Saker Plus Series

Section 1: Screen Design

1.1   What is it?

The Saker Plus is a large venue electric/motorized projector screen.

1.2   How does it work?

The Saker Plus Series ships fully assembled with hardware and controls for out of the box operation. The Saker Plus Series can be operated using an Infrared or Radio Frequency Remote control, manual UP/STOP/DOWN keypad switch, or can be synchronized to a projector's power cycle with its 5-12v trigger. It includes built-in eyebolts on top of the housing for a suspended ceiling installation.

The Saker Plus utilizes our **GREENGUARD Gold** Certified MaxWhite (matte white) front projection material, which has a 1.1 Gain and a wide viewing angle.

Section 2: Control System

2.1   Infrared (IR) remote control

The Infrared remote control requires line of sight to the extended IR sensor, which connects to the RJ45 port on the circuit board control box.

2.2   Radio Frequency (RF) remote control

The radio frequency remote control does not require line of sight and has a wider range of operation. This also works to send out a radio frequency signal for the wireless 12-volt trigger operation.

2.3   5-12 volt trigger

The Saker Plus series is equipped with a 5-12 volt trigger port to synchronize your projector's power cycle with the screen.

2.4   Wireless 5-12 volt trigger

.   The Radio Frequency remote works as a handheld remote control as well as providing a wireless signal to drop the Saker Plus when synced with a projector's power cycle. The 3.5mm mono jack is connected to the radio frequency remote and the other end to the projector's trigger port.

2.5   Motor Specifications

Specifications of Tubular motor – 110v and 220v

Output Current	Output Speed	Output Torque	Voltage	Power	Frequency	Noise level	Protection Index	Insulation Class
1.13A	12 rpm	50kg/cm	AC220V	250 W	50 Hz	48dB	IP44	F
2.18A	12 rpm	50kg/cm	AC110V	240 W	60 Hz	48db	IP44	F

Section 3: Product Features

3.1 Characteristics

Screen Material:
- MaxWhite 1.1 Gain front projection surface
- Wide viewing angle, uniformly diffuses light in all directions
- Standard black masking borders and black backing
- Active 3D and 4K Ultra HD Ready
- Diagonal sizes include 200" and 235" in 4:3 and 16:9 format
- GREENGUARD Gold Certified | UL 2818 for Indoor Air Quality emissions

Control System:
- Internal Radio Frequency/Infrared receivers with IR, RF remotes included
- Infrared IR "eye" extension sensor - ideal for concealed installation but still require Infrared control
- Wireless 12 volt trigger included for synchronized screen operation with the projector's power cycle
- Detachable 3-way wall switch keypad for UP/STOP/DOWN manual operation
- RJ45 port allows 3rd party control system integration

Design and Installation:
- Streamlined arcuate profile aluminum heavy-duty white case
- Ring bolts included on case for suspended ceiling installation
- Plug & play, hardwire installation not required

Quality and Reliability:
- Tubular motor allows swift operation with a superior weight tolerance and operational lifespan
- 2-year warranty from defects in workmanship
- 3rd year warranty offered through ENR-G program
(Education, Non-Profit, Religious, and Government/Military)

3.2 Model Numbers

Model Number	Nominal Diagonal (Aspect Ratio)	Viewable Height (in).	Viewable Width (in.)	Screen Material	Gain	Case Color	N.W. (lbs)	G.W. (lbs)	Packing Dims LxWxH (in.)
SK200XVW2	200"(4:3)	120.0	160.0	MaxWhite	1.1	White	109.7	142.9	182.7"x11.2"x13.2"
SK235XVW2	235"(4:3)	140.3	187.0	MaxWhite	1.1	White	148.3	186.4	211.4"x11.2"x13.2"
SK200XHW2	200"(16:9)	98.0	174.0	MaxWhite	1.1	White	112.1	147.1	196.7"x11.8"x13.8"
SK235XHW2	235"(16:9)	115.4	205.0	MaxWhite	1.1	White	172.5	185.9	227.6"x11"x13.4"

