

Info

While the Government is promoting the Irish business model abroad to attract foreign direct investment and hailing our “state of the art” IT industry with several companies announcing the introduction of 4G, for quite a few broadband connectivity is still a big issue, or the lack of it. Many areas in Ireland are only getting a low-level 3G signal and require the addition of external antennas. There are several different antenna available and in various configuration of cables etc. Cable signal loss is critical with the GSM system and as a result the connectivity is of the utmost importance. Connections can be confusing with all the modern High Frequency connectors on the market for the various types of devices that require additional signal reception. We have put together an explanatory leaflet in our [FAQ](#) section of our website to try and assist in identifying the connectors.



New Products Launched at Consumer Electronics Show in Las Vegas
Last month's Consumer Electronics Show (CES) in Las Vegas, the biggest show of its kind in the world, played host to numerous new products from companies great and small. TV manufacturers were slugging it out by launching 4K televisions and curved screens., but smaller companies, like Pebble, who used Kickstarter to fund the launch of their smartwatch may, however, have stolen the show.

The buzzword of the show was wearables; computer devices that you wear. Many companies are bringing out smartwatches this year but the star smartwatch at CES 2014 belonged to Pebble. Initially launched in 2013, Pebble returned this year with the Pebble Steel, an updated and more fashionable version of their original product. The watch is a Bluetooth device which, when linked into your iPhone or Android smartphone, can access apps like Facebook or LinkedIn, change music on your phone, or track your progress while exercising. It has its own app store and it is possible to write new apps for the Pebble too. The watches are customisable, in much the same way as smartphones, with changeable watchfaces and straps. The Pebble Steel retails in the U.S. at \$249.

Meanwhile, TV manufacturers were showcasing the latest in curved screens and 4K, or Ultra High Definition, TVs. Curved screens have been used in cinemas for years as they offer a more immersive experience than flatscreens. Large curved screen TVs are now being developed and marketed by almost all major TV manufacturers.

If you can't decide whether to watch Coronation Street on a curved or a flat screen then Samsung have the answer. Samsung introduced two series of curved TVs at CES 2014, including an 85-inch LED LCD 4K TV with a bendable screen. By just pressing a button on your remote, the screen will bend or flatten to create whatever TV or cinema experience you require. Samsung will be releasing the TV this year but have not yet said how much it will cost.



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LAN TOOLKIT



Many installers often find themselves in situations where they are asked to install or adapt an existing network or phone system in a premises. The recent introduction of the [LAN TOOLKIT](#) has meant that the right tools are now at hand specifically designed for the job in question. They are all kept together in a neat case that both keeps them clean and convenient.

Vodafone 4G

Recently Vodafone Ireland has switched on 4G in 31 towns in addition to the 6 cities they have also enabled for the service around Ireland.

The service, which is reputed to give up to 10 times faster speed than 3G is functional in Dublin, Cork, Galway, Limerick, Kilkenny and Waterford cities. Don't forget, if you are encountering interference on 4G we have a full range of [LTE filters](#) in stock

4K TVs originally premiered at last year's show but they were still big news at CES 2014. 4K is a massive leap in high definition TV, whereas HDTV offers a horizontal resolution of 1920 pixels, 4K has a horizontal definition of, you've guessed it, 4000 pixels. There's not much content available in 4K yet but you could always make your own movies as Sony were showcasing the Handycam FDR-AX100, a 4K camcorder, and it's a snip at \$1999.99.

An even more impressive camcorder was the Geonate 360. This camera can record 360° moving images. The images are high definition and are recorded at 25fps in MP4 format. There is even a time-lapse option and you can record still images in 4K. Apps are available to transfer the videos to your iPad or Android device. The Geonate 360 will cost €399 when released.

Amongst other things, CES was the show where the video recorder debuted in 1970, the CD player in 1981, and plasma TV in 2001. So, you can expect some, if not all, of the above products to be on Christmas shopping lists soon.

CCTV Via The Internet

Many installers are being asked to provide a facility for their clients to view installed CCTV via the Internet. Typically, this can be a supermarket manager/ proprietor wanting the ability to view a shop from home or a farmer wanting to observe in-calf cows etc.



The simplest configuration for such a setup is for the location to have a fixed line broadband connection with a permanent IP Address. There are options for using a DNS service where the

broadband service provider won't provide a permanent IP Address.

The most popular DVR we have is the [HIKVISION](#) in 4/8/16 models. All of these models can be Network configured (setup to be viewed via the Internet).

In our [FAQ](#) section on our web site we have instruction about configuring the DVR and also Port Forwarding the Router.

For explanation purposes; Port Forwarding is the opening of defined paths through the Router to the DVR from the WEB to allow the DVR be viewed remotely. Without Port Forwarding being setup correctly the DVR can not be successfully accessed from an external location.

NETWORK VIDEO RECORDER NVR

Another area of CCTV that is becoming increasingly more economical is [IP cameras](#) and recorders. An Internet protocol camera, or IP camera, is a type of digital video camera which, unlike analog camera systems, can send and receive data via a computer network and the Internet without the requirement to be digitised. They can connect direct to a network with a standard Ethernet cable (CAT5) without going through a DVR or modulator. Where one or more cameras are employed and recording is required a digital [NETWORK VIDEO RECORDER](#) is an option. Hybrid systems, working both traditional analog cameras and digital [IP cameras](#), are available to special order.

Screen Trade Repairs

One of our customers, Andy Slowey, has decided to provide a trade repair service for dealers and installers. For further information contact Andy on 049 4332199.



