

Interactive Foils FAQ

What is the Paradigm Interactive Foil?

Paradigm's interactive foil is a clear lightweight touch foil that can be applied under or behind any non-metallic substrate to create a through material (glass) touch system.

How does it work?

The Paradigm touch foil uses projective capacitance. When a user's finger or gloved hand comes close to the surface it causes a deflection in the electrical field. This deflection is registered by ultra-fine wires in x and y axes, allowing precise location of the touch position.

What thickness of material can the touch foil work through?

The touch foil can work through non-metallic materials up to 16mm thick. We do recommend testing materials thicker than 10mm.

Will it work through double-glazing?

The touch screen can work through double-glazing. To achieve this the controller board has to be modified in the factory. This modification slows the refresh rate of the touch screen. Due to this only touch functions are available in this mode rather than drag and touch. We recommend site testing in all cases to check functionality since double glazing specification vary widely.

What are the typical uses of the interactive foil?

- Through-window system using rear projection or LCD as the display technology.
- Integrated with LCD displays for creating kiosks or stand-alone touch screens.
- Under table tops for using LCD or projectors from above for the display technology.

What sizes are available?

The foil comes in standard 4:3 format from 30" to 80" and 16:9 format from 32" to 100". Special custom sizes are also available.

What is the largest foil size I can buy.

The width is 120 cm and length is 220 cm.

Please call Paradigm to discuss requirements.

How is it fixed?

- The touch screen can be fixed using either a permanent or non-permanent adhesive system (a sheet of clear material), dependent on the application.
- The non-permanent system is designed to be for used on **glass only** and is ideal for retail applications to allow frequent application and removal.

- Our permanent system uses an optically clear system ideal for applying to glass and other non-metallic substrates. This is also the better option for more rugged applications.
- Both systems use an easy wet lamination process. (You wet the glass with a spray, apply the foil, then use a squeegee to squeeze out excess water.) Full laminating instructions are available.

Will the touch foil work through K Glass?

This type of glass uses a metal in the manufacturing of the glass so the touch foil will not work through this material. Other metal tints also stop the foils working.

What are the key benefits of the Paradigm interactive foil?

- No mechanical wear as you are not touching the touch screen unit - only the substrate it is working through.
- Works through existing windows/glass
- Lightweight foil easy to apply to a range of materials glass acrylic wood etc.
- Easy to ship rolls up in a tube
- Can be made quickly in custom sizes
- Simple setup calibration, sensitivity etc
- Works with LCD and rear and front projection
- Works with gloved hands
- Vandal proof and weather proof applications

Will it work with LCD panels?

- The touch foil can be used with LCD displays.
- As a through window touch unit the touch foil is first applied to the window and then the LCD unit is fixed behind the touch foil.

Can it be integrated completely within an LCD panel?

Yes! The foil must be applied to a substrate. There is typically a requirement for an 6-8mm air gap between the LCD panel and the back of the touch foil; this gap is dependent upon the EM noise generated by the LCD panel. It is also necessary to ground the controller unit to the case of the LCD unit.

Will it work with plasma panels?

No. These displays generate too much electrical noise

Does the foil have a front and a back?

The foil does not have a front or back, However when the unit is supplied with a integrated double release fixing system the foil is applied on one side only.

Must the controller board be at the bottom?

No. The unit can be applied with the controller at the top or bottom the foil can also be supplied with the controller on the side.

Can I use cling film with acrylic (e.g. Perspex)?

For a short period only. Over a longer period the cling film will 'migrate' into the acrylic making a permanent bond with the acrylic.

How long is the serial cable?

Standard cable supplied is 6m. We also have a 15m cable as an optional extra

Can I have longer cables?

It may be possible to use up to 25m. However you may experience additional noise/interference, which can make the system unusable. In these situations we would recommend the use of a suitable RS 232 booster or a RS 232 to Cat5 converter system.

How do I connect to a USB computer port?

You can use a USB to serial converter device which are available as an optional extra.

What is the power required for the touch screen?

The touch screen is powered from the RS232 port and takes between 5-12v

Can I have 2 foils next to each other?

Yes and no!

- It is not possible to have two touch foils on the same piece of glass
- There is a requirement to have an air gap between two foils
- It is also possible that the touch foils will need to be insulated from each other

Can I use foils with other substrates, for example wood for interactive tables?

Yes, the touch foil can work through any non-metallic material. We strongly recommend testing of the substrate to check the functionality.

My calibration points are outside the display area, can I adjust this?

Yes, we can provide instructions on how to do this.

The touch foil is not responding, how do I check what the problem is?

Please refer either the quick start guide or full user manual for fault-finding instructions.

How do I use the cling film?

Laminating instructions are supplied with the touch foil, they can also be found on the CD supplied with the touch foil.

How many times can I remove the foil and re fix it using the same piece of cling film?

It is possible to re-use the cling film if it is kept in good condition between installations. However we would recommend a new piece be used for best quality installation.