Elite Screens Inc. | Elite Screens Europe GmbH | Elite Screens France S.A.S | Elite Screens India
Elite Screens China Ltd. | Elite Screens Taiwan Corp. | Elite Screens Japan

2

Section 4: Screen Material Specifications

4.1   Characteristics

Front Projection Screen Material

MaxWhite screen material is the most versatile screen surface for front projection presentations. This material provides the widest possible viewing angles with perfect diffusion uniformity while giving precise definition, image color reproduction, and black and white contrast. Screen surface has a black-backing to avoid light penetration, is mildew resistant and washable with mild soap & water.
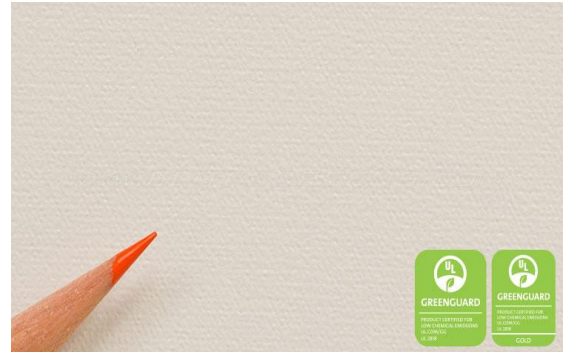
Features & Benefits

- Gain: 1.1
- Viewing Angle: 180° (90°LR)
- Black-backing eliminates light penetration
- Wide diffusion uniformity – maintains luminance levels through out entire surface
- Surface can be cleaned with soap, water and a soft cloth - Mildew Resistant
- Active 3D and 4K Ultra HD Ready
- GREENGUARD Gold Certified | UL 2818 for Indoor Air Quality emissions

Specifications	
Thickness	0.44 mm (0.017")
Weight	450 g/m^2
Roll length	3.2 M (10 ft.)
On-axis gain	1.1
Half-gain angle	Does not reach half gain

4.2   Gain and Viewing Angle Chart

MAXWHITE
By Elite Screens

On axis 0° Gain: 1.1
Viewing Cone: 180°
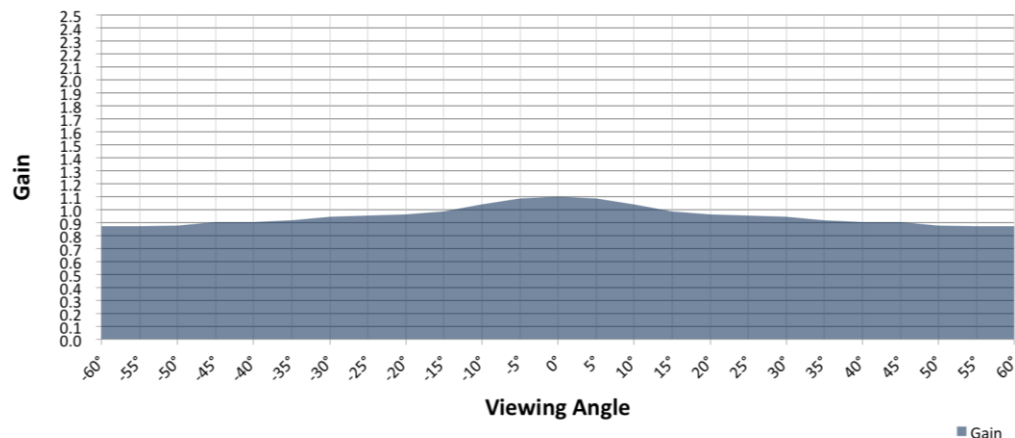
Section 5: Execution

5.1   Preparation

1. Carefully unpack the screen.
2. Always handle the screen in the upright position as it would appear when installed and on a clean level surface.
3. In order to protect the screen from staining or discoloration, keep the unit out of contact with direct sunlight and foreign particles such as dust, sawdust and liquids.

5.2   Installation

1. Select the location for your screen within a reasonable projection angle along with access to a good power source.
2. For an installation with the best weight tolerance, it is ideal to secure your screen into a supporting structure suitable for this product. Elite Screens is not liable for any faulty installations.

