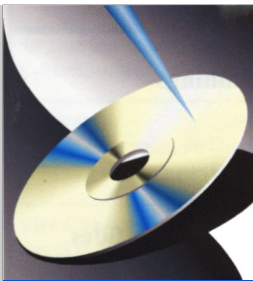
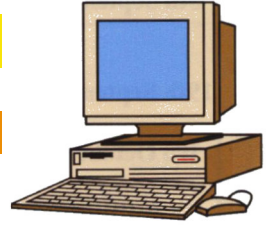


## Monthly Journal

Issue 115 - July 2001



### HOTKEY



Visit to IOW Cable and Wireless with our guide Ben Allwright in the centre

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### Visit to IOW cable & telephone

On Thursday 14th June a group of our members visited the Headquarters of IOW cable & telephone at Communications House, 56 Love Lane, Cowes, where we received a warm welcome. Refreshments were laid on for IWPCUG and after a brief introduction, we were taken on a tour of the premises by Ben Allwright, Head of

Engineering. The tour involved seeing the large satellite dishes involved in bringing the signal to the Island and a visit to the main office where all the plans are made for the installation of the cables for various parts of the Island. Ben then took our party on a tour of the stores and the technical section, which was an eye opener for most of our members. It appears that the digging up of the pavements is going a headfull steam and at the moment vast parts of

Cowes and Newport are in a position to receive the broadband services that are on offer. Wootton is being tackled at the moment with Ryde earmarked for the laying of the necessary cables in Winter. According to the Sales Manager of IOW cable & telephone, the cost of their telephone service with satellite TV and a cable modem will be very competitive.

A thoroughly interesting evening, which was informative and enlightening.

# FORTHCOMING EVENTS

4th July	Using CD Rewriter & Software	Jonathan Burt
18th July	Routine Windows Operations and General Questions and Answers	David Broughton
1st August	Video Editing	Peter Le Count
15th August	Barbecue in Bembridge	Bob Groom's Place
5th September	Internet with Search Engines	Dennis Linzmaier
19th September	Databases	Tim Bateman
3rd October	Corel Draw\Corel Photo Paint	Ian Capom
17th October	Computability Group Presentation followed by General Q. & A.	Members of the Computability Group
7th November	Windows XP (Experience)	Dennis Linzmaier
21st November	New Products	To be advised



In the stores of IW cable & telephone, with our guide, Ben Allwright

**ISLE OF WIGHT PC USERGROUP- COMMITTEE MEMBERS****Honorary President:**

Sir Norman Echlin,

**Chairman:**

Dennis Linzmaier,

**Vice Chairman/Show Organiser:**

David Broughton,

**Treasurer:**

Bob Groom,

**Secretary:**

Christine Jenkins

**Membership Secretary:**

Douglas Rankin

**Refreshments:**

Dorothy Wolletron

**Hot Key Editor:**

Brian Sexton

**Meetings Reception\Hot Key Distribution:**

John Atkin

**Committee Member:**

Maggie Butler

**Committee Member:**

Ian Capon

**Committee Member:**

Marilyn Barrett

**New Members Co-ordinator:**

Dennis Lambeth

**Computabilty Representative:**

Cliff Maidment

**Disability Resources Co-ordinator:**

Helen Edom

# EDITORIAL



This month sees a new look to our monthly newsletter, which I hope meets with your approval. I have switched to Serif Page Plus 7 to create the new design, as it is always necessary to move forward in publishing to keep pace with modern technology. Your comments and suggestions for improvements would be appreciated. Also please keep your contributions coming for future editions as all articles and tips are useful to keep our newsletter interesting and informative.

One of our Committee Members, Maggz Butler, has submitted the following humorous material, which is appreciated.

“A saying for the computer age: give a man a fish and you feed him for a day; teach him to use the Net and he won’t bother you for weeks”.

My friend works in a very busy office and relies heavily on her computer’s spellchecker. Late one Friday afternoon, her boss gave her an urgent letter for a Scottish couple about their son Alistair. He wanted it typed and posted by 5pm, so my friend worked flat out and completed it by the deadline.

It wasn’t until the following Monday, when she got round to filing a copy of the letter, that she discovered it read:

“Dear Mr. and Mrs. MacDonald,            Regarding your son Alligator...”

