



TÉLÉVISEURS D'EXCEPTION

AGATH Television

T1 / T2 / T3 / MD2 / MD3 Series

Operating Instructions

Introduction

Thank you to have chosen AGATH LCD television.

Before using this television, read the operating instructions carefully and keep it for later use. It is advised to read the whole handbook before beginning the installation.

Contents

Safety Instructions	3
Electrical and Electronic Equipment waste	3
Connections	4
Presentation of the keys of the remote control	6
Presentation of the keys of the waterproof remote control	7
Description of the Menus	8
Channel	8
Picture	9
Sounds	9
Time	9
Option	9
Lock	9
IR Relay	10
IR deport (<i>in option</i>)	10
RS232 protocol	11
Communication Parameter	11
Command Reference List	11
Transmission protocol	12
Reading the status of Power On/Off	12
Detailed description of the functions	13
Power On/Off function	13
Input select function	13
Volume mute function	14
Volume control function	14
Remote control lock function	14
Remote control key function	15
IP control (<i>in option</i>)	16
Power supply installation	17
Specifications	18

Safety instructions

CAUTION

Do not remove television cover. Contact an authorised dealer or repair service.

Do not connect too many extension cords or plugs to an outlet ; this may cause an electric shock or fire. If there are any unusual sounds or smells coming from the unit, unplug it immediately and contact an authorised dealer or repair service.

Security

If an object or liquid penetrates inside the television, disconnect and make it check by a qualified staff before restarting it.

For your safety, do not touch any part of the television, power cord or cable of antenna in case of storm.

Power supply

For environmental reasons and safety, it is recommended not to leave the television switch on when you do not use it. For non-used prolonged periods, disconnect it from power supply.

Installation

A technically competent person should carry out the electric installations for your AGATH television unit.

Before connecting the television for the first time, read the following section carefully. The voltage for the power supply is different according to countries and areas, be sure that the power supply of the place where you will install the television has the necessary voltage (for example 230V or 120V) indicated on the power adaptor.

The electric installations must be tested and checked before startup, like at the time of any significant modification, in order to make sure that they were carried out in accordance with standards of the country.

Do not use a damaged plug and keep the electric cable away from any heating source.

Keep the power adaptor away from any heating source.

Electrical and Electronic Equipment waste



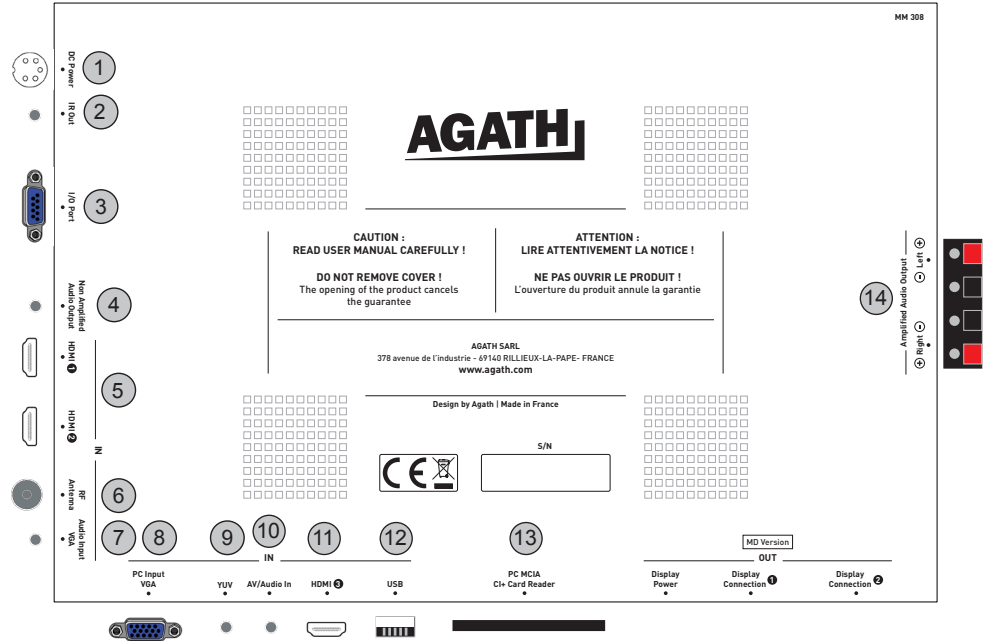
This product is designed and manufactured with high quality materials and components which can be recycled and reused.