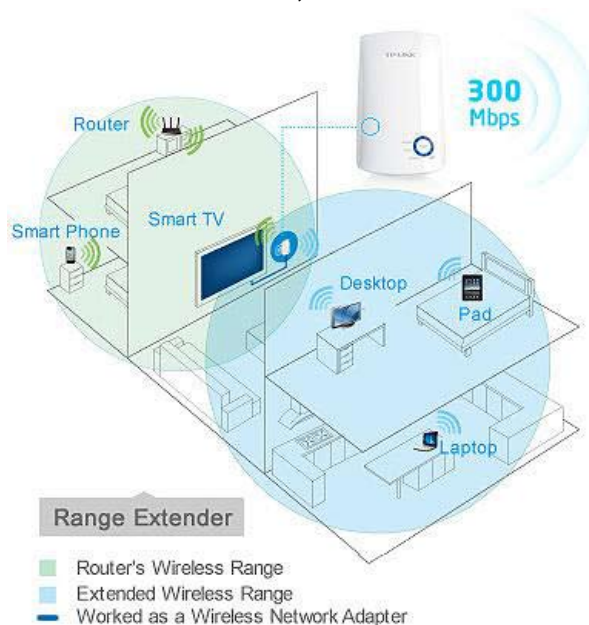
If other TRADE service providers would like a mention here email info@atcsupplies.ie

BBC 3

BBC Three is indicating it may move exclusively online and be dropped as a television channel as part of a cost cutting exercise. The BBC Trust have yet to approve the proposal but if passed, the BBC Three channel would stop broadcasting in the third quarter of 2015. Aimed at 16-34 year-olds, whose viewing tends to be mainly online, this is not surprising. BBC Three have successfully premiered some programming online, in some cases getting more viewers than on traditional broadcast methods (cable, satellite and terrestrial television). Is this the sign of things to come, a move to broadband over broadcast?

How to Improve Home WiFi Coverage?

The TP-LINK [TPLWA850](#) wireless range extender is designed to increase the range and signal strength of an existing wireless network to eliminate dead zones. The device is compliant with N standard (speeds up to 300 Mbps). Due to its small dimensions and integrated mains plug, it can be plugged into any mains socket in a room. As well as its wireless capability, the [TPLWA850](#) has an Ethernet port which can be connected by a UTP patch lead to another device i.e. Smart TV, PC etc.



Typical application of TL-WA850RE 300 Mbps

The users can easily extend the range of their wireless networks without the need for any additional cables, just by placing the device within the range of an existing wireless network. They should press the WPS button on their router and the Range Extender button on the device (in any order). The Range Extender button can also be used to quickly connect to other wireless device. The range extender is particularly useful in buildings where extenders using the power line as means to send the internet signal don't work.

New DVB-S2 Meter from Satlink



Following on the success of the [WS6923](#) satellite meter, SatLink have introduced their [WS6933](#). This is an S2 meter which will allow you to check HD signals as well as standard definition. Dish alignment is much more critical on HD and this is where the [WS6933](#) comes into its own by providing precise alignment of the dish and LNB, as well as for testing signal levels and quality in systems with multiswitches and amplifiers [WS6933](#) comes with 10 popular satellites pre-installed and can be upgraded easily by the user.

Coupled with its lightweight construction, long battery life and low cost the [WS6933](#) is an essential addition to an installers kit.

WiFi Personal Hotspots

Several Internet Service Providers (ISPs) in Ireland have introduced a range of personal WiFi hotspots. The aim of these devices is to do away with dongle connectivity within the home and provide a WiFi zone within which any WiFi enabled device, such as a laptop or smartphone may connect to the internet.

With all air based signals, there are areas in Ireland where there are issues with signal reception of the network. Traditionally, this was easily rectified by installing a GSM aerial and connecting to the older dongle or, indeed the new hotspots - most have antenna connections.

For a reason, known only to themselves, some of the service providers have disabled these ports. If installers are intending to offer customers the service of improving their 3G/4G reception it is advisable to ensure beforehand that the ports on the customer's device actually function.

Outdoor Housing

A recent addition to our [Equipment Cabinet](#) range are new metal housings with a protection rating of IP65. They are ideal for installing electronic devices in areas exposed to harsh weather conditions. The box can be used in places where a sealed enclosure with durability is a must. Perfect for mounting antenna and IP network equipment.

Alarm and CCTV Backup.

In accordance with regulations, alarm systems have to be powered from two independent power sources. The first is the public electricity mains supply. The second source, or backup, is built around a rechargeable battery. This battery is usually fitted in the control unit and kept charged by an inbuilt charger.

Although not regulatory, backup systems are sometimes used to maintain security in CCTV systems. This is achieved by using an Uninterruptible Power Supply (UPS) which is basically an inverter powered by a rechargeable, maintenance-free battery, which is kept charged by a mains powered charger. In the event of a power cut the UPS will switch the inverter on thereby maintaining a 230V supply to the dvr.

Cameras can be supplied with continuous power by using Buffered Power Supplies [CAMPSUBUFFER](#) These are power supplies containing a 12V battery which is kept charged by an internal charger. As the cameras use 12 Volts no inverter is needed in the BPS.

Because of the relatively high current consumption of CCTV cameras only one or two high priority cameras should be connected to the BPS, Also the

UPS cannot be expected to maintain supply to the DVR for a long period of time. It will, however, provide some recorded footage in the event of power is disconnected during the course of a break-in.

In order for the system to be function correctly, it is essential that the correct UPS or [battery](#) is chosen. The following formula can be used to determine the capacity of the battery to be used.

$$Q = 1.25 * (I_a * T_a + I_b * T_b)$$

- Q [Ah] - battery capacity
- I_a [A] - total current consumed by devices in operation state
- T_a [h] - required operation period in the emergency mode
- I_b [A] - total current consumed by triggered alarm devices
- T_b [h] - required alarm period