Hardware Parts List

Please make sure all parts listed below are included before proceeding with the installation.

A.M10*Suspended Hook x 4 pcs	B. 20cm*Bubble leveler x1pc

## Installation Instructions

Recessed Installation

1. Select the installation location for your screen. Measure the distances between each eyebolt (Shown as measurements L and A in Fig.1). Mark the installation area on the ceiling based on the measurements taken. Using the marks as a guideline, drill a hole in the ceiling for each suspension bolt. The distance between the installation hole (M) and the wall should be no longer than the measurement A. Insert one eye bolt of the M10 Suspended hooks into the predrilled holes.
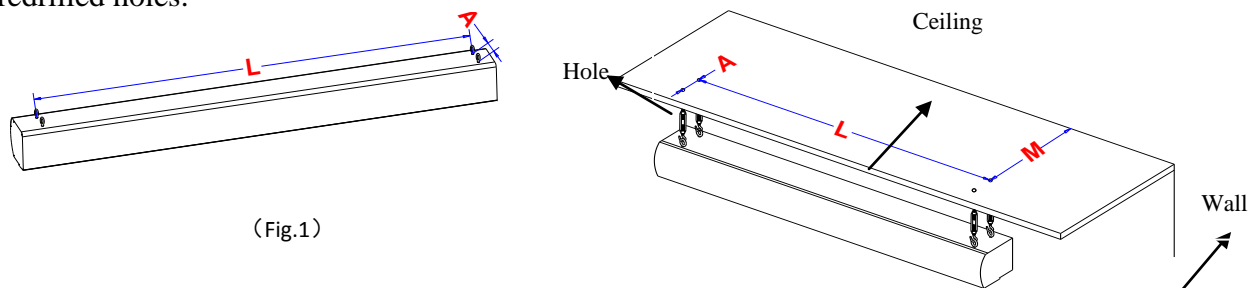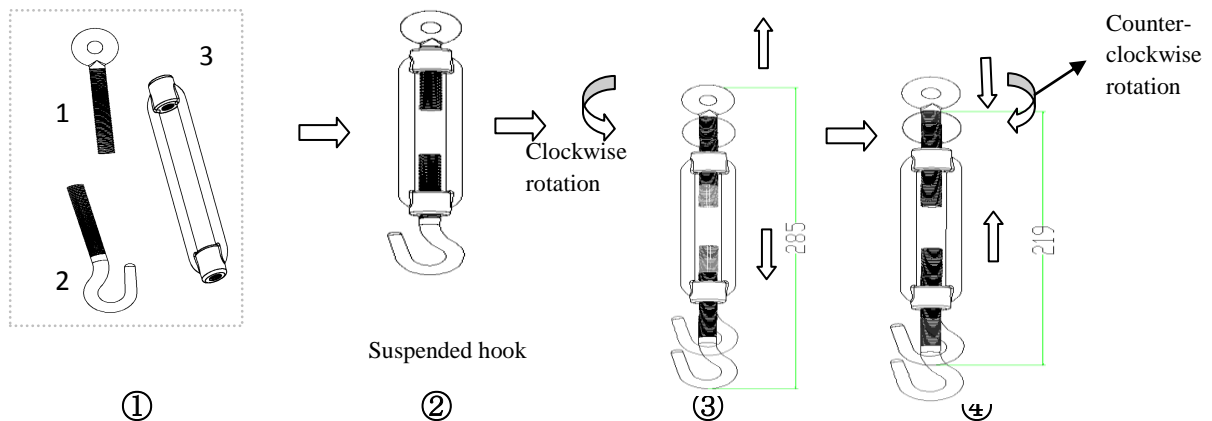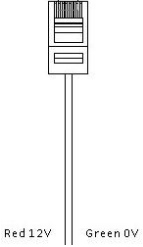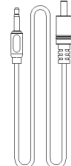

（Fig.1）

2. Connect the center component of the M10 Suspended hooks to the eyebolts installed above the ceiling. Once properly secure, connect the third component of the M10 Suspended hooks. Attach the suspended hooks (4xM10) individually to each of the 4 eye bolts located on the top of the screen (A/B/C/D)