One of my friends mentioned that work colleagues had nicknamed him “the computer”. I asked if this was due to his prodigious brainpower and impressive multitasking skills. “No,” he admitted. “It’s because someone is always swearing at me and trying to get me to work.”

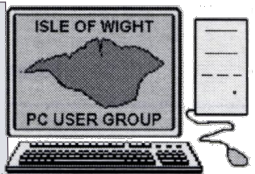
## Recommended Websites

Check your emails before downloading them: [www.mail2web.com](http://www.mail2web.com)

Visit Web User magazine:

[www.web-user.co.uk](http://www.web-user.co.uk)

\*\*\*\*\*



## The Isle of Wight PC User Group

welcomes all owners and users of  
IBM Compatible Personal Computers.

It is a group which seeks to exchange ideas and seek new information.

Our meetings are informal on the **first and third Wednesdays of each month at The Riverside Centre, Newport, 7.30-9.30 pm.**

The first Wednesday has usually a formal talk whilst the third Wednesday is more informal, geared to the new user and aims to help out members with specific problems.  
**Membership is £12 per year.**

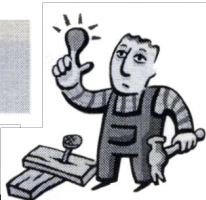
**Visitors are welcome.**

This journal, **HOTKEY**, is produced every month.

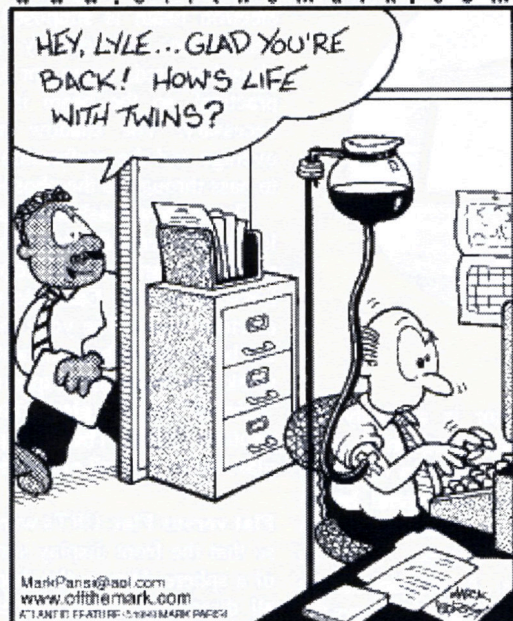
If you would like to know more about us, either come along to one of our meetings or contact one of our Committee Members on one of the numbers on page 3.



# HUMOUR



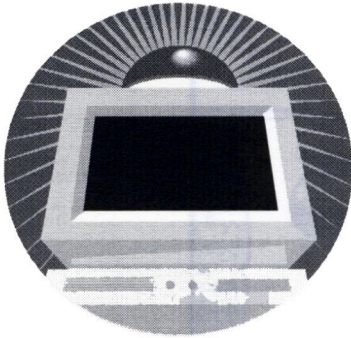
**off the mark** by Mark Parisi  
www.offthemark.com



**off the mark** by Mark Parisi  
www.offthemark.com



# The Video Monitor



The video monitor is arguably the most important and most frequently used computer component. The selection of a high quality monitor can bring substantial health benefits and no other component can so quickly cause physical distress, such as eyestrain and headaches. A **display** is the hardware component that physically shows the video output and the most common display technologies are CRT (cathode ray tube) and LCD (liquid crystal display). A **monitor** contains a combination of a display and the associated electronics required to convert the source video signal into a format that is suitable for use by the display.

**CRT: A cathode ray tube** is a display technology that uses electron beams to stimulate **phosphors** so they emit light. This part of the technology is not that important to the average user.

The CRT's **electron** guns (usually three, sometimes one or two depending upon the design) emit a stream of electron beams (plus spurious radiation) that is directed magnetically by a yoke. The electrons strike phosphors on the front glass of the CRT.

The phosphors are organised as three round dots in a triangle called a **triad**. The triad

has one red, one green, and one blue (RGB) phosphor.

A perforated metal sheet, the **shadow mask**, is placed near the glass inside the CRT. An electron beam is supposed to go through a perforation and exactly strike a specific phosphor (red, green, or blue). This is not practical, so the beam is made larger than necessary. The shadow mask absorbs the overage and the perforation permits the beam to pass through to the phosphor.

