "OFF") of output relays RA, RB, RC and RD

All sectors in "OFF": (ex factory, by default)

→	<input type="checkbox"/> Relay A	<input checked="" type="checkbox"/> ON	<input type="checkbox"/> OFF	
	<input type="checkbox"/> Relay B	<input checked="" type="checkbox"/> ON	<input type="checkbox"/> OFF	(Relay not installed)
	<input type="checkbox"/> Relay C	<input checked="" type="checkbox"/> ON	<input type="checkbox"/> OFF	(Relay not installed)
	<input type="checkbox"/> Relay D	<input checked="" type="checkbox"/> ON	<input type="checkbox"/> OFF	(Relay not installed)

## TCP/IP configuration

This submenu permits the user to see the unit's TCP/IP configuration, see the Lan LED, configure the IP address, the port and the gateway.

When "OK" is pressed, the following submenus are displayed:

- Information TCP/IP
- LED Lan
- Default configuration ex-factory

When "OK" is pressed in "TCP/IP information ", the following information is displayed (the displayed parameters are default, ex-factory)

- Port = 80 (pressing "OK" in this parameter, its value can be modified)
- IP = 192.168.2.10 (pressing "OK" in this parameter, its value can be modified)
- Gateway = 192.168.2.1 (pressing "OK" in this parameter, its value can be modified)
- Mask = 255.255.255.000
- MAC = xx.xx.xx.xx.xx.xx

When "OK" is pressed in "LED Lan", "LED = Lan" is displayed on-screen. The green LED on the front panel acts as LED Lan. Press "ESC" to quit..

Press "OK" in "Default configuration" if you wish to restore the TCP/IP parameters to ex-factory values..

## Language

This submenu permits the user to change from Spanish to English or vice versa.

When "OK" is pressed in "Language", the following configurable option is displayed:

- Español default, ex-factory
- Inglés

## Changing user PIN

The user PIN represents a high degree of security for the owner since this is the sole means whereby the programmed parameters can be validated. Any changes in programmed values only come into effect once said PIN has been entered.

Made up of 4 digits, each one from 0 to 9

- Default PIN enabled at factory: **1,2,3,4**
- The user PIN can be changed if one is in possession of the current one
- The PIN is one and the same for surfing Internet

NOTE: The 0,0,0,0 PIN is a special PIN which totally cancels request for same. The unit will not request it in any change in programming. The user can change any value either via the front panel or Internet (on condition that the latter is not in read-only mode). This PIN can be useful as a temporary measure during a training process or an overhaul or revision of the unit. However, its use is not recommended on a permanent basis in an installation due to problems which could be caused by unauthorised personnel.

**ATTENTION: For security reasons, no master PIN exists. In case of loss, the user must contact the manufacturer to have the unit re-programmed and thoroughly verified. It is recommended that this PIN be noted down and kept in a safe place.**

## Acoustic warnings (beep)

This submenu permits the acoustic warnings to be enabled/disabled.

- Enabled                      default, ex-factory  
 Disabled

## Screen backlighting

This submenu permits the screen illumination mode to be selected. The default ex-factory mode is the timed one. When 30 seconds has elapsed after any key having been pressed, the screen light goes off. As long as keys are being pressed, the light remains on. The permanent mode keeps the light on all the time.

- Timed                      default, ex-factory  
 Permanent

## Version

This submenu permits the user to see the unit's software model and version..

Warning: A change of the software version means a variation in the unit's characteristics. These should be consulted in the manual for the specific version.

