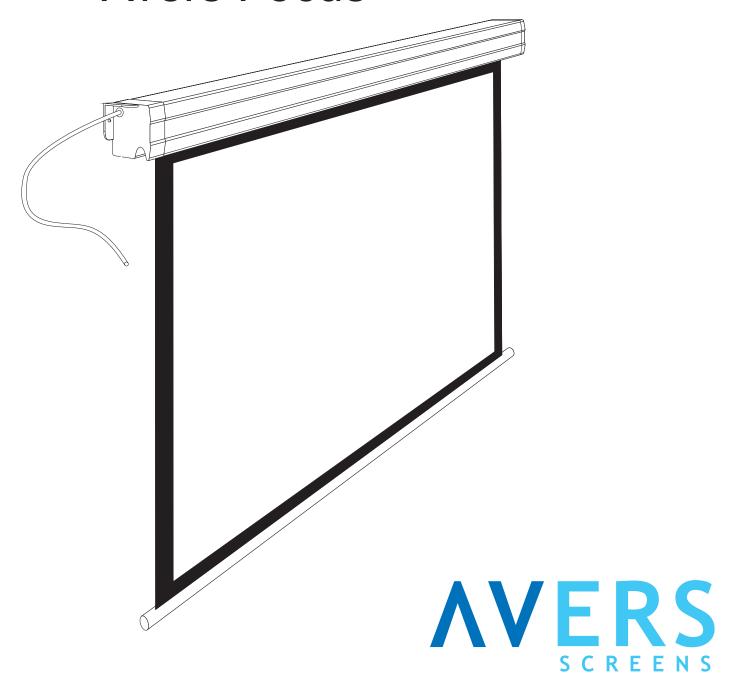
Electric projection screen Avers Focus



User's manual



Read these instructions carefully before operating the screen.

Dear Customer,

Thank you very much for the purchase of our product. The manual booklet contains all operation information you may require to install properly and operate the screen. We hope it will help you to get the most performance and enjoyment of your new screen. Enjoy time with the **Avers Screens** product.

SAFETY INFORMATION

NOTICE: Important safety information.

Follow the instructions described in the operating manual for safety reasons. After reading the manual, please store it in a safe place just in case you need it in the future.

NOTICE: THE DEVICE HAVE TO BE EARTHED.

WARNING:

- 1) Disconnect the device from the power supply if it will not be used within longer period of time.
- 2) Do not open the casing of the device in order to avoid possible electric shock. There are not any user operated parts inside the case of the screen. All service work can be done by Avers Authorized Service Center personnel only.
- 3) Do not remove the Ground pin from the power outlet neither connect the device to the socket without the Ground pin. If you can't put the plug to the power outlet, please ask electrician for assistance.

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1. SAFETY RULES

SAFETY INFORMATION

NOTICE: Important safety information. It is important for the safety of persons to follow these instructions.

After reading the manual, please save it just in case of need in the future

- Do not allow children to play with the fixed controls (remote control).
- Keep the remote control unit out of reach of children.
- Frequently examine the screen installation for imbalance and signs of wear or damage to cables. Do not use if repair or adjustment is necessary.
- Watch the moving screen and keep the people away until the screen is completely rolled in/out. It will help to avoid injuries caused with moving screen.
- Do not attach any objects to the screen's bottom bar. Screen damage and/or person injury danger.
- All installation work should be carried out by the qualified technician.
- Improper installation of the screen can cause device damage or health breakdown.
- Ceiling/wall installation can be done with the originally supplied mounting brackets dedicated for this model only.
- · Do not do anything that may damage the power cable or power plug.
- Do not damage the power cable: make any modifications by your own, put it near the hot objects, bend it strongly, twist it, pull out the power cable, put the heavy objects on the cable, wrap it into the bundle.
- · Operation of the screen with damaged power cord can result with electric shock, electric short circuit and fire.
- Do not touch the power cable and the power plug with wet hands.
- Always follow the instructions described in the operating manual.

