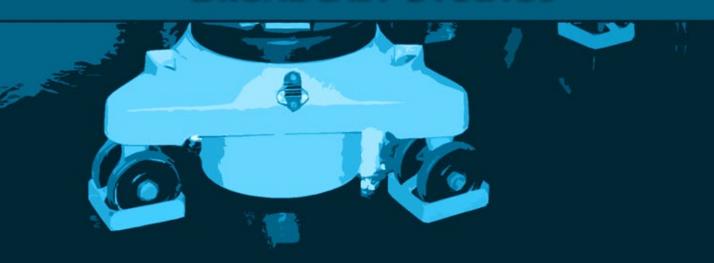


# SCO BROADCAST STUDIOS





**RoscoVIEW Brochure** 

# **RoscoVIEW** is the solution for studios with windows!



With RoscoVIEW panels on the windows, the exterior exposure can be easily controlled by rotating a matching camera filter.

The RoscoVIEW system allows you to shoot your lenses wide open with the exterior overexposed. Simply dial in the exterior exposure to match the interior. Best of all, the ambient light coming into the room or studio is reduced by only one stop.



Properly exposed exterior



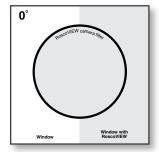
Properly exposed interior

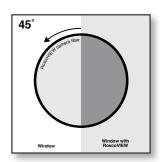


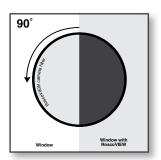
Properly exposed interior using RoscoVIEW to balance



Properly exposed interior using RoscoVIEW to darken







Technically this is achieved using cross-polarization. The window panels and the camera filter are both one stop, Rosco Linear Polarizers. By rotating the camera filter, the degree of cross polarization on the RoscoView window filter is changed. This results in 100% control of exterior brightness as seen through the camera.



## RoscoVIEW is a perfect solution for Broadcast News and Sports as well as the TV and Motion Picture industries.



## **Network News and Sports**

ABC, BBC, CBC, CNN, CTV, GLOBO News, Bloomberg News, NBC, Sky Sports, TV2, Golf Channel, WFTV, Tour de France, Phoenix TV, Record Brazil, Shaw TV

#### Film and Television

"Parenthood", "Californication", "The Latest Buzz", "How Do I Look", "Extra at the Grove", "Degrassi - The Next Generation"



#### **Rosco Camera Filter Control**

Motorized camera filter rotators are available from Rosco, providing the flexibility of remote controlled rotation. All rotators are IP controlled allowing operation from anywhere a network or

internet connection is available. Remote operation is accomplished either using a hard switch or the Rosco Graphical User Interface (GUI). The GUI can control up to 8 separate rotators in any location.

#### **Camera Filters**

Rosco also provides RocsoVIEW glass camera filters in a variety of sizes for mattebox use. Additionally we have an 82mm rotating screw-in filter.



#### Benefits of RoscoVIEW

You can instantly compensate for changes in the daylight exposure as clouds move in and out, or as sunset approaches

Use fewer and lower wattage lighting fixtures which can save electrical and cooling costs

Reduces studio down-time, no more change out of filter, increase shooting time

Great for areas where it is difficult to re-apply filter regularly







#### **RoscoVIEW Panels**

A two part system, RoscoVIEW is placed on the windows and a RoscoVIEW camera filter is fitted to the camera lens. By rotating the camera filter, when shooting towards the windows, cross polarization occurs. This effectively lets you change the exposure outside the windows to match the interior exposure. It is quite possible to be 10 stops overexposed outside and dial that overexposure down. As the exterior exposure changes, you can instantly make corrections by simply rotating the camera filter. All this happens for the camera sensor only. To the naked eye there are no changes except for a reduction of one stop of light entering the windows.