D

C

A

B
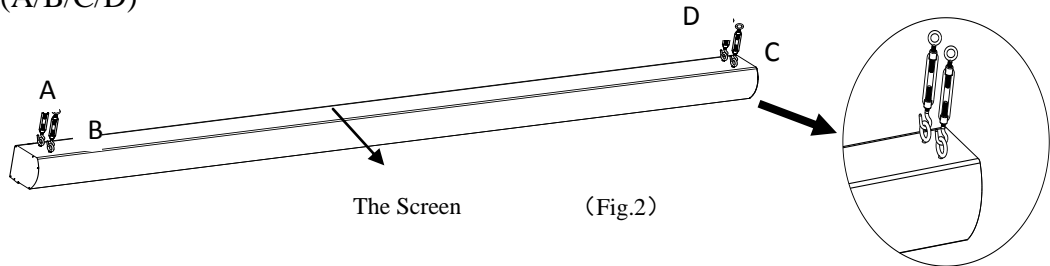
The Screen （Fig.2）

3. After the installation is complete, if the screen is not leveled, you can adjust the height of the suspended hooks to level the screen. Below are the adjustment methods for the suspended hooks.The maximum and minimum adjustable lengths are shown in Fig 3.

3

1

2

Counter-clockwise rotation

Clockwise rotation

285

219

Suspended hook

①　　　　　　　　　②　　　　　　　　③　　　　　　　　④

（Fig.3）

Saker Plus Series | Controls and Accessories

A. IR Remote	B. RF Remote	C. Wall switch control box	D. 5-12 volt trigger cable
			Red 12V Green 0V
E. IR extended "eye" receiver	**F. Wireless 5-12v trigger cable**	**G. AAA batteries**	

Elite Screens Inc. | Elite Screens Europe GmbH | Elite Screens France S.A.S | Elite Screens India
Elite Screens China Ltd. | Elite Screens Taiwan Corp. | Elite Screens Japan

5

Screen operation

Electric Current: The screen may operate on 100v-220v, depending on region.

1. After ensuring the power outlet & screen are compatible (voltage), plug the power cord into the power outlet.

2. Once the screen has power, you'll be able to control it using any of the 5 methods described below.

**5 ways to control your Saker Plus**

1. *IR remote control* (**Item A, Fig 1**) *and IR "Eye" Receiver* (**Item E, Fig 2**):
The Infrared functions by direct line of sight contact with a beam range of 30 feet. The IR "Eye" receiver plugs directly into the screen's RJ-45 input to present a low profile line-of-sight control option for your IR remote control even in a recessed ceiling installation. Once connected, simply aim the IR remote at the IR "Eye" receiver to control the screen.

UP
STOP
DOWN
IR/RF remote
Fig.1
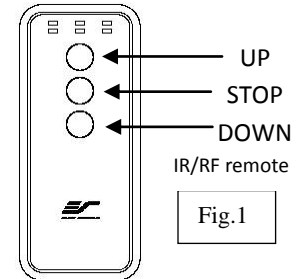
2. *RF Remote Control* (Item B): The radio waves eliminate the need for a direct line of sight with a range of 100 feet.

3. *3-Way Wall Switch* (Item C, Fig 3): The 3-way wall switch is a wall mount control box with an up/stop/down button and plugs directly into the screen's RJ-45 input.

