# AVIS
ELECTRONICS

User Guide
Bathroom / Shower TV AVIS
AVS190F / AVS220F / AVS260F

To prevent injury, AVIS Bathroom TV must be securely attached to the wall in accordance with the installation instructions. The power supply must be connected to a mains socket outlet with a protective earth connection. The mains isolation switch must remain readily operable. Failure to observe the above safety warnings may invalidate the warranty. All electrical installation should be carried out by a fully qualified electrician.
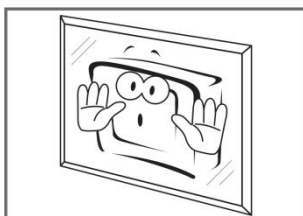
Warnings
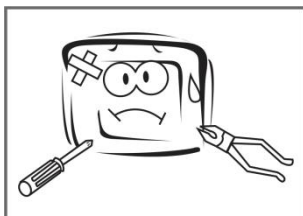
Do not attempt to service the unit.
Contact an authorised dealer or repair service.
– Servicing the unit yourself may cause an electric shock or fire.
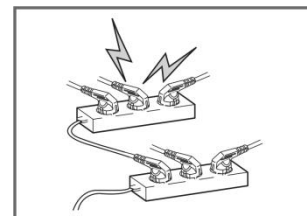
Do not connect too many extension cords or plugs to an outlet.
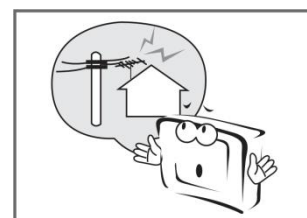– This may cause a fire.

Do not add an additional screen or cover the TV glass.
– The heated screen prevents condensation forming in steamy rooms and covering the screen may cause the unit to overheat.
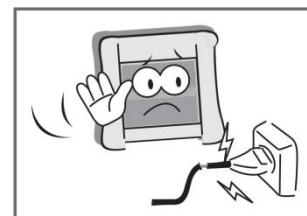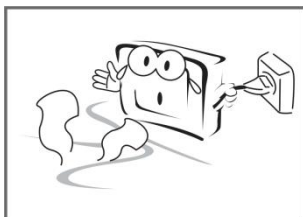
Do not use a damaged socket and do not let the power cord touch a heat source.
– This may cause an electric shock or fire.

If an outside antenna is connected to the unit, ensure the external to internal cable entry is fully sealed
– This may cause an electric shock or fire.

Ensure the antenna is located away from overhead cables.
– This may cause an electric shock.

If there are any unusual sounds or smells coming from the unit, turn it off immediately with the isolation switch and contact an authorised dealer or repair service.
– This may cause an electric shock or fire.
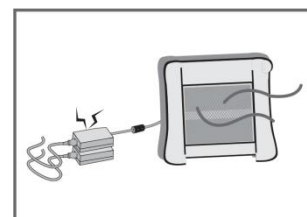
Keep the power adaptor away from any heat source.
– This may cause a fire.

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Accessories

Within the box there are following accessories supplied (beside the main unit):

Installation back box x 1pcs

Waterproof ceiling speakers x 2pcs

Speaker's connecting cables x 2 pcs

Remote control x 1pcs

DC Adapter x 1pcs

* real accessories may be slightly different from the pictures. Pictures are provided for reference use.

Installation Steps

When you install your AVIS TV please make sure you follow the steps as recommended below:

1.   Assemble the installation back box
2.   Prepare installation niche in accordance with back box sizes and type of installation (see Page 5).
3.   Prepare a niche in the wall or a place in your Bathroom cabinet for connecting cables.
4.   Lead sound cables from the ceiling speakers to the cables connecting niche.
5.   Fix installation back box inside the wall.
6.   Prepare a place for AC/DC Adapter (see Page 6).
7.   Install your TV into the back box (make sure all the cables are inside and there is no jamming between the TV and installation box).
8.   Connect neccessary cables and check your TV.
9.   Seal your TV as suggested on Page 7.

1. Assemble the installation back box

Assemble supplied metal installation back box and try if you TV can be fixed and released easily.

