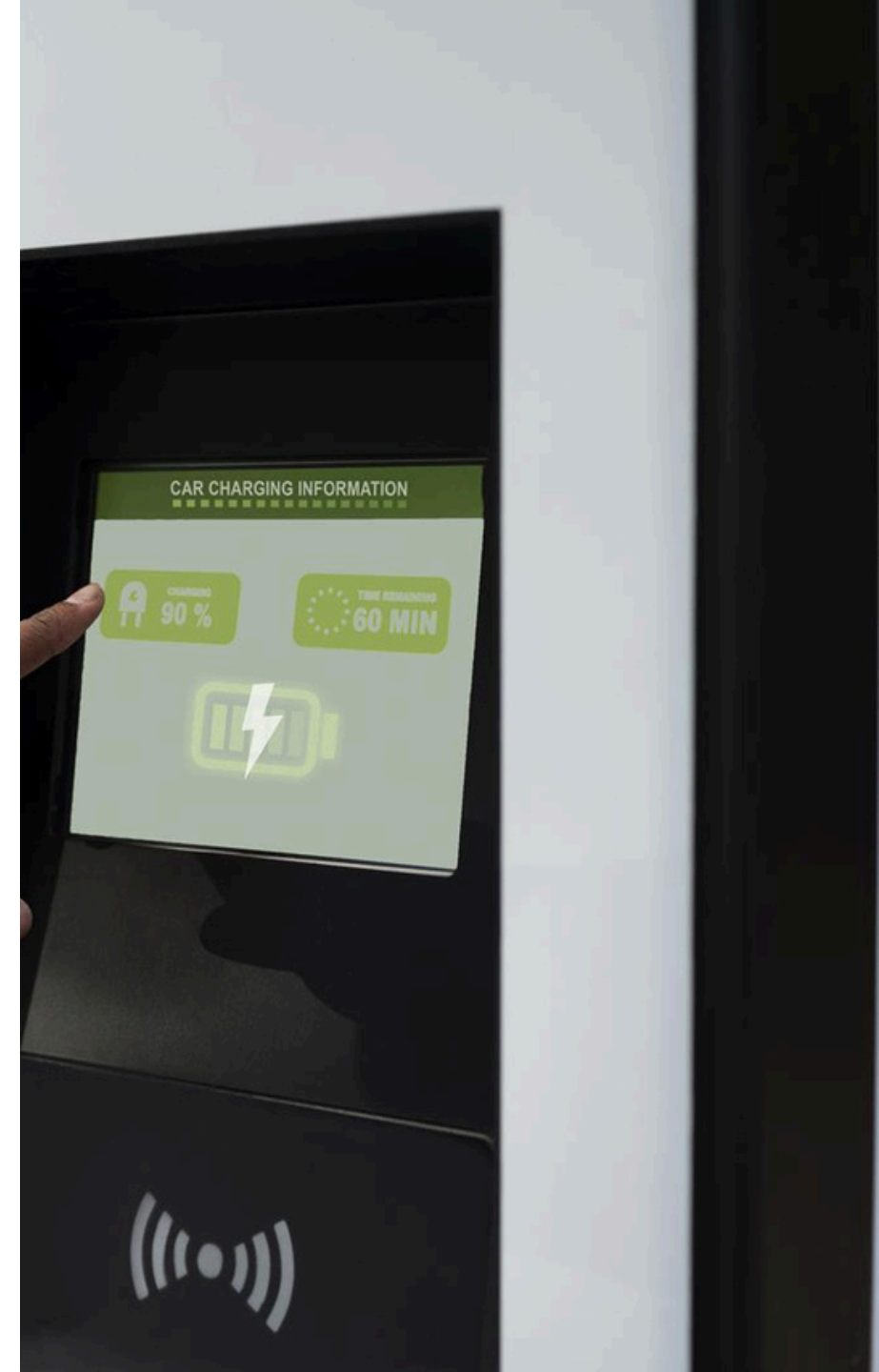




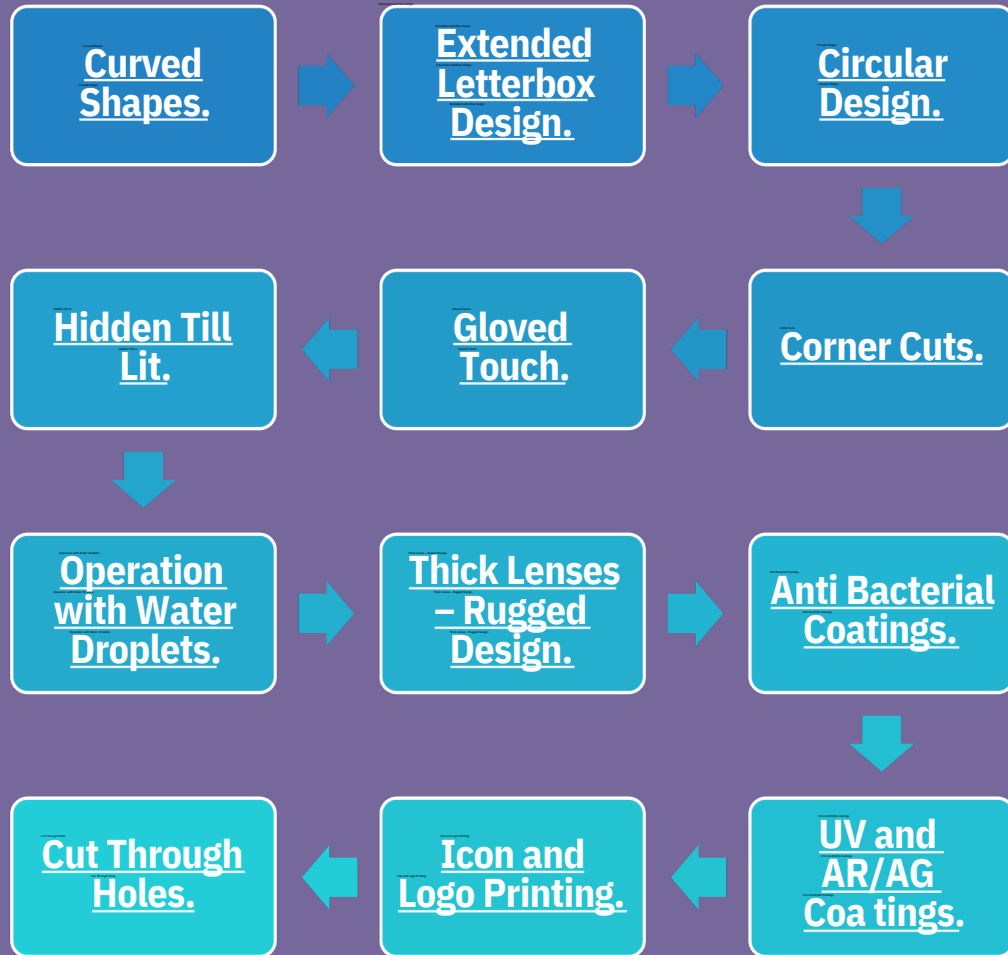
2024

Cover Lens and PCT Sensor Design Guide.

Never End of Supply , Support Small Quantity.



MODES OF CUSTOMIZATION FOR DISPLAY AND TOUCH COVER LENS DESIGN.



CURVED SHAPES IN COVER LENS DESIGN.

- Increasingly HMI Design is including curves. Often the display behind the glass is a standard rectangular shape, but the glass itself is a curved cover lens.
- CDS has designed curved lenses for Home Automation and Automotive client projects and can create bespoke shapes to meet diverse project requirements.





EXTENDED LETTERBOX DESIGN.

- Certain sectors inherently require stretched displays and HMI Design, such as Telecommunications and the 1U convention, or transport signage.
- CDS has a large range of bar type/letterbox aspect ratio IPS TF PCT Modules, where the Cover Lens design can be extended to encompass the stretched aspect ratio.

CIRCULAR COVER LENS DESIGN.

- Home Automation, Smart Buildings and the IOT have created a demand for circular lens design.
- Whilst the TFT is not perfectly circular, often a Hexagonal Mother-Glass, the Lens window creates the impression of a circle, through the use of an intelligent Silk Screen Border, and Smoked Glass effects.





CORNER CUTTING LENS SHAPES.

- CDS often cuts off sections of the Cover Lens glass to create bespoke Polygon shapes.
- Cutting corners doesn't mean reducing quality !
Many HMI Designs incorporate creative Polygon shapes.

GLOVED TOUCH OPERATION.

- CDS's PCT IC's will sense through upwards of 6mm glass for rugged applications, with Gloved Touch.
- The PCT firmware, and lens thickness are designed in combination to ensure optimum touch sensitivity using anything from Nitrile to thick gloved touch.





HIDDEN TILL LIT.

- IPS TFT achieves high Contrast Ratio's of 1000:1 for a compelling black background when the display is off. Although there will always be a visible differential between the border and the display active area.
- Adding a smoked finish to the display window, using a smoked cover lens, can create the ultimate Hidden Till Lit experience.

WATER DROPLET OPERATION.



The increased use of PCT Sensing outdoors requires moisture and droplet operability.



This is achieved through the use of software/firmware tailored to ignore the water particles and pick up the human touch.