Fig.3

Fig.2

3 Way Wall Switch
(does not have IR sensor)

IR "eye" receiver

3 prong power cord
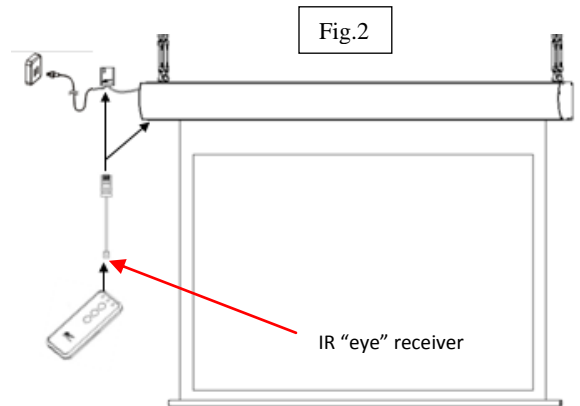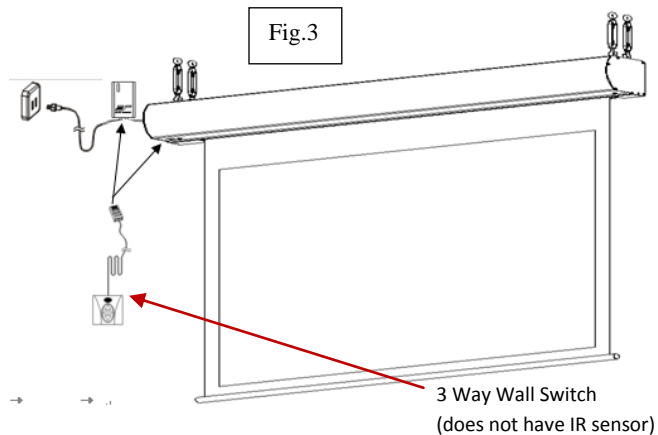
4. *5-12 volt trigger* (Item D, Fig 4): The built-in 5-12V trigger input allows your screen to synchronize its drop & rise with the projector's power cycle. The screen deploys when the projector powers on and will retract when the projector powers off. The 5-12 volt RJ45 cable connects to your projector's trigger output via a separate cable that may or may not be provided by the manufacturer of the projector. The trigger feature will not work without an output cable from the projector, but it can be tested by connecting the Red (+) and Green (-) cable to a 9-volt battery.

5-12 volt trigger cable

Fig.4
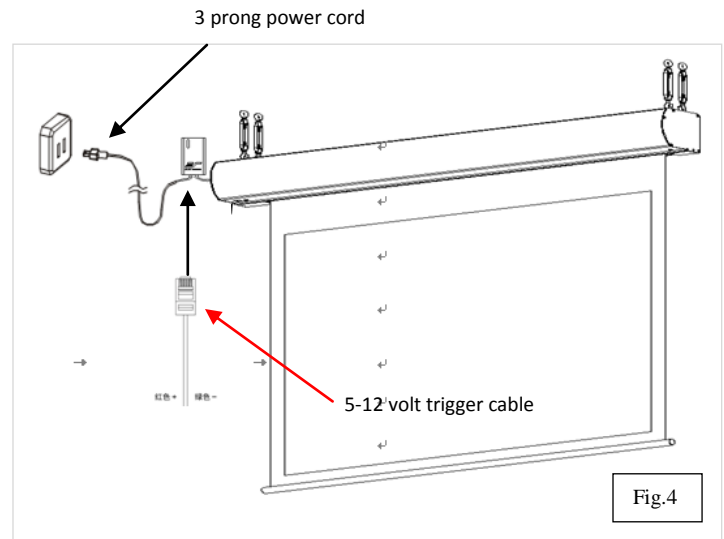
5. _Wireless 5-12 volt trigger_ **(Item F, Fig 5)**: The RF remote control serves as a dual purpose, independently as a handheld remote control, or in conjunction with the Wireless 5-12 volt trigger cable. The radio frequency technology can be programmed to send a wireless signal to synchronize its drop & rise with the projector's power cycle.

Here's how to set up your Wireless 5-12 volt trigger | Synchronization Instructions

Step1: Connect the wireless 5-12 volt trigger cable to the RF remote (3.5mm)

Step 2: Connect the 12 v adaptor end of the wireless 5-12 volt trigger cable to your projector

Step 3: Make sure to unplug your screen from the power outlet

Step 4: Hold the **UP** button on your RF remote

Step 5: While holding the **UP** button, plug the screen back to the power outlet

Step 6: Wait 5 seconds and then release the **UP** button

Step 7: Your 5-12V wireless trigger should now be activated with your screen and ready to be used and able to control your screen with your projector's power cycle

Repeat the steps again if not successful.