## CHAPTER 4 – TECHNICAL CHARACTERISTICS

Technical characteristics UNIVERSAL+ TWR 1PHAD 6A 230VU	
Input voltage power 230V AC (POWER L-N)	Power: Universal AC and DC: (85V – 265V AC 47-440HZ) and (130V – 370V DC)
Power consumption 230V AC 50Hz (POWER L-N)	2,2W (power 85V to 265V AC RMS 50Hz alternating sinusoidal)
Output relay RA	6A Max AC1 (250V AC Max) Attention: AC1 = resistive load
Output dimmer 1.	0% - 100% (0V – 10V) VDC
Output impedance dimmer 1	250 OHM
Output resolution dimmer 1 (increase decrease)	0,1% (0,001V)
Start	Initial value of dimmer (%)
Stop	Final value of dimmer (%)
Speed	Increase – decrease speed (s/%)
Programming "Start/Stop"	0% - (0V) at 100% - (10V) in 1% steps
Programming "Speed"	0.000 s/% - 999.9 s/%. (4 digits)
Maximum time	0% or 100% - 0% with 999.9 s/% = 27.7 hours (resolution 0,001 s/%)
Minimum time	0%-100% or 100%-0% with 0.000 s/% = instantaneous (resolution 0,001 s/%)
12x3-character LCD screen	5X7 matrix
Green "Working" LED	Working... Blinks every 1 sec.
Dimensions UNIVERSAL+ TWR 1PHAD	72mm (4 modules) height: 81mms 35mm DIN rail
Weight UNIVERSAL+ TWR 1PHAD	375 grs.
Configurable languages	Spanish and English
In conformity with standards	UNE-EN 6101-1:2011 (IEC 61010-1:2011) UNE 20-600-77(CEI-278)
Working temperature (power 85V to 265V AC RMS 50Hz alternating sinusoidal)	0° to +45° C. Standard version -10° to +55° C. Industrial version, models with "TI" suffix -25° to +70° C. Extended industrial version, models with "TE" suffix
Screen with programmed backlighting	Timed or permanent
WebServer	Version: HTML 4.01 transitional IPV4 Connection: RJ45 8-pin 10 BASE-T TCP/IP. HTTP communication protocol
Four independent time programmers	- Daily/weekly astronomical - Daily/weekly (512 programs) - Daily/monthly/yearly (2048 programs) - Daily/monthly/yearly (vacations, holidays..., 512 programs)
RTC circuit (clock)	Time accuracy: $\pm 20$ ppm @ 25°C. Manufacturer MICRO CRYSTAL SWITZERLAND
Guarantee	3 years

### Description of front panel

#### Version with display

- 1 – Display: 12 characters in three alpha-numerical lines, 5x7 dot-matrix
- 2 – Green LED indicator "WORKING", flashing (1 Hz)
- 3 – Square yellow keys whose meaning depends on the context:
  - MENU - ESC
  - NEXT (up)
  - TEST (down)
  - OK – RESET – (General reset if maintained pressed more than 10 seconds)

## Function: Program recovery in the event of a power cut:

When the unit's power is cut off, the processes do not run due to lack of energy. The unit memorises the current status of the relays and the date power was cut off.

After a period of being deprived of power (up to 31 days), once power is restored, the unit can recover the processes of the different time programmers and place the status of the relays in the current corresponding time taking into account the most recent actions of up to 31 days previously.

Those relays which are not affected by the programs will remain as they were prior to the power cut.

This recovery function enables the "Working" led permanently during a period of time which is proportional to the number of days to be recovered (from 1 sec to 5mins). This function can be deleted by pressing any key

If the time is superior to 31 days or the unit detects that the clock has become de-programmed due to failure of the internal battery, this recovery does not take place, the relay statuses are reset to OFF and programs continue as from the current date.

## Description of connection terminals UNIVERSAL+ 7WR 1PHAD

⤴ L POWER 230V	PHASE POWER (LINE) 230V AC 50Hz
⤴ N POWER 230V	NEUTRAL POWER
⤴ UNIDENTIFIED TERMINAL	DO NOT CONNECT
⤴ 9 RELES OUT	DO NOT CONNECT
⤴ 8 RELES OUT	DO NOT CONNECT
⤴ 7 RELES OUT	DO NOT CONNECT
⤴ 6 RELES OUT	DO NOT CONNECT
⤴ 5 RELES OUT	DO NOT CONNECT
⤴ 4 RELES OUT	DO NOT CONNECT
⤴ 3 RELES OUT	RA OUTPUT RELAY A (6A MAX AC1) COMMON CONTACT
⤴ 2 RELES OUT	RA OUTPUT RELAY A (6A MAX AC1) N/O CONTACT
⤴ 1 RELES OUT	RA OUTPUT RELAY A (6A MAX AC1) N/C CONTACT
⤴ 1 AUXILIARY IN-OUT	DO NOT CONNECT
⤴ 2 AUXILIARY IN-OUT	DO NOT CONNECT
⤴ 3 AUXILIARY IN-OUT	DO NOT CONNECT
⤴ 4 AUXILIARY IN-OUT	DO NOT CONNECT
⤴ 5 AUXILIARY IN-OUT	DO NOT CONNECT
⤴ E AUXILIARY IN-OUT	ANALOGUE OUTPUT1 DIMMER1 (OUTPUT VOLTAGE 0V - 10V)
⤴ F AUXILIARY IN-OUT	DO NOT CONNECT
⤴ A AUXILIARY IN-OUT	DO NOT CONNECT
⤴ B AUXILIARY IN-OUT	DO NOT CONNECT
⤴ C AUXILIARY IN-OUT	DO NOT CONNECT
⤴ D AUXILIARY IN-OUT	DO NOT CONNECT
⤴ 6 AUXILIARY IN-OUT	0V COMMON ANALOGUE OUTPUT1 DIMMER1
⤴ ETHERNET	ETHERNET RJ45 CONNECTION