Prepare installation niche

Choose one installation type as shown below.
We recommend type 1 as more simple and universal.
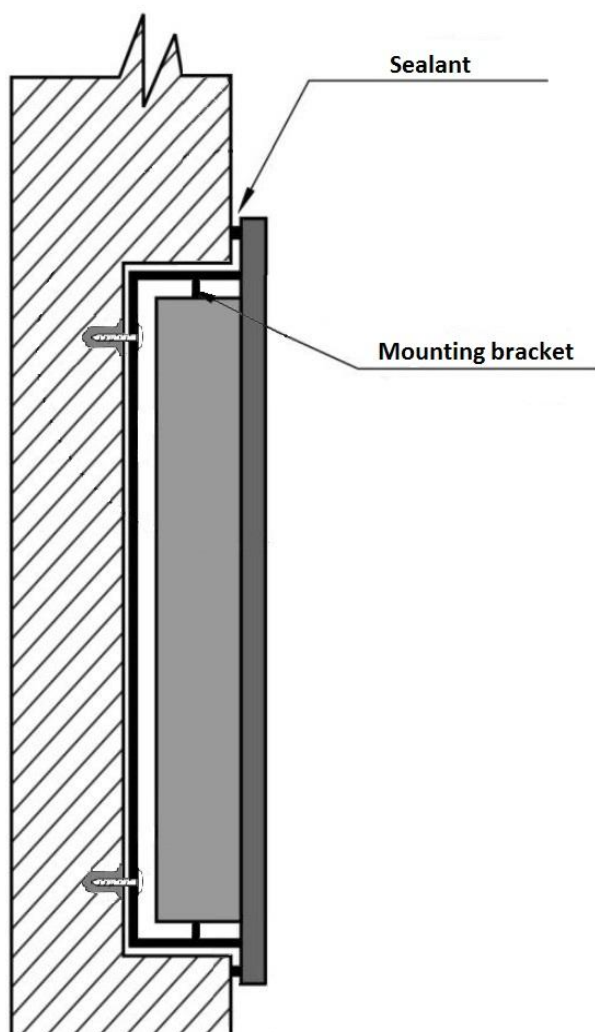
Type 1:   *Type 2:*

Use waterproof sealant as suggested on the pictures above to fix your TV and to make sure the water will not enter the back niche. Be noted that you may need to take off your TV for maintanance.

Connecting signal and power

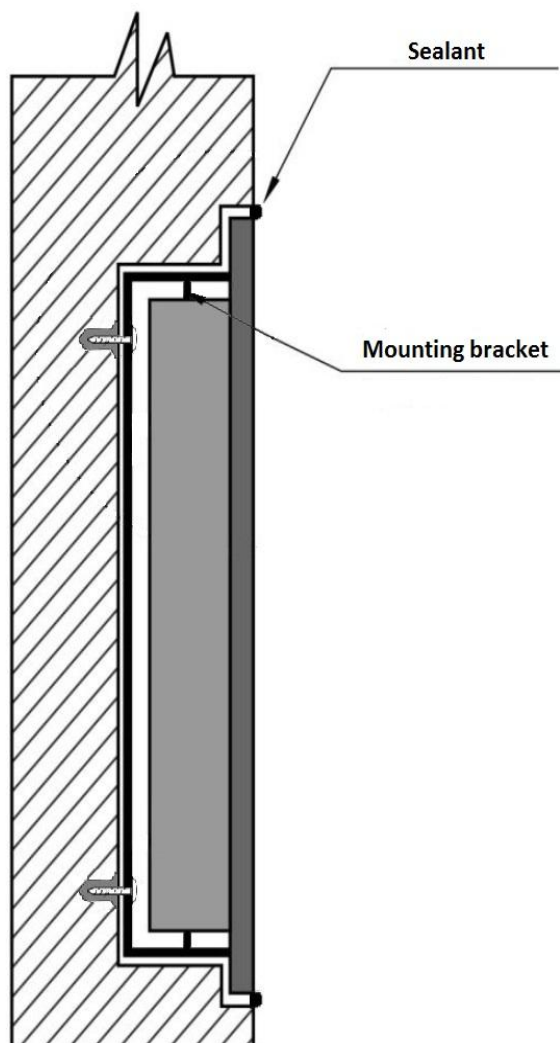Connect signal cables that you need according to the suggested scheme below. We aware that AC/DC power adapter is not waterproof and to be fixed in a dry place.