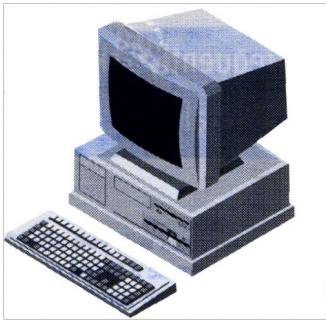
The shadow mask heats up and must have a low coefficient of expansion so that the correct phosphors are always correctly illuminated. Let's recap this. Each electron gun emits an electron beam. The yoke magnetically directs the beam through a perforation in the shadow mask. The beam hits a specific phosphor that is "painted" on the glass. The phosphor emits photons (light). The light passes through the glass to the eyeball of the viewer.

**Flat versus Flat:** CRTs were historically made so that the front display surface was a section of a sphere. Hence, the display was curved in all directions. Later, so-called "flat" screens were created from sections of a much larger sphere. The resulting display surface was less noticeably curved, but they were still not absolutely flat.

Sony's original Trinitron CRT technology is vertically flat. The display is created from a section of very large cylinder. As a result, incidental room lighting can be better controlled.

Today, absolutely flat displays are becoming common. The display surface is flat in all directions.

**Aperture Grill versus Shadow Mask:** Shadow masks are sheets of metal that typically have round holes in them. The size of the phosphor is restricted by the technology. Aperture grills were created to improve upon the technology. An aperture grill is composed of many (sometimes over two thousand) fine wires aligned vertically next to the glass. The phosphors are stripes of red, green, or blue.



The aperture grill is used in place of the shadow mask. The resulting stripes of phosphors can potentially be brighter than standard shadow mask technology.

The most common implementation of aperture grill technology is the Sony Trinitron tube. Its other features include a single electron gun instead of three (to theoretically improve electron beam aim) and a vertically flat CRT.

**LCD-Liquid crystal diode (LCD)** technology is totally different from CRT technology. LCD panels allow light to pass through them, CRTs emit light.

A polarising filter blocks light waves from passing through it except, for example, horizontally oriented light waves. Two stacked (sandwiched) "horizontal" polarising filters allow the horizontal light waves to pass through them.

LCD technology can potentially offer much greater contrast ratios than CRT technology. Since there are no electron guns or magnetic yokes, there is significantly less radiation from an LCD panel and power consumption can be a fraction of a CRT.

LCD panels are best used at the specified resolution (for example 1024x768 at 60 hertz). If such a display is used at 800x600, the displayed image could have a 112 pixel black border on the two sides and 84 pixels on the top and bottom. Or else, the image would be awkwardly stretched to fit the display.

LCD displays don't need to be refreshed like CRTs. The LCD "conduit" removes this need. Therefore, LCD displays should be refreshed at their "natural" electronic rate of 60 hertz instead of 72 hertz or higher.

**Refresh Rates-** Computer display images are dynamic and must be periodically

refreshed. The interaction between the human eye, room lighting, and the CRT display can cause unwanted side effects like flicker which results in eye strain. It is best to set the horizontal refresh rates to much higher than 60 hertz to avoid interaction with fluorescent lighting. The minimum recommended horizontal refresh rate for small CRT monitors is 75 hertz. Larger monitors may require a minimum of 85 hertz. This is because flicker is more pronounced in the peripheral vision (which is bigger on larger displays). Most monitors support common resolutions of 640x480, 800x600, 1024x768, 1280x1024, 1600x1200, 2048x1536, etc. If you run your monitor at the maximum resolution and maximum refresh rates, it will likely shorten its lifespan. A more capable monitor will jog along whereas a less capable monitor will sprint to a fiery end.

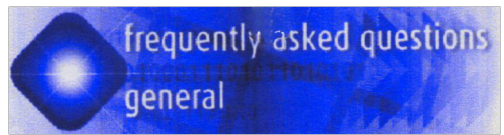
**What you see is:** The size of a computer video monitor is specified as a diagonal measurement, in inches, of the display.

When a monitor is constructed, it usually has a protective **bezel** that surrounds the four sides of the display like a frame around a picture. Part of the display is hidden beneath the bezel.