• cast acrylic panels with RoscoVIEW

- nominal sizes of 4'x8' and 4'x10' available
- provides a flat, smooth product for mounting on windows can be custom cut



#### **RoscoVIEW Mark II Rotator**

The Mark II Rotator provides motorized rotation of the RoscoVIEW camera filter on the camera lens. By rotating the cameras RoscoVIEW filter, cross polarization with the RoscoVIEW material on the windows gives the user complete control of the exterior exposure to the camera sensor.

gear driven for no slip rotation

- works with the Rosco GUI (Graphical User Interface)
- remotely control the RoscoVIEW camera filter
- · utilizes the same connections and controllers as the original
- will fit any lens with an outer barrel diameter of up to 139mm • 7.5" x 6.2", 17 oz.
- the next generation of the RoscoVIEW camera filter rotator with a more robust design



#### **RoscoVIEW Compact Rotator**

The Compact Rotator is a smaller, lighter version of the Mark II Rotator. By rotating the cameras RoscoVIEW filter, cross polarization with the RoscoVIEW material on the windows gives the user complete control of the exterior exposure to the camera sensor.

- smaller and lighter than the Mark II Rotator (6"x4", 8.4 oz.)
- works with the Rosco GUI (Graphical User Interface)
- 76mm diameter RoscoVIEW camera filter
- gear driven for no slip rotation
- 3 mounting holes permit the user to design a customized mounting rig best suited for their needs
- designed for smaller cameras often used in remote satellite studios or for Web broadcasts
- · utilizes the same connections and controllers as the Mark II Rotator



## RoscoVIEW Camera Filter Rotator - LCU (Local Control Unit)

- Local Control Unit (LCU)
- Controls and powers the RoscoVIEW rotator
- Connections for the Rotator, Network and remote switch
- When used with a POE (power over Ethernet) switch, the LCU will supply power to the Rotator no external power connection required
- Onboard rocker switch for local control of the Rotator
- Remote switch connection can use a hand held switch up to 70 feet away



## RoscoVIEW Camera Filter Rotator - RCU (Remote Control Unit)

- Remote Control Unit (RCU)
- Allows the remote control of the RoscoVIEW rotator and LCU over a network
- Connections for the Network and remote switch
- If used with a POE (power over Ethernet) switch, the RCU requires no external power connection
- Onboard rocker switch for local control of the Rotator
- Remote switch connection can use a hand held switch up to 70 feet away



#### Rosco Remote Switch

The Rosco Remote Switch controls the RoscoView Rotator up to 75 feet away from the LCU or the RCU. It connects with a thin telephone like cable and employs a spring loaded switch for controlling rotation in either direction. Specifications: 4.1"x1.8"x1.27" (104mm x 46mm x 32.4mm) .28 pounds (130 grams) Connectors: RJ45





#### **RoscoVIEW Camera Filter**

RoscoVIEW camera filters utilize the same polarizer as panels, only in photographic glass. Used in the RoscoVIEW rotator or standard mattebox, they provide the camera side component of the RoscoVIEW system to control exterior exposure. These filters are the same quality as any photographic filter on the market and can be used with confidence by any camera person. They are available in a number of standard sizes. Custom filter sizes are possible with sufficient notice.

Sizes available: 6.6" x 6.6", 4" x 5.6", 4" x 4", 138mm round and an 82mm round in a threaded rotating ring.



## **Step Ring**

For lenses with an end barrel outer diameter (OD) of less than 139mm, a step ring is necessary to fit the RoscoView Rotator on the lens. The Step Ring is machined aluminum with an inner diameter custom cut to fit smaller lenses. Rosco carries Step Rings for 85, 95 and 98mm OD as stock items and can supply other diameters with appropriate notice.





The RoscoVIEW GUI provides a computer interface for controlling the RoscoVIEW camera Rotators. Rather than controlling the cameras with individual physical switches, the GUI consolidates all controls in a single computer window.

