

TV reception issues in the Greater Newcastle region

If you live in the areas of Caves Beach, Belmont, Eleebana, Charlestown, Mount Hutton, Belmont North or Dudley, and have been having problems with your TV reception, this fact sheet is for you.

Read on as we explain the issues that can affect TV reception and the options you have to improve your reception.



What's the story with TV reception in the region?

The beautiful (but hilly!) terrain in the Greater Newcastle region means broadcasters have had to set up a large number of TV transmission sites to allow adequate television coverage. But this also means that sometimes your TV can have problems picking up the best signal, or perhaps your antenna isn't right for the transmission site it picks up.

So, how can I improve my reception?

The good news is, this is not about 'bad' reception—in fact, it's almost the opposite. The wide availability of signals means it's actually about ensuring you have the right antenna, pointed the right way, and tuned to the right channel for the best possible reception. So, let's step through the solutions.

1. Get the right antenna

There are several ways to install and optimise your antenna installation:

- > **use a single antenna only**—multiple receive antennas pointed to the different transmission sites would most likely cause reception difficulties.
- > **install it correctly**—antennas should be installed clear of all obstacles and in cases where the signals are variable, up to 10 metres high. Table 1 on page 3 of this fact sheet has detailed information on suitable antennas, along with images of suggested antennas on page 4.
- > **get an expert opinion**—have your antenna installation inspected by an experienced antenna installer. They can check and optimise your antenna system, tune the TV sets and determine if reliable reception from one of the TV broadcasting site is possible.

2. Manually tune your TV or set-top box

In areas with multiple broadcasting sites, it's important that you perform a manual tune on your TV to select the services that provide the best coverage.

Doing an 'auto-scan' does not guarantee that your TV will tune into the best channels. Instructions for performing a manual tune or scan can be found in your TV manual or by contacting the manufacturer.

See Table 1 to find out which transmitter and channels are best suited to your location.

3. Use the best transmission site

Even if you have your antenna set-up correctly, it may not be picking up the best site. A phenomenon known as atmospheric or signal ducting means that distant TV signals from Illawarra can travel much further than they normally would, which causes interference to the reception in the Greater Newcastle region.

If you live in an area that receives TV signals from the Newcastle (Mt Sugarloaf) transmission site, you shouldn't point your antenna to the south. Instead, tune to the secondary transmission site servicing your area—the details in Table 1 over the page can help with this.



Other options

mySwitch coverage predictions

The mySwitch website—<https://myswitch.digitalready.gov.au>—allows you to check television coverage at your street address and provides location-specific information about the best television broadcasting site to point the antenna and television channels to tune TV sets. It also includes advisory notices when particular reception difficulties arise in an area. The information should be considered indicative, as it doesn't take into account of things like foliage or building clutter, and also assumes a properly installed and optimised antenna.

VAST

If you've tried all these steps, and still don't have good reception, you may have to consider VAST.

The government's Viewers Access Satellite Television (VAST) service provide households without reliable terrestrial television reception with access to commercial and national services, including multi-channels where available. Access to VAST is free although there is a one-off cost in engaging an antenna installer to install the VAST box and satellite dish.

More information about the access to VAST services, including to how to apply, can be found at www.mysattv.com.au.

Need more information about TV reception?

To help all Australians get the most from digital TV, we've developed an online information hub at www.acma.gov.au/tvreception. It has more information on how to resolve TV reception issues, focusing specifically on the importance of an optimised receive antenna system for reliable TV reception.

You can also keep-up-to-date with the latest news from the ACMA by subscribing to our newsletter, *engage* for regular email updates.

Table 1: Best transmission sites and guide to antenna types by location

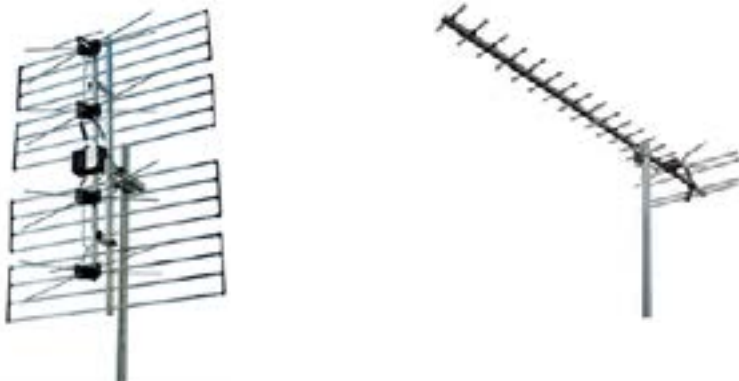
	Caves Beach	Belmont	Eleebana	Charlestown	Mount Hutton	Belmont North	Dudley
Transmitter main	Newcastle	Newcastle	Newcastle	Newcastle	Newcastle	Belmont North	Belmont North
Strength	Good strong	Good strong	Good strong	Good strong	Good strong	Good strong	Good
Channels	35–39	35–39	35–39	35–39	35–39	28–33	28–33
Polarization	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Vertical	Vertical
Direction distance	NW 26 km	NW 20 km	NW 14 km	W 16 km	NW 16 km	NE 1 km	NE 4.7 km
Suggested antenna	A — see over	A — see over	A — see over	A — see over	A — see over	C — see over	C — see over
Antenna height	Roof height	Roof height	Roof height	Roof height	Roof height	Roof height	Up to 10 m above ground
Transmitter 2	Belmont North	Belmont North	Belmont North	Warners Bay	Kotara	Newcastle	Newcastle
Strength	Variable moderate	Very good	Variable moderate	Very good	Variable moderate	Good	Variable moderate
Channels	28–33	28–33	28–33	28–33	35–39	35–39	35–39
Polarization	Vertical	Vertical	Vertical	Vertical	Vertical	Horizontal	Horizontal
Direction distance	N 11 km	NE 3.4 km	SE 4 km	W 4.2 km	NE 4 km	NW 18 km	W 20 km
Suggested antenna	D — see over	C — see over	D — see over	C — see over	D — see over	A — see over	B — see over
Antenna height	Up to 10 m above ground	Roof height	Up to 10 m above ground	Up to 10 m above ground	Up to 10 m above ground	Up to 10 m above ground	Up to 10 m above ground
Transmitter 3	Kotara N/A		Warners Bay N/A	Kotara	Belmont North N/A		Port Stephens
Strength	Variable poor		Variable poor	Good	Variable poor		Variable moderate
Channels	35–39		28–33	35–39	28–33		28–33
Polarization	Vertical		Vertical	Vertical	Vertical		Vertical
Direction distance	N 17 km		N 4.6 km	NE 2.1 km	S 3 km		NE 48 km
Suggested antenna	D — see over		D — see over	C — see over	D — see over		D — see over
Antenna height	Up to 10 m above ground		Up to 10 m above ground	Up to 10 m above ground	Up to 10 m above ground		Up to 10 m above ground

Examples of suggested antennas—refer to Table 1

A: High gain —Horizontal —Wideband UHF antenna



B: High gain — Horizontal —Wideband UHF antenna



C: Low gain — Vertical — Wideband UHF antenna



D: High gain — Vertical — Wideband UHF antenna

