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# **UVI LIGHT XS**

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**User's guide**

**CE**

**SCHOTT**  
Instruments



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Reference	Date of last modification	Version	Date of document.	Writer	Controller	Approving
0M8123	06/12/05	<b>1.1</b>	November 2003			



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The new equipment and material sold by SCHOTT INSTRUMENTS is guaranteed against any manufacturing defects for one year (unless otherwise stated by SCHOTT INSTRUMENTS) with effect :

- From the technical acceptance of the equipment in the factory by the buyer or his designee,
- or failing this :
  - \* For Metropolitan France: from the date on the delivery note.
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The SCHOTT INSTRUMENTS company guarantee applies exclusively to defectiveness arising from a design fault or from a concealed defect. It is strictly limited to the free dispatching of replacement parts (except for consumable items) or to the repairing of the equipment in our workshops within a deadline of 10 working days (shipping delay not included).

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- All damages, notably for staff costs, loss of earnings, business trouble, etc
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- The lamps, the cells and generally any item which appears in the "accessories" section on the price list.

Our customers are kindly asked to apply for our consent before returning any instrument for repair. No return of materials may be accepted without the prior written consent of our Sales Management which will precise the terms of such return.

If the above consent is given, articles shall be returned in their original packaging on a prepaid basis to the following address:

**SCHOTT INSTRUMENTS – Hattenbergstraße 10 D 55122 Mainz**

We reserve the right to reship all instruments received collect failing such consent.

Whatever method and conditions of transport are chosen for the shipment of the equipment to be repaired under guarantee, in the original packaging, the corresponding costs and the insurance costs will be payable by the customer.

Any damage connected to the return transport of the equipment falls within the framework of the guarantee on the express condition that the customer has sent his complaint within forty-eight hours by registered letter with acknowledgement of receipt to the carrier. A copy of the letter should be sent to SCHOTT INSTRUMENTS.

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The customer is informed that the software cannot be guaranteed exempt from defects or bugs.

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## 3 RECEPTION

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If the material is not immediately used, it agrees that it is stored in an own and dry place. To respect temperatures of storage (10 - 35°C).

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The material SCHOTT INSTRUMENTS has been conceived, made, tested and inspected while respecting procedures bound to the norm ISO 9001. ex " Receipt "

The material SCHOTT INSTRUMENTS is inspected carefully before his/her/its conditioning. Since receipt of your device, control the state of the packing and if you note an anomaly, make in the 48 hours reserves of use close to the carrier. Consult then, the list of colisage and verify that all is in order. Finally, if you note that he/it misses you something or if the material is damaged:

**DO NOT WAIT, CALL SCHOTT  
INSTRUMENTS**

To benefit some SCHOTT INSTRUMENTS services (cards of applications, SCHOTT INSTRUMENTS information, technical advices...), send back us from now on the joined guarantee questionnaire duly completed to the following address:

### **SCHOTT INSTRUMENTS**

Hattenbergstraße 10  
D-55122 Mainz  
GERMANY

Phone. : +49 6131 66 5111  
Fax : +49 6131 66 5111  
E-mail : support@schottinstruments.com



## 4 PRECAUTIONS OF USE



- Always make sure that the instrument is connected on the good voltage.  
(Between 100 – 240V 50-60Hz)
- Always disconnect the mains plug before starting any work inside the instrument.
- When dangerous substances for health and environment are used, the laboratory or site rules, where the instrument is installed must be followed.
- Take all the necessary precautions, during the use the instrument, to protect the operator from eventual liquids leaks or spills or possible radiations (protective gloves, anti-UV radiation glasses , protected clothes, etc)
- The deuterium lamp used in this unit emits UV radiation.
- Install the instrument in a ventilated area because it is likely to generate ozone, which, beyond the limits below, can harm health.  
Exposure average value = 100 ppb  
Exposure limits value = 200 ppb
- All operations made inside the instrument, must be done by SCHOTT INSTRUMENTS or by SCHOTT INSTRUMENTS's authorized technicians.



# **5** INSTALLATION

## **5.1 INSTALLATION**

All precautions of rigidity and planéités of the support of the instrument must be taken so that the optic bench didn't undergo any distortion.

## **5.2 FEATURE OF THE NETWORK**

UVI LIGHT is equipped with an automatic switching adaptor for 230V/50Hz and 115V/60Hz. No voltage selection is required before plugging the instrument.