1.1. Declaration of Conformity CE



Manufacturer's Dedlaration of ConformityCE

AVERS Screens Sp. z o.o. Under it's own responsibility declares:

All screensand accessories mentioned below are manufactured in Polandaccording to the essential safety requirements of Council Directive 98/79/WE

Projection screens: Stratus, AkuStratus, Focus, Cumulus X, Solar, Solaris, Contour, Altus, Cirrus CL, Cirrus X, Cirrus X crank
Projector mount brackets: Alumount, Promount, SimpleMount, Prolift

The above mentioned products are in conformity with the European Directives and especially with the norms:

PN-EN 55014-1:2007(U) PN-EN 50082-1:1997 PN-EN 60335-1:2004 PN-EN 61000-3-2:2007 PN-EN 61000-3-3:1997 IEC 60335-2-97:2007



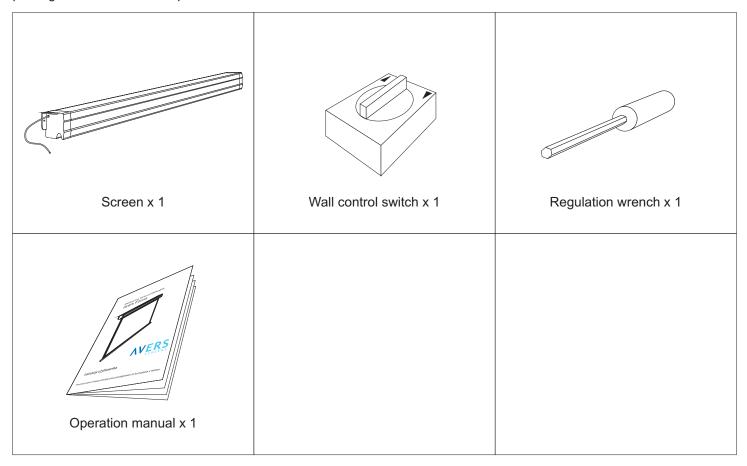


2. Product specification

Electrically rolled projection screen designed for fixed installation at projection systems for business presentations and/or home cinema applications. Best picture quality can be reached based when the selection of the projection surface type and size will be optimal for the, projection device (projector) and projection conditions at the planed installation. Optional remote control system can significantly improve comfort of use of the screen.

2.1. Contents of packaging

Please check carefully if any physical damage of the screen has not happen during transportation. Please inspect the package for all accessories presented below:



2.2. Technical Data

Projection fabrics characteristics:

- Matt White E (MWE) a special screen dedicated polyester fabric double side covered with vinyl, black back surface and white front (projection) surface, recommended for application with DLP and LCD multimedia projectors.
 Neutral color of the surface enables projection from any directions. Gain: 1.0, viewing angle: 150 degrees, thickness: 0,35 mm.
- Matt Grey E (MGE) a special screen dedicated polyester fabric double side covered with vinyl, black back surface and grey front (projection) surface, recommended for application with high brightness DLP and LCD multimedia projectors. The surface offers deeper level of black and more realistic rich dark colors recognized as a feeling of higher image contrast. Recommended for home cinema applications. Gain: 0,8. Viewing angle: 150 degrees, thickness: 0,35 mm.

Dimensions of projection screens.

Screen width [cm]	Viewing area size [cm]	Screen aspect ratio	Screen case size W x H x D [cm]	Projection fabrics max. length [cm]	Top belt width [cm]	Version *)	Net weigth**)
180	170 x 95,6	16:9	197 x 9,2 x 9,2	141	35	ВТ	7,7
	170 x 127,5	4:3		153	8	ВВ	7,8
	170 x 95,6	16:9		123,5	8	ВВ	7,5
	180 x 118,2	16:9		123,5	-	-	7,5
	180 x 135	4:3		150	-	-	7,8
	180 x 180	1:1		190	-	-	8,0
210	200 x 112,5	16:9	227 x 9,2 x 9,2	158	35	ВТ	9,7
	200 x 150	4:3		168	8	BB	9,8
	200 x 112,5	16:9		130,5	8	ВВ	9,5
	210 x 118,2	16:9		130,5	-	-	9,5
	210 x 157,5	4:3		168	-	-	9,8
	210 x 210	1:1		220	-	-	10,0
240	230 x 129,5	16:9	257 x 9,2 x 9,2	174,5	35	BT	11,5
	230 x 172,5	4:3		190	8	ВВ	11,7
	230 x 129,5	16:9		147	8	BB	11,3
	240 x 135	16:9		147	-	-	11,3
	240 x 180	4:3		190	-	-	11,7
	240 x 240	1:1		250	-	-	12,0

