



**NEW**

## Web site

Our web site has recently been completely overhauled. There shouldn't be any need for existing customers to re-register, but if anyone is having any difficulty accessing the site please let us know as soon as possible. We have several new features that are proving very popular. The site now has a comprehensive search facility allowing searches in both product code, manufacturer, product type etc.

Customers who have provided email addresses should now get an email when a parcel is sent out via FASTWAY giving them details of the shipment.

Should a delivery not arrive when expected a track & trace facility is now available from our home page giving details of the current parcel location.

Free delivery is very popular on all pre-paid orders over €200 (Nett)

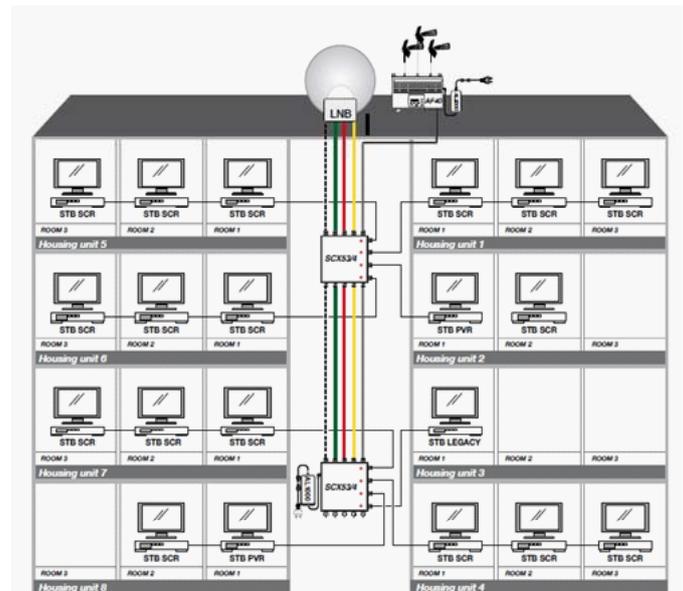
## What is SCR ?

SCR or Satellite Channel Router is a system of distributing satellite signal to multiple points using a single cable. The basic system which uses an SCR Inb is used mainly for small installations and is not really cost effective for most jobs. However, using an SCR system multiswitches in apartment blocks, hotels, institutions etc. can solve a lot of problems caused by lack of cabling infrastructure.

The [LeM SCR multiswitch](#) can feed up to 3 receivers utilising a single cable from the multiswitch.

Alternatively one twin tuner receiver and one single tuner receiver can be used. As with any multiswitch system the terrestrial signal is also carried in the cable and a standard [quatro Inb](#) is used. The line is split using standard 2 or [3 way splitters](#) which must have a frequency range up to 2250MHz and have one way voltage throughpass on all legs. Consumer terminals can be [diplex](#) or [triplex](#) outlet plates, or in the case of twin tuner receivers, [quadplex outlet plates](#).

With SCR, only receivers which are SCR compatible can be used on a single cable loop. Most modern receivers and all Sky receivers have this compatibility, which needs to be enabled via the settings menu. Receivers without SCR can often be updated by a firmware upgrade.



## This issue

What is SCR [P.1](#)

New Web Site [P.1](#)

Hard Drive Failure [P.3](#)

3G Internet Setup [P.3](#)

MRBI Survey-TV Usage [P.3](#)

APPLE WATCH [P.4](#)

Sad to hear of the closure of Peats Electronics last remaining shop on Parnell st., the site of the original store. Founded over 79 years ago by Billy Peat, selling ex army electrical and electronic components to repairmen, hobbyists, and students, Peats in the early years was a treasure trove of bits and pieces of gear. As time went by Peats developed into a more modern company, selling brown goods and new components. During the time of the infamous Celtic Tiger the company expanded by opening a number Sony Centres. Unfortunately the economic downturn meant that these stores had to close, but the Parnell st. shop remained open until mid August. In a press release, Ben Peat explained that due to the downturn in the electronics sector they had no option but to close.

### Copper works

The International Telecommunications Union (ITU) has started procedures for standardizing G.fast, the next DSL-based broadband technology. G.fast promises data rates up to 1 Gbps over existing copper telephone wires.

Receivers without SCR or “Legacy Receivers” can be connected to the LeM SCR multiswitch but require a dedicated cable back to the switch, just as with a standard multiswitch

If necessary, the switches can be cascaded either at the headend or on different floor levels to increase the number of distribution points. As per standard practice, unused outlets should be terminated using isolated 75 ohm terminations.