The plug should comply with the existing norms and should be equipped with an earth wire.

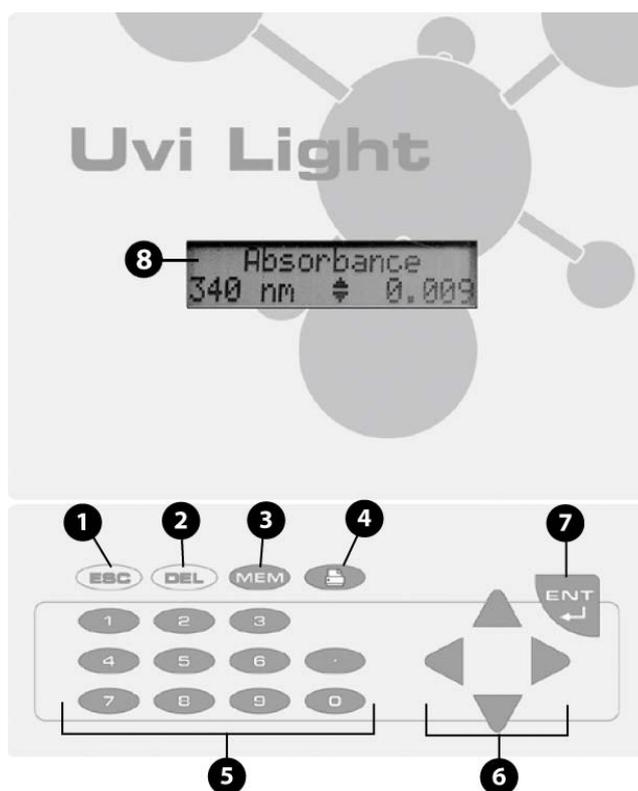
WARNING: THIS DEVICE IS NOT RACCORDABLE TO A NETWORK IT



## 6 GENERAL INFORMATION

### 6.1 THE KEYBOARD

The key "0" has a double fonction :  
- Numerical entry "0"  
- Zero photometric (blank)



- 1- Return to main menu
- 2- Correction of entries
- 3- backup/access to methods
- 4- Printing results

- 5- Numerical keypad
- 6- Navigation menu
- 7- Validation of the entries
- 8- Back lit screen 2 lines

### 6.2 LINE OF STATE

The second line of the LCD indicates the wavelength and the Absorbance value permanently & in real time (line of status):

540 nm	0.362
--------	-------

### 6.3 THE UPPER & LOWER NAVIGATOR KEYS

By using the Upper and Lower arrows, you can display different informations according to the menu used. Thus you can :

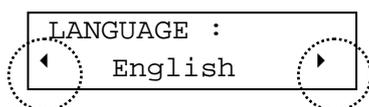
- move from one mode of the vertical main line to another ( see chapter 5.11), for example from Absorbance to Configuration.
- have access to an analysis by name when using **Method** menu.
- have the limits to choose displayed upon keying in a number.
- have the parameters of a method displayed when you are working within the menu **Save a method**.

### 6.4 THE RIGHT & LEFT NAVIGATOR ARROWS

To inform you that you are given several choices, two arrows appear on both sides of the display.

- use Right and Left Navigator Arrows to switch between different options proposed.
- use “ ENT ” to validate.
- use “ ESC ” to return to the main menu without considering the modification (in the main menu it allows you to return directly to the Absorbance mode).

Numerical keypad as well as “ DEL ” and “ MEM ” keys are not employed in menus except when naming an analysis for the purpose of safeguarding it.



### 6.5 MEASURE OF THE ZERO

Within one measuring mode, when UVI LIGHT asks “ BLANK READY ? ”, you should reply by “ ENT ” to have your choice taken into account.

In any case, you keep the possibility to run the zero by pressing the “ 0 ”key.

### 6.6 LIMITS OF CONCENTRATION

One-standard and factor Mode: the concentration of a sample is only limited by UVI LIGHT’s Absorbance limit. (2.500Abs)

Multi-standards Mode: the concentration of a sample should not exceed 10% the value of the last standard of the curve.

### 6.7 PRINTING THE RESULTS

Printing included method name, date and hour. A space is reserved for the user’s signature or identification in accordance to the requirements of the Good Laboratory Practices.

It is not intended to print graphs.