## CHAPTER 5 – GUÍA DEL USUARIO/INSTALADOR

### Precauciones/advertencias para el usuario/instalador

- Despite this unit's being of maximum safety, both from a design and features standpoint, the utmost care must always be taken when using it. It must not be used until its characteristics and mode of operation have been fully understood.
- Particular attention should be paid to the fact that the unit automatically connects/disconnects the output relay RA, which could culminate in injury to inattentive operators or users. In order to avoid this:
  - ▲ Disconnect all conductors upstream (by means of switches, disconnectors or other such).
- The installation should be equipped with elements of protection against over-intensity (suitable fuses, circuit-breakers) and adequate differentials.
- The wiring of the installation and the installation itself must be foreseen so as to support the maximum intensity of the protection elements.
- Do not apply current nor use the unit until all its connections have been connected up and it has been correctly installed in a standard enclosure. Once current has been supplied to the unit, its connections must not be disconnected/connected.
- Do not connect the unit up to voltages–frequencies other than those indicated in the section regarding the input power voltage (consult technical characteristics).
- Do not exceed the maximum intensity in the output contacts of relay A.
- In the event of electrostatic discharges or electromagnetic emissions, it may well happen that the LCD screen goes blank (without control) without this affecting the functioning of the unit itself. In order to reset the LCD screen, press the MENU key. Nevertheless, the unit resets the LCD cyclically every 15 minutes.
- Do not expose to liquids or humidity.
- Do not drop, knock or expose to vibrations..
- Do not expose to sources of heat
- Do not expose to environmental temperatures, depending on version, below 0°, -25° C. or over 40°, 50°, 70° C.
- Do not expose to electromagnetic sources or emissions (electric motors and transformers, electro-magnets, radio emitters, etc.).
- Under no circumstance whatsoever must the unit be opened and the interior manipulated. The safety seals must remain intact. Should they be broken, the correct functioning of the unit could be jeopardised.
- In the event of any of the above occurring, the authorised technical service must be contacted immediately in order for the unit to be checked.
- The unit must be completely disconnected from the mains before cleaning with a soft, dry cloth or brush
- For security reasons, change the ex-factory PIN for a personalised one and *note it down in a safe place.*

### ATTENTION - MOST IMPORTANT!

This unit (UNIVERSAL+ 7WR 1PHAD module and the external wiring) sector relay-contactors must be installed in a closed, standard enclosure, the only part within access of the user being the module's display and command panel.

## Wiring. Precautions/warnings for the user/installer

All the connection terminals must be handled and connected with the unit totally disconnected from the AC supply and no interconnection can be effected with the unit live.

It is of the utmost importance that **the correct polarity is ensured upon connection of the Sureline terminals.**

The main risk of the unit not functioning correctly could be originated principally by a an incorrect wiring up of the connection terminals. It is, therefore, of the utmost importance **that this wiring be carried out correctly** in accordance with the following protocol:

- ⤴ An homologated "male pin" is to be incorporated in the naked core of the stripped pliable conductor. These terminals are placed in the corresponding grooves as far in as they will go.
- ⤴ Ensure that the conductor lead is correctly fixed with the pertinent tightening torque, i.e. there must be no displacement of the terminal nor any damage to the screws on head, thread, fillet or washer, any of which would be to the subsequent detriment of the assemblies and screw connections.

## Transport and handling

This being a highly sophisticated electronic unit, it must be transported and handled with care as per the precautions stipulated in the foregoing section "PRECAUTIONS"

## Installation

The installation must be carried out by responsible, competent and qualified technical personnel once the present manual has been fully understood.

The location of the unit must meet the requirements and respect the precautions stipulated in the section "PRECAUTIONS",

The unit must be installed in a standard single-phase installation, active phase and neutral having a difference of potential of 230 V AC and also a protection conductor of operative earth. Moreover, the installation must have, at its main switch panel, appropriate protections against over-intensities and earth faults.

## Wiring

The unit is fitted with top quality connection terminals. Each terminal has notches to enable easier fixing of the wires and prevent accidental removal. Likewise, the clamping screws have a self-fixing system which avoids their falling out should they work loose.

Moreover, the serigraphy identifies the corresponding counter-positioned terminals on the fanning strip. The graphic indications are backed up by intuitive identifying colours.

