



smartfilmplus

# SMARTFILM - INSTALLATION

(instruction and security)

# SMARTFILM INSTALLATION

*(please follow the instructions)*

## **BEFORE YOU START**

*Please read the following instructions for gluing the digital adhesive film carefully before you start your work. Please pay attention to the individual instructions and keep them during the bonding process. Incorrect processing of the film may result in damage or injury. Please also read the safety instructions carefully!*

*To avoid damage to the products, please follow the installation instructions. Please use only those of MM Solution or SmartFilmPlus recommended processing tools! Please also note the warranty regulation at (<http://www.smartfilmplus.com>)*

*To prevent damage to the digital film, the power supplies or the control devices, or electrical shock to people, do not install the digital film directly on glass surfaces that are electrically conductive or directly on glass surfaces with a metallic frame without a proper safety margin between the film and the frame element. The min. Security Space between the edge of the Film and the Frame Element is 2,5mm.*

*When glued with open film cut edges (film is glued onto existing glass!), The edge must be additionally sealed with „acid-free silicone“ after mounting the film.*

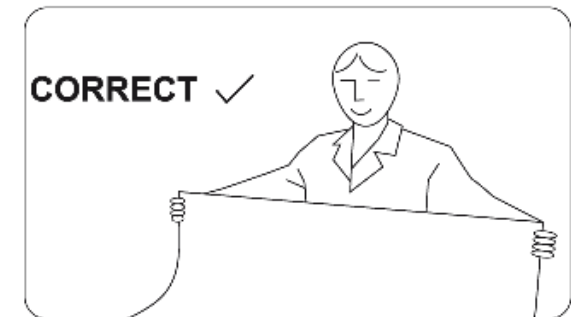
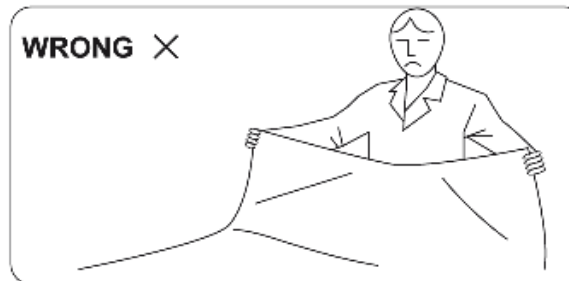
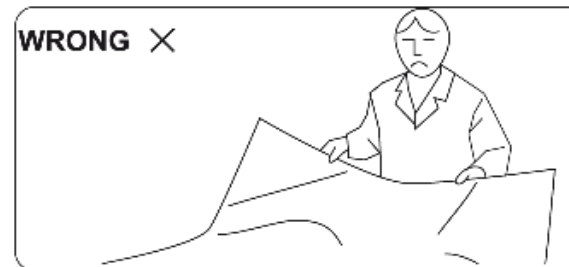
## **General safety instructions**

*To prevent fire hazards, please only use cables and connecting devices approved for the respective devices. These must be checked and installed by an authorized electrician.*

- Only use electrical equipment that complies with the technical specifications in connection with our digital products.*
- Make sure that the supplied power supply units and control units are commissioned exclusively (and only by authorized personnel) on grounded power systems.*
- Never open the covers of the control and power supply units.*
- Use the digital film only indoors. Avoid use in wet rooms or rooms with water vapor.*

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- Do not use the digital film in explosive areas.
- Before commissioning the system, make sure that the input voltage corresponds exactly to the specifications.
- Make sure that the foil surfaces have sufficient cooling (Operating temperature: -20 ° to 70 °)
- Do not operate any electrical equipment that shows obvious damage. In case of that, please contact your dealer!
- Process the digital film according to the instructions.
- Only clean the film with „non-alcohol“ fluids using only soft cloths.
- To disinfect the foil, use only the disinfectants recommended by the manufacturer.



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## 1) Preparation

*To properly bond the digital slide you need the following tool.*

- Soft Racel
- Isopropanol Fluid
- One-Way Gloves
- Dust-free, dry and clean cleaning cloths
- Glass Scraper

*Make sure that the installation of the film can take place in a largely dust-free environment - even the stirring up of dust by the movements of people on the glass causes contamination.*

*If possible, the glass (the surface to be bonded) should be glued vertically - this is the only way to start with the installation of the film at the upper end and continue working downwards - only this procedure prevents dust falling from the top onto the glass surface between the film during installation and causing contamination! The ambient temperature should be at „room temperature“ - about 18 to 20 degrees.*

*The films must be unpacked before gluing and lie on a flat surface for one or two days so that the pre-tension due to the rolled transport can dissolve !!*

*The glass must be completely cleaned (dust-free). Remove any dirt and dust. Use the above-mentioned cleaner or commercial glass cleaner. If you work here clean, you save a lot of time during installation and ensure a good result. Use the glass scraper to carefully test the glass for damage (small bumps, holes, scratches). Damage to the glass and scratches may be visible after installation of the film. Dust and dirt cause visible irregularities on the film.*

**Before starting the installation, check all delivered parts for completeness, damage and function - this is the only way you can safeguard the warranty claim.**

**ATTENTION:** Isopropanol usually contains more than 99% alcohol and is a colorless, volatile and flammable liquid, which has a slightly sweet, pungent with stronger inhalation smell. Always use appropriate protective clothing when using and observe the safety regulations!