## 6.8 FLAGS TO USERS

LCD	Problems	LCD- Line 2
Blinking	The Absorbance is superior to 2,500. UVI LIGHT is not linear to all wavelength.	Blinking
Conc < 0	The value in concentration is negative.	-
> Lin	The value in concentration is beyond the linearity limit of the straight standard.	-
Memory empty !	No analysis is present in memory	-
Saturated memory	Insufisant space for the safeguard of a new analysis.	-
-	The printer doesn't answer.	« Retry? » ou « Abandon? »

## 6.9 ERROR MESSAGES

LCD	Problems	LCD- Line 2
-	Lamp or sensor out of order	Lmp Pb
Memory problem	EEPROM nonaccessible : back-up or loading impossible	
Clock problem	Nonaccessible clock, hour and date are not correct	
WL problem	UVI LIGHT's WL doesn't set.	Retry or Abandon
Energy problem	The light beam is shifted from the cell axis.	Retry or Abandon
Black problème		Retry or Abandon

For any case other than the 1<sup>st</sup> case, call after-sales service.

## 6.10 AUTOTEST

During the autotest, UVI LIGHT displays the type of test in progress.

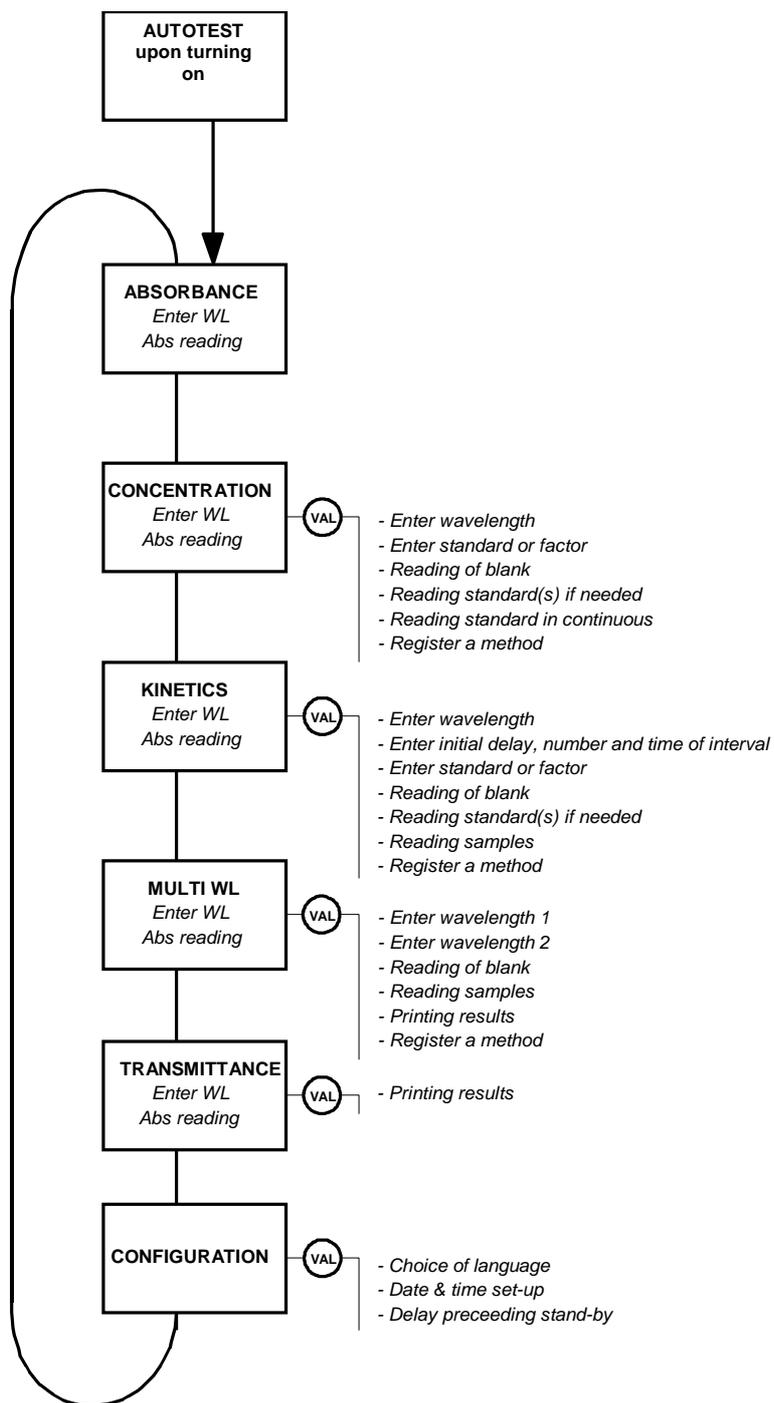
None of the problems detected will block the UVI LIGHT. You have the choice to either pursue or restart the autotest.