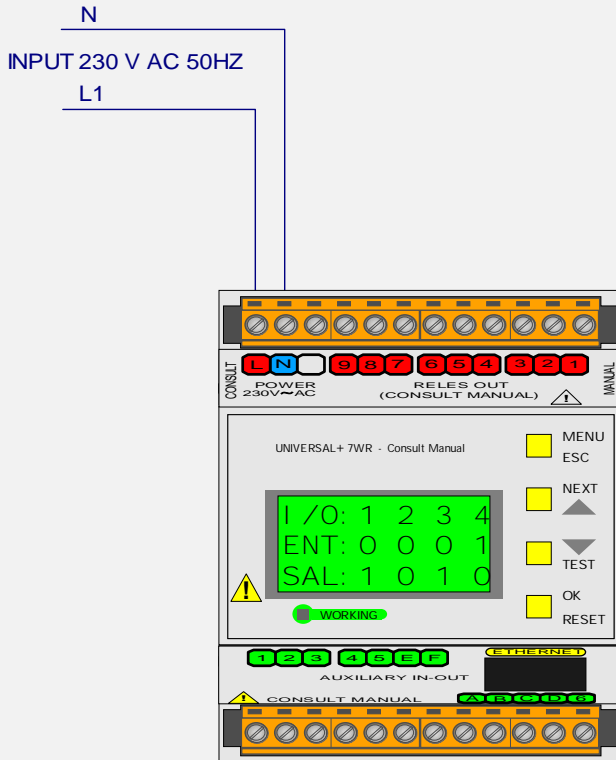
Connect the terminals as indicated for the typical or chosen configuration. Please, refer to "Wiring diagrams".

It is imperative that the wiring of the terminals and the tightening of the screws in the fanning strip be effected correctly.

"Wiring diagrams" should be consulted. Should any doubt arise, the manufacturer or authorised distributor should be consulted.

Wiring diagrams

Description of connection terminals UNIVERSAL+ 7WR 1PHAD



TERMINAL Nº	TERMINAL RELES OUT RA OUTPUT RELAY A (6A MAX AC1)
1	CONTACTO N/C RELE A
2	CONTACTO N/O RELE A
3	CONTACTO COMUN RELE A



TERMINAL Nº	TERMINAL RELES OUT
4	DO NOT CONNECT
5	DO NOT CONNECT
6	DO NOT CONNECT
7	DO NOT CONNECT
8	DO NOT CONNECT
9	DO NOT CONNECT

CONEXION ETHERNET RJ45



TERMINAL Nº	BORNAS POWER 230V AC
	UNIDENTIFIED TERMINAL DO NOT CONNECT

ANALOGUE OUTPUT1 DIMMER1  
OUTPUT VOLTAGE 0V - 10V (0% -100%)

BORNA Nº	TERMINAL AUXILIARY IN-OUT
6	0V COMMON ANALOGUE OUTPUT1 DIMMER1
E	ANALOGUE OUTPUT1 DIMMER1 (OUTPUT VOLTAGE 0V - 10V)

BORNA Nº	TERMINAL AUXILIARY IN-OUT
1	DO NOT CONNECT
2	DO NOT CONNECT
3	DO NOT CONNECT
4	DO NOT CONNECT
5	DO NOT CONNECT
F	DO NOT CONNECT
A	DO NOT CONNECT
B	DO NOT CONNECT
C	DO NOT CONNECT
D	DO NOT CONNECT



