



# INNOVATIVE YET

# Down-To-Earth

**Steve Chuang of Protronic (Far East) Ltd introduces the award-winning Flashlight Digital Video Recorder, and explains the importance of R&D to industry.**

It is said that there is nothing new under the sun, so is innovation possible then? If everything under the sun is cleverly utilised, a great number of innovative ideas can be generated, bringing about tremendous surprises and convenience to make life better.

### A Clever Combination

Flashlight Digital Video Recorder (Flashlight DVR) can certainly bring such surprise and convenience. Ordinary as it may look, the winning product of the Hong Kong Awards for Industries: Consumer Product Design Grand Award 2007 is special in the way electronic applications are incorporated into a torch for security use.

“While torches are necessary tools used by the police and security guards, Flashlight DVR takes the practicality of a torch to a higher level by adding two extremely useful functions – photo taking and video and audio recording,” says

**Steve Chuang, chief executive officer of Protronic (Far East) Ltd.**

With a high-power LED flashlight, this multi-functional product has a built-in camera, microphone, infrared LED lights and a light sensor. A security guard using this tool for patrolling can thus record crime evidence if needed. Even if there is a need to do such recording without turning on the flashlight, the infrared LED lights will automatically turn on to provide light source to complete the task.

Only three C-sized batteries are needed to support photo taking or recording for six to eight consecutive hours, which is sufficient enough for a day or night shift. The built-in Ni-MH charger adds further convenience. In addition to the built-in 128MB memory, a 2GB SD card which can save over two hours of audio/video recording can be used for data storage. The data can be easily retrieved and backup via a USB cable connected to the Flashlight DVR.

“The product is designed to bring the maximum level of convenience,” explains Mr Chuang. “Despite the fact that many mobile phones have similar functions, Flashlight DVR

is far much easier to operate. Users simply need to press a button to utilise any of the functions available without having to go through a long list of items usually found on the operation menu of a mobile phone. Besides, if something suspicious occurs and you want to capture evidence in secret, the function that allows recording in the dark is extremely useful. It is true that individual applications may be found in other products, but the idea of putting together these functions into a handy tool makes Flashlight DVR stand out.”

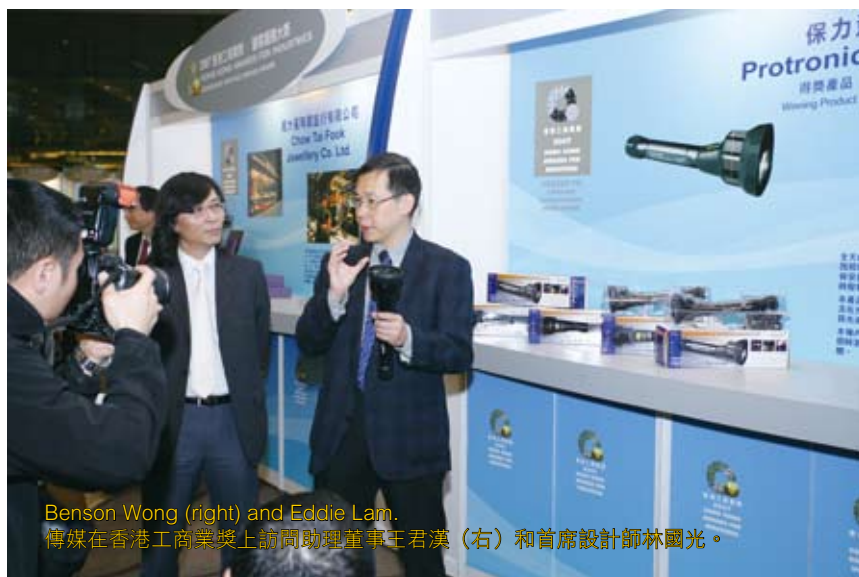
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### Designed for Practicality

According to **Eddie Lam, chief designer of Protronic**, the users' practical needs give designers the inspiration to create such an innovative product. “We find that those using a torch for security use have also the need for evidence recording tools. Putting ourselves into the perspective of users enables us to arrive at this brilliant idea.”

“Our company designs and produces a lot of products, but we think that Flashlight DVR is special in many aspects. It can best represent our design and engineering capability in this prestigious competition,” says Mr Lam when explaining why the company chose to submit this product to enter into the competition.

“It is true that we have many well-designed products, like the wireless back up camera



Benson Wong (right) and Eddie Lam, 傳媒在香港工商業獎上訪問助理董事王君漢 (右) 和首席設計師林國光。

system, which also offers users great convenience and has won an award in another competition. But when it comes to originality, the Flashlight DVR is naturally a better choice. The Award proves that we have made the right decision,” adds **Benson Wong, associate director of Protronic.**

Despite possessing the technologies of the applications involved, it is no easy task to turn a conceptual idea into the smart-looking, handy final product. Mr Lam points out that maintaining the product at a compact size while putting together all the electronic components needed was the greatest challenge. “The electronic components we used are of great precision, and we needed to do a lot of fine-tuning to ensure it captures high quality images. The product’s stability and ease of operation have to be considered as well.”

ter of last year. “We have a 100-strong R&D team that contributes to the development of the product. Besides a weekly product development progress meeting which allows exchanges among staff, a brainstorming session is held every two months to explore new product ideas,” Mr Chuang says.