A tremendous advantage of SCR multiswitches is the opportunity to retrofit them in installations, where not enough cables or large enough multiswitches have been fitted, to allow clients to use twin tuner receivers such as Sky plus.

Although the multiswitch itself does not need power a [power supply](#) unit is required to power the LNB.

### How does it work ?

Each receiver (or in the case of twin tuner receivers each tuner) on a single line is given its own frequency via its SCR menu. Detection at the multiswitch end is automatic. This frequency band is between 1200 and 2150 MHz.

When a channel is selected on a receiver it sends a request, via the cable, to be connected to the transponder carrying that channel. The SCR multiswitch then selects the transponder requested and sends it back to the receiver by modulating the transponder frequency on to the allocated frequency of the receiver. The electronics in the SCR multiswitch control the entire process and ensure the correct delivery of content to each receiver.

Very little programming is required, other than setting the frequencies in the lcr menu on the receiver.

---

### Hard Drive Failure in DVRs

A hard disk failure in the DVR, though it happens rarely, would mean the loss of all or a significant part of the archive. Modern DVRs and HDDs offer features that minimize such risks.



WD1 DVRs of the newest

[Hikvision](#) series support S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology) function that monitors the operation of hard drive(s) and notifies the system operator of a risk of failure.

S.M.A.R.T monitors the following disk parameters:

- number of start/stop cycles,
- number of corrected ECC errors,
- temperature,
- number of seek errors,
- number of errors in Ultra DMA mode,
- total operation time.

## Ipsos/MRBI survey - How we watch TV.

The report commissioned by the Broadcasting Authority of Ireland (BAI) has revealed that more than 85% of the Irish population still watch "audio-visual content" – such as TV, web video sites and other services, like Netflix – on the main television in their homes. Computers or mobile devices are only used by a tiny minority to watch programmes.

The survey shows that only 4.6% view content on their laptops at home, while smartphone or tablet computer accounted for just 1% to watch videos. The research found that 96% of over-55s watch programmes at home, but that number fell to 79% for 12 to 17-year-olds.

Damian Loscher, of Ipsos/MRBI dismissed suggestions of any "great migration" to computers and mobile devices. He said: "Very often we are led to believe digital is everything, but when we look at the numbers we are still very traditional in our habits. The growth in smaller and more mobile devices has improved the experience of watching TV but hasn't changed it as such."

## DIGITAL

"We have LCD, HD and widescreen TVs and so on, so we have a far better TV experience in our home. The experience of watching TV on a phone is still not great and is unlikely to be a great experience in the future."

## 3G Internet Connection

Several installers find themselves in the predicament of a customer requiring a system they can view via the internet from home, office or smartphone and they have no wired internet connection. Unfortunately, this is quite common in rural Ireland despite efforts to provide good broadband nationwide. While some areas are in the process of upgrading to fiber a large number have little, or no wired broadband. In these cases, or in remotely located buildings, such as farms etc. with no internet connection, the preferred option is to connect via a 3G network. This is soon to be upgraded also to 4G. Essentially, the difference between the 2 systems is speed of uploads and downloads.

The current 3G networks out there in Ireland today generally run slower than a wired connection. Typically, one uses a dongle type modem supplied by one of the main mobile phone network providers with a sim card - normally contract based. There are still many areas unreachable by this type of service, or have a poor signal strength.

There are currently four 3G operators licenced in Ireland;

- 3 ([www.3ireland.ie](http://www.3ireland.ie))
- O2 ([www.o2.ie](http://www.o2.ie))
- Vodafone ([www.vodafone.ie](http://www.vodafone.ie))
- Meteor ([www.meteor.ie](http://www.meteor.ie))

A lot of people are used to using the dongle modems supplied by the various providers in lap tops to access the internet. However, if 2 or more connections are required it becomes very messy. The [TPLMR3420](#) we have found to be very popular for this purpose. It is 3G & 4G compatible and allows access to the internet via WAN (Wide Area Network or wired broadband) and a 3G network. It effectively proves a WiFi hotspot into which any WiFi enabled device can access the internet such as a laptop and a mobile phone or a number of mobile phones. The network created can be fully secure if required complete with a log-in requirement. Many DVRs can be accessed via the if they are hard-wired to a 3G router on remote farm, home or business locations too.