Before starting the autotest, UVI LIGHT displays the type of UVI LIGHT, the software version, as well as the device serial number:

UVI LIGHT XS V3.8 - S/N 218
--------------------------------

It is recommended to note these informations down on the manual. It will be needed the day you call our authorized servicing network to report a problem.

## 6.11 FLOW CHART



## 7 AUTOTEST

### 7.1 DESCRIPTION

Upon starting up the UVI LIGHT, these are the successive stages of automatic test:

- Indication of UVI LIGHT model,
- Indication of the software version number,
- Indication of UVI LIGHT serial number,
- Wavelength recalibration,
- Filter-wheel positioning,
- Memory test,
- Internal clock test.

### 7.2 ACCESS TO THE AUTOTEST MODE

To go from the stand-by mode to the autotest mode simply press any key

```
SCHOTT INSTRUMENTS - UVI LIGHT V1.0 -  
Nr 218  
06/11/2003 - 17h38  
  
Utilisateur : .....  
  
Autotest de mise en route  
Test lampe      : Passed  
Test EEPROM     : Passed  
Test horloge    : Passed  
  
Calibrage LO 441,9  
Calibrage LO 476,2  
Calibrage LO 528,7  
Calibrage LO 584,4  
Calibrage LO 684,7  
Calibrage LO 744,2  
Wavelength Test : Passed  
  
Autotest : Passed
```



## 8 ABSORBANCE

### 8.1 ACCESS TO THE ABSORBANCE MODE

The displayed values are always the latest used value arbitrarily

```
ABSORBANCE
540 NM      0.213
```

#### 8.1.1 Upon starting up UVI LIGHT

After the autotest, the Absorbance mode is selected automatically.

#### 8.1.2 From the main menu

From whatever position of the main menu, there are two ways to go back to the Absorbance mode:

- by using the Upper & Lower Navigator keys,
- by pressing the "ESC" key.

### 8.2 KEY IN THE WAVELENGTH

Modify the wavelength by entering a new value using the numerical keys. (This will interrupt the permanent display of value read), confirm the wavelength by "ENT"

```
Wavelength
3_ nm
```

UVI LIGHT sets and displays successively:

```
350 nm setting...
```

The display indicates the values of the wavelength and the Absorbance in real time.

```
Absorbance
350 nm      0.000
```

### 8.3 MEASURE OF THE ZERO

The zero (blank) is done by pressing the "0" key.

### 8.4 MEASURE OF THE SAMPLE

Sample measure is done in continuous. Display indicates the mode, wavelength and Absorbance simultaneously.

## 8.5 PRINTING OF RESULTS

Printing of results is done by pressing “  ’ key.

```
SCHOTT INSTRUMENTS - UVI LIGHT V1.0 -  
Nr 218  
06/11/2003 - 5:10 pm  
  
Utilisateur : .....  
06/11/2003 - 5:10 pm  
Mode : Absorbance  
longueur d'onde : 540 nm  
  
Ech : 01      0.213Abs      17h39  
Ech : 02      0.832Abs      17h50  
Ech : 03      1.352Abs      17h55
```

```
SCHOTT INSTRUMENTS - UVI LIGHT V1.0 - S/N  
218  
11/06/2003 - 5:10 pm  
  
User : .....  
11/06/2003 - 5:10 pm  
Mode : Absorbance  
Wavelength : 540 nm  
  
Sam. : 01      0.213Abs      5:39 pm  
Sam. : 02      0.832Abs      5:50 pm  
Sam. : 03      1.352Abs      5:50 pm
```

## 8.6 QUITTING THE MEASURING MODE

Use the Upper & Lower Navigator arrows to exit from the Absorbance mode and proceed to the next measuring mode .





## 10 CONCENTRATION

From the main menu, select Concentration mode with the help of Upper & Lower Navigator keys.

```
Concentration
540 nm      0.213
```

Validate the Concentration mode by "ENT".

```
Wavelength
540 nm      0.213
```

### 10.1 KEY IN THE WAVELENGTH

Modify the wavelength by keying a new value directly using numerical keys. (this will interrupt the permanent display of value read), then "ENT".