[&]quot;) – BT and BB versions are available with MWE or MGE fabrics

Motor:

Electric tubular engine AC:

Voltage: 220-240V AC 50 Hz, 125 W Power consumption: 0,52A

Rotation speed: 28 rot./min

Torque: 3 Nm

max. operation time*: 4 min

3. Screen installation

3.1. Installation precautions

- Installation work should be carried out by a qualified technician in accordance with the instructions described below.
- Fixed installation of the screen should be done with use of the screws and anchors suitable for the walls/ceilings materials at the installation place and the genuine installation brackets delivered with the screen.
- Check carefully after installation if the screen is perfectly leveled. Do not roll out the screen not installed in horizontal position. In case the screen leveling is not perfect correct the installation.

3.2. Ceiling installation

- Appoint the location of the ceiling mount brackets fixing points.
- Drill holes for anchors fixing the screen brackets to the ceiling.

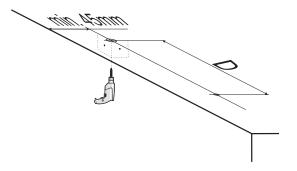
The mounting screws diameter should be not smaller than Ø8 mm. In case of the cartboard-plaster ceiling installation, use cartboard-plaster dedicated steel anchors with Ø11mm diameter screws.

Version BB – 5 cm width black border surrounding the viewing area

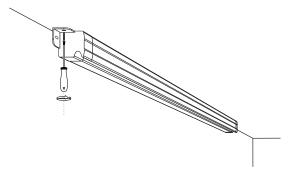
Version BT – 5 cm width black border surrounding the viewing area and additional black top 30 cm above the top black border.

[&]quot;approximate value for the screen with Matt White E fabrics

^{*)}Engine single cycle operation time, operation cycle can be repeated in 20 minutes intervals.



Pic.1 Drilling the holes for mounting anchors



Pic.2 Screen ceiling installation

D distance depends on the screen width: 194,8cm for Focus 18xxx 224,8cm for Focus 21xxx

254,8cm for Focus 21xxx 254,8cm for Focus 24xxx

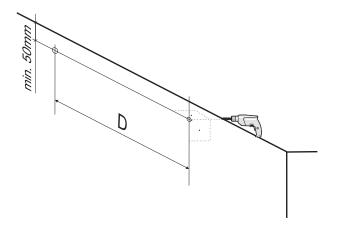
Fix the screen to the ceiling with anchors and screws.

Check the screen case leveling before first unrolling the screen. Do not use the screen if it is not properly installed(leveled).

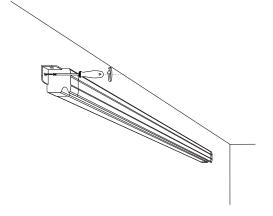
3.3. Wall installation

- Appoint the location of the ceiling mount brackets fixing points.
- Drill holes for anchors fixing the screen brackets to the ceiling.

The mounting screws diameter should be not smaller than Ø8 mm. In case of the cartboard-plaster ceiling installation, use cartboard-plaster dedicated steel anchors with Ø11mm diameter screws.



Pic.3 Drilling the holes for mounting anchors.



Pic.4 Screen wall installation

D distance depends on the screen width: 194,8cm for Focus 18xxx 224,8cm for Focus 21xxx

254,8cm for Focus 24xxx

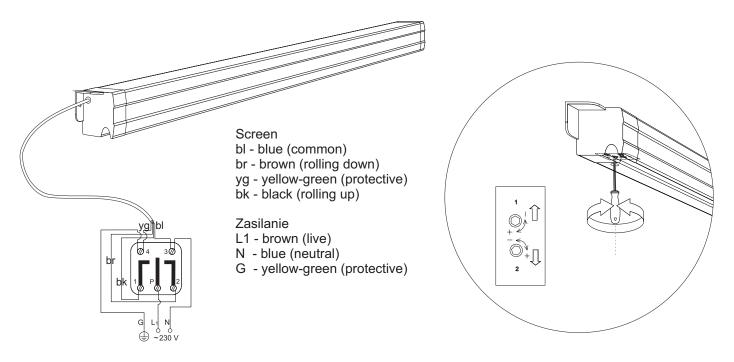
- Fix the screen to the wall with anchors and screws.