The factory in Dongguan.  
東莞廠房外貌。



Protronic’s product design and development team.

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And there are a lot more things that need to be taken care of. To facilitate the use of the tool, designers have taken into account the ergonomic factors. Aluminium was chosen as the material to build the case because of its light and tough nature. As many delicate electronic components are packed inside, the two ends of the Flashlight DVR are made relatively larger and wrapped with rubber to give the necessary protection if it is dropped accidentally.

Protronic came up with the product idea at the beginning of last year. With efforts and inputs from various departments, Flashlight DVR was formally launched in the third quar-

ter of last year. As the first batch of products has just reached buyers around last Christmas, the company is still waiting for their feedback. However, Mr Wong believes the fact that police forces or security companies in different countries have placed orders means the practicality of the product is highly recognised.

### Versatility Wins Attention

Receiving the Grand Award of the competition also helps promote the product, Mr Chuang says. “On the evening of the Award presentation ceremony, we were already approached by several enterprises interested in our product. I would say that the award leads to very quick market response. Given the

relatively high ex-factory price at US\$150, we believe demand will mainly come from those for professional use rather than domestic use. So we are considering launching the second generation that caters for domestic uses.”

Besides the police and security companies, rescue teams will find the Flashlight DVR extremely useful for searching and evidence recording. “Engineers who need to do repair works in dark places will also find it of great use as it not only lights up the place but also enables them to record details of the damaged equipment or causes of the problem for further analysis,” Mr Wong explains.

Purchase orders placed by a night club in Australia was out of the company's expectation, however. "It is because of this order that we realise the product can be used as a handy tool to check the identity card of visitors at night clubs overseas, which prohibit those aged under 18 from attending. Flashlight DVR speeds up the checking and information recording process and is far more efficient than the scanner they originally used," says Mr Wong.

Competition in the electronic products market has always been fierce, with rising production and labour costs in the Mainland adding to the difficulties facing the industry. Amid the increasingly tough environment, Mr Chuang believes devoting resources into R&D is the best way to create and maintain the competitive edge.

"Strengthening R&D capability is crucial as we aim to produce innovative and quality products. At the same time, we are proactively promoting our brands as well. Investing in these areas helps us secure orders, widen our customer base and enhance competitiveness," Mr Chuang says.

### R&D Enables Originality

Began as an OEM manufacturer, Protronic has evolved and launched two brands for its automotive electronics and security products respectively. At present, OEM constitutes around 30 per cent of the company's total sales. "It is a natural evolution as we gradually enhance our design and engineering capability which allows us to develop some special products. A successful brand has to be supported by a range of unique products and carefully protected via intellectual property management," Mr Chuang remarks.

"Originality is crucial," Mr Lam adds. "Enhancing product value via R&D should be the direction for Hong Kong industry." He points out that the designs of many big international brands are actually done by Hong Kong designers, so it is a misconception that the city's designs are inferior to those of other countries.

At Protronic, most staff in the R&D team are Mainlanders but the design and product development work is led by Hong Kong staff, who generally have wider exposure and are more sensitive to worldwide trends. Mr Lam believes design is closely connected to the environment in which designers live so the future will not see Hong Kong designers being



replaced by their Mainland counterparts.

When asked about the supply of design talent in Hong Kong, Mr Lam believes a holistic perspective should be adopted. "Hong Kong is talking about developing the creative industry, but it is not something that could be achieved by the introduction of a few courses at certain institutions. Creative industry is not about producing tangible products only but also intangible ones. Actually all industries require people with creative thinking. So it concerns the whole education system through which our next generation are nurtured."

Steve Chuang receives from the Chief Executive Donald Tsang the Hong Kong Awards for Industries: Consumer Product Design Grand Award.

莊子雄（左）接受特首曾蔭權頒發香港工商業獎——消費產品設計大獎。

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Mr Lam cautions that a brilliant design does not automatically result in a successful product. "A good design has to be supported by a complicated process which involves the utilisation of production technology, selection of materials, cost analysis and price determination to produce a marketable product well received by customers. So a company's commitment in R&D is crucial. And it would be helpful if the Government could offer support to help the industry achieve technology breakthroughs."

"Now product life cycle is getting shorter and new products become obsolete very quickly. Manufacturers have no choice but to step up the pace of product development in order to survive. Production support from the Mainland gives us a competitive edge so the challenge remains how we can capitalise on the strengths of the two places through collaboration," Mr Chuang concludes.

