LiDAR Security for the Entertainment Industry

The recent theft of luxury wines from Spanish restaurant, Atrio, highlighted one of the greatest difficulties when it comes to security in the entertainment sector. From museums and art galleries to wineries, hotels, and restaurants, protecting against theft, vandalism and unauthorized handling of goods is a continuous challenge in the tourism industry. Despite the wide variety of issues, there is a key differentiating element, which is that these are places open to the public, where security must coexist with daily business operation and must not deteriorate the visitor experience.

This is a key aspect to consider when designing an effective security strategy, with 2D LiDAR sensors positioned as the perfect security solution. Laser detectors based on LiDAR technology (Laser Imaging, Detection and Ranging) allow you to protect goods very discreetly on display by detecting hands or objects that come too close to them. The sensor creates an invisible virtual wall or curtain that protects the cabinets or shelves where the items are on display, precisely excluding other areas, thus avoiding the effect on the user experience. Because of their smart and versatile detection, LiDAR sensors are successfully used in a wide variety of applications.

Security in Warehouses, Bars and Restaurants

Bars and restaurants often offer diners a selection of fine wines and spirits. Wineries and cellars have also become a tourist attraction, and an important part of the experience is usually to visit areas where high-value products are stored. In these confined spaces, the precise detection of LiDAR technology can alert if a bottle or item is removed from the shelf.

For example, in the case of The Londoner luxury hotel in the UK, its six bars and restaurant areas have REDSCAN LiDARs installed to protect their expensive beverages on display. The laser sensor creates an invisible wall and continually scans the detection area; the size of the detection zone can be configured for objects as small as 2.5 cm, so that if any hand or object were to enter the detection area, the alarm would trigger, alerting staff by activating cameras or sound alerts. At the same time, LiDAR allows you to create separate zones within the detection area and link them to arming and disarming alarm systems, or access control credentials to not obstruct day-to-day work.

Protection in Art Spaces

Similarly, in museums, galleries, and art exhibitions, 2D LiDARs are used to create a virtual “shield” that allows customers and visitors to enjoy works of art while protecting them, activating alerts with extreme precision only when someone or something approaches the protected art.

Whether intentionally or not, paintings, sculptures, and other pieces of art face a series of threats—it could be a curious hand, a child playing or a real theft attempt. This can occur during opening hours or while the business is closed, but in all cases losses due to stolen or damaged art can be very significant; therefore, adequate protection is required.

Some artistic goods can be protected in a display cabinet, but, in most cases, art is exhibited without any physical protection. So that visitors may connect with the art, it’s important that security should not get in the way nevertheless threats must be identified quickly and accurately and security personnel must be alerted.

LiDARs allow different settings to protect the same space to adapt to security needs depending on opening and closing times. For example, only valuables can be protected during opening hours, and complete wall protection can be set up when the exhibition is closed.

Security at Festivals and Seasonal Events

The organization of festivals requires mobilizing large electronic and AV equipment, instruments, costumes, props and more. The short-term nature of these events can be a significant vulnerability when it comes to protecting all these high-value goods and, to some extent, limits security options. The solution must be quick to implement and not require an existing structure or fixed wiring.

A LiDAR with a built-in camera, such as the new REDSCAN Pro model, allows the creation of a security system in these environments, offering extremely precise and ultra-fast detection to initiate security events, together with a camera for video verification of alarms and event recording. Mounted on a retractable pole and easy to install and transport, the LiDAR sensor can create a virtual wall that alerts if someone enters the warehouse area or parking areas, where equipment is usually stored. In addition, the LiDAR wall can alert if someone or something enters hazardous areas, such as fuel tanks or electrical generators, immediately alerting someone to their approach to these areas and setting off a sound warning or informing the security team.

Conclusion

With the use of smart, versatile, and accurate detection technology, security goes from being a reactive process to a proactive, much more agile, and effective security system. LiDARs offer the precision and reliability that high-value goods need, in addition to being aesthetically discreet, both because of the type of protection they offer (a very thin invisible laser curtain) and because the cover can be customized to adapt them to the environment where they are going to be installed.