

Wireless microphones — Spectrum for ‘plug and play’ users: Perth & surrounds

From 1 January 2015, wireless microphones must not be used in the 694–820 MHz frequency range. Visit www.wirelessmicrophones.gov.au for information about this change.

As a ‘plug and play’ user, this fact sheet provides general advice to help you decide which spectrum you can use for your wireless microphone from 1 January 2015. You are responsible for ensuring that you **comply with the regulations**.

Choose spectrum and your wireless microphone with care

There are many different types of wireless microphones available. When choosing a wireless microphone:

- > use spectrum in the frequency range that is permitted for wireless microphones
- > this spectrum may be shared with television and radio services and other users, so you must make sure that you don't cause interference to these services and users
- > you should understand that you are not protected from interference received from these services and any changes to the regulations—so choose equipment with the widest possible frequency range.

Whether you have an existing device or are buying a new wireless microphone, you need to make sure that it meets Australian requirements and it's suitable for use after 1 January 2015. You should contact your supplier for technical advice on spectrum and equipment before purchasing new equipment.

Nationally available spectrum

The following spectrum is now available nationally for wireless microphones, no matter where you are in Australia:

- > 520–526 MHz (see Note 3)
- > 1790–1800 MHz.

Frequency ranges 915–928 MHz, 2.400–2.4835 GHz and 5.725–5.875 GHz are also available for wireless microphone use, but they are shared with Wi-Fi and Bluetooth devices.

The benefit of using the nationally available spectrum is that you will not cause interference to television and radio services in your area.

Spectrum for plug and play users in your area

Due to the high density of television and radio services in the Perth area, plug and play users need to be extra careful when choosing spectrum suitable for their needs.

The table over the page identifies spectrum that is considered available for wireless microphone users. However, as spectrum availability varies across Perth, in some areas it is only possible to *indicate* whether spectrum could be available for wireless microphone users. In areas that are marked **Likely** or **Possible**, contact your supplier for technical advice about your needs, including what spectrum options you may have in your area.

While the table identifies what spectrum is available for wireless microphone users, you must remember that this spectrum is primarily used by radio and television services. You must not cause interference to these services and you are also not protected from any interference received from these services.

The table identifies spectrum options suitable for plug and play users whose requirements can typically be accommodated within one television channel. Depending on the quality of your equipment, one channel can support between six and eight wireless microphones. If you have greater requirements than this, contact your supplier for advice.

Spectrum in 520–694 MHz is now available across Perth, as shown in the table.

Spectrum in the 520–694 MHz range can be used indoors on the condition that no interference is caused to television and radio services. For more information on indoor use, contact your supplier for advice.

Information on spectrum availability at the suburb level and technical resources are available from www.wirelessmicrophones.gov.au.

Notes:

1. The channels and frequencies provided in the table will be available from 1 January 2015. However, some channels and frequencies may be available before then. For more information, use the ACMA's online [channel finder](#).
2. Wireless microphones operate on a shared-spectrum basis with radio and television services. These arrangements can change over time. Wireless microphones users are not protected from such changes and are responsible for ensuring they comply with current regulations.
3. The frequency range 520–526 MHz is unused by television services and is available Australia-wide. However, the use of this spectrum may change as result of future replanning.
4. Resources and technical television planning data are available on www.wirelessmicrophones.gov.au.



Legend	
YES	Available for wireless microphone use.
LIKELY	This frequency is likely to be available for wireless microphone use. However, it is possible that you may receive interference from distant television and radio services in some areas. Seek advice from your supplier to determine whether this frequency is suitable for your needs.
POSSIBLE	This frequency is possibly available for wireless microphone use. However, many locations will be prone to receiving interference from television and radio services or causing interference especially when using the wireless microphone outdoors. Seek advice from your supplier to determine whether this frequency is suitable for your needs.
NO	Not available for wireless microphone use.

Available spectrum for wireless microphones from 1 January 2015

Location	Band TV channel Frequency (MHz)	VHF	UHF				
		6, 7, 8, 10, 11, 12	27	28, 29, 30, 31, 32, 33	34, 35, 36, 37, 38, 39	40, 41, 42, 43, 44, 45	46, 47, 48, 49, 50, 51
		174–195 209–230	520–526 (see Note 3)	526–568	568–610	610–652	652–694
Perth		NO	YES	LIKELY (except Ch 32)	YES	POSSIBLE	NO
Areas surrounding Perth							
Bakers Hill		NO	YES	YES	YES	NO	YES
Baldivis		NO	YES	NO	YES	NO	YES
Bindoon		NO	YES	YES	YES	YES	YES
Byford		NO	YES	YES	YES	YES	NO
Chidlow		NO	YES	YES	YES	NO	YES
Dwellingup		NO	YES	YES	YES	NO	YES
East Bullsbrook		NO	YES	YES	YES	YES	NO
Ellenbrook		NO	YES	YES	YES	YES	NO
Gingin		NO	YES	NO	YES	YES	YES
Herne Hill		NO	YES	YES	YES	YES	NO
Hovea		NO	YES	YES	YES	YES	YES
Jarrahdale		NO	YES	YES	YES	YES	YES
Kwinana		NO	YES	NO	YES	NO	NO
Lancelin		YES	YES	YES	YES	NO	YES
Lower Chittering Valley		NO	YES	YES	YES	YES	YES
Mahogany Creek		NO	YES	YES	YES	YES	YES

Available spectrum for wireless microphones from 1 January 2015

Location	Band	VHF	UHF				
	TV channel	6, 7, 8, 10, 11, 12	27	28, 29, 30, 31, 32, 33	34, 35, 36, 37, 38, 39	40, 41, 42, 43, 44, 45	46, 47, 48, 49, 50, 51
	Frequency (MHz)	174–195 209–230	520–526 (see Note 3)	526–568	568–610	610–652	652–694
Mandurah	YES	YES	NO	NO	NO	YES	
Mount Helena	NO	YES	YES	YES	YES	YES	
Muchea	NO	YES	YES	YES	YES	YES	
Mundaring	NO	YES	YES	YES	YES	YES	
Mundijong	NO	YES	YES	YES	YES	YES	
North Dandalup	NO	YES	NO	YES	NO	YES	
Parkerville	NO	YES	YES	YES	YES	YES	
Pinjarra	NO	YES	NO	NO	NO	YES	
Rockingham	NO	YES	NO	YES	NO	NO	
Sawyers Valley	NO	YES	YES	YES	YES	YES	
Serpentine	NO	YES	NO	YES	YES	YES	
Gabbadah	NO	YES	NO	YES	YES	YES	
Stoneville	NO	YES	YES	YES	YES	YES	
The Vines	NO	YES	YES	YES	YES	NO	
Toodyay	YES	YES	YES	YES	NO	NO	
Tuarts Rise	NO	YES	NO	YES	YES	YES	
Two Rocks	NO	YES	NO	YES	YES	YES	
Woodridge	NO	YES	NO	YES	YES	YES	
Wooroloo	NO	YES	YES	YES	YES	YES	
Wundowie	NO	YES	YES	YES	NO	YES	
Yanchep	NO	YES	NO	YES	YES	YES	

More information

- > Contact your supplier about your specific device to find out the most suitable frequency range for your location.
- > Visit www.wirelessmicrophones.gov.au or email us at freqplan@acma.gov.au.

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