

DIGITAL TV RECEPTION

Digital broadcasting is a more efficient way of transmitting television services. Benefits of digital television include:

- Free to view and Pay TV offering more TV channels and programme choice
- Digital radio stations
- Sharper, clearer pictures and improved sound quality
- Digital text
- On screen Electronic Programme Guide (EPG) to help select and personalise viewing choice
- Interactive services - extra features for special events, sports and other programmes

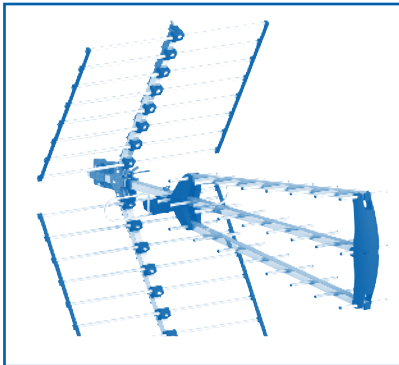
Reception of digital television is available using a:

- TV aerial
- Satellite dish
- Cable
- Broadband telephone line

Switchover from analogue to digital broadcasting is being rolled out region by region across the UK. It started in Whitehaven, Cumbria in 2007 and should be completed by 2012. To find out when your region is due to go digital or for further information on digital television visit www.digitaluk.co.uk

Once the signal has been switched over to digital transmission in your region, you will no longer be able to receive the analogue signal

DIGITAL TERRESTRIAL TV



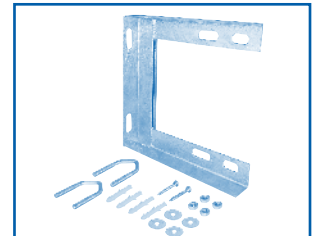
DIGITAL SATELLITE TV



TV DISTRIBUTION



ACCESSORIES



This project will guide you through the steps required to enable you to enjoy the benefits of digital television throughout your home either through a digital terrestrial TV aerial or a satellite dish. In addition you will also need a digital terrestrial or satellite set top box to go with your existing television. New televisions will often have an integrated digital tuner.

The Wickes system is comprehensive and you can very easily install an entire distribution system from the aerial or satellite dish downwards. For digital terrestrial television (DTT) reception, if your current aerial is already digital compatible and in good condition, simply make use of your existing aerial and build from there.

It should be stressed that the Wickes Distribution system alone is not able to improve the quality of your existing reception. It can only distribute and maintain that present reception. For the project to be effective your aerial must be of sufficient reception capability and correctly aligned so that it picks up a strong, good quality signal.

Please note that some digital distribution systems are more complex than others. This project shows the most typical applications.

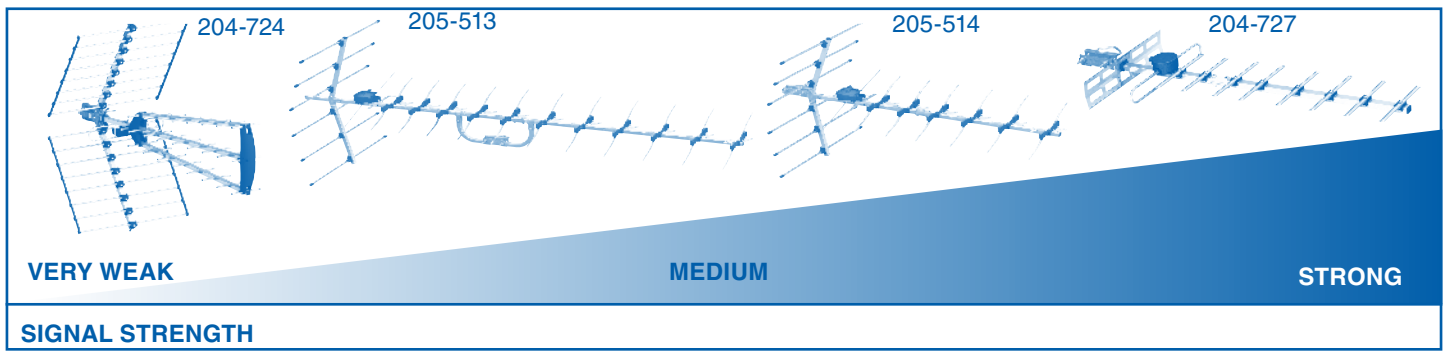
KEEP INFORMED

- Look for other Good Idea Leaflets that could help you with your current project.
- Check that your Good Idea Leaflets are kept up to date. Leaflets may be amended to reflect product changes so keep an eye on issue dates
- If you would like to be put on our mailing list for the Wickes booklet, call our Freephone number which is
0500 300 328
- Visit our website at www.wickes.co.uk

