

High-Transmissive Touch Panels



Multiple anti-reflective films that increase transmissivity and reduce reflectivity

An ideal choice for applications operating in various lighting conditions, or where power conservation is required:

- Mobile Computing
- Medical Equipment
- Military Equipment
- Aerospace Equipment

Benefits of anti-reflective touch panels

- Highly transmissive, incorporating anti-reflective technology
- Overlay choices from 2H-9H
- Clear color contrast indoors and outdoors
- Multiple glass options available

Multiple anti-reflective films that increase transmissivity and reduce reflectivity.

Layered Anti-reflective Film

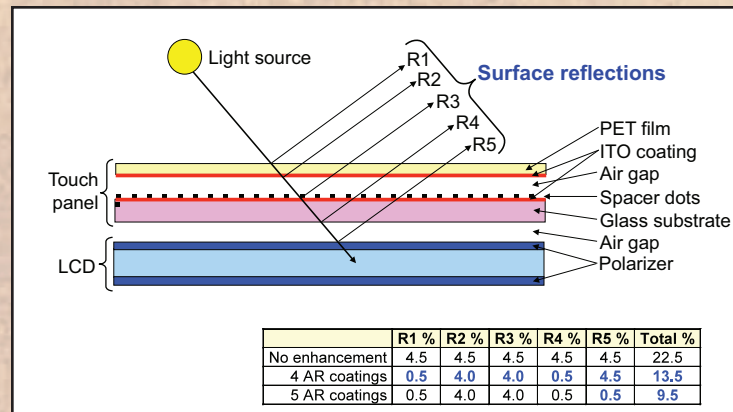
Adding anti-reflection (AR) treatment to the surface of the touch panel is a highly effective means of reducing light reflection.

A single layer of AR film effects only a narrow range of visible light waves; multiple layers of AR film prevent light reflection in a broad range of light waves.

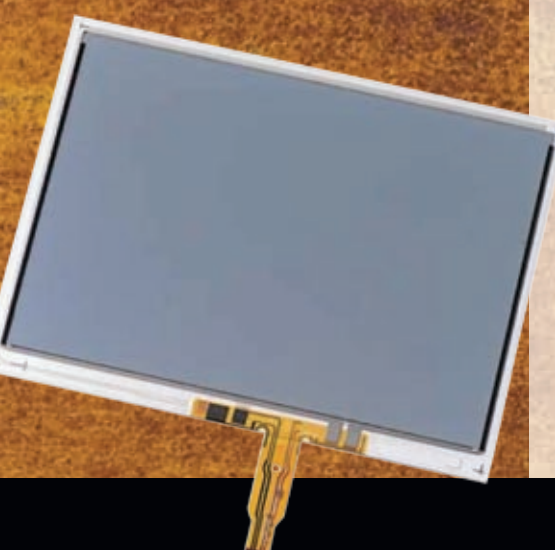
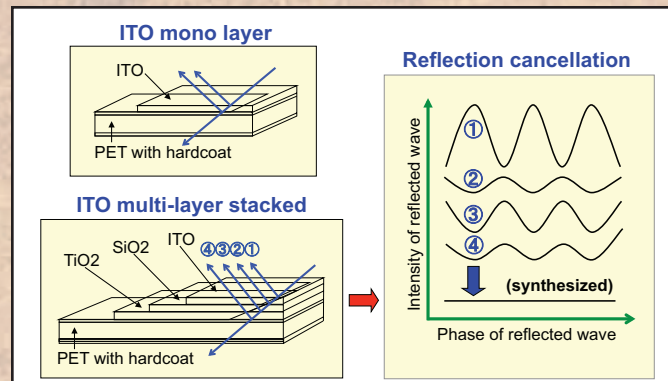
Gunze's AR technology now makes it possible to manufacture touch panels with low reflection that are also highly durable and that can utilize both pen and finger input.

Gunze's AR technology prevents light reflection on the surface, with a high transparency rate. With high-transmissive touch panels, the AR coating can be placed on multiple layers of the touch panel stack-up.

Touch Panel Surface Reflections



Stacking Multiple Optical Layers for Reflection Control



Learn more about other Gunze USA touch panel solutions

Along with high-transmissive touch panels, Gunze USA provides film-glass, tough, and LCD integrated touch panels. Configurations in 4-wire, 5-wire and 8-wire are available in custom designs, as well as in a range of cost-effective standard models. To learn more about Gunze USA touch panel solutions, call 512-990-3400 or visit www.gunzeusa.com

About Gunze USA

Gunze is one of the world leaders in resistive touch panel manufacturing. Gunze USA is a division of Gunze Limited, Japan, a multibillion-dollar company and the largest manufacturer of resistive touch panels in the world, employing over 8,000 people who work together to achieve international leadership through innovation.

Gunze USA works with OEMs and system integrators to design both standard and custom touch panel solutions. In addition, the company manufactures a wide variety of standard panels and total interface solutions for consumer electronics, industrial, automotive, medical, mobile, and POS/retail kiosk applications.

Additional Surface Treatment Options

Gunze offers optional surface treatments that further enhance the performance and durability of the touch panel.

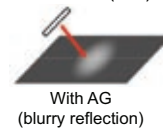
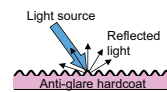
Gunze's anti-glare film changes specular reflections into diffused reflections. It changes the form of reflected light, but does not reduce the amount of reflected light. When added to the touch panel stack, anti-glare film helps to minimize glare from ambient light on the touch panel surface.

Gunze's anti-smudge film minimizes the effect of skin oils on the touch panel surface by using a hydrophobic coating combined with an anti-glare coating. This helps to mask smudges that the end-user may find undesirable.

Surface Treatments

❖ Anti-Glare (AG)

- ◆ Changes specular reflections into diffuse reflections
- ◆ Changes the form of reflected light but doesn't reduce the amount
- ◆ Usually formed by mechanical means on a hardcoat (HC)



❖ Anti-Smudge (AS)

- ◆ Minimizes the effect of skin oils on the touch panel's top surface
- ◆ Hydrophobic coating, easily combined with AG



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