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## 2) Bonding

- *Use the supplied disposable latex gloves (please use only dust-free gloves!)*
- *Check the correct size of the film by placing the film with the protective film on the glass and checking the edges*
- *Check again the entire glass surface (and also the protective foil) for dust or dirt particles - if necessary clean again.*
- *Now place the foil with the adhesive side (protective foil is still attached!) on the glass and align it accordingly*
- *Now stick the foil with adhesive tape (we recommend so-called painter's masking tape as it can be easily replaced again!) on the glass / frame.*
- *Now glue the film in the middle with several strips of adhesive tape (over the entire width of the film) so tight that it can not slip any more.*
- *You can now remove a strip of about 15-20cm on the top of the film, of the protective film and pull back / down.*
- *Now you can easily stick this strip with the „soft“ racker on the glass (always work from the inside out!)*
- *After this step, you have the film fixed to the glass so that you can remove the remaining adhesive strips and slowly work from top to bottom. To do this, always pull down only small pieces (15-20 cm) of the protective film and rack the area again.*

***Never touch the now exposed adhesive side! Fingerprints or dirt cause visible irregularities!  
Make sure that no dirt gets on the open adhesive side!  
Never bend the foil!***

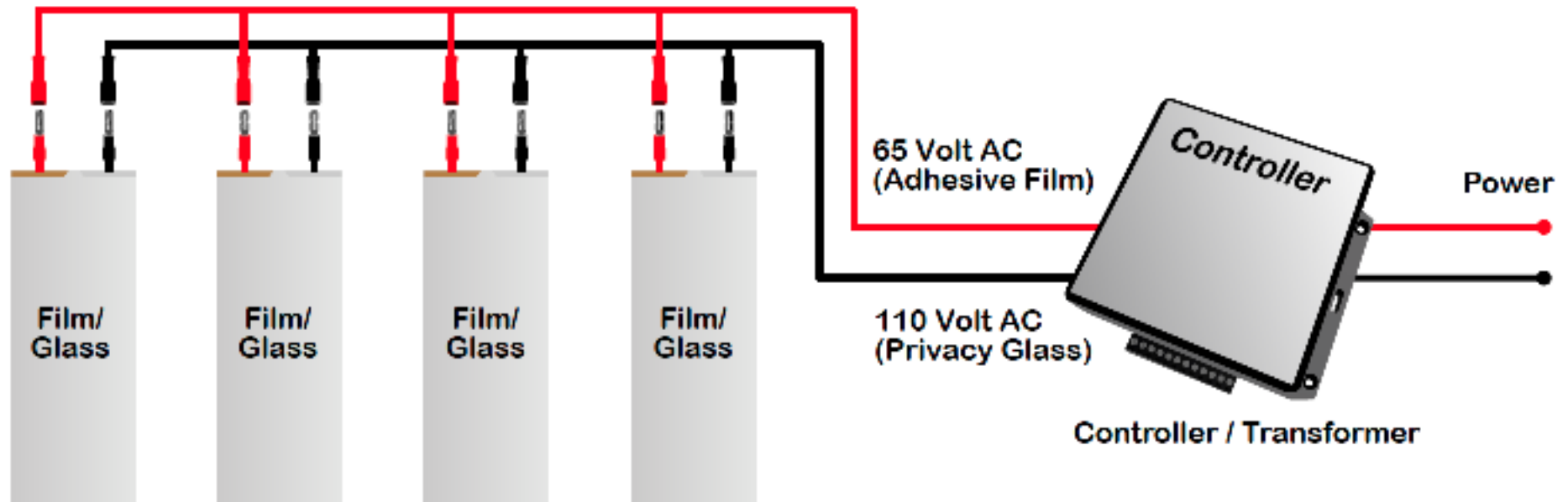
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- *If you see any air bubbles in the film, you can carefully remove the film from bottom to top and stick it again with the „soft“ racle.*
- *If the film has been processed correctly, you can now remove the protective film (on the front side of the film).*
- *Now, the space between the edges of the film and the frame element of the glass should be sealed with the supplied (special, acid-free silicone) - this is the only way to prevent from damaging the film in the future (if you can stick the film before attaching the frame element, this part may be omitted - ask your dealer!)*
- *After the silicone has dried enough you can start with the connection of the cable (between power supply and the film).*
- **Please only order appropriately authorized persons and / or companies for that!**

## 3) Tips

- *Dust inclusions treat you like air inclusions - Use tweezers to remove the dust from the glass or foil. Do not touch the adhesive side with your hands - always work with the disposable gloves.*
- *After sticking the film you may recognize marks on the film, a slightly spotty appearance. The film need some days to become a honogene Surface*
- *Squeeze only on the protective foil*
- *If you later find smaller air pockets, try to carefully stroke them out with pressure. In most cases it is still possible.*
- *Ca 2-3 air / dust inclusions per square meter are considered normal*

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**Elektronical Example:** You can control the Power with any kind of Powercontrol (RF, Switch, Media Management Crestron, AMX ...)