Digital switchover dates

• West Country	2009	• STV Central	2010/11	• London	2012
• Wales	2009/10	• Central	2011	• Tyne Tees	2012
• Granada	2009	• Yorkshire	2011	• Ulster	2012
• West	2010/11	• Anglia	2011	• Channel Is	2012
• STV North	2010	• Meridian	2011/12		

The above dates are correct at time of press 01/09 - visit digitaluk.co.uk for up to date information



1. REPLACING YOUR TV AERIAL FOR DIGITAL TERRESTRIAL TELEVISION (DTT) RECEPTION

1A CHOOSING THE CORRECT AERIAL

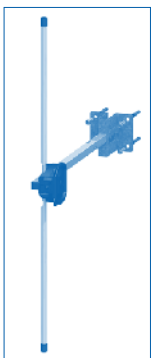
To be guaranteed to receive all available DTT channels you will need a wideband aerial. Traditionally aerials have been designed to receive a specific group of the television channels. However, during and after the digital switchover your local TV transmitter may broadcast across the whole frequency band.

All Wickes TV aerials are directional wideband aerials, designed for DIY installation and are suitable for reception of all available DTT signals.

If you replace your existing TV aerial, your choice of TV aerial is dependent on the signal strength in your area. Wickes supply a choice of aerials for different reception conditions: See above diagram.

- 10 Element Digital TV Aerial - For Strong Signal Areas (204-727)
- 30 Element High Gain Digital TV Aerial - For Weak to Medium Signal Areas (205-514)
- 50 Element High Gain Digital TV Aerial - For Weak Signal Areas (205-513)
- Ultra High Gain Tri-Boom TV Aerial - For Very Weak Signal Areas (204-724)

In strong digital reception areas it may be possible to use a set top or indoor aerial to receive the signal, however the best quality reception will always be obtained using an external aerial.



Wickes also supply a DAB aerial to optimise the reception of DAB signals. It is suitable for mounting externally or in the loft space.

Digital Audio Broadcast (DAB) offers a wide range of radio stations broadcast in high quality audio.

To check if you can receive DAB in your area visit www.digitalradionow.com

1B FITTING THE TV AERIAL - GUIDELINES FOR BEST RECEPTION

The best reception is always obtained when the correct type of aerial is used in

an outside position, high enough to clear local obstructions and pointing in the direction of the transmitter. For the best interference free reception, we recommend the aerial is mounted either on the eaves, outside wall, chimney or balcony. If this is not possible the aerial can be mounted in a loft, but the signal strength will be reduced.

NOTE: If you are unsure of which type of aerial you require, look at neighbours who currently receive Freeview and buy similar. If you are in any doubt, play safe and buy an aerial suitable for a lower signal strength area (see signal strength chart). Mount yours with the elements the same way (vertical or horizontal to match the polarity being broadcast from the transmitter) and point in the same direction as everyone else. If you are still not sure and you don't have a neighbour nearby or you have a large building in the way, seek professional advice.

Wickes supply a range of masts and fixings:

- 6ft A Crank Mast (204-705)
- 5ft Straight Mast (204-706)
- TV Loft Fixing Kit (205-496)
- TV Aerial Fixing Kit (204-728)
- 6" Wall Fixing Kit (205-283)
- 9" Wall Fixing Kit (204-730)
- Chimney Fixing Kit (204-729)

Product compatibility reference chart

Aerial...	10 element	30 element	50 element	Triboom
6" Wall Fixing Kit	✓	✓	✓	✗
9" Wall Fixing Kit	✓	✓	✓	✓
Chimney Fixing Kit	✓	✓	✓	✗
TV Loft Fixing Kit	✓	✓	✓	✗
TV Aerial Fixing Kit	✓	✓	✗	✗