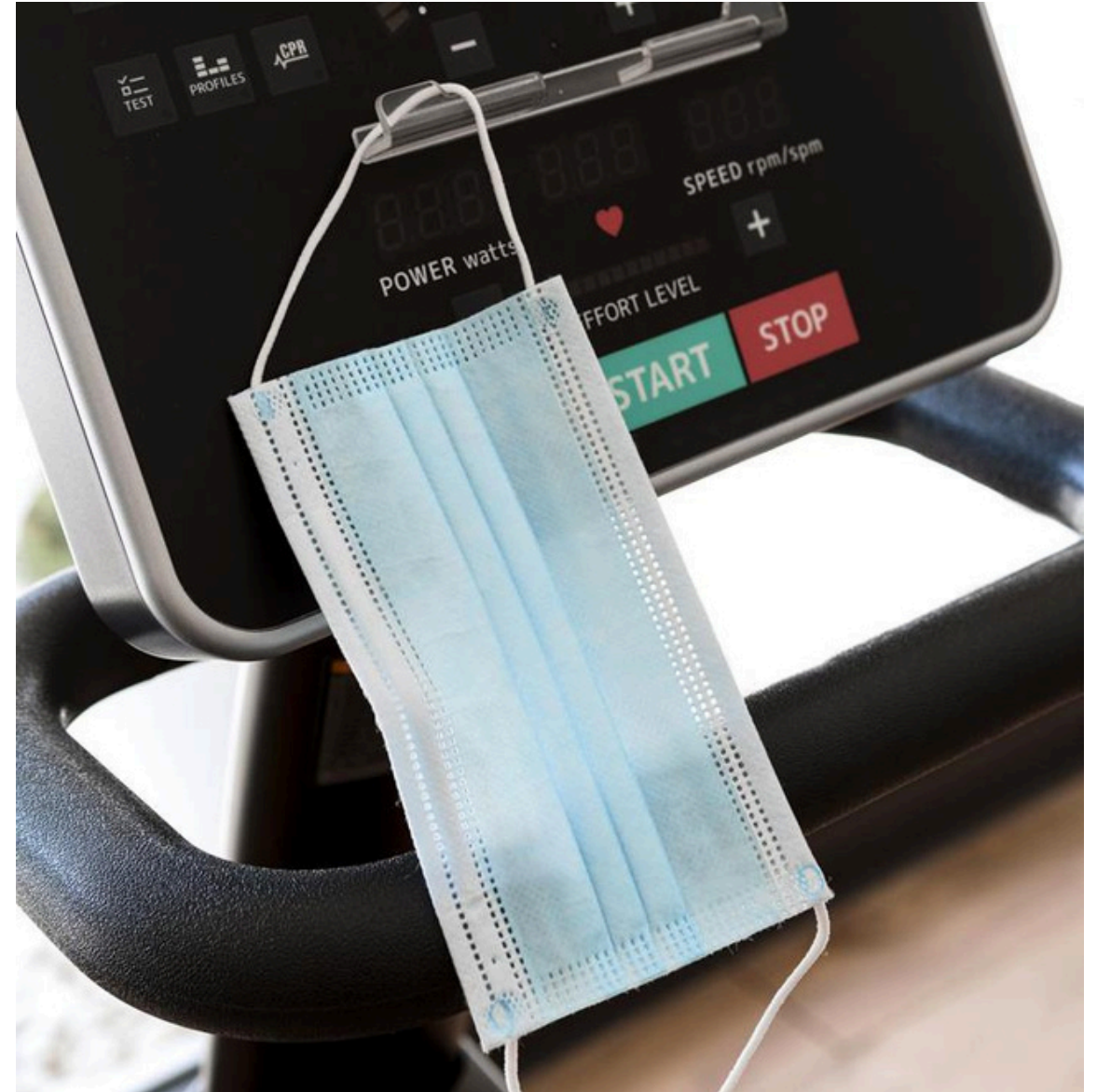


THICK LENSES RUGGED DESIGN.

- Demanding environments where damage from hard objects or vandalism can occur require rugged Cover Lens Design.
- CDS configures the PCT Sensor to operate with thicker glass.

ANTI BACTERIAL LENS COATINGS.

- Specialist Silver Nano Particle etched Cover Lens glass can deliver protection from Bacteria on the surface of the display HMI.
- This is especially prominent given the post Covid-19 society.





UV AND AR/AG COATINGS.



CDS can deploy UV coatings to slow degradation in sunlight operation.



We also use Anti Reflective and Anti Glare coatings to mitigate spotlights and sunshine.

ICON AND LOGO PRINTING

- Silk Screen printed Logos and Icons, Text and Graphics can be applied to the non-active border region of the Cover Lens.
- A wealth of colours from the Pantone range can be applied, as well as transparencies, to create an inprising HMI design finish, and bringing consumer grade design to industrial products.





CUT THROUGH HOLES



Laser cut holes are created in the Cover Lens border region, for physical dials and buttons to protrude.



Physical Buttons and Knobs can be combined with Cover Lens designs with the use of Cut Through Holes.



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