(Please be aware, the projector on/off cycle may take longer to fully activate. It usually takes around 20-30 seconds for full off and on cycle each time)

The back of the projector

DC 5-12V out

Wireless 5-12V trigger cable

UP
Stop
Down

Fig 5

Elite Screens Inc. | Elite Screens Europe GmbH | Elite Screens France S.A.S | Elite Screens India
Elite Screens China Ltd. | Elite Screens Taiwan Corp. | Elite Screens Japan

7

http://www.elitescreens.com
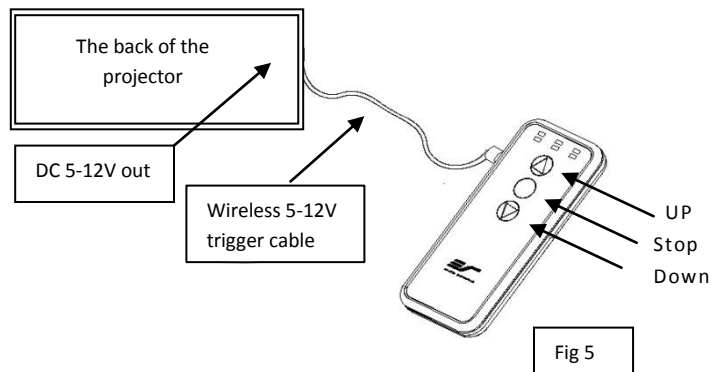
Section 6: Product Specifications
6.1   Dimensions

Saker Plus Dimensions Table

Unit: mm																		
Model Numbers	Nominal Diagonal	Case Length (A)	A1	Screen Width (A2)	View Width (A3)	A4	A5	B	B1	B2	View Height (B3)	B4	Screen Height (B5)	C	C1	C2	C3	C4
SK200XVW2	200" (4:3)	4471	4298	4164	4064	50	4264	3430	170	152	3048	60	3260	170	220-285	48	25	67
SK235XVW2	235" (4:3)	5182	5009	4875	4775	50	4975	4014	170	203	3581	60	3844	170	220-285	42	25	67
SK200XHW2	200" (16:9)	4834	4661	4528	4428	50	4628	2873	170	152	2491	60	2703	170	220-285	48	25	67
SK235XHW2	235" (16:9)	5609	5436	5303	5203	50	5403	3360	170	203	2927	60	3190	170	220-285	42	25	67
Unit: Inch																		
Model Numbers	Nominal Diagonal	Case Length (A)	A1	Screen Width (A2)	View Width (A3)	A4	A5	B	B1	B2	View Height (B3)	B4	Screen Height (B5)	C	C1	C2	C3	C4
SK200XVW2	200" (4:3)	176.0	169.2	163.9	160.0	2.0	167.9	135.0	6.7	6.0	120.0	2.4	128.3	6.7	8.7-11.2	1.9	1.0	2.6
SK235XVW2	235" (4:3)	204.0	197.2	191.9	188.0	2.0	195.9	158.0	6.7	8.0	141.0	2.4	151.3	6.7	8.7-11.2	1.7	1.0	2.6
SK200XHW2	200" (16:9)	190.3	183.5	178.3	174.3	2.0	182.2	113.1	6.7	6.0	98.1	2.4	106.4	6.7	8.7-11.2	1.9	1.0	2.6
SK235XHW2	235" (16:9)	220.8	214.0	208.8	204.8	2.0	212.7	132.3	6.7	8.0	115.2	2.4	125.6	6.7	8.7-11.2	1.7	1.0	2.6

The listed measurements are for general reference only. Please contact Elite Screens to verify product design and dimensions before attempting to integrate its products with any structural or furniture modification. Although a manufacturer may offer product advice, it may be taken or disregarded at the integrator's discretion. Elite Screens will not be held responsible or be otherwise liable for faulty installations.