---

---

This step is no longer necessary in preprogrammed method.

---

---

```
Wavelength
3_ nm
```

UVI LIGHT sets and displays successively:

```
Facteur
350 nm      0.312
```

### 10.2 KEY IN STANDARD OR FACTOR VALUE

Select "Factor" or "n Standard" using the Right & Left Navigator keys.

*UVI LIGHT n = 1 to 8*

Validate the choice by "ENT".

- in the case of a Factor (maximal value 9999)

```
Facteur : 15.0
340 nm    0.312
```

- in the case of one Standard (maximal range 0.001 to 9999)

```
Etalon : 10.0
340 nm   0.312
```

- in the case of n Standards (0.001 to 9999)

Etalon 1:	10.0
340 nm	0.312

Validate or modify the proposed numerical value (last value used or calculated) by keying the new value using the numerical keys.

### 10.3 MEASURE OF THE BLANK

UVI LIGHT requests for the blank :

Blank	Ready?
340 nm	0.312

The measure of the blank resets the automatic incrementation of samples
---

Insert the blank then validate by " ENT ", UVI LIGHT does the zero, then proceeds to the next step.

Standard	Ready?
340 nm	0.000

### 10.4 MEASURE OF THE STANDARD

Insert the standard then validate, UVI LIGHT does the measure, the display indicates the value of the calculated Factor as well as the concentration at 0 absorbance.

Origin :	15.3
340 nm	0.159

Factor :	15.3
340 nm	0.159

The calculation done is a linear regression non-obligatorily through zero.

Use " ENT " key to print the measured values and proceed with sample readings.

Use " DEL " key to measure a new standard.

### 10.5 MEASURE OF SEVERAL STANDARDS

The straight standard is of linear regression type. You have to program at least 2 standards to reach this menu.

Insert the standard indicated then validate,

Standard 1	Ready?
340 nm	0.000

UVI LIGHT runs the measure, displays the standard value. Validate to print the value and proceed to the next standard.

Extrapolation limits of the straight standard are 0 for the minimal value and 10% beyond the value of the last standard for the maximal value

Repeat the operation until UVI LIGHT displays the value of the calculated factor from the straight regression. Use the Right & Left Navigator arrows to display the ordinate at the origin of the standard curve.

◀ Factor : 15.3 ▶
340 nm            0.159

◀ Origin : 0.025 ▶
340 nm            0.159

Use "ENT" key to print the measured values and proceed with sample readings.  
Use "DEL" key to measure a new standard.

## 10.6 MEASURE OF THE SAMPLE

Insert sample of unknown concentration.

Sam :	0.0
340 nm	0.000

UVI LIGHT runs the measure in continuous, upper display indicates the value of the sample in Concentration.

Sam :	13.2
340 nm	0.212

Use "0" key to redo the measure of the blank and to initialize the counter of samples to 1 for a new set.

In the case of a multi-standard concentration, values of samples beyond more than 10% to that of the last standard of the range are not accepted, the display indicates "> Lin". Negative values of concentration are not accepted, the display indicates "Conc < 0".

## 10.7 PRINTING OF RESULTS

Use the "ENT" key to print the value of the sample **and** adding the number of the sample.

Use the "🖨️" key to print the sample **without** adding the number of the sample (it allows to attempt another printing instruction if the software is set-up without printer.)

Sam 2 :	13.2
340 nm	0.212

Example of printed results :  
in the case of a factor:

```
SCHOTT INSTRUMENTS - UVI LIGHT V1.0 -
Nr 218
11/06/2003 - 5:10 pm

User : .....
11/06/2003 - 5:10 pm
Mode           : Concentration
wavelength    : 540 nm
Factor        : 13.6

Sam : 001      2.9      0.213Abs
Sam : 002     11.3     0.832Abs
Sam : 003     18.4     1.352Abs
```

in the case of a standard:

```
SCHOTT INSTRUMENTS - UVI LIGHT V1.0 - Nr
218
11/06/2003 - 5:10 pm

User : .....
11/06/2003 - 5:10 pm
Mode           : Concentration
wavelength    : 540 nm
No.Std       : 1
Factor        : 16.7

Std          13.6      0.812Abs

Sam : 001      2.9      0.213Abs
Sam : 002     11.3     0.832Abs
```

in the case of several standards:

```
SCHOTT INSTRUMENTS - UVI LIGHT V1.0 - Nr 218
11/06/2003 - 5:10 pm

User : .....
11/06/2003 - 5:10 pm
Mode      : Concentration
wavelength : 540 nm
No. Std   : 4
Origin    : 0.025
Correlation : 0.717
Factor    : 16.7

Std 1      10.0      0.212Abs
Std 2      20.0      0.325Abs
Std 3      40.0      0.421Abs
Std 4      80.0      0.519Abs

Sam : 01      2.9      0.213Abs
Sam : 02     11.3      0.832Abs
```

## 10.8 QUITTING THE MODE

Use the "ESC" key to quit the "Concentration" mode and to return to the main menu.

