



## Touch Window - An Option of Touch Screen Design

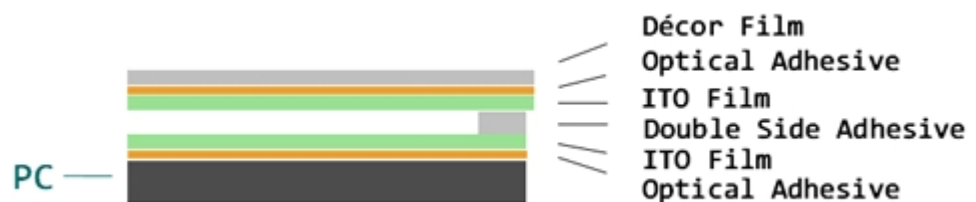
True Flat Touch screen design is getting popular with ID designers for a variety of applications, such as the Mobil phone, GPS, All-in-one PC, and those systems placed in public with interactive features for users. We call the true flat design as “Touch Window”. With such design, different job performance can be operated more easily. We see a lot of creative design ideas lately and would like to take this opportunity to introduce the different constructions and designs of Touch Window.

Touch Window construction and its corresponding system circuit design are varied based on different mechanical ideas. Therefore, a good communication with the mechanical designer during design stage is very important. Touch Window is definitely an OEM customized type of project which aims to optimize the customer's idea, enhance the stability and usability of the final product and accelerate customer's time to market requirement. AMT has two different kinds of Touch Window design; the construction drawing is as below:

### ◆ Film-Film-Glass Construction



### ◆ Film-Film-Film- PC Construction



Generally, we take the ITO glass as backer, once the product needs to withstand greater impact, we will recommend using PC (polycarbonate) as backer for the design. For products requiring high environmental temperature or size bigger than 12.1", we will suggest using glass backer for the design. Once customer needs to lay out additional features for it device such as a microphone, a speaker or some other buttons, we will drill holes on the Touch Window backer to enable these features to function accordingly. In addition, we will need to make special process on the edges and corners of the touch screen should customer requests to have oval designs for the borders.

What should the thickness of touch screen be? This is related to the product property; for handheld device, it certainly should be light in weight, therefore, the glass must be thin. For desk-top or big device, thicker glass would be recommended; the thicker the glass the higher the impact resistance. Whatever the thickness of the glass used as backer, Touch Window’s tail has to be designed and manufactured as flat as possible. There are several methods to allow the tail to go through the back of the backer, either by drilling a hole on the glass or applying a notch along the

glass edge. When the glass has been drilled, the strength around the drilled hole of the glass will be decreased. We have already made some tests and can discuss further with customer when there is a demand.

The Touch Window is normally designed with a clear surface finish. If customer needs the anti-glare surface, it is also available from AMT. Usually most customers prefer to use black or silver color to draw out a metallic look for the device therefore enhancing its overall appearance and making it more professional looking. No matter which idea customer has, there will be many details to be discussed before decision is made. If you have this kind of request, please contact with us. It will be our pleasure to provide you a total solution for your project.

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