This symbol means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste. Please, dispose of this equipment at your local community waste collection / recycling centre.

In the European Union, there are separate collection systems for used electrical and electronic product.

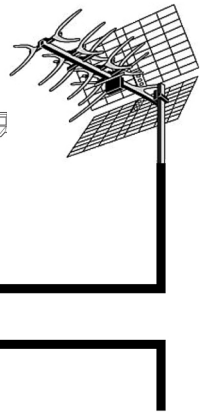
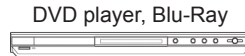
Please, help us to conserve the environment we live in !

Connections



- ① Power Input DC 24V / 12V
- ② IR relay
- ③ RS232 Connexion (use not compatible with VGA)
- ④ Non amplified audio output
- ⑤ HDMI 1&2 input
- ⑥ Antenna Input

It is possible to connect to the television large choice of optional equipments.



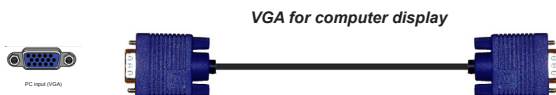
ANTENNA



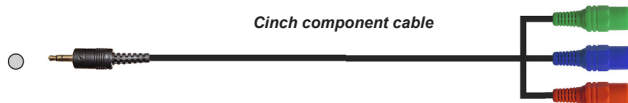
Cable

7 PC audio Input (mini jack)

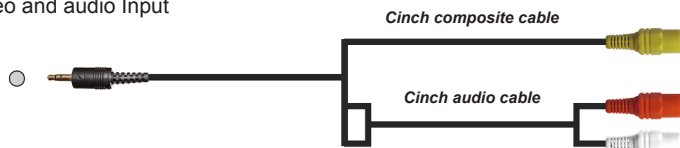
8 PC Input (VGA) (use not compatible with RS232)



9 Component Input



10 Video and audio Input



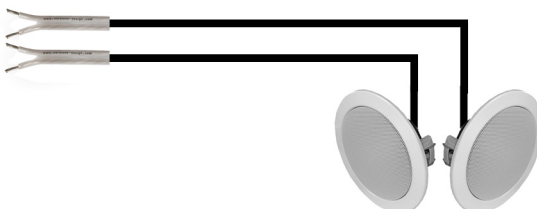
11 HDMI 3 input



12 USB port (for USB recording)

13 PC MCIA CI+ card reader

14 Audio output connections



All the connections must be carried out before the final installation of the television.

Presentation of the keys of the remote control



1. **TV/Radio (option)** : Inactive
2. **PIC SIZE** : Selection of the zoom mode
3. **PIC MODE** : Selection of the picture mode
4. **DUAL I/II** : choice of the audio track
5. **0..9** : Selection of the channel required
6. **SLEEP** : Sets the sleep timer
7. **INFO** : Displays informations about the viewing program
8. **LIST** : Displays the channel list
9. **S. MODE** : Selection of the Audio mode
10. **STILL** : Allows to freeze the picture
11. **AGATH** : AGATH+ = ON et AGATH- = OFF
12. **Buttons Red, Green, Yellow and Blue** : Function keys
13. **S-Vidéo** : Selection of the CADTV source
14. **PC RGB** : Selection of the PC source (VGA)
15. **SCART** : Selection of the USB source
16. **YUV** : Selection of the YUV source
17. **TV ana** : Selection of the analog TV source
18. **HDMI** : Selection of the HDMI sources
19. **DVB-T** : Selection of the numeric TV source
20. **SOURCE** : List of the available sources
21. **FAVORITE** : List of the favorite channel
22. **EXIT** : Exit the menus
23. **MENU** : Enter or exit the menu
24. **MIX** : Time Shifting
25. **TTX ON** : PVR
26. **VOL-, VOL+** : Increase or decrease the volume. Left and right navigation in the menus
27. **PR-, PR+** : Previous or next channel. Up and down navigation in the menus
28. **ENTER / OK** : Validation key
29. **MUTE** : Shut down or restoration of sound
30. **FLOF/LIST** : Selection of the FLOF or LIST mode
31. **SIZE** : Modification of the teletext size
32. **HOLD** : Stop scrolling teletext pages
33. **Update** : Update the TV
34. **INDEX** : Access the index page in the teletext
35. **REVEAL** : displays hidden informations in the teletext mode
36. **EPG** : Electronic programm guide(DVB-T)
37. **SubTitle** : Selection of the available language subtitles