CONSULT MANUAL



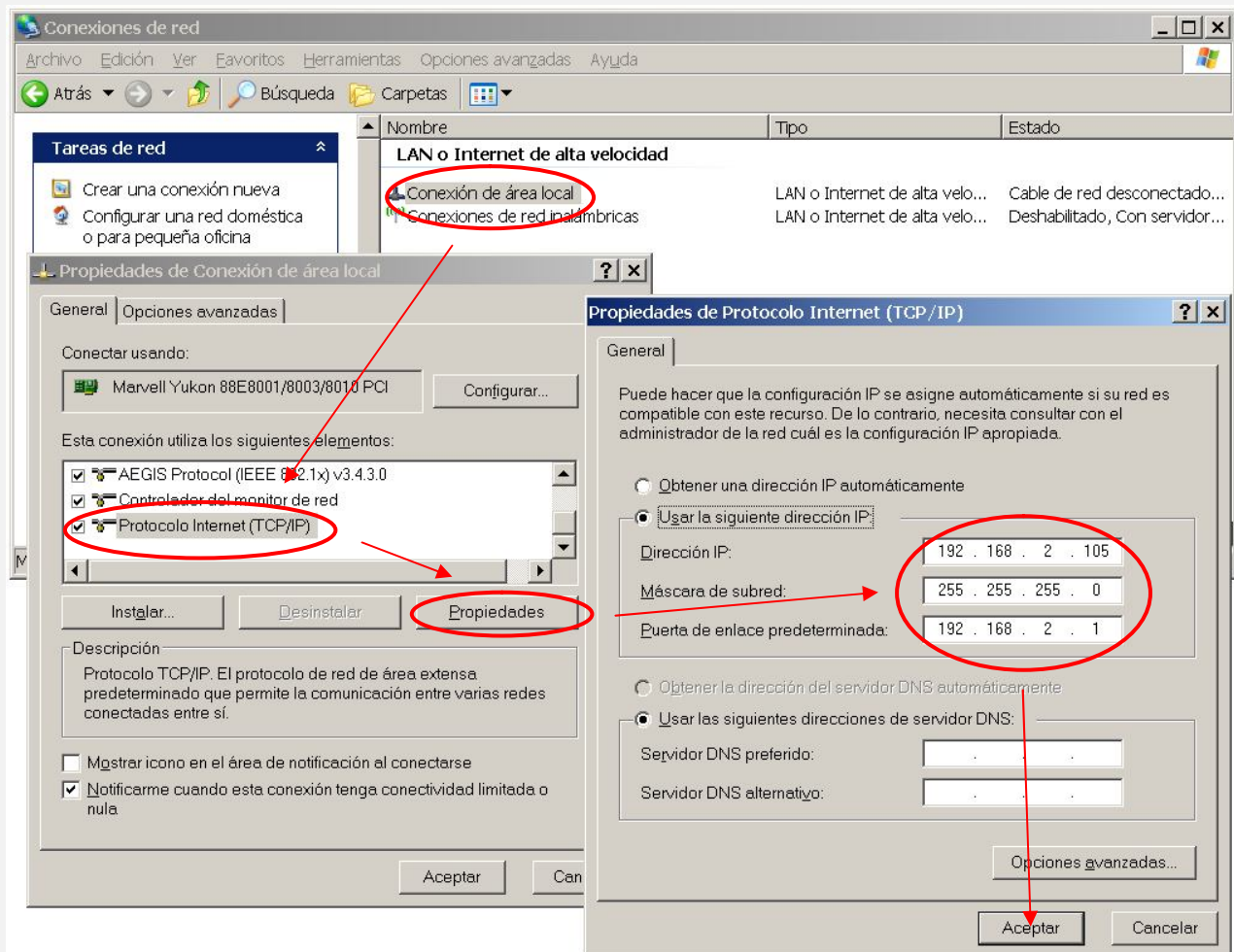
## CHAPTER 6 – INTERNET/INTRANET CONFIGURATION

### Point to point connection configuration

This section explains how to adjust the PC's TCP/IP parameters manually so that they coincide with those of the universal unit. An RJ45 cable must be connected from the PC to the unit. In very old PC's, an RJ45 crossover cable is used.

1. Connect the unit to the PC using an RJ45 Ethernet cable
2. Go to "Control panel" >> "Network connections" or "Network central and shared resources"
3. Disable "Wireless network connections" and enable "Local area connection" (should it be necessary)
4. Click on "Local area connection" to open up the properties
5. Double click on "Internet protocol (TCP/IP)"
6. Select "Use the following IP address:"
7. Fill in the boxes as shown below. Accept.