FIG. 1 - Wall mounting

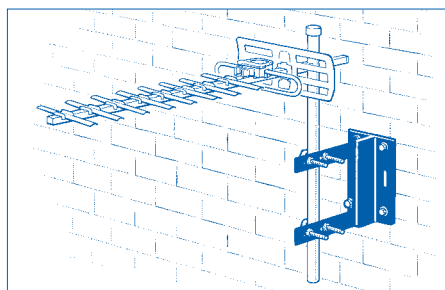


FIG. 2 - Chimney mounting

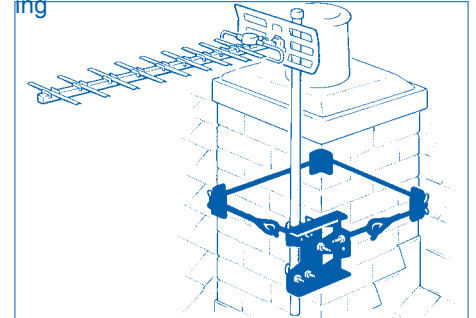
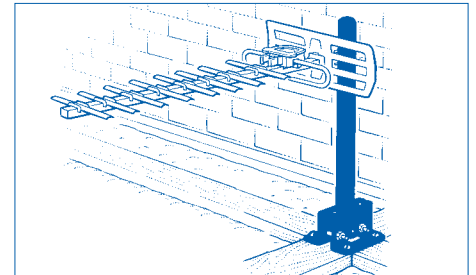
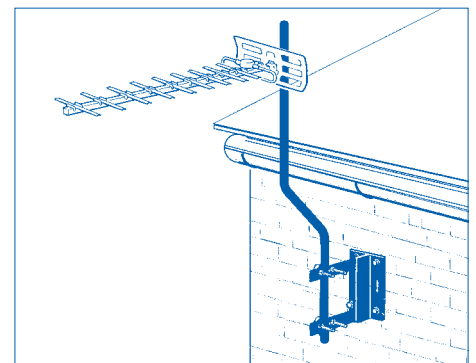


FIG. 3 - Loft Fixing Kit



When fitting a loft aerial you must ensure that the items in the loft such as water storage tank, do not obstruct the signal from the transmitter. Fitting instructions are included in the packs.

FIG. 4 - Wall Bracket with Crank Mast. Ideal for avoiding guttering or fascias.

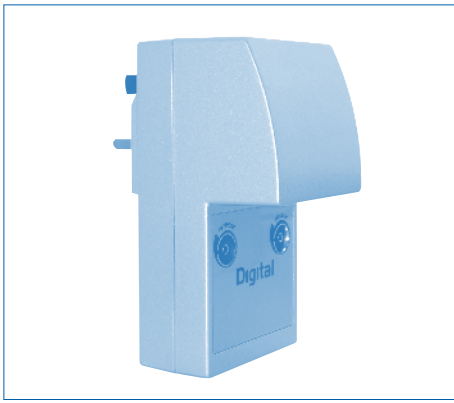


1C CONNECTING THE AERIAL DOWNLEAD

To minimise any signal losses between the aerial and the television, it is essential to:

- Minimise cable lengths
- Use good quality screened coaxial cable
- Have no sharp bends in the cable
- Avoid cable runs close to power cables

A 25m Coaxial Cable Kit is available from Wickes (205-503)



1D AMPLIFYING SIGNAL

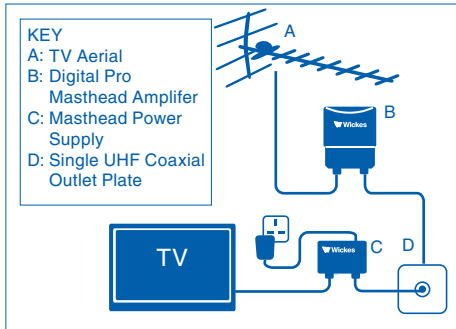
If you live in a very weak signal area, and experience signal break up and interference, then an amplifier or booster may be required in an installation.

Options available:

1. It is best practise to amplify the signal at source. The Digital Pro Masthead Amplifier (204-702) is specifically designed to be installed under the aerial. To power the Masthead amplifier you will require a Masthead Power Supply (204-703). See below.