The worn batteries must be put at the reject in a circuit of recycling.

Presentation of the keys of the waterproof remote control

1. Temporary Sound Mute

Shut down or restoration of sound.

2. Source key

Selection of the source.

3. Menu key

Activation or deactivation of the menu.

4. Power On/Off key

Switches the set on from standby or off to standby.

5. Numeric keypad

Selection of the channel required.

6. EPG

Electronic programm guide (DVB-T)

7. LIST

Displays the channel list.

8. Pr. and key

Selection of the previous or next channel. Enables also the navigation in the menus (Up / Down arrows).

9. Vol.+ and Vol.- key

Increase or decrease the volume. Enables also the navigation in the menus (Left / Right arrows).

10. Clock

Sets the sleep timer. (maxi 240 min.).

11. Valid.

Validation of the choices.

12. Red, Green, Yellow and Blue keys

Navigation keys in the teletext mode. Enables also the sort of the channels.

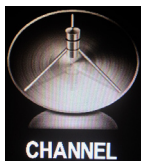


The worn batteries must be put at the reject in a circuit of recycling specialized for lithium.

Description of the Menus

CHANNEL

Auto Scan :



- DVB Select type : DVB-T or DVB-C
- Selection of the country (*France, Germany, Greece, Hungary, Iran, Israel, Italy, Luxembourg, Morocco, Netherlands, New Zealand, Norway, Poland, Portugal, Rumania, Russian, Serbia, Slovakia, Slovenia, Spain, South Africa, Sweden, Switzerland, Tunis, Turkey, UK, UAE, Algeria, Australia, Austria, Belgium, Bulgaria, China, Croatia, Czech, Denmark, Egypt, Estonia, Finland*)
- Tune Type : ATV + DTV, DTV or ATV
- Press «OK» in order to tune the channels

Scan Type (for DVB-C) : Full or Network Scan

Frequency : Auto or 356000

Network : Auto or 1111

Symbol (ks/s) : Auto or 6900

CADTV Manual Tuning

ATV Manual Tuning (Manual tuning of the analog channels)

Storage To : Selection of the target channel

System : Selection of the system L, BG, I ou DK

Current CH : Selection of the current channel

Search : Search for the next channel

Fine Tune : Fine tune of the channels

DTV Manual Tuning : Manual tuning of the digital channels

Programme Edit :

Red key : Delete a channel

Green key : Rename a channel

Yellow key : Move a channel

Blue key : Skip a channel

Favorit key : Change to a favorit channel

Signal Information : information regarding the signal quality and strength

CI Information : information regarding the CI Card

The recorded options need to use a disk storage (USB connection)

Record Start : To start a record of a programme

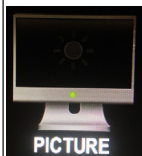
Recorded List : List of the recorded programmes

Recorded Mode : Programming the recorded programmes (start time and end time)

Schedule List : List of the programming records

PVR File System : Allows to check the disk when using a new disk storage

PICTURE



Picture Mode : Adjustment of the picture mode (Standard, Mild, User, Dynamic)

Contrast : Contrast adjustment

Brightness : Brightness adjustment

Color : Color adjustment

Sharpness : Sharpness adjustment

Tint : Tint adjustment (in NTSC mode)

Color temperature : Color temperature adjustment (Medium, Warm, User, Cool)

Red

Green

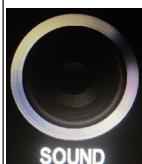
Blue

Aspect Ratio : Zoom adjustment (16:9, Zoom1, Zoom2, Just Scan, Panorama, 4:3)