#### Windows XP:

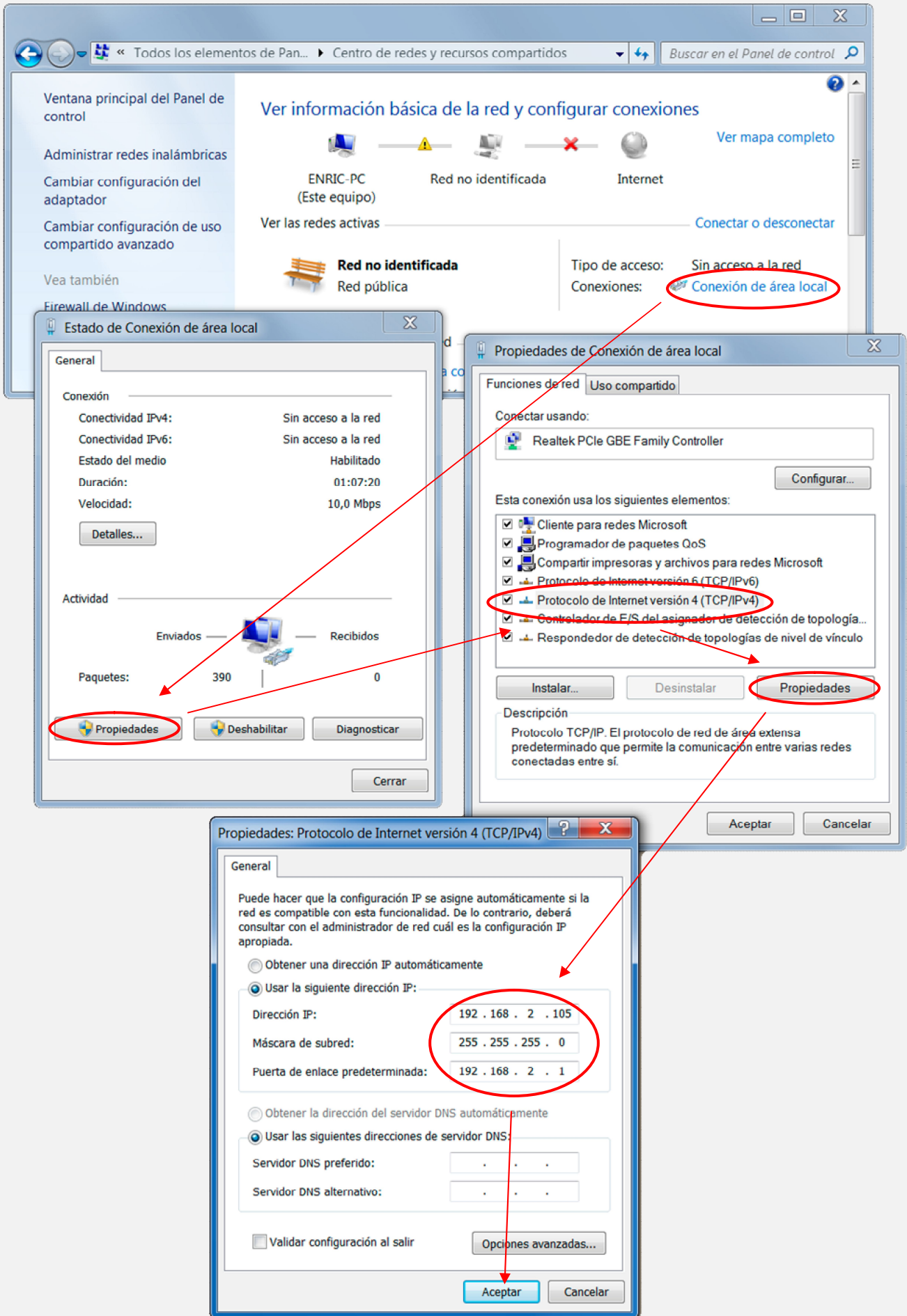


8. Open the browser and type `http://192.168.2.10` in the address bar
9. Press Enter

Default configuration ex-factory:

IP:Port	192.168.2.10:80
Gateway	192.168.2.1
Mask	255.255.255.0
MAC	xx.xx.xx.xx.xx.xx

Windows 7:



## Internet/Intranet connection configuration

In order to make for an easy TCP/IP configuration of the unit, the IP address, the port and the gateway can be modified from the unit's front panel.

The configuration of the unit's TCP/IP parameters must be consistent with the network in which it is to be installed. Should the user not know whether the factory values coincide with those of his network, he should proceed as follows:

From any PC in the network:

- a) Go to start-up
- b) Execute
- c) Type "cmd.exe"
- d) Accept (the screen goes black)
- e) Type "ipconfig.exe"
- f) Accept

An informative list is displayed. The PC's IP address and gateway should be noted down.

These values should be copied to the unit, *but increasing the last digit of the IP address by one (or more) units* since there cannot be two IP addresses with the same number in the same network.

For example: If the PC's IP is y.y.y.100, the unit should be assigned y.y.y.101 or y.y.y.150

From the unit's front panel, access the menu and search for:

TCP/IP configuration >> TCP/IP information >>

```
Port:          80
P:            x.x.x.x
Gateway: x.x.x.x
Mask:         255.255.255.0
MAC:         -
```

Place the cursor on the parameter to be modified, press OK. Using the increase and decrease keys, adjust the value and press OK. Repeat until concluded.

Press "Esc" until "Accept and save changes?" appears. Press OK and enter the user PIN (1234 by default).

Connect the unit up to the network. Open the browser and type `http://y.y.y.101` or `http://y.y.y.150` (i.e. the assigned IP). Press "Enter".

## Remote access configuration

Execute the steps described in the previous section "Internet/Intranet connection configuration".

In order to access the WebServer remotely from any other network, certain changes must be effected in the Router in the network where the WebServer is connected.

Since one is accessing remotely, one cannot use the WebServer IP as if it were in the same physical network. The reason for this is that the WebServer is hidden behind a Router which cannot be seen externally. Therefore, in order to access the WebServer, the Router must be first connected and then it will redirect to the WebServer.

