

Ensuring Good Television Reception upon Use of Spectrum in 700 MHz Band for 5G Services

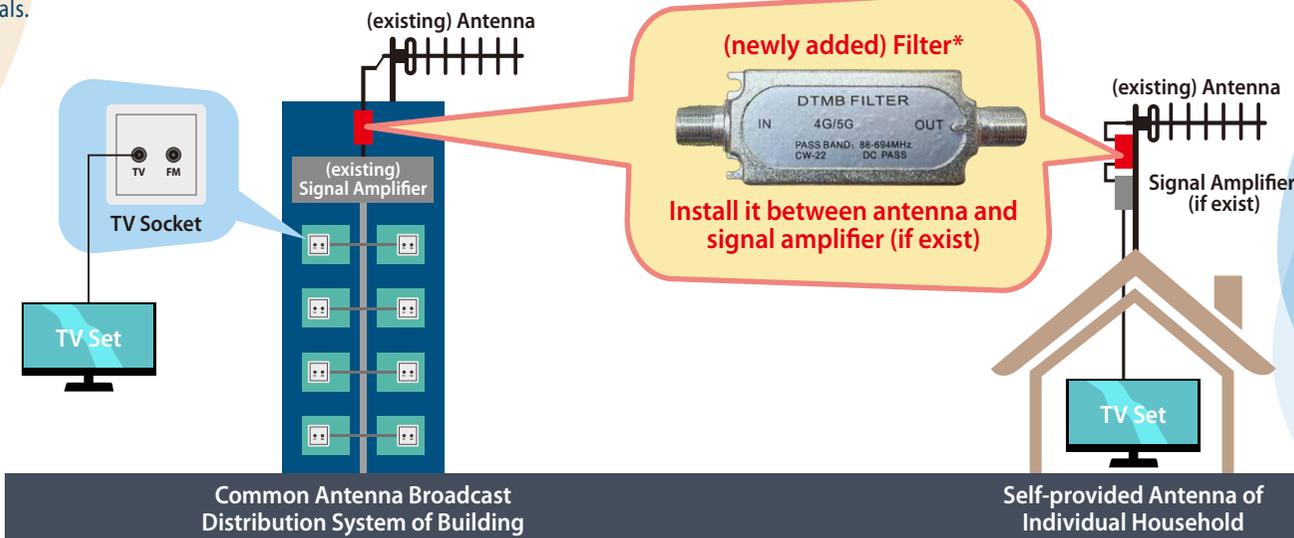


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In support of telecommunications and smart city developments in Hong Kong, the spectrum in the 700 MHz band originally used for television broadcast has been re-assigned for the provision of mobile telecommunications services. Starting from 30 June 2022, mobile network operators will gradually activate their base stations in the 700 MHz band for the provision of 5G services to the public.

Ensure normal reception of television signals by antenna system

As the spectrum in the 700 MHz band was used for television broadcast in the past, the common antenna broadcast distribution (CABD) system of a building/self-provided antenna of individual households (collectively known as antenna system) may still be able to receive signals in that particular band. If an antenna system is in close proximity to a base station and has not been installed with suitable protective equipment such as a filter, the reception of television signals will likely be affected by the mobile network signals.



Generally speaking, an antenna system can avoid receiving mobile network signals operating in the 700 MHz band via the following means –

- adding a suitable filter (see above diagram);
- using a television receiving antenna with suitable frequency band (e.g. receiving frequencies of television receiving antenna ranged from 470 to 694 MHz); or
- using a television receiving antenna with a suitable built-in filter, etc.

Depending on individual antenna system, the price of relevant equipment in general ranges from tens of dollars to several hundred dollars.

In case any antenna system is found to have problems with the reception of television signals, its owner may engage a CABD contractor/relevant technician to check the system, and where necessary, arrange for an adjustment of the system or installation of suitable equipment to ensure that the system would not be affected by the mobile network signals operating in the 700 MHz band.

Tips for installation of new antenna system

For a new antenna system, a television receiving antenna with suitable frequency band should be used to avoid receiving any mobile network signals operating in the 700 MHz band that may affect television reception.

* For reference only. There are different varieties of filters on the market.

Enquiries

If members of the public suspect that their antenna systems are affected by the mobile network signals operating in the 700 MHz band, they may consider adopting the above advice to ensure continued normal reception of television signals. For enquiries on television reception, please contact the Office of the Communications Authority at 2961 6333.

Office of the Communications Authority
Website: <https://www.ofca.gov.hk>