Noise reduction : Noise reduction adjustment (Off, Low, Middle, High)

Screen

SOUND



Sound Mode : Sound mode adjustment (Standard, Music, Movie, Sports, User)

Treble : Treble adjustment (0 à 100)

Bass : Bass adjustment (0 à 100)

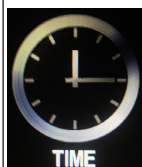
Balance : Balance adjustment

Auto Volume : Automatic volume (On or Off)

Surround Sound : Off, On

SPDIF Mode : Off, PCM, Auto

TIME



Clock : adjustment of the current time

Off Time : repeat (Off, Once, Every Day, Mon. ~ Fri., Mon. ~ Sat., Sat. ~ Sun., Sunday)
Adjustment of Hour and Minute

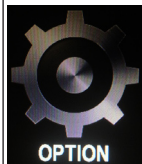
On Time : repeat (Off, Once, Every Day, Mon. ~ Fri., Mon. ~ Sat., Sat. ~ Sun., Sunday)
Adjustment of Hour, Minute, Source and Volume

Sleep Timer : Sleep timer adjustment (Off, 10, 20, 30, 60, 90, 120, 180 and 240min.)

Auto Sleep : On or Off

Time Zone : Selection of the Time Zone

OPTION



OSD Language : Selection of the language (German, English, Spanish, French, Italian, Dutch)

Audio Languages 1st

Audio Languages 2nd

Subtitle Languages 1st

Subtitle Languages 2nd

OSD Duration : Time display of the OSD Menu (5, 10, 15, 20, 25, 30, 35 or 40 sec.)

Hard of hearing : On or Off

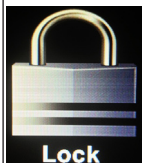
Country : The choice of the country is done at the time of automatic tuning

HDMI CEC : On or OFF

Restore Factory Default : Restore the factory setup (default password 0000)

SET ID : selection of the set ID (0 to 100) for control

LOCK (default password 0000)



Lock Channel : Lock the menu TV setting

Set Password : Change password

Block program : Allows to lock channels with password

Parental Guidance : Off or age limit adjustment, from 4 to 18 years old

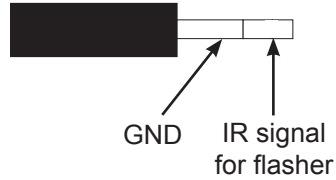
IR relay

The IR relay at the rear of AGATH TVs allows to relay the emitted signal at the front of the TV. Simply plug a flasher in order to control a deported device.

The connection is as following :

- 1 - IR signal
- 2 - GND

The jack model used is 3,5mm.



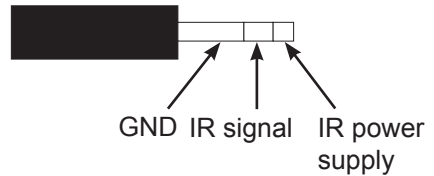
IR deport (in option)

The IR deport at the rear of AGATH TVs allows connecting a remote relay to control the TV. ON and OFF signals are distinct.

The connection is as following :

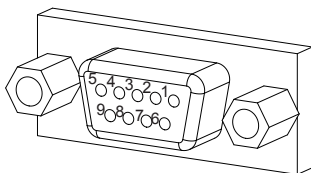
- 1 - Infrared jack power supply
- 2 - Infrared Signal
- 3 - GND

The jack model used is 2,5mm.



RS232 protocol

The protocol defines the RS232 communication between the AGATH T2 television sets and an automaton.



Pinout to use :

- Pin 2 : Rx
- Pin 3 : Tx
- Pin 5 : Ground

It is customary to use a straight cable, but this may depend on the controller used.
The use of RS232 is not compatible with using the VGA input.