## 11 KINETIC

From the main menu, select the KINETICS mode with the help of the Upper & Lower Navigator keys.

```

Kinetics
540 nm      0.213
    
```

Validate the KINETICS mode by "ENT".

```

Wavelength
540 nm      0.213
    
```

### 11.1 KEY IN THE WAVELENGTH

Modify the wavelength by keying a new value directly with the help of numerical keys (this will interrupt the permanent display of value read), then "ENT".

This step is no longer necessary in preprogrammed method.

```

Wavelength
3_ nm
    
```

UVI LIGHT sets and displays successively :

```

350 nm Setting...
    
```

```

Init delay. : 20
350 nm      0.312
    
```

The display indicates the value of the wavelength and the Absorbance in real time.

### 11.2 PROGRAMMING MEASURE TIME

#### 11.2.1 Initial delay

Limit : 0 to 240 seconds

Validate or modify the proposed numerical value (which is the lastest value used) using the numerical keys, by entering the new value directly.

```

Init. delay. : 20
350 nm      0.312
    
```

The limits of a value can be displayed at once by pressing Upper or Lower Navigator keys!

#### 11.2.2 Time of interval

Limits : 1 to 240 seconds.

Validate or modify the proposed numerical value (which is the lastest value used) using the numerical keys, by entering the new value directly.

```

Tp inter. : 6
350 nm      0.312
    
```

This step is no longer necessary in preprogrammed method.

#### 11.2.3 Number of intervals

Limits : 1 to 25 intervals.

Number :	5
340 nm	0.312

Validate or modify the proposed numerical value (which is the latest value used) using the numerical keys, by entering the new value directly.

### 11.3 KEY IN FACTOR OR STANDARD

Use factor to calculate enzymatic activity. By default it is equal to 1.

Use standard to run KINETICS on a standard. The OD/min is calculated, then the corresponding factor is memorized.

Select "Factor" or "Standard" by using the Right & Left arrows.

◀	Factor	▶
340 nm		0.312

◀	Standard	▶
340 nm		0.312

Validate the choice by "ENT".

- in the case of a Factor (9999 Max.)

Factor :	<u>1</u> 5.0
340 nm	0.312

- in the case of one standard

Standard :	<u>1</u> 0.0
340 nm	0.312

### 11.4 MEASURE OF THE BLANK

Blank	Ready?
340 NM	0.312

Insert the blank then validate, UVI LIGHT does the zero, proceeds to the next stage then:

### 11.5 MEASURE OF THE STANDARD

Standard	Ready?
340 nm	0.000

Insert the standard then validate, UVI LIGHT does the measure, the display indicates the value of the calculated Factor.

Once the total time of KINETICS has elapsed, the display indicates the activity as well as the slope in OD/minute.

Use Right/ Left Navigator Arrows to display the standard slope.

Standard : 10.0 ◀ Factor: 15.3 ▶	Standard : 10.0 ◀ Pente 0.310/mn ▶
-------------------------------------	---------------------------------------

Validate and print the value using " ENT " .

Intermediate slope values in OD/min can be displayed using the Right/Left arrows.

Standard : 10.0 ◀ P01 0.305/mn ▶
-------------------------------------

Use "ENT" key to print the measured values and proceed to sample readings.  
Use "DEL" key to remeasure the standard.

## 11.6 MEASURE OF THE SAMPLE

Sam	Ready?
340 nm	0.000

Insert the sample and launch the KINETICS using " ENT " key

Delay :	0'27"
340 nm	0.123

The initial delay is indicated and time count down started. Absorbance value is displayed in continuous.

Once the initial delay has elapsed, display indicates time count down for KINETICS. The absorbance value is displayed in continuous.

Sam 1 :	1'03"
340 nm	0.513

Once the total time of KINETICS has elapsed, display indicates the activity as well as the slope in OD/minute.

