



Interference to consumer electronics equipment—Hamersley residents

The information is intended to help Hamersley residents experiencing interference to domestic equipment, such as televisions, radios, telephones and hi-fi systems.

Warning

The removal of protective covers from electrical equipment poses a real threat to your health that could result in electrocution. All electrical equipment should be unplugged from a power source before any inspection of the internal mechanism is undertaken. Equipment warranties may be affected if protective or sealed covers are opened. Only a qualified technician should conduct such inspections.

Reason for interference to consumer electronics equipment

Unwanted radio waves can interfere with consumer equipment such as computers, telephone handsets, audio-visual systems and electronic devices.

Due to the design of some modern consumer electronics interference from radio broadcast transmissions is sometimes unavoidable. This can be frustrating as these devices may respond unexpectedly to signals from external sources such as nearby AM radio transmitters.

The Hamersley AM radio transmission facility is used by the Australian Broadcasting Corporation (ABC) to provide ABC Local Radio, Radio National and NewsRadio services to Perth and the surrounding region. Homes built close to this long-established AM radio transmission facility may experience interference.

The Hamersley AM radio transmission facility was assessed during mid-2010 and was found to be operating within its technical specifications. Providing such transmission facilities are operating according to their licensed conditions and are complying with the electromagnetic energy emission (EME) and electromagnetic radiation (EMR) safety standards, no action can be taken against the operator of the service for interference to consumer devices in the transmission area. A copy of the assessment report is available from the Australian Communications and Media Authority (ACMA) website on the interference investigations page at www.acma.gov.au/WEB/STANDARD/pc=PC_410074

Consumer equipment manufacturers may be able to reduce or even eliminate interference by designing their equipment to adequately shield or filter-out unwanted radio signals.

The measures outlined below may help reduce or eliminate interference in some cases, but may not resolve all cases.



Technical measures to reduce interference

There are three basic technical measures that can be used to address interference from unwanted radiofrequency signals.

These methods are:

- > correct earthing of antennas and equipment
- > proper radio frequency shielding
- > appropriate filtering where necessary.

A combination of these techniques may be used in severe cases. It is important that you seek professional assistance when dealing with technical measures to reduce interference.

Options to minimise interference

Telephones

If there is interference to your telephone service, first contact your service provider or telecommunications carrier to establish the cause. For example, the interference could be caused by a faulty line or connection.

Broadcast radio and television reception

Interference to your television or radio reception can be caused by a number of factors including:

- > the type of components being used
- > the age, quality and location of the antenna receiving system and connecting cables
- > the age and quality of the television or radio receiver
- > the location of the television or radio receiver.

The ACMA has recommended that householders install a dedicated external roof-mounted television antenna designed to receive the services broadcast in the particular area where they live. As antennas designed for analog television services may not perform adequately when tuning to digital television services, a qualified antenna technician should be engaged to assess potential options to enhance television reception.

Analog television services are scheduled to be switched off in the Perth metropolitan area by 30 June 2013. The Australian Government has developed the Antenna Installer Endorsement Scheme as part of the digital television switchover program. Antenna installers endorsed under the scheme can check your antenna, reception and cabling and help you become digital-ready.

Local endorsed antenna installers can be found by visiting mySwitch on the Digital Ready website at www.digitalready.gov.au or by calling the Digital Ready Information Line on 1800 20 10 13.

The ACMA has produced a booklet that provides general information to help consumers self-diagnose analog television or radio service interference. The Better television and radio reception: Identifying your analog TV and radio interference problem booklet is available from the ACMA website at www.acma.gov.au/webwr/_assets/main/lib100342/btr_handbook.pdf

Electromagnetic compatibility regulatory arrangements

The ACMA has regulatory arrangements in place covering a wide range of domestic electrical equipment supplied to the Australian market. Products must comply with relevant standards made under these arrangements for radiocommunications, electromagnetic energy, electromagnetic compatibility (EMC) and telecommunications. For example, sound and television broadcast receivers and associated equipment are covered by the EMC regulatory arrangements. The applicable EMC standard is AS/NZS CISPR 13. International standards CISPR 13 and EN 55013 are considered as equivalent, and test reports demonstrating compliance with these international standards are acceptable under the arrangements.

Under the EMC arrangements, the supplier—who can be an Australian manufacturer, an importer of products manufactured overseas or an agent—is responsible for ensuring products meet the appropriate ACMA regulatory requirements, hold compliance records and have the correct labels.

The C-Tick label is used on products to indicate compliance with the ACMA's radiocommunications, EMR and EMC standards.



The A-Tick label is used to show compliance with telecommunications standards.



Visit www.acma.gov.au/WEB/STANDARD/pc=PC_310704 for more information about EMC regulatory arrangements.

Purchasing consumer equipment

Residents who consider that their electronic equipment may be affected by interference from AM radio transmitters should consider the adequacy of earthing, shielding and filtering in future purchases of domestic equipment, and seek professional advice as required. Purchasing well-known brands from reputable retailers may offer some level of assurance to consumers with regard to interference protection.

Disclaimer

The information in this publication is provided by the Department of Broadband, Communications and the Digital Economy (the department) and it is intended to help residents in the Hamersley area experiencing interference to domestic equipment, such as televisions, radios, telephones and hi-fi systems. The department makes no representation or warranty about the accuracy, reliability, currency or completeness of any information contained in this publication. The department recommends that you exercise your own skill and care with respect to your use of this information and that you carefully evaluate the accuracy, currency, completeness and relevance of the information for your purposes.

The department does not intend this information to be used by the public as a guide to undertaking their own installation and/or repair of electrical or electronic equipment. If you are experiencing difficulties with your consumer electronics equipment, you should seek advice and services specific to your needs from an experienced installer / technician. The department is not liable for any loss, injury or damage resulting from any action taken or reliance made by you on any information or material provided in this publication (including, without limitation, third party information).