



**Australian Government**



## Low and high signal strength – masthead amplifiers, boosters and attenuators

Some people living in areas of poor TV signal strength may have an amplifier fitted to their antenna system to help boost the signal strength. A masthead amplifier or 'booster' usually looks like a small box located near the antenna, such as on the pole or in the roof space.

### **What happens if I have an amplifier or booster attached when the analog TV signals switch off in my area?**

If you're going to receive your new digital services from the same transmitter site as your existing reception, then you may not need to change anything.

However, if there is a new digital TV transmitter site that is closer to your home, or of significantly higher power than the old site, you may need to make some changes.

You can use **mySwitch** on the Digital Ready website [www.digitalready.gov.au](http://www.digitalready.gov.au) to find out where your nearest transmitter is located.

### **What happens if my signal strength changes?**

Amplifiers and boosters can help if you receive low to very low signal strength, but if signal strength increases because a transmitter is upgraded or a new one is built closer to your home, you may start to receive new signals that are medium or high power. This can affect your TV in two ways:

1. High signal strengths into the booster can cause it to overload.
2. Your digital TV or set-top box may not be able to decode the high power signals.

An overloaded booster or amplifier can behave in strange and somewhat unpredictable ways. You will not be able to watch TV with an overloaded booster, and it may also interfere with your neighbours' reception. Once an amplifier is overloaded it can begin radiating interfering signals. These can be transmitted out of your antenna and be picked up by some of your neighbours' antennas and interfere with their television reception. Even if you're not watching TV, the booster can continue radiating these interfering signals.

If your booster isn't overloaded, you still may not be able to receive reliable TV because your set-top box is receiving too much signal. Set-top boxes and digital TVs are designed to receive TV signals in a particular range. Poor reception can occur from either too little and too much signal.

## What do I need to do?

If you can watch digital TV with your existing system and your neighbours can also watch TV, then you don't need to do anything and can keep using your existing masthead amplifier or booster. However, if you are unable to receive digital TV, then you may need to either turn off your booster to prevent it being overloaded, or attach an attenuator to the wall socket where your set-top box plugs in. An attenuator will reduce the high level of signal to something your set-top box or TV can handle and display clearly. You can talk to your endorsed antenna installer or approved digital advisor to find an attenuator to suit your needs, such as a 6dB or a 10dB attenuator.

## Disconnecting your booster

Boosters are powered either from a power pack plugged into a normal power point (usually in the roof cavity) or alternatively from the equipment they are plugged into. If you can turn the power point off that powers the booster, this may resolve the problem and you should be able to use your existing antenna. However, your antenna may need to be repositioned to point towards the closest transmitter. You may also need to retune your channels again through your digital TV or set-top box to ensure you have the best possible reception.

If you power your booster from your television receiver or set-top box, then you will need to either have the booster removed completely, or use a different antenna system.

Some older boosters do not let the TV signal pass through if they are switched off. If you see a blank screen or 'no signal' after you have retuned your digital TV or set-top box you will need to get the booster physically removed or you may need to use a different antenna system. If you cannot get the booster removed from your system, you may need to run a new cable, or use a joiner to bypass the booster.

Most importantly, you should contact an endorsed antenna installer to remove your booster or adjust your antenna if required. For your own safety, you should not climb onto your roof or other structure to remove your booster or adjust your antenna yourself.

## Help is available

You may want to have an antenna installer check your whole TV reception system. They will be able to assist in reducing any interference you may be experiencing, and will be able to provide you with the best options for getting better quality reception.

## Where can I find out more?

If you'd like to know more about the switch to digital TV or to find your nearest endorsed antenna installer visit **mySwitch** at [www.digitalready.gov.au](http://www.digitalready.gov.au) or call our Digital Ready Information Line on **1800 20 10 13**.