Check the screen case leveling before first unrolling the screen. Do not use the screen if it is not properly installed(leveled).

3.4. Electric installation.

ATTENTION: Electric installation work should be carried out by a certified electrician.

- Lead out the power cables to the place of installation of the wall switch and between wall switch and screen.
- Screen power line should be fused with 1A fuse.
- Switch off the screen power line during installation work.
- Manual wall steering switch should be installed at the place meeting the following conditions:
 - a) installation150-180 cm above the floor level,
 - b) the screen should be visible by the wall switch operator during the screen operation,
 - c) wall switch operator cannot stay in reach of any of the screen's moving parts during the screen operation .
 - d) the wall switch must be visible from the each part of the room irrespective of the screen position.



Pic.5 Wall switch connection

Pic.6 Lower bar fine tuning

3.5. Screen programming.

The screen is programmed properly at the factory and there is no need to reprogram it without any important reason. Setting of screen extreme positions was made by manufacturer. If you need to change the screen extreme position follow the instructions described below.

Programing the length of the rolled out screen (screen bottom bar position).

- Roll up the screen until it will stop automatically in the upper position.
- Insert regulation wrench included in the screen set into the regulation slot (see picture. 6) located in the left bottom part of the screen.

Regulation knob "2" (red color) enables setting of the lower extreme position of the screen bottom bar:

- ",+" means increasing the length of the fabrics is rolled down when the screen is rolled out, ",-" means decreasing the length of the fabrics is rolled down when the screen is rolled out.

Regulation knob "1" (white color) enables setting of the upper extreme position of the screen bottom bar:

- "-" means increasing the lenght of the fabrics is rolled down when the screen is rolled in,
- "+" means decreasing the length of the fabrics is rolled down when the screen is rolled in.

IMPORTANT!

Do not decrease (tuning knob 1+) the range of the rolled down surface. It can damage the screen. Do not increase (regulation 2+) the range of the surface which was rolled down behind the STOP mark, placed in the upper right corner of the screen. Rolling down the screen behind the mark can damage the screen.

4. Screen operation

Projection screen AVERS can be operated automatically (after installation of optional remote control system) or manually.

4.1. Manual operation

Manual screen operation is possible with the wall control switch or by radio frequency transmitter of the optional remote control system.

- Push button " ", the screen will begin to roll down and stop automatically at the bottom position after rolling down.
- Push button "A", the screen will begin to roll up and stop automatically in the upper position after rolling up.

4.2. Screen maintenance

Pojection screen Avers do not require periodical service maintenance. Clean dust from the screen case and fabrics with dry soft cloths. If needed use moisturized cloth with soft detergent to remove stains. After stain removal dry the cleaned surface with cloth carefully.

4.3. Before calling the service

Symptoms	Reasons	Remedy		
The screen fabrics does not roll down	Power failure	Check the screen's circuit fuse and the power cable		
the screen fabrics does not roll down smoothly	The screen was not installed properly in horizontal position.	Check if the screen case is properly leveled. Reinstall the screen correctly.		
The screen stops in the middle position.	There are some objects on the bottom bar way.	Remove the objects which can block the proper work of the screen or are at the bottom bar way.		
	Power failure	Check the propriety of electric installation and the state of the power wires.		

At other cases please contact service.

5. Warranty conditions

- 1) Avers screens warranty period is 24 months from the date of purchase confirmed with the original purchase invoice.
- 2) Extended warranty period for electric engine is 60 month.
- Surety commits to fix free of charge any failures (component or production defects) of the product which appear during warranty period.
- 4) Warranty exclusions:
 - a) the failures caused by the usage of the screen against the rules described in operation manual,
 - b) the failures caused by improper storage or transportation,
 - c) mechanical defects of the screen other than mentioned at point 3),
 - d) damages caused with overvoltage at power network,
 - e) deinstallation and reinstallation of the screen.
- 5) Avers Screens Service department will remove all defects within 21 days after receiving the demaged product.
- 6) Warranty claims should be passed to the screen supplier (dealer).



Manufactured after 13.08.2005

This symbol on the products and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste. Disposing of this product correctly will help to save valuable resources and prevent any potentialnegative effects on human health and the environment which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest designated collection point.