### Procedure:

1. Configure the Router's work mode as multi-terminal. If the network is already functioning with different users, it is probably already in multi-terminal mode.
2. Ensure that there is no filter in the Router which closes port XX, the work port configured in the WebServer (default: 80).
3. The NAT or PAT ("Network Address Translation" or "Port Address Translation") of the Router must be configured in such a way that any IP with port XX is redirected to the WebServer's IP, also with port XX. As mentioned above, the work port configured in the WebServer is by default 80.

e.g.: The WebServer has work port 80

HOME	(in) ROUTER (out)	OFFICE
Type in Navigator	Public IP → Private IP	WebServer displays
<code>http://80.65.135.62</code>	<code>80.65.135.62 → 192.168.2.10</code>	<code>192.168.2.10</code>

NOTE: If the port is other than 80, this must be specified in the navigator by adding "number of port" to the IP.

e.g.: The WebServer has work port 120

HOME	(in) ROUTER (out)	OFFICE
Type in Navigator	Public IP → Private IP	WebServer displays
<code>http://80.65.135.62:120</code>	<code>80.65.135.62:120 → 192.168.2.10:120</code>	<code>192.168.2.10:120</code>

## More than one WebServer in the same network

In order to be able to have several WebServers in the same network, it is imperative that:

In INTERNET:

they have different ports and IP's.

The NAT or PAT ("Network Address Translation" or "Port Address Translation") of the Router must be configured in such a way that any public IP input with port XX is redirected to the IP of WebServer, this also with port XX. As mentioned above, the work port configured in the WebServer is, by default, 80.

e.g.:      WebServer1      IP = 192.168.2.10:80  
             WebServer2      IP = 192.168.2.11:8080

Therefore, the NAT or PAT of the Router must be configured in such a way that all the IP's with port 80 are enrouted to IP 192.168.2.10 and those IP's with port 8080 to IP 192.168.2.11.

If the port is other than 80, this must be specified in the navigator by adding "number of port" to the IP

In the case of an nnnnn port, this would be <http://192.168.2.10:nnnnn>

In INTRANET:      It can be configured with different IP's and with the same or different ports.

## TCP/IP configuration. When the ex-factory IP domain is not within the IP range of user's network

This section explains how to access the unit in order to change the TCP/IP parameters for others belonging to the local network and, thus, access the unit from any point whatsoever of the network.

- Connect the unit up to the network's router or switch
- Obtain the network's parameters
- Create a route for the PC to locate the unit
- Access the unit and exchange the IP for another belonging to the network

To connect the unit up to the network's router or switch

With 230V AC, connect an RJ-45 cable from the unit to the router or switch.  
From any PC in the network, proceed as follows.

To obtain the network's parameters

Go to start-up >> Execute >> Type "cmd.exe"  
Press Accept. (The screen goes black, the so-called command prompt)

The "ipconfig.exe" command can now be used to see the network's TCP/IP configuration

On the black screen, type "ipconfig.exe"  
Press Accept.

An informative list is displayed. The PC's IP address, submask and gateway values should be noted down.

e.g.:      IP:                    y.y.y.100  
             Mask:                255.255.255.0  
             Port:                 y.y.y.1

To create a route for the PC to locate the unit

Type the following command (omitting the inverted commas):  
**Route add "unit's IP" "PC's IP"**

Unit's IP = If this has not been changed, ex-factory IP is 192.168.2.10  
PC's IP = as previously noted (y.y.y.100)

Go to start-up >> Execute >> Type "**route add 192.168.2.10 y.y.y.100**" >> Press Enter.  
(This can also be done from the command prompt)

Open the browser and type:

<http://192.168.2.10> in the address bar. Press enter..

Access the unit and exchange the IP for another belonging to the network

If all has been executed correctly, the user code should now be requested.  
Default code ex-factory is **1234**.

The parameters can now be modified so as to pertain to user's network.

The PC's values are now to be copied to the unit but changing the last digit of the IP address since there cannot be two IP addresses with the same number in the same network.

e.g. If the PC's IP is y.y.y.100, the unit should be designated y.y.y.110 or y.y.y.200

Go to "access configuration" and modify the parameters to those previously noted.

In IP address:

Use the PC's IP changing the last digit to avoid duplication in the network. As in the above example, if the PC's IP is y.y.y.100, the user can assign his unit = y.y.y.200. Any value can be assigned as long as it does not exceed 255.

In Subnet mask:

Use that previously obtained with Ipconfig.exe

In Gateway:

Use that previously obtained with Ipconfig.exe

En Port: usually 80

The browser will now have lost communication with the unit. Close the browser completely. .

Open the browser again and type the new IP address in the address bar, as in the following example:

<http://y.y.y.200> Press Enter.

## Aid to a correct configuration

### IP Address

This is the name of the system (software), also known as logical address, with which one wishes to communicate. There cannot be two identical IP's with the same port in one same network.

### MAC (Media Access Control):

This is the protocol which controls at all times within a local network which device has access to the transmission media. As its address is unique, it identifies each device (hardware) unequivocally. Also known as hardware address.

### Mask:

This is another IP address. It is used to distinguish when a given machine pertains to a given subnet thus ascertaining whether or not two machines are in the physical network. If one does not know which is to be configured, one should enter the same mask as one's own PC

### Gateway:

This device is connected to several networks. It acts as a bridge between them and carries packets from one to another. It is another IP address pertaining to the network's Router.