- AV input (3 x RCA - Yellow, White, Red)

- TV video input (1 x RF)

- HDMI input

- Mini Jack audio input (for use with VGA video input)

- VGA video input

- USB to play files from external media
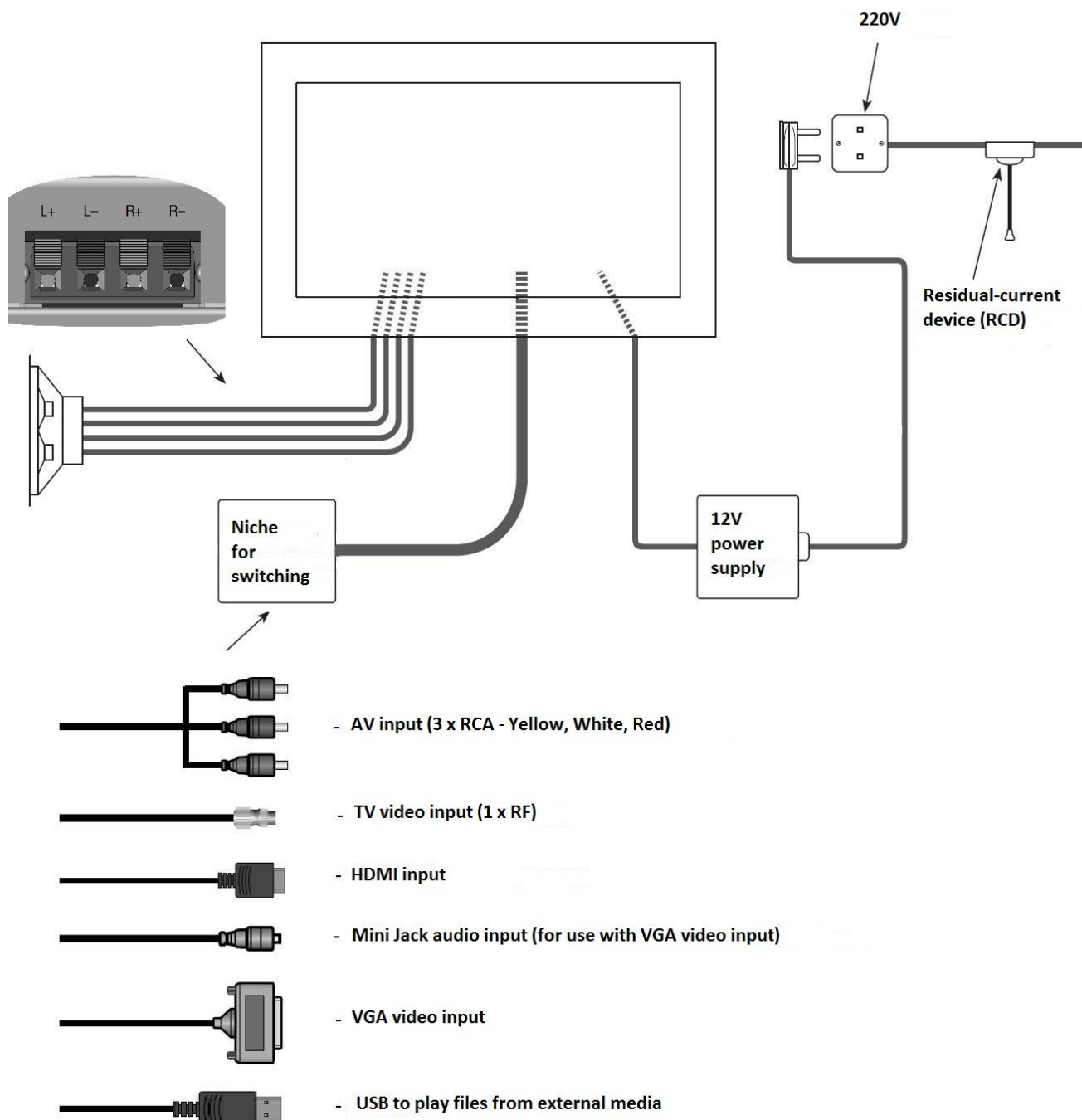
Sealing of joints

Before sealing make sure the TV is connected and works properly. According to type of installation carefully seal the joints with waterproof sanitary sealant.
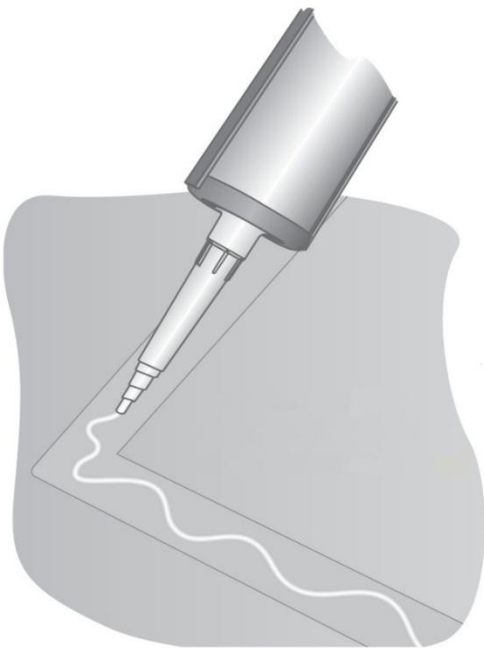
For Type 1 installation:

If you choose installation Type 1 add sealant on the back of the TV frame as shown on the picture and press the TV to spread the sealant between the wall and the TV frame.