Communication Parameter

Baud Rate	: 9600 bps (UART)
DATA length	: 8 bits
Parity bit	: NON
Stop bit	: 1
Flow control	: NON
Communication code	: Codes ASCII

Command Reference List

	Commande 1	Commande 2	Data(Hexa)
01. Power	k	a	00H-01H
02. Input select	k	b	00H-0DH
03. Aspect ratio	k	c	01H-06H
04. Volume mute	k	e	00H-01H
05. Volume control	k	f	00H-64H
06. Contrast	k	g	00H-64H
07. Brightness	k	h	00H-63H
08. Colour	k	i	00H-63H
09. Tint	k	j	00H-63H
10. Sharpness	k	k	00H-63H
11. OSD select	k	l	00H-01H
12. Remote Lock On/Off	k	m	00H-01H
13. Balance	k	t	00H-63H
14. ACC	k	u	00H-03H
15. Auto configure	j	u	01H
16. Key	m	c	Key code (codes AGATH)

Transmission protocol

Command setting

[COMMANDE 1] [COMMANDE 2] [] [ID_TV] [] [DATA] [CR]

[DATA] : Parameter

OK Acknowledgment

[COMMANDE 2] [] [ID_TV] [] [O] [K] [DATA] [x]

[DATA] : Parameter sended

Error acknowledgment

[COMMANDE 2] [] [ID_TV] [] [N] [G] [DATA] [x]

[DATA] : The <DATA> byte sends an error code
01H = Illegal code (Unknown parameter)
02H = Not supported function

[COMMANDE 1] et [COMMANDE 2]	: Command identified by a character (see commands list)
[]	: Character <SPACE>
[ID_TV]	: Identification of the television
[CR]	: Character <CARRIAGE RETURN>
[x]	: Character <x> (lowercase)

The identification of the television is defined in the Option Menu.

The [DATA] parameter should be composed of 2 bytes. For example, in order to send 1, it needs to be sended 01.

For all the [DATA] parameters, it is not necessary to add the H letter (means HEXA). For example, if it is written 01H, you have to enter 01.

Reading the status of Power On/Off

Composition of the reading command

[COMMANDE 1] [COMMANDE 2] [] [ID_TV] [] [FF] [CR]

[FF] : The FF value allows to read the status of the function indicated by the 2 first characters (Command 1 and Command 2)

Acknowledgment of receipt : **READING DONE**

[COMMANDE 2] [] [ID_TV] [] [O] [K] [DATA] [x]

[DATA] : The <DATA> byte sends the current parameter of the function

Detailed description of the functions

Power On/Off function

This function enables to switch on or off the TV.

Max duration of the function : ON ► 12 s

OFF ► 2 s

• EXECUTION ORDER

[k] [a] [] [SetID] [] [DATA] [CR]

DATA 0 ► Power Off

DATA 1 ► Power On

• ACKNOLEDGMENT «ORDER DONE»

[a] [] [SetID] [] [O] [K] [DATA] [x]

• ACKNOLEDGMENT «NON PERMITTED ORDER»

[a] [] [SetID] [] [N] [G] [DATA] [x]

The <DATA> byte sends an error code :

01H = Illegal code (unknown parameter)

02H = Not supported function

• READING OF THE STATUS

[k] [a] [] [SetID] [] [FF] [CR]

• ACKNOLEDGMENT «STATUS OF THE FUNCTION»

[a] [] [SetID] [] [O] [K] [DATA] [x]

<DATA> = Current parameter of the function

Input Select Function

This function enables to select the active source.

Max duration of the function : 9 s

• EXECUTION ORDER

[k] [b] [] [SetID] [] [DATA] [CR]

DATA	SOURCE	DATA	SOURCE
02H	AV	0AH	Analog TV
05H	YUV	0BH	DVB-T
07H	PC (VGA)	0CH	SCART
08H	HDMI 1	0DH	SCART YC
09H	HDMI 2		

• ACKNOLEDGMENT «ORDER DONE»

[b] [] [SetID] [] [O] [K] [DATA] [x]

• ACKNOLEDGMENT «NON PERMITTED ORDER»

[b] [] [SetID] [] [N] [G] [DATA] [x]

The <DATA> byte sends an error code :

01H = Illegal code (unknown parameter)

02H = Not supported function

The direct access to a source is made by this function. It is also possible to access directly to the TV or PC source using the key function of the remote control (see corresponding chapter).