- Graphical User Interface control for the RoscoVIEW camera filter rotators
- control up to 8 rotators (original, Mark II or Compact) on a single screen
- · Windows based software connects to each rotator across your network
- IP control permits operation from anywhere an internet/network connection is possible
- each Rotator can be controlled individually or locked together for simultaneous rotation
- remote connection status at a glance

## **RoscoVIEW H Channel**



H Channel is typically used as a seaming joint when 2 panels must be used to cover a window higher than a single panel can cover alone. The H channel is not a structural element, more a decorative one to keep the Polarization effect smooth at the joint. It prevents uncontrolled exterior light from coming through the joint crack. When panels deflect (bow) they move in a uniform way rather than apart. It cannot be expected to support multiple panels across a large area.

Available for 6mm and 9mm panels

#### Air Channel



The RoscoView Air Channel is a modified aluminum channel that is placed at the bottom of a RoscoView Panel window installation. It permits the necessary air flow behind the panel to reduce heat buildup and condensation. The vented section (with holes) is set against the window sill with the RoscoView Panel fitting into the top slot. Another section may be placed on the top most panel where it meets the ceiling or window top sill. There should either be an opening or an Air Channel at the top to allow air movement.

Air channels should not be considered structural members particularly across large spans. Panels need vertical support with L Brackets at a minimum and horizontal Air Channels may need to be affixed to the sill for longer lengths.

Available for 6mm and 9mm panels

#### **RoscoGUARD - Protective TAC Film**



Rosco's Protective Film is a 3 mil thick low tack film used to protect the surface of RoscoView panels during transportation. It will not leave a residue on the panels and can be pulled off and re-applied if care is used. The Protective Film is good for protecting the panel from dust, dirt, fingerprints and mild abrasions but should not be considered sufficient to protect a panel from more vigorous treatment.

Available in 60" x 40'

# **Rotator Control Configurations**





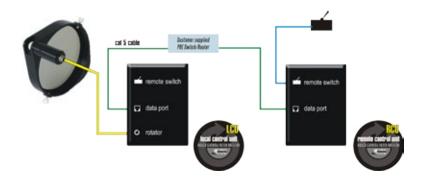


# Basic Package - Rotator, LCU, Remote Switch



This package represents the basic configuration required for a RoscoVIEW Rotator system. The Rotator itself (filter included) and the LCU (Local Control Unit) are the minimum components required to operate the system. The Remote Switch which is standard with all packages permits extended control of the Rotator up to 10 feet away with the included cable from the LCU, or up to 70 feet using an optional cable. The system is powered using the included AC adaptor.

# Remote Package - Rotator, LCU, RCU, Remote Switch



This package is identical to the Basic package but adds the RCU (Remote Control Unit). The RCU enables full remote control of the Rotator across local Networks and over the Internet using IP control. The LCU and RCU have fully configurable IP and Subnet Mask settings allowing any IT department to set up the system. The Control Units are connected to a router or switch using standard CAT5/6 cable through the Data Port on each unit. If a POE (Power over Ethernet) switch is used, no local power is required for either of the Control Units or Rotator.

# Remote with GUI Package - Rotator, LCU, GUI, Remote Switch



The Remote with GUI is the same as the Basic package but rather than using an RCU for remote control, a GUI (Graphical User Interface) is used. The GUI is a Windows based program which permits control of up to 8 different Rotators when connected over a network or the Web. Each Rotators IP address can be entered in any of the 8 controls on the GUI. All cameras can be operated individually or locked together for simultaneous operation.