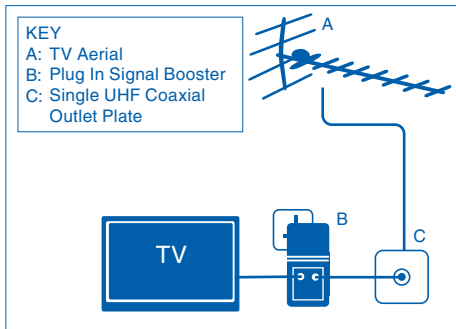
NOTE: Power supply can be located behind the TV or in the loft.

FIG. 4 - Typical application example



2. Alternatively a signal booster designed to be plugged in and installed behind the TV can also be used.

FIG. 5 - Typical application example



Plug In Signal Booster 1 output and 1 input (204-714)



2. INSTALLING A SATELLITE DISH FOR DIGITAL SATELLITE RECEPTION

Digital satellite reception is available to the vast majority of households throughout the UK. It is a popular solution to those who cannot receive digital TV through an aerial. It also allows you to receive all regional broadcasts of BBC and ITV programmes anywhere in the UK.

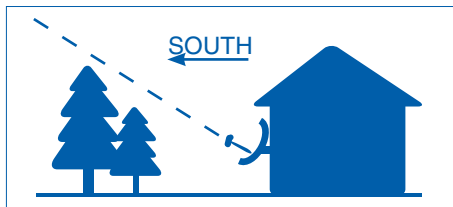
The Wickes 57cm Satellite Dish Pack is suitable for reception of digital satellite television. It includes everything needed for a complete installation:

- Dish & LNB
- Wall Bracket and Fixings
- Coaxial Cable
- Satellite Receiver
- Scart Lead
- Satellite Finder

The included Satellite Receiver allows reception of over 200 UK channels as well as hundreds of foreign language channels. These channels do not require a subscription.

2A FITTING THE SATELLITE DISH – GUIDELINES FOR THE BEST RECEPTION

Satellite dishes are normally installed either on a mast, the chimney or wall or alternatively strategically placed in the garden to camouflage the dish. To receive a strong signal, the satellite dish must have a clear, unobstructed line of sight to the satellite.



Astra 2 is the satellite which broadcasts the most popular channels to the UK and has an orbital position of 28.2 degrees East of South. The compass bearing will be slightly different however due to the magnetic variation. In the UK you will need to align your dish to a compass bearing of about 23 degrees East of South.

Once you have the correct horizontal alignment you need to align the dish vertically. The dish angle of elevation throughout the UK is from 21 degrees in the North to 27 degrees in the South.

With the dish now roughly aligned you should now only need to tweak the dish to receive a picture. A satellite finder is included in the dish pack which will greatly help the process.

3. INSTALLING A DISTRIBUTION SYSTEM

A digital amplifier can be used to amplify an incoming signal or to distribute signals around the home without loss of quality.

Your first step is to decide the number of outlets you require. Bear in mind that your viewing requirements may change in the future and it is always worthwhile to build in extra capacity. Wickes supply a choice of amplifiers for different applications:

- Plug-In Signal Booster - 1 TV Output (204-714)
- High Gain Signal Booster - 2 TV Outputs (204-704)
- Digital Pro Amplifier - 4 Output (204-699)
- Digital Pro Amplifier - 8 Output (204-700)
- Digital Pro Dual Mode Amplifier - 6 Output Sky Distribution (204-701)
- Digital Pro Masthead Amplifier - 1 Input, 1 Output Amplifier (204-702)
- Digital Pro Masthead Power Supply (204-703)

The illustrations on the following page show 2 typical applications. Choose the application which most closely reassembles your desired set up.

For independent viewing of DTT or digital satellite television each television will require its own set top box.

We recommend for the best possible digital installation that you use fully screened outlet plates, screened coaxial cable and 75ohm coaxial flyleads. A complete range of accessories are available from Wickes.