Setting up the device is not as complicated as might be assumed.

- Place the Router in a well ventilated place far from any heater or heating vent
- 
- Avoid direct irradiation of any strong light (such as sunlight)
- 
- Keep at least 2 inches (5cm) of clear space around the Router
- 
- Operating Temperature: 0°C ~40°C (32 °F ~104 °F) . Don't leave in an open shed where temperature in winter may fall below 0°C
- 
- Operating Humidity: 10%~90%RH, Non-condensing

## APPLE WATCH

Apple, known to be a trendsetter in consumer electronics and new technologies, plans to sell... wrist watches may give rise to a new era in wrist fashion design. Apple's watch is to be used for mobile payments, navigation, access to emails and text messages..., for everything that is now done by smartphones. Additionally, which at first may seem a gadget, the monitoring of physical activity of the user, thus the possibility to assess their health condition. With the development of services in the cloud (cloud computing) and M2M (machine-to-machine) communication, this type of functionality can be invaluable for older people. It will be possible by integration of instruments to measure vital parameters such as blood pressure, temperature etc. Adding a high-resolution camera, a doctor in a remote center could even diagnose less severe symptoms, give medical advice and so on. The device will be based on an Intel chipset and a new energy-efficient Bluetooth module. The priority is to maximize the operation time with one battery charge. Aside from 1.5" touch screen, the watch will support "Siri", the application known from iPhone, an intelligent personal assistant and knowledge navigator using natural language interface to answer questions, make recommendations, request Web services. The basic tasks include voice commands and dictation of text messages.

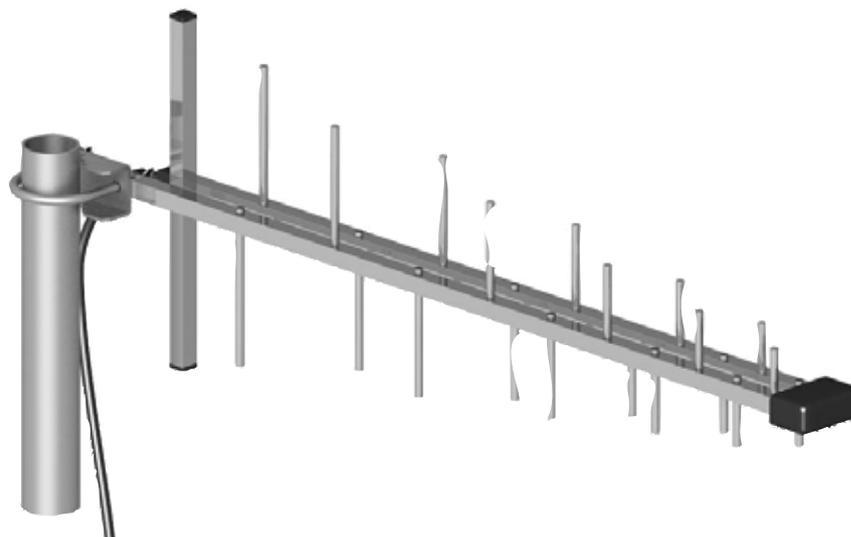
### Quick Setup

*(Full instructions are provided in PDF on the mini-disk included - its worth reading too)*

1. Ensure your internet connection is active via the 3G dongle on a laptop and/or that your ADSL modem is working.
2. Plug your 3gdongle into the usb port and/or the ADSL modem into the WAN port of the [TPLMR3420](#)
3. Ideally, plug a patch cable from a laptop into one of the available LAN ports on the reverse of the unit.
4. Type in the default IP address for local access to the router (192.168.0.1) into the address bar of your web browser
5. This will bring up a login pop-up asking for username & password. The default for both is "admin" (lower case). This can be changed in the configuration later if you want to restrict the ability to login and make changes to the network etc.
6. Once logged into the router select your service type - generally if just using a dongle this will be set to 3G only
7. Select the county and service provider and auto setup - this will apply the network setting to the router.
8. When all is set go to diagnostics and click reboot system.
9. The unit should now be ready for use and connected to the internet.
10. If security settings are desirable refer to the user manual on the disk to configure these.

We have a full range of [TP-Link](#) devices available.

Should you find a poor signal level for the 3G network at your location consider



erecting an external antenna such as [ATKLOG](#) or similar. This should vastly improve reception. We supply a large selection of adapters to allow the FME connection to fit most dongles on the market in Ireland.