Volume Mute Function

This function enables to switch on or off the sound of the television.

Max duration of the function : 3 s

• EXECUTION ORDER

[k] [e] [] [SetID] [] [DATA] [CR]

DATA 1 ► Volume mute OFF (the sound is activated)

DATA 0 ► Volume mute ON (the sound is deactivated)

• ACKNOWLEDGMENT «ORDER DONE»

[e] [] [SetID] [] [O] [K] [DATA] [x]

• ACKNOWLEDGMENT «NON PERMITTED ORDER»

[e] [] [SetID] [] [N] [G] [DATA] [x]

The <DATA> byte sends an error code :

01H = Illegal code (unknown parameter)

02H = Not supported function

Volume control function

• EXECUTION ORDER

[k] [f] [] [SetID] [] [DATA] [CR]

DATA 0 ► Volume = 0

DATA 99 ► Volume = 99

• ACKNOWLEDGMENT «ORDER DONE»

[f] [] [SetID] [] [O] [K] [DATA] [x]

• ACKNOWLEDGMENT «NON PERMITTED ORDER»

[f] [] [SetID] [] [N] [G] [DATA] [x]

The <DATA> byte sends an error code :

01H = Illegal code (unknown parameter)

02H = Not supported function

Remote control lock function

This function enables to activate or deactivate the remote controls of the television.

Max duration of the function : 2 s

• EXECUTION ORDER

[k] [m] [] [SetID] [] [DATA] [CR]

DATA 0 ► Remote lock OFF (the remote control is activated)

DATA 1 ► Remote lock ON (the remote control is deactivated)

• ACKNOWLEDGMENT «ORDER DONE»

[m] [] [SetID] [] [O] [K] [DATA] [x]

• ACKNOWLEDGMENT «NON PERMITTED ORDER»

[m] [] [SetID] [] [N] [G] [DATA] [x]

The <DATA> byte sends an error code :
01H = Illegal code (Unknown parameter)

02H = Not supported function

• **READING OF THE STATUS**

[k] [m] [] [SetID] [] [FF] [CR]

• **ACKNOWLEDGMENT «STATUS OF THE FUNCTION»**

[m] [] [SetID] [] [O] [K] [DATA] [x]

<DATA> = Current parameter of the function

Remote control key function

This function enables to use reserved codes of the remote control.
The maximum duration of the function depends of the selected function.

• **EXECUTION ORDER**

[m] [c] [] [SetID] [] [DATA] [CR]

DATA ► Hexadecimal code presented in the table below

• **ACKNOWLEDGMENT «ORDER DONE»**

[c] [] [SetID] [] [O] [K] [DATA] [x]

• **ACKNOWLEDGMENT «NON PERMITTED ORDER»**

[c] [] [SetID] [] [N] [G] [DATA] [x]

The <DATA> byte send an error code :
01H = Illegal code (Unknown parameter)

02H = Not supported function

FONCTION	DATA (HEXA)		FONCTION	DATA (HEXA)
POWER OFF	11		9	1B
MUTE	13		0	1E
PIC SIZE	03		SCART	1A
PIC MODE	0B		COMPONENT	4D
SLEEP	0A		Analog TV	58
DUAL I/II	56		HDMI	54
S. MODE	5A		SOURCE	4F
1	1D		MENU	43
2	1C		PR+	47
3	46		EXIT	50
4	15		VOL-	57
5	14		ENTER	04
6	45		VOL+	53
7	00		PR-	4B
8	1F			

IP control (*option*)

The TV can also be controlled using IP control.

AGATH TV control using the network is achieved through a gateway IP / RS232.

It is therefore possible to send all orders you can find in the RS232 chapter, using the TCP IP protocol.

To configure the AGATH TV IP module, you have two options :

- 1- Using the software DeviceInstaller by Lantronix for Xport (available at Lantronix.com)
- 2- By connecting directly to the module (IP address on the back of the TV. There is no login and password)

Power supply installation (13" to 65")

The television set is not disconnected from the power supply when it is switch off. Install the power adaptor in an adapted place so that it is easy to disconnect it in the event of incident.