Intermediate slope values in OD/min can be displayed using the Right Navigator key.

Sam 1 : 4.65 Pente 0.310/mn ▶	Sam 1 : 4.65 ◀ P1 0.305/mn ▶
----------------------------------	---------------------------------

Use " ENT " key to launch a new KINETICS without modifying the parameters.

## 11.7 PRINTING OF RESULT

Printing of results takes place:

- automatically at the end of the KINETICS.
- manually by pressing on "  " .

Example of printed result:

```
SCHOTT INSTRUMENTS - UVI LIGHT V1.0 - Nr 218
11/06/2003 - 5:10 pm

User : .....
11/06/2003 - 5:10 pm
Mode      : kinetics
Wave length : 540 nm
Délai initial : 30 secondes
Nombre intervalle : 4
Temps intervalle : 25 secondes
Facteur      : 13.6

Ech 01 :
T0 - 0.210Abs
T1 - 0.230Abs
T2 - 0.250Abs      P1 = 0.306/minute
T3 - 0.270Abs      P2 = 0.307/minute
T4 - 0.300Abs      P3 = 0.309/minute

Activité : 4.161      Pente = 0.306/minute

Ech 02 :
T0 - 0.317Abs
T1 - 0.335Abs
T2 - 0.355Abs      P1 = 0.016/minute
T3 - 0.370Abs      P2 = 0.017/minute
T4 - 0.400Abs      P3 = 0.019/minute

Ech : 002      11.3      0.832A
Ech : 003      18.4      1.352A
```

## 11.8 QUITTING THE KINETICS MODE

Use "ESC" to leave the "KINETICS" mode and return to the main menu.

## 12 MULTI WAVELENGTH

From the main menu, select Multi WL mode using the Upper & Lower Navigator keys.

```
Wavelength 1
540 nm      0.213
```

Validate the Multi WL mode using " ENT ".

```
Wavelength 1
540 nm      0.213
```

This step is no longer necessary in preprogrammed method.

### 12.1 KEY IN WAVELENGTH

Modify wavelength 1 by entering a new value directly using the numerical keys. (This will interrupt the permanent display of the value read), confirm by " ENT ".

```
Wavelength 1
3_ nm
```

Repeat the above operations to enter the 2nd wavelength (550 nm). UVI LIGHT sets and displays successively:

```
550 nm Setting...  Blank Ready?
                    550 nm 0.312
```

### 12.2 MEASURE OF THE BLANK

Insert the blank then validate, UVI LIGHT does the zero on the 2 wavelengths

```
Blank
550 nm Setting...
```

```
Blank
550 nm      0.000
```

```
Blank
340 nm Setting...
```

```
Blank
340 nm      0.000
```

then displays :

```
Sam Ready?
340 nm 0.000
```

## 12.3 MEASURE OF THE SAMPLE

Insert the sample then validate, UVI LIGHT does the measure on the 2 wavelengths.

```
Sam
550 nm Setting...
```

```
Sam
550 nm      1.250
```

```
Sam
340 nm Setting...
```

```
Sam
340 nm      1.567
```

then displays results in ratio and difference of absorbance (delta):

◀ LO1/LO2 : 1.254 ▶	◀ 550 nm 1.250 ▶
◀ LO1-LO2 : 0.317 ▶	◀ 340 nm 1.567 ▶

Values of absorbances of the two respective wavelengths can be displayed using the Right Navigator key.

Use " ENT " key to launch a new measure without modifying parameters.

## 12.4 PRINTING OF RESULTS

Printing of results takes place:

- automatically at the end of the measure.
- manually by pressing "  ".

```
SCHOTT INSTRUMENTS - UVI LIGHT V1.0 - Nr 218
11/06/2003 - 5:10 pm

User : .....
11/06/2003 - 5:10 pm
Mode      : Multi wavelength
Wavelength 1 : 540 nm
Wavelength 2 : 610 nm

Sam 01
LO1/LO2 = 0.104      LO1-LO2= -1.090
  WL1 : 0.127Abs
  WL2 : 1.217Abs

Sam 02
LO1/LO2 = 0.284      LO1-LO2 = -0.691
  WL1 : 0.274Abs
  WL2 : 0.965Abs
```

## 12.5 QUITTING THE MODE

Use " ESC " key to quit the " Multi WL " mode and to return to the main menu.

## 13 TRANSMISSION

From the main menu, select Transmittance mode using Upper & Lower Navigator keys.