Manufacturers classify monitors according to the diagonal size of the entire CRI including the portion hidden by the bezel. Since the bezel can be designed to obscure any arbitrary amount of the display, knowledgeable users measure the **visible diagonal** from the inside of the bezel corners.

**What you get:** Computer monitors have several basic controls to adjust the image. These include size and position controls for both horizontal and vertical image, brightness, and contrast. For ease of explanation, let's consider a monitor that has a visible area within the bezel that is eight inches wide and six inches high. When the computer is connected, the monitor usually needs to be adjusted for that video card's signal (for each given resolution; which can be changed through the Windows Control Panel Display icon's Settings tab).

*Continued on page 10*



## **W**ho are Isle of Wight Cable and Telephone?

Using an innovative fibre optic network that will provide state of the art digital broadband technology, IOWCTC will become the Island's first choice for its communication and entertainment needs. With over £24 million of inward investment, a highly professional and experienced management team and the creation of over 40 jobs directly and thousands more indirectly the time is right for cable communications.

### **What is Cable communication?**

Cable communication is a wired network buried under the ground about 10-12 inches down. The Island company is also using the existing infrastructure from other utilities to provide the main routes around the Island, to keep disruption to a minimum.

### **If I take a combination of services (e.g. TV and phone) will I get discount?**

Yes

### **Will Cable offer a faster Internet service?**

Yes

How can I get a faster Internet?

Cable will offer the 'dial-up' internet you get now through BT, ours will be the Wightsurf brand, but will also offer a cable service that is between 20 and 30 times faster than standard service. The faster service will always be on (you will not need to keep dialling your service provider every time you want to send or receive e-mails or when you browse the web). But residents can expect to pay from £20 per month.

### **What other services will you offer?**

IOWCTC will provide a brand new, very high quality telephone service to residents and businesses, that dramatically reduces the cost of making calls. We plan to offer free talktime local cable phone to cable phone calls in the evenings, weekends and bank holidays. We will make the south coast, between Bournemouth and Bognor as far up as Winchester, a local call, with a regional band including London at a much cheaper rate. Our long distance tariff charges will be significantly lower than BT's.

### **Will I have to change my phone number?**

No, but you can have one of our numbers

### **Will I need a special phone?**

No, but your phone will need a star (\*) and a hash (#) key to access telephone features

### **Will I need any other equipment?**

No

### **Will international calls be cheaper?**

Very much cheaper for everybody, to every destination in the world

### **Can I just take the phone service?**

Yes

### **If I take a combination of services (e.g. TV and phone) will I get discount?**

Yes

### **Will the whole Island be cabled?**

Eventually, yes. The current plan is to build the network into the major towns:

Cowes  
East Cowes  
Newport  
Ryde  
Shanklin  
Sandown  
Ventnor  
Bembridge



West Wight Will receive a service once a new radio technology has been tried and tested and is available to IOWCTC (approx. 12-18 months).

**Will it cost me money to change from BT to cable phone?**

If you don't mind changing your phone number there will be no admin. charge. If you want to keep your existing number BT will charge a small admin. fee which will be £5 for island residents.

**Can I still have a cable phone if I am not a BT customer?**

Yes

What do you get with IOWCTC Cable? Customers can have most satellites, digital and terrestrial television channels (including T.V.12) delivered to their home along the network. 9 TV Channels and 9 Radio Stations will be available for as little as £4.95 per month.

The Network is also designed to provide pay per view and on demand movies as well as an efficient, cost effective telephone service

**Will I need to change my television?**

No. All television sets will work with cable

**Will I need other equipment?**

A set top box will be needed to provide access to all T.V. services. This can be rented from the Cable company or purchased in your local electrical store

**Will I be able to receive all the SKY channels?**

At the moment no, but channels will be added

**Will I be able to receive all the ON Digital channels?**

At the moment no, but channels will be added

**Will I be able to receive channel 5 & TV 12?**

Yes

**Is there parental control so I can control what my children can watch?**

Yes

**Can I just take the T.V. service?**

Yes

**How many Cable channels can I get on my TV.?**

As many as you want. The basic services such as UK Gold, MTV, Discovery and SKY One are not particularly expensive (around £5 for every 15 channels). The movie and sports channels are a little dearer, but with pay per view, subscribers will be able to pick and choose their movies or sports events and only pay for what they watch.