6.2   Drawings

Unit: mm

Elite Screens Inc. | Elite Screens Europe GmbH | Elite Screens France S.A.S | Elite Screens India
Elite Screens China Ltd. | Elite Screens Taiwan Corp. | Elite Screens Japan

8
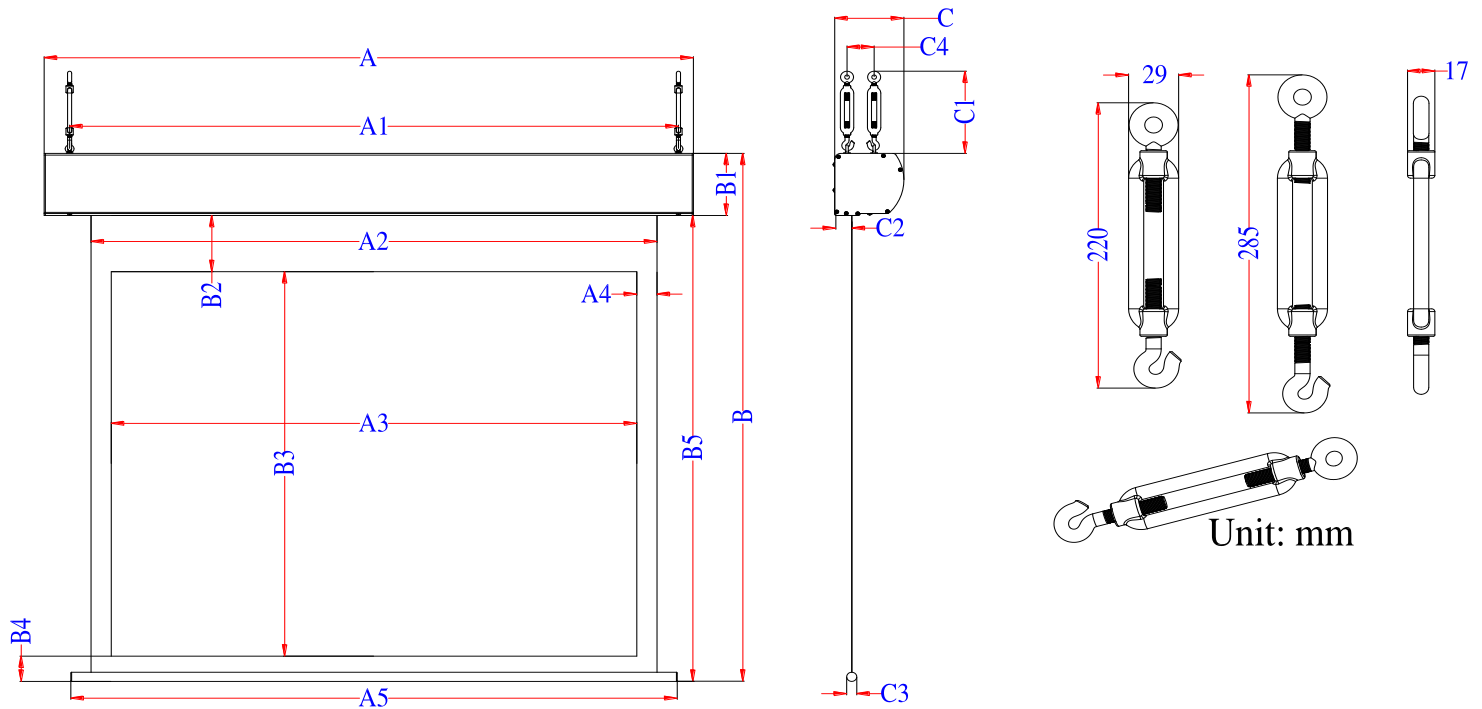
6.3   Pictures
Full Screen View of 4:3 models

Full Screen View of 16:9 models

Elite Screens Inc. | Elite Screens Europe GmbH | Elite Screens France S.A.S | Elite Screens India
Elite Screens China Ltd. | Elite Screens Taiwan Corp. | Elite Screens Japan