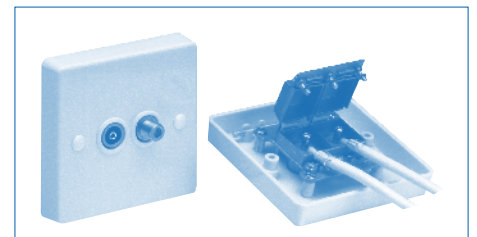


FIG. 6 – Features Digital Pro Amplifier - 4 output
 DTT and DAB signals to all rooms for independent viewing of DTT on all TV's.

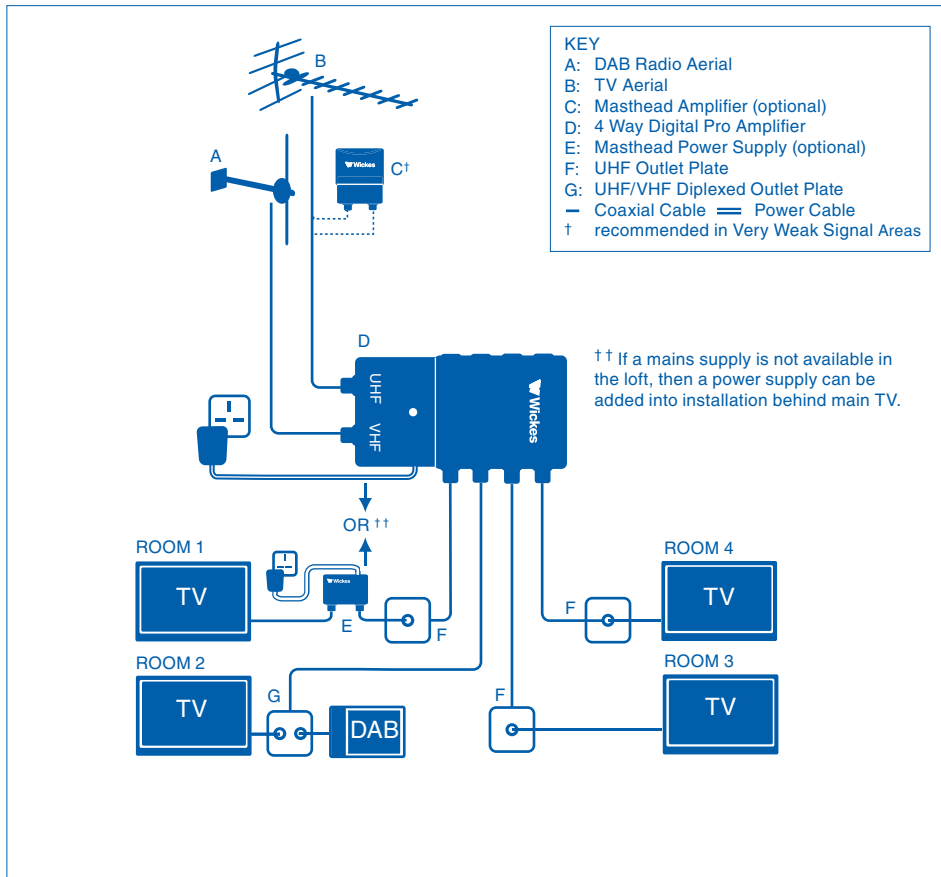
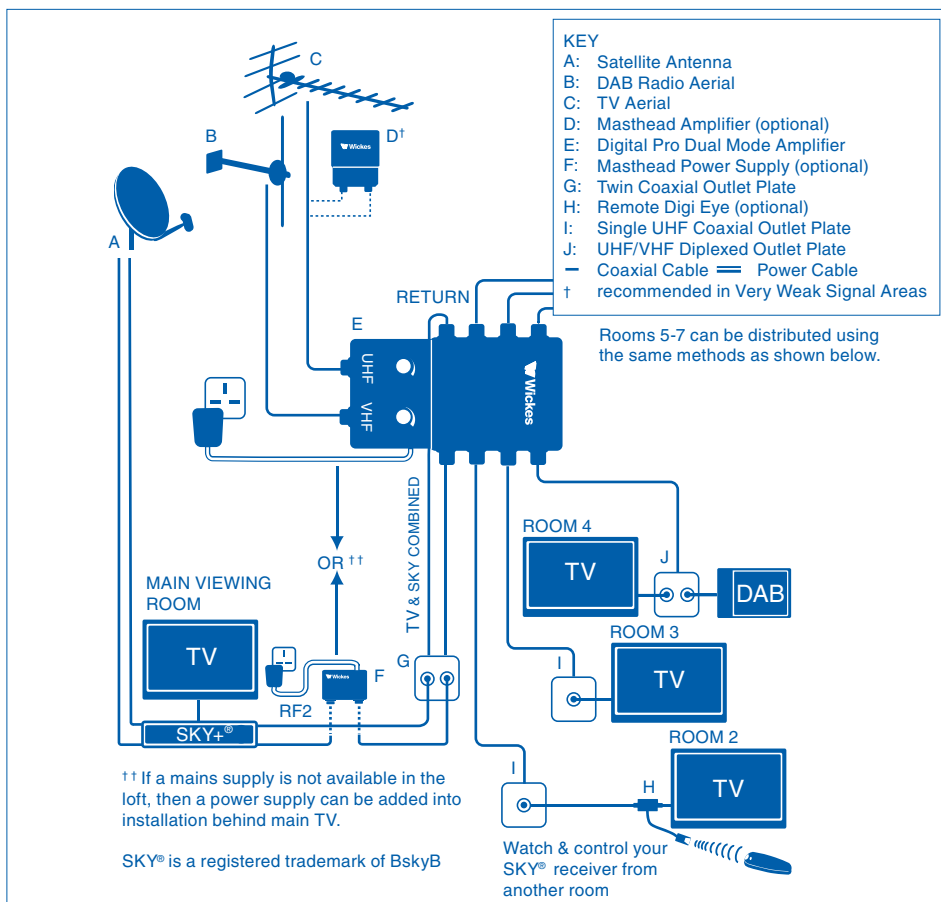