**Will it be possible to have channels for a short time, such as when my grandchildren come to stay i.e. Movie Pack with Disney?**

Yes

**What else will I get from cable that I don't already get on SKY Digital?**

You will not have an unsightly satellite dish on your wall. In addition fast internet services and a cheaper phone service. Flexible service-Packages can be taken for one month at a time.

**Will you be using fibre optic cable?**

Yes

**Who gives IOWCTC permission to dig up the roads and pavements?**

IOWCTC operates under licences from the Independent Television Commission and the DTI. The ITC and OFTEL regulate the company's activities. The construction of the network falls under the Companies Telecommunications Act licence that gives the company utility powers similar to the gas, electric and water companies and BT. The company will also liaise very closely with the council.



The **contrast control** adjusts the ratio between the brightest white and darkest black. This helps configure the visibility of the gradients of different shades of color.

The **brightness control** sets the maximum illumination (brightness) of the image. The inclusions of other controls are usually all devoted to improving imperfections in the image. They might be trapezoidal, pincushion, barrel, moiré pattern, etc.

**Plug-And-Play:** Plug-And-Play support allows a monitor to report its specifications and manufacturer's information to Windows to use in its configuration.

**USB:** USB support is usually limited to having either a passive or a powered USB hub in the base (stand) of the monitor. It can also be a convenient location to plug-in USB devices.

### Power Management

**Normal** operation uses the maximum power, which is typically about 100 to 150 watts depending upon the monitor's size.

**Standby** mode shuts off the CRT's RGB guns but the power supply remains on, and the tube filaments remain energised. This is usually the elementary screen saver mode and power consumption is less than 110 watts. Normal operation can resume in two to three seconds.

**Suspend** mode shuts off the CRT's RGB guns and the power supply is shut off but the tube filaments remain energised. Power consumption

is less than fifteen watts. Normal operation can resume in two to three seconds.

**Power off** mode isn't power off. As much as 11 amount of power is consumed by a circuit that monitors the H-sync and V-sync signals. It will resume normal operation through software (operating system) and hardware control. Power consumption is less than five watts. Normal operation can resume in eight to ten seconds.

If the monitor is not going to be used for long periods of time and energy conservation is important, there is only one solution. The monitor must be disconnected from the power mains circuit. It can either be unplugged or put on a power strip that is shut off

**Conclusions:** I firmly believe that you should get the best monitor that you can for your application. A superior quality monitor will last for two or three generations of your computer systems. A good monitor is good for your physical health because it can reduce eyestrain, headaches, body stresses, etc.

LCD panels are becoming attractively priced. They free up desk space and can be positioned anywhere on a desk.

### Resources:-

**IBM Information Brief**

Finding the Perfect Match-Choosing the Right Monitor

(<http://www.pe.ibm.com/us/infobr/fibmon.html>).

### The PC Guide

Monitors

(<http://www.pcguid.com/ref/crt/index.htm>).

### Computer Shopper

Choosing a 15" or 17" Monitor

(<http://www.zdnet.com/computershopper/edit/cshopper/shopguid/0695/>).

Our thanks to Herbert Wong, Jr., for these extracts  
ocug@SingularityTechnology.com.

# Buying a New Computer



## What to consider

**Processor:** The processor is the core of the computer and currently you have a choice between processors made by Intel and AMD. The price between equivalent speed processors can vary but generally AMD processors are less expensive to buy.

The speed of the processor is measured in megahertz and usually written as MHz. The

low-end computers have a speed specification of 700 MHz. What that means is that the processor clock is ticking at 700 million times per second. Running at that speed, the processor generates a lot of heat thus requiring a heatsink and cooling fan.

**Hard Disks:** The computer will have an Ultra DMA hard drive which is the latest evolution of the IDE drive. Drives will range from 10 GB (gigabytes, a billion bytes) to 50 GB. If you are not familiar with the term gigabytes, think of one GB as 1,000MB.

**Memory:** Required memory size has grown over the years. Adding memory to the system will increase performance more than an increase in processor speed will and at the moment you can purchase 128Mb of PC133 RAM for £30 (incl. vat).

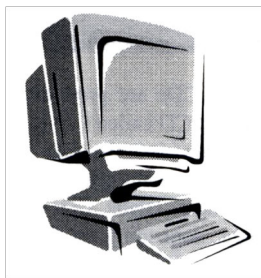
**CD Drives:** Every computer has a CD (Compact Disk) drive of some kind these days. CD media allows us to store about 640MB of data. The CD has taken over as the media of choice for program distribution, due to the low cost of manufacturing a CD.

