Digital Satellite Receiver

# TouchBOX 4

Réf : 441327-4

3500 channels

Parental lock

2 scarts

16/9 Compatible

DiSEqC 1.2

MET815

METRONIC

## IMPORTANT NOTICE !

The inside of your Touch Box 4 contains components submitted to high tension. Never open the product, even after having removed the sector cable. In general, audio video products are not related to the earth so you can actually feel electric waves (which are not dangerous) by touching the two products simultaneously (or one product and the antenna cable). We advise that you plug the products in the sector after having made all the connections.

To clean the box or its remote, do not use any solvent or detergent. A dry or slightly humid cloth is all you need to remove the dust.

Do not install the box near other electric products. Find a spacious area and do not place anything on top of the box. The box must never be exposed to water, even water splashing, and you must never leave objects filled with liquid, such as vases, on top of the box. Never place the box on another product, as the overheating would make the components age prematurely. If you are subject to a storm, unplug all your audio video products from the sector : the storm could cause damages that the warranty would not cover.

The remote needs two AAA 1.5V batteries. Please respect the environment and the law and do not throw used batteries with domestic rubbish. Take them back to your point of sale where you will find containers for used batteries.

The installation and usage of the product is based on pre-programmed channels. If you have a problem with a channel you should look for a specialised magazine that will advise if this specific channel is sometimes transmitted clearly. Operators often change the channels characteristics without warning.

Your TouchBOX 4 is DiSEqC 1.2. compatible so it can control any DiSEqC 1.2. motor. In the case of a motorised DiSEqC 1.2. installation, we advise that the motor is installed in an accessible area (avoid chimneys for example). Indeed, a motor might need to be re-screwed, oiled... For your information, the DiSEqC 1.2. standard is a brand from Eutelsat.

If you only have one satellite receiver, you will not be able to view a satellite channel different form the one that you are recording. We also advise you to keep your terrestrial antenna if you have one.

This symbol indicates that the product must not be treated as household waste. The harmfull substances possibly contained in the equipment may have negative consequences on the environment and / or the human health. At the end of its life, bring any electronic equipment back to your retailer or at the collection point that your city or town puts at your disposal.

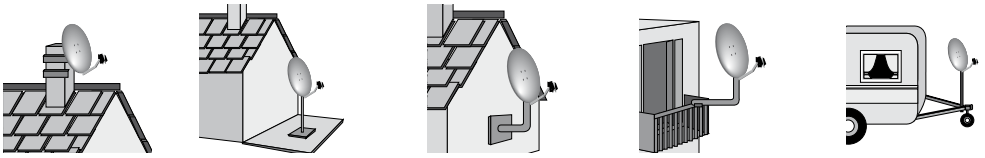
# Index


| | | |
|---|---|---|
| 1 | - Installation - General | page 4 |
| 2 | - Installation of a fixed antenna on a satellite | page 6 |
| 3 | - Installation of an antenna + Astra / Hotbird monobloc | page 7 |
| 4 | - Installation of motorised equipment | page 8 |
| 5 | - Plugging a fixed antenna already on satellite | page 20 |
| 6 | - Installation of more than one satellite | page 21 |
| 7 | - Remote description | page 22 |
| 8 | - TouchBOX 4 description | page 23 |
| 9 | - Daily usage | page 23 |
| 10 | - Adding channels | page 24 |
| 11 | - Classifying channels | page 26 |
| 12 | - Advanced options | page 28 |
| 13 | - Radios | page 29 |
| 14 | - Use with a VCR | page 29 |
| 15 | - Universal remotes | page 30 |
| 16 | - Q / A | page 30 |
| | Channels Guide | page 33 |

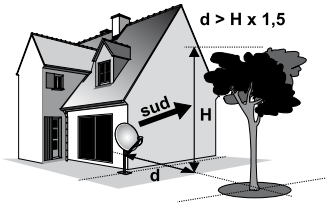
# 1 Installation – General

## A Choosing the right place and installing the antenna

However you decide to install your antenna, it has to be stable and vertical.