#### **RoscoVIEW General Information**

- RoscoView is a 1 stop Linear Polarizer.
- It is available as acrylic panels or, in very specialized applications, as a film. Please read specific product information as well for important differences.
- The camera side RoscoVIEW filter is available in 2 sizes of motorized, IP controllable Rotators or a group of standard Motion Picture and Broadcast sized mattebox filters.
- Ensure there are no plastics, films or clear tapes on the windows or between RoscoVIEW and the RoscoVIEW Camera Filter. Some plastics or films can create a rainbow/spectral effect. It looks similar to gasoline on water. This effect, known as "Birefringence", is caused by any plastic that has been oriented (stretched during the manufacturing process). Polyester is an example of a plastic that will cause this effect as well as polycarbonates. Even some Cast acrylics will affect the Rosco VIEW system if placed between the 2 polarizing materials, but to a much lesser degree.
- Studios which have some kind of laminate on their windows, such as bomb proofing, tinting or other coating should be tested prior to using RoscoVIEW. The materials used in these situations could cause Birefringence or other effects.
- RoscoView works well when all windows are on a single plane and provides consistent adjustment of the exterior exposure. Should a window be curved, or an off angle window such as a bay be covered with the filter, the effect will be different than that portion of the image plane for which the effect was adjusted. Distance from the camera to the RoscoVIEW plays a part in the polarization effect. The greater the distance, the more uniform the effect across multiple windows.
- The polarization effect is optimal at 90 degrees to RoscoVIEW and is effective to approximately 45 degrees off each side of the 90 degrees. The sharper the angle, the more "banding" that can be present. Distance from the window can affect this. You could compare the off angle effect to a car windshield when viewed through a polarizer, the curved sides are different that the center section. The closer the camera is to the RoscoVIEW, the more evident the banding. Banding is inherent in the nature of linear Polarization at sharp angles.
- There is an optical effect referred to as "orange peel" inherent in RoscoVIEW. Similar effects can be seen with other types of glass tints and protective films. The effect is most evident tracking side to side when there are strong horizontal and vertical lines outside the windows
- RoscoVIEW is intended for use where the lens focus is on talent/objects between the camera and the filter. It is not recommended to focus on talent/objects outside the window; a "distortion" will be evident. It is particularly noticeable when focus is placed beyond the RoscoVIEW panel and a distant object is magnified through the lens (zoomed in). RoscoVIEW works optimally as a background when focus is placed on the foreground subject. The effect is less evident when close to the material and becomes more pronounced the further you are away from it. Rosco recommends a full camera test with a RoscoVIEW panel of sufficient size and RoscoVIEW camera filter prior to purchase. A Rosco representative should be in attendance to answer questions.
- When RoscoView in placed over a window an anomaly referred to as "quench marks" can sometimes be seen. These marks are a byproduct of the cooling process in tempered or heat treated glass and are made more visible by a polarizer. The same effect is seen when looking at car windows with polarized glasses. The effect can change depending on the direction of the sun, the viewing angle or the cloud cover that day. Always do tests at varying times of the day and different weather conditions before committing to RoscoVIEW.
- If a colour correction filter on the windows is necessary, only use Rosco Lex85 panels. There should be no gel media used.
- LCD/LED TV screens utilize a polarizing filter in their construction. Should one of these LCD/LED TV's be used "on camera" when using RoscoView, its



- be used "on camera" when using RoscoView, its image will be affected in the same way as the RoscoView mounted on the windows. Plasma televisions do not incorporate polarizer's and are not affected and are the only "on camera" monitor type recommended by Rosco.
- Do not expose RoscoView to rain or use in areas of high humidity where condensation forms on the material. A "wicking" can occur at the edges of the laminate that will discolour it. It is intended as an interior product although short term exterior use is possible with the appropriate care.
- Many Teleprompters now use an LCD screen for projecting text onto the glass. LCD screens use Linear Polarizer's. Our tests thus far show no effect on LCD teleprompters when the camera polarizer is mounted on the lens.
- Do not use alcohol, Glycol or ammonia based cleaners to clean RoscoView. A good glass cleaner should work well. Use a lint free cloth or micro fiber cloth and avoid rubbing hard or in circular motions.

