

# VCI Systems Cable and Socket Identification Guide

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## **Introduction**

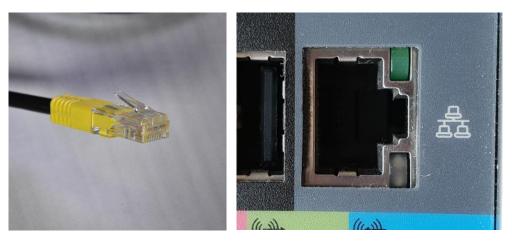
Here at VCI Systems, we understand that it can sometimes be confusing as to which cable goes where, when and why.

Here is our brief guide to help identify the correct cables and their corresponding sockets for most I.T. related jobs so that hopefully you won't be getting your wires crossed in future.

But first, our **top tip when removing cables** – if you're removing more than one and intend on putting them all back in the same location then take a picture before you start. It's easy to think "well, this went here and that went there" but if you get interrupted and return to the job 20 minutes later with 6 loose cables, you'll be thankful for that visual reminder.

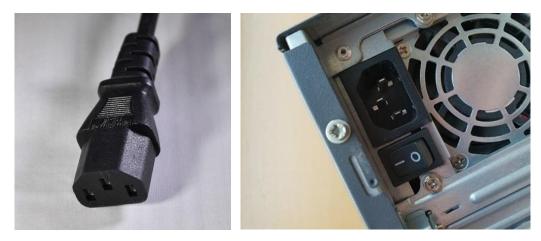
# 1. Network cable (Cat5/Cat6/Ethernet/RJ45)

Used to join network devices together - 'the cable with a clip' makes a satisfying ping as it is plugged in. Seen on all network devices – one end will be into the back of your PC, printer, etc. and the other end will most likely be found plugged into a Switch or wall socket. Small LED lights seen to the side of the socket indicate an active connection when lit or flashing.



# 2. <u>Power cable (Kettle lead/IEC)</u>

The standard power lead used for monitors, PCs and printers. Be careful not to knock the nearby rockerswitches when removing these cables. If you were removing the power lead anyway then you can't do any damage but if the switch is knocked to 'off' you won't be able to power-up the PC next time the cable is plugged back in.

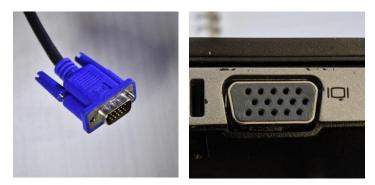


# 3. Monitor/Display cables

Below are the various monitor cables and their connections. These days it is not uncommon to find adapters in use when matching screens to PCs. They're not pictured here but all of the adapters will share some of the charatersitics of the connections below as they convert one type to another.

## a. VGA

Video Graphic Array or VGA, the original 'standard' video cable. Most commonly blue, but not always. The plug has some small thumb-screws either side so be sure to release those before removing the plug.



#### b. DVI

As we moved towards more digital signals the Digital Visual Interface or DVI cable became more common. Again this one features thumb-screws so be sure to check those before removing.



#### c. HDMI

A cable you might be more familiar with from the back of your home TVs, the High Definition Multimedia Interface cable or HDMI. This cable has the advantage of carrying sound as well as a higher quality image than the two previous cables.



## d. Display Port (DP)

The newest of the bunch, DP or display port. Can be used to transmit sounds as well as video, much like HDMI, but has the advantage of being able to daisy-chain more than one screen from a single port – assuming the monitors in use support this.



## 4. USB connectors

Arguably the most common connection around and certainly the most widely known. Can be used to connect all sorts of devices to your PCs and laptops. Keyboard, Mice, Cameras, Phones... They all use USB. As time has moved on the humble USB connection has evolved and there are now a few different variants available.

## a. USB-A

The first and most common USB connection. Comes in three speeds – USB, USB2, USB3. The same cable and connections can be used for all – it is mostly the devices themselves that determine the speed. USB3, pictured below, is the fastest of the three and often has a fancy blue insert to indicate its support of the faster speeds.



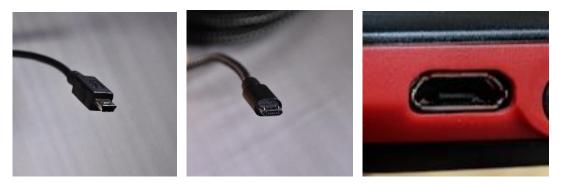
## b. USB-B

Whilst you will find the above connection USB-A at the back of your PC, you're more likely to find the USB-B at the back of scanners and printers. Has the same function as USB-A, just a different socket.



#### c. Mini-B and Micro USB

As USB grew more prolific and devices shrunk in size the need for smaller cables and connections came about. Mini (left) and the newer Micro (right, with socket) came about. You're probably familiar with these from your mobile devices.



#### d. USB-C

The newest of USB connections. Can be plugged in either way and, as well as being a lot faster, can carry video and sound. You will start to see a lot more of this connection on newer devices.



## 5. Phone plug and Broadband filter

The cable that brings the BT phone line into the building. Most commonly goes from a wall socket to a router or straight into a Broadband filter that will then be plugged into the router. The broadband filter will split the signal between phone and internet and features a socket to plug your phone into.



# 6. Audio jack

This is used for sound output from your PC and will either be used for speakers or in conjunction with a Mic for a headset. Typically a green connection and cable though not always and so they include tiny symbols that only those with great eyesight will see. Arrow out for sound out, Arrow in for sound in (Blue) and a small Mic for your microphones (Pink).



## 7. Old style keyboard and mouse connectors (PS2)

Seen less frequently these days – the older mouse and keyboard connectors. Often colour coded as above, purple for keyboard and green for mouse. A word of warning when swapping these cables – the PC needs to be restarted before it will recognise these cables so probably best to only do this whilst the PC is shutdown.