Low-production CDs are produced using a specially formulated CD called CD-R. The CD-R has the holes into the data layer via a laser. These can be written once and are then considered permanent. Blank CDs cost in the 50p to 99p range, depending on the brand. A special version of the CD-R was developed that could be erased and then rewritten. This is the CD-RW. The benefit of CD-RW is that you can re-use the CD, but with an overhead penalty. A CD-RW disk must be formatted as we used to do with floppies, but it takes longer. A partial erase just maps around the erased data without regaining the used space. A full erase requires reformatting. This media has dropped in price to an affordable 99p to £2.00 depending on the brand. In theory, this would be a good media to use for system backups. I prefer to use the less expensive CD-R media and archive different versions of what I am backing up. Most computers with just a CD-ROM drive cannot read CD-RW media but they will read CD-R media. [Ed note: Multi read CD-ROM drives can read CD-R and CD-RW. Most CD-ROM drives over 24X are multi read].

DVDs: (Digital Video Disks) look like CDs except they store a lot more data ( 5.2Gb to 17Gb). They use a blue laser instead of a red laser to read smaller holes, which allows for greater density of data in the same space. DVD-ROM drives can serve as CD-ROM drives. I have not forgotten DVD-RW and DVD-RAM drives. The concept of writing to disks with that capability is enticing, but it is still too early for individuals to invest in them. DVD-RW and DVD-RAM are conflicting standards; we need to wait for the dust to settle.

CD-ROM: It seems that 40X is the standard on entry-level systems. This means it can read the contents of a CD at 40 times the original CD speed (the speed used to play audio CDs). Some of the faster drives use buffering to gain some speed but the media does not really spin that fast.

*continued on page 12*



**CD-RW:** Everyone should have a CD-RW drive on his or her system. Data files have become too large to fit on floppies, and CD-R and CD-RW media are very inexpensive. I envisage that soon there will be no more floppy drives on computers.

CD-RW drive specifications confuse people because there are three speed numbers associated with the drive. The numbers on a popular CD-RW is 8x4x32. The first number is the speed that the drive can write to CD-RW media. The middle number is the speed that the drive can write to CD-ROM media. The last number is the read speed. Compare this to the speed of a CD-ROM drive.

Consider the centre number to be the most important. A 4X drive would require one fourth that time or 18'2 minutes. A 10X takes us down to about 7/2 minutes. The incremental cost for the faster drives is not much: get a fast one when you can. The fastest I have seen is a 16X but I suspect they will get faster. In the near future, we will see double density CD-RW drives.

**DVD-ROM:** DVD-ROM drives let you play DVD movies on your computer. Some companies that were shipping multiple CDs are now offering DVD as an alternative. A 1X DVD drive reads a CD at a speed equivalent to a 10X CD-ROM drive. Drives running at 16X, indicates that they are very fast drives.

**DVD-RW or DVD-RAM:** There are two standards for writing DVD disks. The standards, DVD-RW and DVD-RAM, are not compatible. When the industry decides which standard is best, it will be worth buying.

**Video Cards:** The video graphics card available on a pre-made computer is now normally a 32Mb nVIDIA card. Some hard-core gamers will spend as much as £400 for a

graphics card but for the rest of us, the standard 16Mb card will do just fine.

Many of the low-end computers will have the video built into the motherboard. You may be able to tell by looking at the back of the computer. If all the connectors are in line with each other (including the video port), the video is definitely on the motherboard.

**AGP** is a special interface developed by Intel that provides a much faster communications channel. In addition, AGP allows 3-D textures to be stored in main memory rather than video memory. This is why you will see shared video memory in some specifications.

**Data Ports:** Your computer will include several connectors for external devices. These connectors are called data ports. The standard ones you should expect to find are keyboard, mouse, serial, printer, USB, network, and telephone. In most cases, the data is transmitted one bit at a time (or serially). The printer port is one exception; it transmits multiple bits at one time (or in parallel). Most name brand computers will colour code the ports and the cables that connect to them. This way you just match up the colours. It works well for everyone except the colour-blind.