Trans. :	88.0%T
540 nm	0.213

Printing of results takes place by pressing “”.  
Example of printed results :

SCHOTT INSTRUMENTS - UVI LIGHT V1.0 - Nr 218		
11/06/2003 - 5:10 pm		
User : .....		
11/06/2003 - 5:10 pm		
Mode	: Transmittance	
Wavelength	: 540 nm	
Sam : 001	87.0%T	0.213Abs
Sam : 002	23.5%T	0.832Abs
Sam : 003	17.9%T	1.352Abs

### 13.1 QUITTING THE MODE

Use “ESC” key to leave the “Transmittance” mode and to return to the main menu.



## 14 METHODS

The menu ' Methods ' appears only if at least one method has been saved.

From the main menu, select " Methods " mode using the " MEM "key.

Name : AMYLASE Kinetics		
7/50 Méthods ◀ ACID P. 2 ▶	7/50 Méthods ◀ AMYLASE 3 ▶	7/50 Méthods ◀ ASAT/GOT 4 ▶
WL = 540 nm Factor : 12.3		
Intervalles = 4 Tp inter = 30sec		
Delay = 30sec		

All parameters of the method displayed can be seen by pressing the Upper&Lower arrows.

The upper line indicates how many methods are in file / out of 50 which the file can contain. The lower line indicates the method name as well as its file number. Methods are classified in alphabetical order.

Select the method you want using the Right & Left arrows.

### 14.1 LOADING A METHOD

To load the selected test just validate by " ENT".

7/50 Méthods ◀ ACID P. 2 ▶
-------------------------------

Test parameters are printed automatically. The software sets itself in the selected mode, ready to do a measure.

Upon next access to methods, the software would be set on the last method loaded.

### 14.2 ERASING A METHOD

To erase the pre-selected analysis simply validate " DEL ".

7/50 Méthodes ◀ ACID P. 2 ▶
--------------------------------

For every suppression of predefined method, the software requests confirmation (the choice is by default « NO »).

Erase ACID P. ◀ NO ▶
-------------------------



## 15 SAVE A METHOD

Use "MEM" key to save a method. This key takes the function Protects solely in the following cases:

If one or several memories remain free.

If, in KINETICS mode, the initial delay, the number of interval, the time of interval are already determined.

If, in Concentration mode, the type of calculation is already specified (Standard or Factor) as well as the value of the Factor (concentration AND Absorbance of standard(s)). Then UVI LIGHT requests you to enter the name of the method (using 8 letters max.).

At first, the name is composed of 8 blanks by default or the preregistered method.

- Use "Right" and "Left" Arrows to modify the letter.
- Use "ESC" during operation to quit the menu without protecting and return to the main menu
- Use "ENT" to validate a letter.
- Use "DEL" to modify the previous letter.

```
Name: ALBUM
      HIJKL -M- NOPQ
```

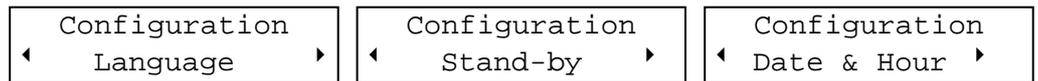
If the name of the method already exists, the software asks for confirmation before deleting the previous method (the choice is by default "NO").

```
Erase ALBUMINE
      NON
```



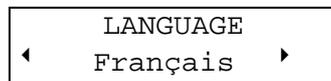
## 16 CONFIGURATION

From the main menu, select the " Configuration " mode using the Upper & Lower Navigator keys.



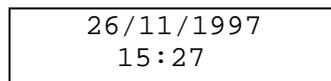
Select the option you want using the Right & Left Arrows, then " ENT ".

### 16.1 LANGUAGE



Select the option you want among French, English and Deutsch using the Right & Left arrows, then " ENT ".

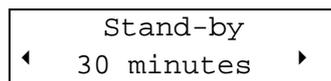
### 16.2 DATE



Modify values by pressing " SUP " key or by entering the new value of the day directly. Validate parameters by " ENT ".

### 16.3 STAND-BY

Stand-by function of the UVI LIGHT permit to sustain the UV lamp's time life



Select among the options 15, 30, 60 minutes and No using the Right & Left Navigator keys, then " ENT ".

### 16.4 RS232

This option activates the RS232 port for computer communication. This function is not stored by default and should be reactivated after each start up.



# 17 ISO 9001 CERTIFICATE