FIG. 7 – Features Digital Pro Dual Mode Amplifier
 Typical distribution for digital satellite.



3A COMPLETING THE DISTRIBUTION NETWORK

Connect the aerial download(s) into the antenna input(s) of the digital amplifier. Coaxial cable can now be run from each output of the digital amplifier to the intended location. Keep cable runs as short and direct as possible to avoid excessive use of the cable. You may find it more convenient to run the cable down the outside of the house, rather than making holes through walls, floors or ceilings.

Cable should always be secured to walls or along skirting boards using cable clips. Take care not to crush the cable.

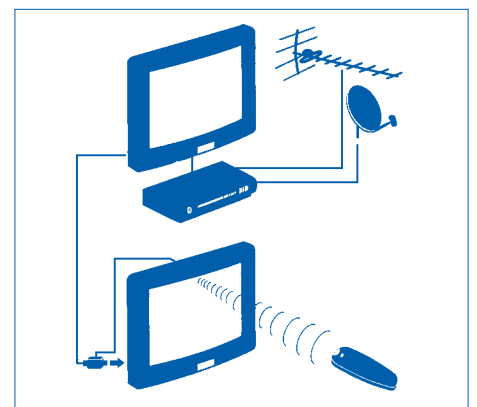
The cable can be terminated in two ways. If run through a wall they can be connected directly into flush mounted outlets which fit on a standard 25mm deep single metal mounting box, which is recessed into the plaster. These provide a neat finish with no exposed wiring. If you wish to receive digital terrestrial television and DAB radio signals in the same room a UHF/VHF diplexed outlet plate must be used.

If flush mounting cannot be used and you have surface mounted the coaxial cable, flush mounted outlet plates can also be mounted on shallow plastic surface mounted boxes with the coaxial cable fed in through one side of the box or using a surface outlet box.

To connect from the outlet socket to the equipment, a coaxial flylead is used.

3B Digi Eye Control for SKY® Receivers

The Digi Eye allows you to watch and control a SKY receiver from another room.



The 2 output High Gain Signal Booster and 6 output Dual Mode Amplifier are compatible with the Wickes Remote Digi Eye (204-712).

Whilst every care has been taken to ensure that the product design, descriptions, specifications and techniques of constructing the products are accurate at the date of printing, Wickes products will inevitably change from time to time and the customer is advised to check that the design, descriptions, specifications and techniques of constructing any of the products described in this leaflet are still valid at the time of purchase or placing an order.