For Type 2 installation:
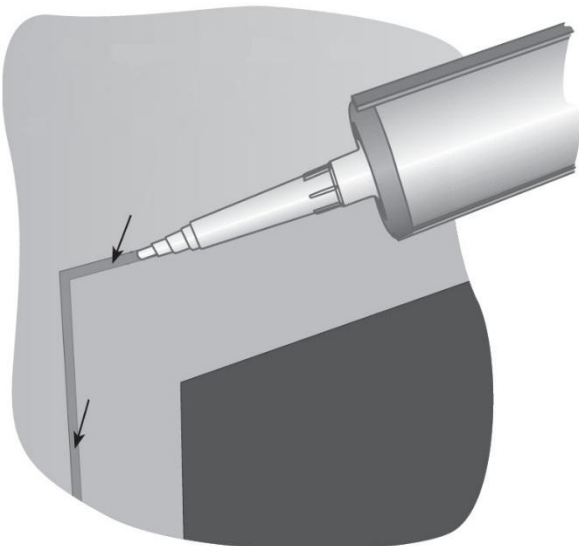
If you choose installation Type 2 seal the gap between the wall and frame of the TV as shown on the picture.

IR remote control (IP67)

Power ON/ OFF

INPUT — source select (TV / AV IN / HDMI / USB..)
MUTE — sound mute

0-9 — choose TV channel
▲, ▼, ►, ◄ — navigate in OSD Menu
OK — confirm your selection

CH+ / CH - — next / previous TV channel
VOL+ / VOL- - Volume control

Your remote control is full waterproof and can be submerged in water.

Caution! When you change the battery make sure that rubber O-ring under the cover is fixed properly otherwise your remote can be damaged by water.

OSD Menu

1. **CHANNEL** — choose TV input to activate menu
1.1 **Auto Tuning** - automatic tuning of all available TV channels
1.2 **ATV Manual Tuning** - manual tuning allows to fine-tune the channel, set the color system, sound system and enable automatic frequency control (AFC)
1.3 **Programm Edit** - allows you to set channel numbers
2. **PICTURE**
2.1 **Picture Mode** - allows you to select between "Dynamic", "Standard", "Mild" and "User" modes
2.2 **Color Temperature** - allows you to select between "Cool", "Medium", "Warm"
2.3 **Noise Reduction** - allows you to select between "Off", "Low", "Middle", "High".
3. **SOUND**
3.1 **Sound Mode** - allows you to select between "Standard", "Music", "Movie", "Sport" and "User" modes
3.2 **Balance** - adjust the volume balance between the left and right channels
3.3 **Auto Volume** - enable or disable the automatic level control of the sound
4. **TIME**
4.1 **Sleep Timer** - allows you to set the time before TV turns off
4.2 **Auto Sleep** — allows you to set time before TV turns off if you didn't push any buttons during whole period
4.3 **Timer Menu** - allows you to set the time period before the menu will disappear.
5. **OPTION**
5.1 **OSD Language** — choose menu language
5.2 **Aspect Ratio** - allows you to select between 4:3, 16:9, Scale1, Scale2
5.3 **Blue Screen** - appearance of a blue screen when there is no TV signal
5.4 **Key Lock —** function inactive
5.5 **Reset**
5.6 **Software Update (USB)**

Source selection

To select an external video and audio signals, press on the remote control INPUT and select one of the listed video inputs (see. P. 6). If the selected input is not connected the corresponding device, the screen will display "No Signal."
To view the TV signal "ATV" input is to be selected.

USB Host function

To turn on the media player, connect the USB memory stick to the input of the TV and select the video input "Media". In the menu you will be prompted to select "Photo", "Music", "Movie", "Text".
When viewing files on the memory card, press the "OK" button to access the playback control menu.

Table on Page 11 shows the supported media formats.