### Public IP of the router:

This is the public IP of the network where the WebServer is located. This address can be static or dynamic (changing in each connection). Normally, if one wishes to access the WebServer from Internet, this address should be static. By default, if one does not have a Router, this address is the same as that of the WebServer's IP.

### Port:

Generally speaking, website servers work with port 80. Nevertheless, should one wish to install 2 WebServers in the same network, it is obligatory to configure different ports. Please, refer to "More than one WebServer in the same network" and "Remote access configuration")

### Display, font size and type:

These parameters do not depend on the WebServer. Should one wish to modify the letter size or font, one must consult one's navigator. Optimum display: screen resolution 1280x1024, text size "small" or "medium".

## Help: FAQ (frequently asked questions)

### I have modified the IP. How do I restore communication?

If you have only modified the IP, close and then re-open your navigator. Enter the new IP. Special care must be taken when defining a new IP. You must ensure that it is within and near to the IP range used by your network. If you still cannot communicate, you must verify your Router's sub-mask. If the IP is not allowed to pass to the network, try changing your Router's sub-mask to "255.255.255.0".

### I have modified the Port. How do I restore communication?

By default, your navigator uses port 80 to communicate with a server. If the port has been modified to other than 80, you must go to the address bar and type in that you wish to establish communication with a server in that port. e.g. for port 120: <http://192.168.2.10:120>

### I have configured an IP which does not pertain to my network. How do I restore communication?

Execute the steps described for a first connection or restore factory configuration

### What is the purpose of "close session"?

This informs the WebServer that communication has terminated. At the next connection, the PIN will be requested.

### What happens if I shut down my computer without closing the session?

If you do not close the session, information security will be reduced since anyone can now access the last page you visited and from there surf at will. All they would have to do is enter the correct IP address of the WebServer from any PC and no PIN will be requested. However, having said that, if they do not know the PIN, they will not be able to modify any parameter.

### I do not know or cannot remember the configured IP

You will have to go to the unit's command console. Within the submenu "TCP/IP configuration", go to option "TCP/IP information". Please, refer to chapter "User's guide (front panel)", section "TCP/IP configuration"

## CHAPTER 7 – DIAGNOSES AND TROUBLE-SHOOTING

### Mensajes informativos

- **"¡ATENCIÓN! PIN de fábrica por defecto 1234"**

Este mensaje sólo aparece en la página Web de bienvenida, advierte al usuario de que no se ha cambiado el PIN y, por tanto, la seguridad o privacidad del equipo está comprometida.

- **"Atención: PIN de usuario incorrecto"**

Este aviso de error ocurre cuando el usuario pulsa cualquier botón ("Guardar" "Poner a 0" "Enviar") de las paginas Web al no haber introducido el PIN de usuario en la casilla justo al lado de dicho botón o al haber introducido un PIN erróneo.

## CHAPTER 8 – TECHNICAL SERVICE

AUTHORIZED TECHNICAL SERVICE: EXCLUSIVELY BY THE MANUFACTURER

## CHAPTER 9 – GUARANTEE CARD

(photocopy or print and send to Safeline)

SURELINE model .....  
 Serial nbr .....  
 Date of purchase .....

Stamp of establishment where unit purchased (with complete address)

.....  
 .....  
 .....

Complete name and address of purchaser

.....  
 .....  
 .....

e-mail .....

Main use to which the Sureline unit is to be put .....

Notes .....

.....

I hereby authorise Safeline to keep me periodically informed  Yes  No

### GUARANTEE

SAFELINE, S.L., as a leader in the field of electrical and electronic safety equipment endeavours to maintain an extensive service along with up-dated information to the users of its products. To this end, it is indispensable that the user fills out and returns the present guarantee further to purchase of his SURELINE unit.

Period of guarantee: three years as from date of purchase.

Conditions and application of the SURELINE guarantee: Your SURELINE unit is guaranteed against any defect of manufacture or original components as determined by our Technical Service. Any repair or substitution does not extend the guarantee period.

#### The guarantee covers:

- Reception of the unit for its repair or servicing.
- Cost of all components, replacements and labour on original components

#### The guarantee does not cover:

- Transport.
- Breakdown caused by non-original components or devices
- Defects caused by incorrect installation.
- Damage caused by incorrect usage, or errors arising from repairs and internal manipulation by unauthorised persons.
- .- Consumables: fuses, thermal fuses, varistors and labour involved in replacement of same

#### The guarantee is automatically forfeited in the event of:

- Breakage or deterioration of the seals of any of the original SURELINE elements
- Incorrect usage due to non-observance of the recommendations given in the SURELINE manual.

Repair service: All repair service, both within and outside of the guarantee period, is by SAFELINE, S.L. and its Authorised Technical Assistance Services



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