• If there are any obstacles you should follow the rules of below that explain distances. For a motorised system, only terrace bases or wall brackets can be used.

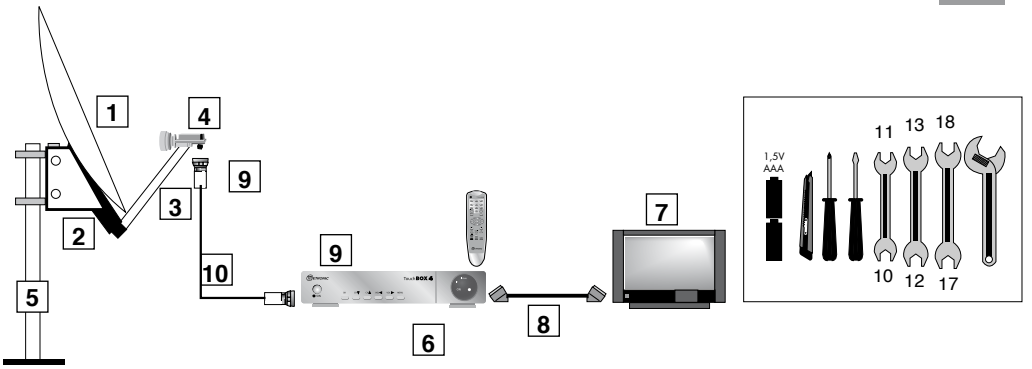



• To assemble the antenna, please refer to the manual included in the screws bag that is provided with the antenna.

*BE CAREFUL ! Handle the antenna with precaution as the compass can be very sharp.*

## B Necessary items and utensils :

1 - Antenna
2 - Screws
3 - Offset arm
4 - Universal LNB
5 - Mast or wall bracket
(minimum diameter = 40mm)
6 - Digital box with remote
7 - PAL / SECAM TV
8 - Scart cable (21 screened pins)
9 - F sockets
10 - Special satellite cable
(standard cable is not compatible)



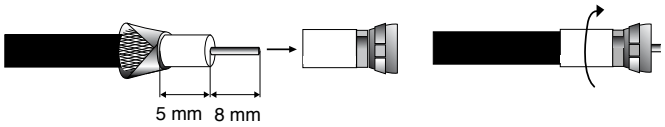


info@metronic.com

## C Mounting and isolating the F sockets

- The socket must be screwed on the aluminium flat strapping. Ensure there is not one bit of the braid in contact with the coaxial cable.
- When you have finished mounting the product, do not forget to isolate the LNB with isolation paste or silicone gel (see photo below)

*Badly or non isolated LNBs are not covered by the warranty.*

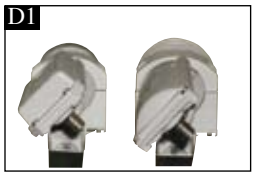


## D Mounting the LNB

Your kit can contain two types of LNB :

- LNB in grey metal (image D1): ensure that the triangular mark (▲) is positioned towards the top. It is normal for the head to be inclined at 45°.
- Other LNB: must be positioned vertically (image D2).

In either case, never remove the protection cap.



## E Pre-programmed channels and satellites

Your TouchBOX 4 is pre-programmed for the main satellites available in Europe. Some satellites need a 1m wide antenna, meaning you will not receive these satellites with a smaller antenna, even if this satellite appears on the list of pre-programmed channels. These channels will help you direct your antenna towards the satellite that you want.
Figure 1 shows the sizes required for your antenna for each satellite

