LED-based ambient lighting continues to transform the cabins of many aircraft but certain pitfalls could see it leapfrogged by even more advanced technology in the future.

GUY BIRD, AIRCRAFT INTERIORS INTERNATIONAL

lightitup
Lighting that does more than help you see – better known as ‘mood’ or ‘ambient’ lighting – is now so commonplace in domestic and commercial housing it’s taken for granted in many parts of the world. You wouldn’t expect a club, hotel foyer or even someone’s living room to only have a single incandescent light from the ceiling doing all the work with only ‘on’ or ‘off’ for brightness choice, but in transport it’s been a slower process for numerous reasons from space and heat to safety and cost.

In the automotive industry Mini has been offering personally adjustable interior lighting with colour variations on various models for nearly five years and Virgin Atlantic started the trend for cabin mood lighting in aircraft as far back as the early 2000s as Gareth Southall, senior designer at Virgin Atlantic Airways boldly states: “A decade ago we revolutionised the cabin lighting experience on our 747 fleet. The great thing for the passenger is that mood lighting is now implemented on most airlines. Those who don’t have it are behind the curve in terms of cabin experience.”

Those early technological forays into ambient lighting were not as advanced as they are today of course. Southall admits that Virgin’s early technology involved not much more than two different coloured fluorescent tubes which mixed to create a different mood for the passenger throughout the flight. For Virgin’s new A330 fleet the latest LED RGB lighting system is used though, which, says Southall, “means our colours, light levels and moods are now infinite.”

Of course for Virgin such lighting technology trail-blazing not only helped create repeat customer business but also became part of its brand identity as Tyler L. Smith, lead engineer for Boeing’s payloads lighting development, acknowledges: “There are large items that can make one airline stand out from another such as unique architecture in combination with unique lighting scenes.” Little details can be equally as important though, as Smith continues: “Small items such as enabling a light to fade on and off or having a sign that dims to match a cabin light level can really change a passenger’s experience.”

**AMBIENCE TO WELL-BEING** Beyond such ‘surprise and delight’ capability, designers, carriers and manufacturers have also come to realise that lighting can actually improve customers’ health on board, especially during long flights. “An aircraft is an enclosed area moving independently from the sun’s journey,” notes ex-Airbus and now independent lighting designer Caroline Crespin of Crespin Lumieres. “There is no indication of time inside so we could compare this to a dark closed box. But this darkness allows us to draw using light like a pencil.”

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**THOSE WHO DON’T HAVE IT [MOOD LIGHTING] ARE BEHIND THE CURVE IN TERMS OF CABIN EXPERIENCE**

01. Starlight ceiling from Airbus’ A380 cabin mock-up
02. A380 staircase lighting detail
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