9
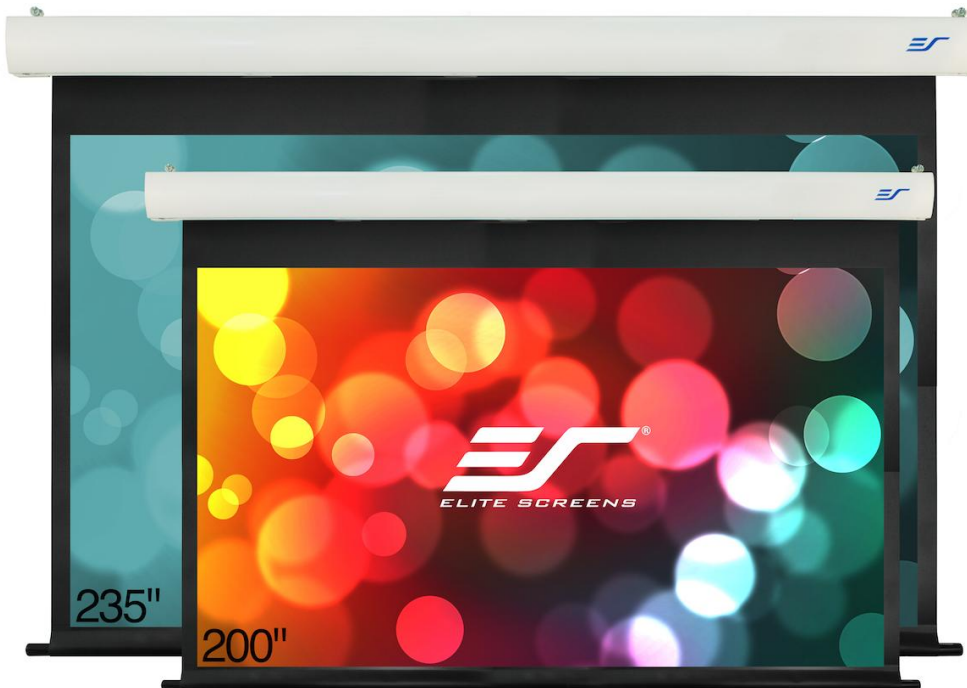
Close up of right side with screen material

Close up of bottom

Elite Screens Inc. | Elite Screens Europe GmbH | Elite Screens France S.A.S | Elite Screens India
Elite Screens China Ltd. | Elite Screens Taiwan Corp. | Elite Screens Japan

10

Close up of eyebolts on top of case for suspended ceiling installation

Close up of hooks (included) attached to eyebolts for suspended ceiling installation

Elite Screens Inc. | Elite Screens Europe GmbH | Elite Screens France S.A.S | Elite Screens India
Elite Screens China Ltd. | Elite Screens Taiwan Corp. | Elite Screens Japan

11

Back of the case

IR and RF remote controls with wall

IR and RF remote controls, wall switch keypad, wired and wireless 5-12 volt trigger cable and IR extended sensor

Section 7: About Elite Screens

7.2   Company Description

Elite Screens Inc. is a California based company that specializes in making quality commercial and home-theater projection screens for the retail and custom install sales channels. Our company began as an innovative venture into the projection market by manufacturing veterans from the AV/IT industry. Elite Screens quickly established itself as an entry-level commercial and home theater screen manufacturer. This was accomplished by making a quality product cost effective with a focus on mass-producing screen material, sizes and aspect ratios that were most commonly preferred by AV customers in general. We focused on uniformity with what would match the mainstream demographic while including extra features that are not usually included by other manufacturers. In time, we progressed from just retail sales into the realm of custom installer/integrator manufacture as our numerous reviews and awards will attest. We stand behind our product and are so certain of customer satisfaction with the quality of our product that we offer a 2-year manufacturer's warranty, which is twice the industry standard.

In our continued devotion to excellence in products and service, we are committed to implementing green practices with our production. We have adopted manufacturing methods that promote conservative regulation of our energy needs. Our simple product designs combined with the expertise of our permanent staff ensures that our entire line of products are made by experienced hands devoted to the high standards of today's audio-video consumer.

###

Elite Screens Inc. | Elite Screens Europe GmbH | Elite Screens France S.A.S | Elite Screens India
Elite Screens China Ltd. | Elite Screens Taiwan Corp. | Elite Screens Japan

13