

# EMC requirements and products needing modification for compliance

The Australian Communications and Media Authority's (the ACMA's) electromagnetic compatibility (EMC) regulatory arrangement specifies mandatory standards for a wide range of electrical and electronic devices.

Under these arrangements, the Australian supplier (importer or Australian manufacturer) must ensure their products meet mandatory standards and are labelled with the C-Tick regulatory compliance mark.

## Modification for compliance

Products to which these regulations apply may need modification during testing to become compliant with the relevant standards. The supplier (importer or manufacturer) in Australia must ensure that the modifications are made to the product before the product is supplied to the Australian market.

Some typical modifications are the addition of ferrites on cables, use of an EMC filter on the mains power, or use of special cables.

If the supplier in Australia provides the product and the cable (or accessory) that needs the modification, then the modification must be pre-installed.

For example, if a vacuum cleaner needs a ferrite core attached to its power cord to meet the standard (AS/NZS CISPR 14.1) and the power cord is supplied with the vacuum cleaner it must have the ferrite fitted prior to supplying to the market. If the ferrite is not fitted, the ACMA may view this as non-compliant, even if the ferrite is supplied in the packaging as an accessory, and the instructions state it should be fitted by the consumer. It is not the responsibility of the consumer to do the modification.

If the Australian supplier does not provide the cable or accessory requiring modification with the product, the supplier must provide the parts for the modification, and detailed instructions on fitting the parts.

For example, if a computer system needs a ferrite attached to the cable from the computer to the monitor to be compliant and the computer and monitor are supplied as a package, the cable from the computer to the monitor should have the ferrite fitted. However, if the same computer needs a ferrite on a USB cable during testing and the supplier does not supply this cable, then the supplier must include the ferrite and instructions on how to fit it to the cable.

## Interconnection cables

Care must be taken with the cabling between products and any auxiliary equipment to make sure that any ferrites or filters needed are fitted, and also the correct type of cable is used.

The test report for the product may specify a special cable, or a maximum length of cable for the product to comply with the EMC standard.

For example, if a split system type of air conditioner has a test report stating that the cable between the control unit and the outdoor unit is a screened (or shielded) cable, and the air conditioner is supplied without the same type of cable as tested, it may not be compliant with the standard. As a minimum, the installation instructions must contain the specifications for the cable that is to be used.

## More information

The ACMA booklet [\*Electromagnetic Compatibility – Information for suppliers of electrical and electronic products in Australia and New Zealand\*](#) is on the ACMA website.

For more information suppliers can also contact [comply.label@acma.gov.au](mailto:comply.label@acma.gov.au)

The ACMA has [fact sheets](#) on a range of topics.

*Please note: this document is intended as a guide only and should not be relied on as legal advice or regarded as a substitute for legal advice in individual cases.*

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