#### **RoscoView Panels**

- RoscoView Acrylic is available in 51"x101" or 51"x125" panels, 8mm thick. It is the standard form of RoscoVIEW sold.
- The RoscoView side of the panel should always be facing the camera. It should not face the window. Typically, the RoscoView side has a clear protective liner if received directly from Rosco. The acrylic side to the window will have a paper liner.
- Panels should be mounted away from direct contact with window glass, usually no closer than one inch. An Air Channel from Rosco, mounted at the bottom and top of the panel, permits air flow behind the panel to reduce condensation and fogging.
- RoscoView acrylic is subject to the same issues acrylic panels are. It can scratch easily and is not as rigid as glass. Larger panels will have some deflection, particularly if they are mounted at an angle as some TV studios do. Acrylic Manufacturers recommend supporting acrylic every 36-39 inches to minimize deflection. (Deflection: 1. Any displacement in a body from its static position, or from an established direction or plane, as a result of forces acting on the body. 2. The deformation of a structural member as a result of loads acting on it.)
- To clean, dust off the panels before cleaning with liquids. A "Swifter" has worked well in the past. This removes larger debris before wiping, thus reducing the chance of scratching. Be sure to clean both sides of a panel before mounting in place. The window needs to be clean as well!
- Do not use alcohol, Glycol or ammonia based cleaners to clean RoscoView. A good glass cleaner should work well. Watch for residue left from the liquid used, change cleaners if there is streaking. Use a lint free cloth or micro fiber cloth and avoid rubbing hard or in circular motions.
- · When cleaning, moving and placing panels, wear cotton gloves to prevent transfer of fingerprints or dirt from your hands.
- Panels cannot be effectively "butted together" without some evident light leak through the seam. We advise against "butting" to cover large window areas. In some circumstances an acrylic "H" channel from Rosco can be used to join 2 panels; however it is not a structural element and cannot be relied upon to support the weight. Its primary function is to keep deflecting panels together in the same direction so no light leaks occur.
- Always have a small sample of RoscoView to examine panels as you are installing them. Be sure that the orientation of the panels remains the same when placing multiple panels. Otherwise, checker boarding will occur.
- RoscoVIEW panels are created with typical Rosco care but small blemishes can occur. These blemishes are not an issue when the product is used as intended (used in the background, as an exterior exposure control) but can be noticeable when examined up close. They can be a result of "off gassing", a process of moisture migration in and out of the sheet which is typical with acrylics or from a small particulates that get trapped during the manufacturing process. They may appear as a small bubble in the sheet but should not affect its stated performance. Lifting of the laminated material at the edges and corners may also occur. This is due to the contraction of materials and is usually quite minimal and doesn't affect the core area of the panel. Since the edges are usually behind a supporting system it is not considered a defect.





#### **Soft RoscoVIEW**

- Soft RoscoView is available in 56 inch width by linear footage.
- While Soft RoscoVIEW has been used successfully by some end users, its characteristics prompted Rosco to develop the RoscoVIEW acrylic panel. Due to these characteristics, Rosco cannot guarantee the performance of Soft RoscoVIEW and provides the product "as is" with no warrantee or guarantee.
- Soft RoscoVIEW is good for very small windows in a temporary situation or when used to polarize the light from lighting units such as Strobes. Do not attempt to use it on hot lights.
- Due to its thickness and physical properties, Soft RoscoView cannot be "squeegeed" onto glass.
- Sheets larger than approximately 1 foot square will not lay flat.
- High heat/direct sunlight can cause the material to become wavy and develop "bubbling".
- The edges of Soft RoscoView are sharp and brittle. To avoid tearing we recommend taping the edges with a nylon tape.
- Clear tapes can cause Birefringence on RoscoView. So if you try to seam soft RoscoVIEW film with tape the effect is visible. If applying RoscoView to a window by taping the edges, use an opaque tape.
- Sandwiching between acrylic sheets will not keep material flat.
- To clean, dust off before cleaning with liquids. A "Swifter" has worked well in the past. This removes larger debris before wiping, thus reducing the chance of scratching.
- Do not use alcohol, Glycol or ammonia based cleaners to clean RoscoView. A good glass cleaner should work well. Watch for residue left from the liquid used, change cleaners if there is streaking. Use a lint free cloth or micro fiber cloth and avoid rubbing hard or in circular motions.
- Always have a small sample of RoscoView to examine panels as you are installing them. Be sure that the orientation of the panels remains the same when placing multiple panels. Otherwise, checker boarding will occur.