Media	File Ext.	Codec		Remark
		Video	Audio	
Movie	.avi	MJPEG	MP3, WMA, AAC MP2, PCM	**Max Resolution And Frame Rate:** 720p@30fps **Max Data Rate:** 10 Mbps
		Xvid, MPEG-2, MPEG-4		**Max Resolution And Frame Rate:** 720p@30fps **Max Data Rate:** 20 Mbps
	.mp4	MPEG-2, MPEG-4		
	.ts/ .trp	MPEG-2		
	.mkv/ .mov	MPEG-4		
	.mpg	MPEG-1, MPEG-2		
	.dat	MPEG-1	MP2	**Max Resolution:**352×288 **Max Data Rate:** 20 Mbps
	.vob	MPEG-2		**Max Resolution:**720×576 **Max Data Rate:** 20 Mbps
	.rm/ .rmvb	RV8, RV9, RV10	COOK	**Max Resolution And Frame Rate:** 720p@30fps **Max Data Rate:** 10 Mbps
Music	.mp3	--	MP3	**Sample Rate:** 32K~48KHz **Bit Rate:** 32K~320Kbps **Channel:** Mono/Stereo
	.wma	--	WMA	
	.m4a/ .aac	--	AAC	**Sample Rate:** 8K~48KHz **Bit Rate:** 24K~384Kbps **Channel:** Mono/Stereo
Photo	.jpg/ .jpeg	Progressive JPEG		**Max Resolution:** 1024×768
		Baseline JPEG		**Max Resolution:** 15360×8640
	.bmp	--		**Max Resolution:** 9600×6400
				Pixel Depth: 1/4/8/16/24/32 bpp
	.png	Non-Interlaced		**Max Resolution:** 9600×6400
		Interlaced		**Max Resolution:** 1200×800

File system: Hi Speed FS, FAT32, FAT16, NTFS(NTFS compressed file is not supported).

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VIDEO INPUT	TV	Receiving Range	48.25MHz-863.25MHz
		Input impedance	75Ω
		Video System	PAL/SECAM
		Sound System	B/G,D/K,I
			NICAM/A2
		Max storage Channels	200CH
		TELETEXT	1000Pages
	PC-RGB	Format	Up to SXGA@75Hz
	CVBS	Video System	PAL/NTSC/SECAM
		Video level	1.0 V_{P-P} ±5%
	S-Video	S-Y:0.714 V_{P-P}±5%, S-C:0.286 V_{P-P}±5%	
	Component	480i, 480p, 576i, 576p, 720p, 1080i, 1080p	
	HDMI	480i, 480p, 576i, 576p, 720p, 1080i, 1080p	
AUDIO INPUT	PC Audio	Earphone Input	0.2 ~ 2.0 V_{RMS}
	CVBS & Component & S-Video Audio	L/R RCA Input	0.2 ~ 2.0 V_{RMS}
AUDIO OUTPUT	Frequency Response	120Hz~14KHz @±3dB (1KHz, 0dB reference signal)	
	Max Output power	2×3W(4Ω)　THD+N<10%@1KHz (Power Supply: 12V, Audio Input: 0.5V_{RMS})	

	AVS190F	AVS220F	AVS260F
Screen	19" LCD	21.5" LED	26" LED
Product size (WxHxD)	536*400*52.5 mm	607x414x52.5 mm	737*497*52.5 mm
Resolution	1440 x 900	1920 x 1080	1920 x 1080
Brightness	350 cd/m2	350 cd/m2	400 cd/m2
Contrast	1000:1	5000:1	800:1
Colors	16.7M	16.7M	16.7M
Angle view (H/V)	170 / 160	170 / 160	178 /168
I/O	1 x TV (75 Ohm — PAL/SECAM)	1 x TV (75 Ohm — PAL/SECAM)	1 x TV (75 Ohm — PAL/SECAM)
	1 x PC (VGA)	1 x PC (VGA)	1 x PC (VGA)
	1 x HDMI	1 x HDMI	1 x HDMI
	1 x CVBS	1 x CVBS	1 x CVBS
	1 x USB	1 x USB	1 x USB
Audio input	2 x RCA Audio L - R	2 x RCA Audio L - R	2 x RCA Audio L - R
	1 x Mini Jack	1 x Mini Jack	1 x Mini Jack
Audio output	Amplified 2CH (8 Ohm) for ceiling speakers	Amplified 2CH (8 Ohm) for ceiling speakers	Amplified 2CH (8 Ohm) for ceiling speakers
USB Host	Supports video, audio and images playback from USB and HDD	Supports video, audio and images playback from USB and HDD	Supports video, audio and images playback from USB and HDD
Wateproof grade	IP65	IP65	IP65
Power supply	AC 100-240V, 50/60Hz/12V/5A Adapter	AC 100-240V, 50/60Hz/12V/5A Adapter	AC 100-240V, 50/60Hz/12V/5A Adapter
Power consumption	max.42W; 3W (stand by)	max.45W; 3W (stand by)	max.45W; 3W (stand by)