**Keyboard and Mouse Ports:** The keyboard and mouse port use identical-looking small round connectors. It is easy to get them confused. These ports are normally built into the motherboard.

**Printer Ports:** There is normally one parallel printer port on a computer, referred to as LPT 1. This is designed to provide a high-speed link to a printer. It uses a 25-pin D-type connector. This port can also be used for connecting devices, like scanners and zip drives. Additional printer ports normally require an expansion board. Windows supports up to three parallel ports.

**Serial Ports:** There is normally at least one serial port, referred to as COM1. This port uses a 9-pin D-type connector. One or two of these ports are usually built into the motherboard.

**USB Ports:** USB stands for Universal Serial Bus. USB ports started appearing on computers



after Windows 95 was released. The support for USB in Windows 95 was spotty at best, but subsequent Windows releases have excellent support. USB devices include scanners, printers, keyboards, mice, cameras, and even PDAs. USB ports are fast, providing a throughput of up to 12 megabits per second.

USB connections use a small flat connector; a symbol that resembles a pitchfork usually identifies it. Most current motherboards will have one or two USB ports on the back of the computer. USB is capable of connecting up to 127 USB devices. You can increase your USB ports through a USB hub, a small box with one cable that connects to an existing port and then a series of ports to connect your devices.

**FireWire (IEEE 1394).** It works similarly to USB, but it runs at a higher speed. This technology was conceived by Apple Computers and is useful for talking to a digital video camera. It supports up to 63 devices, with a maximum cable length of 4.5 meters between devices.

**Modems.** Most computer systems include an internal modem. Any modem you get will be V.90-compatible, meaning you will be capable of connecting at 56Kbps. In some cases, these will be processor-less modems (often referred to as WinModems that use your computer to control the modem functions fairly heavily. However some people prefer an external modem but the connection speeds of both types are similar.

**Monitors:** There are three types of CRT (cathode-ray tube) monitors currently available, and each has its advantages for various applications. There are also LCD (liquid crystal display) monitors available to save desk space.

**15" Monitor.** Suitable for word processing or spreadsheet applications. This will look best at a resolution of 800x600 pixels.

**17" Monitor.** This is a good size for web browsing and other Internet applications. It will also work well for word processing and spreadsheet applications. This will look best at a resolution of 800 x 600 pixels and may be okay at 1024 x 768. The price for this size of monitor is just slightly above the 15" monitors.

**19" Monitor.** This is the size for the amateur graphics designer or the hardcore gamer. This will look best at a resolution of 1024 x 768 pixels. These monitors take a lot of desk space.

**Expandability.** Ideally you should get a computer that has at least one empty drive bay and one empty expansion slot.

**Recommendation.** This recommendation is for typical home use (word processing, spreadsheets, e-mail, and Web browsing). It will work fine for most games but it will not be the fastest on the block. It will work fine for Webcams, DVD and video editing system.

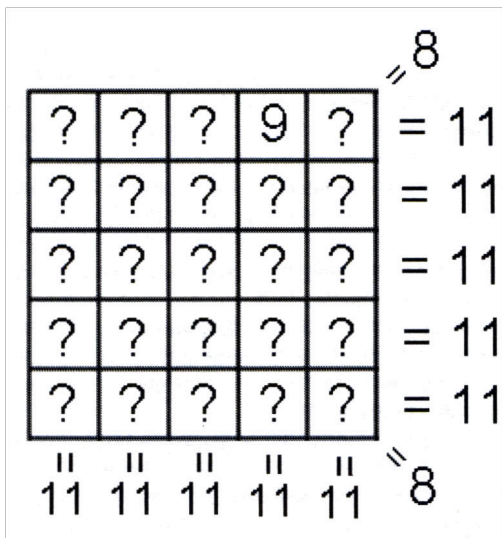
700 MHz to 1GHz processor (Intel or AMD) 20 GB Ultra DMA hard drive  
128 MB SDRAM memory  
CD-RW drive DVD-ROM drive  
1 floppy drive  
1 USB port, | serial port. | printer port  
V.90 K56/flex modem AGP graphics card Keyboard  
Mouse  
Sound card and speakers  
17" Monitor

*Our thanks to Ken Hopkins,  
Sacramento PC Users Group.*



## Prize Puzzle for July 2001

by David Broughton



The prize puzzle this month is on the CD-ROM Cover Disk in the form of a computer program called FIVE.EXE. If for any reason there is no cover disk or you cannot access the file, it is also on the club's web site (select Downloadable Binaries from the left hand menu). The program can be run under any version of Windows (double click the file name) or under DOS (navigate to the directory, type FIVE and press Enter.)