The power adaptor is not waterproof (index of protection IPX1) and must be installed in a **dry place, well ventilated and away from water and humidity**. The 4m length provided cable should not be cut, shortened, be lenghtened, etc., because that can damage television set and have implications on the safety of the television set.

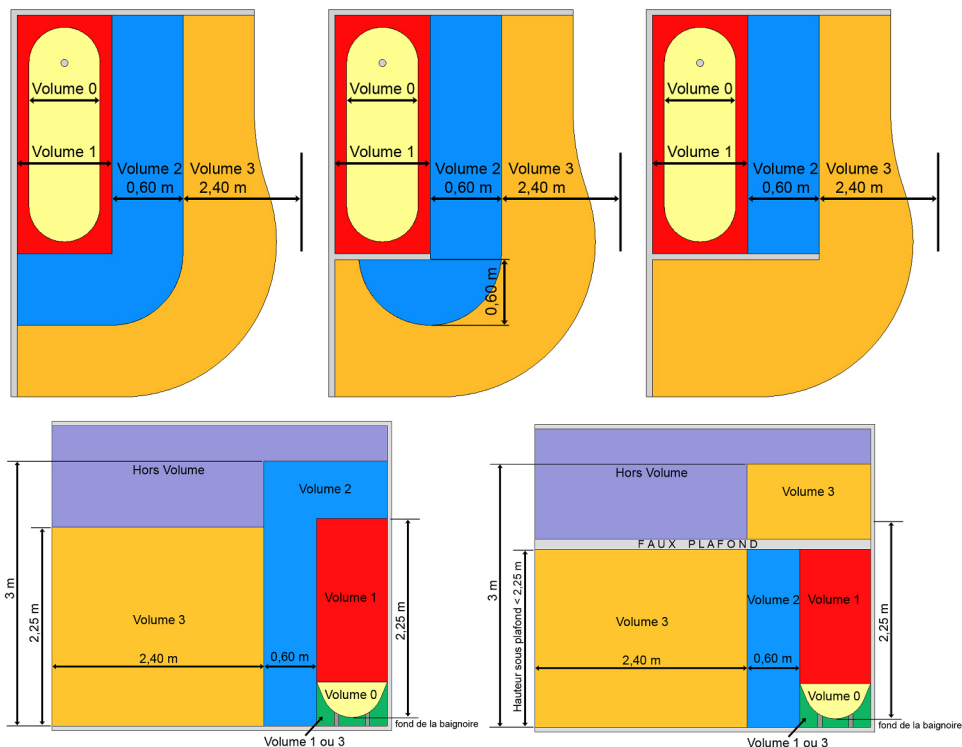
So, it must be exclusively installed in an area allowing a total safety of the people.

The space located below the bath-tub cannot in no case to be a place for the power adaptor.

Please refer to standards of your country to determine the place of the power supply.

The installation in bathroom and near water has to be done in respect of the country regulations and according to this installation book.

Volumes definition (according to NF C 15-100 standard)



Once the silicone sealant made, the TV has an IPx6 index in front for the product line T2 and S2.

Specifications

Panel													
Type	Active matrix TFT												
Dimension	13,3" (34cm)	15,6" (40cm)	18" (47cm)	22" (55cm)	27" (69 cm)	32" (81 cm)	37" (94 cm)	42"(107 cm)	46"(117 cm)	55"(139 cm)	65"(165 cm)	82" (208 cm)	
Display area (H/V)	293x165	344x194	410x230	477x265	598x336	698x392	820x460	930x523	1018x573	1210x684	1429x804	1806x1016	
Screen ratio	16 : 9												
Colors	16,7 M												
Resolution (pixels)	1366x768			1920 x 1080									
TV													
Color systems	PAL / SECAM												
Available broadcast	B/G, D/K, L, L' and cable												
DVB	DVB-T / DVB-C / UHF and VHF band												
Audio													
Output audio power	2 x 15 Watts												
Stereo sound	Nicam												
Power supply													
Input	DC 12V			DC 24V / Adaptator CA 230V, 50 Hz									AC 220V
Distinctive feature													
Ambient temperature	0 à 35° C												

The design and the specifications can be modified without notice.