All the instructions are self-contained within the program. Although the puzzle can be done most conveniently using the program, in theory you don't need the program at all. The diagram above is the puzzle. Each of the 14 question marks must be replaced with a single digit in the range 0 to 9 so that each row and each column adds up to 11 and each of the two diagonals sum to 8. One of the cells in the diagram, however, is fixed and equal to 9. This cannot be changed. The computer program helps you by instantly showing the current row, column and diagonal sums as you change the cell values and so reduces the amount of mental arithmetic involved.

The computer program will give you a code word on successful completion of the puzzle. Alternatively you can send me a diagram. Results to arrive, please, by Wednesday, 1st August 2001.

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The following shows when we expect to start work in your area. Please note that these times are only estimates as we are dependent on the weather conditions at that time.

<b>Town</b>	<b>Start Date</b>	<b>Finish Date</b>
Cowes	November 2000	September 2001
Newport	February 2001	May 2002
Wootton	February 2001	August 2001
Binstead & Ryde	March 2001	February 2002
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Bembridge	January 2002	May 2002
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**Phone pack - (Calls to any number on the Island - 1p per min.)- £8.95 line rental.**

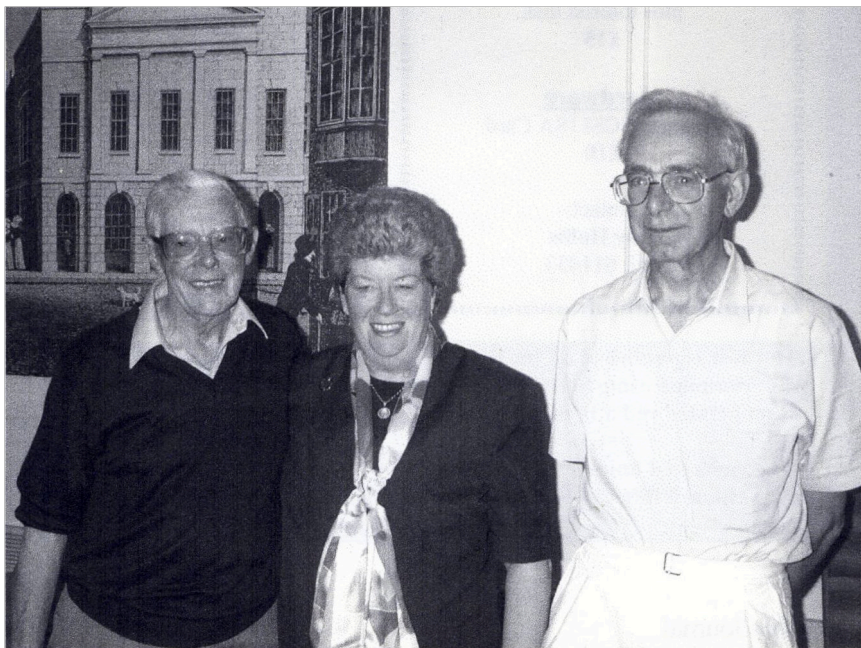
**TV Satellite Packs (various)- starting from £4.95 per month.**

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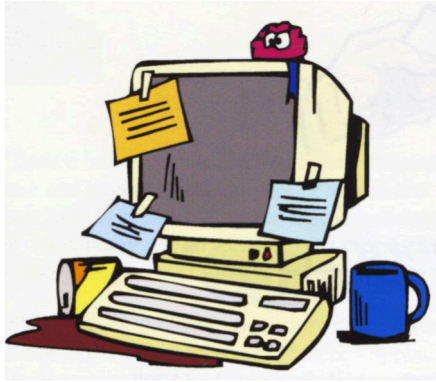
**Prices - All inclusive of VAT**

Enquiries - Tel. 294222 or email: [enquiries@iowctc.co.uk](mailto:enquiries@iowctc.co.uk)



**Bert and Veronica Bareham with David Broughton at the "Colossus and the Secret War" talk**

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Contact:-  
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