| ***Sat channels guide*** | | | | | |
|---|---|---|---|---|---|
| ***Sat name*** | ***#*** | ***chaînes*** | ***pos*** | ***Ø*** | ***(freq / SR / pol)*** |
| Atlantic Bird 3 | 1 | France 2 | 5° W | 80 cm | 11590 V 20000 |
| Hot Bird | 79 | ZDF | 13° E | 80 cm | 11051 H 27500 |
| Astra 19 | 331 | TV 5 europe | 19° E | 60 cm | 11595 V 22000 |
| Eutelsat W2 | 475 | Kanal 3 | 16° E | 95 cm | 11301 V 30000 |
| Eutelsat W3 | 489 | M6 Suisse | 7° E | 80 cm | 11281 V 27500 |
| Astra 28 | 583 | CNN | 28° E | 80 cm | 12050 V 27500 |
| Sirius 2 | 785 | NOVY KANAL | 4° E | 80 cm | 11766 H 27500 |
| Hispasat 30.0 | 802 | Andalucia TV | 30° W | 80 cm | 11810 V 27500 |
| Turk 1C 42.0 | 834 | TRT 1 | 42° E | 80 cm | 11094 V 27500 |

**Table 1 reference' channel**

# 2 Mounting a fixed antenna on a satellite

Note: Mounting on more than one satellite is not ideal for the TouchBOX 4. However, this procedure is to be followed for each antenna if you wish to have a two antenna reception.

## A Connecting

At the time of purchase, the box is not connected to the sector, so you should connect the LNB directly to the LNB input of the product. Connect the TV to the TV scart outlet of the product.
Switch the TV on and plug in the box on the sector. If you can see a green light on the front of the box, it means the product is switched on. You should be able to see a menu to select languages on the screen. If this is not the case, force the AV mode of the TV (see manual if necessary).

## B Wedging / Orientating the antenna

Find the reference number of the satellite you wish to receive. Enter the number on the remote.

- No signal' appears on the screen : Press 'info' to view the level of reception (see images below). The left bar shows the level of reception, and the right bar shows the level of quality.

  On the example below, the left signal is insufficient (screen background is black and quality bar shows nil) but the right one is correct.

- Position the antenna vertically and point it towards the South. Start a slow screening (about 20 seconds) with a 1/4 turn towards the left, then 1/4 turn towards the right at the same time as you monitor your TV. The level indicator should not increase at that stage.
- Incline the antenna (2 degrees) towards the top and start the screening again.
- Continue doing so, until the level indicator increases and the image appears. When the channel appears, adjust the wedging (vertically and horizontally) in order to get the best quality. Screw everything tightly apart from the LNB.

info@metronic.com

## C Adjusting against-polarization

Turn the LNB a few degrees clockwise in its support in order to increase the quality. If the signal decreases, turn it the other way.
Once you receive the best signal, screw everything tightly for good to fix the LNB.

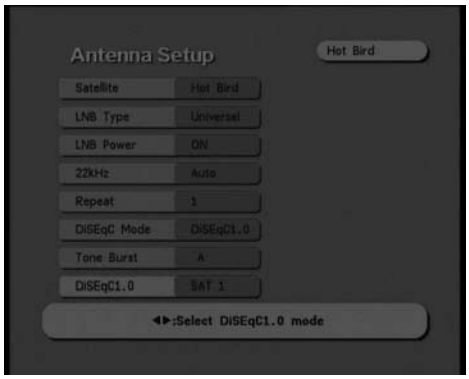
You have finished your installation.

# 3 Installing an antenna + Astra / Hotbird Monobloc

The easiest way to receive Astra and Hotbird is to install an LNB, also called 'monobloc', on an 80 antenna. A monobloc LNB contains a DiSEqC 1.0 connector that you must declare before wedging the antenna :

## A Declaring the connector :

- Go to MENU / Channels search / Antenna.
- On SATELLITE , select Hot Bird with the arrow ▸
- On DiSEqC MODE , select DiSEqC 1.0
- On DiSEqC 1.0. , select 1.
- Go back up to SATELLITE line and select ASTRA.
- Go down to DiSEqC 1.0. and select 2.
- Press EXIT 3 times.

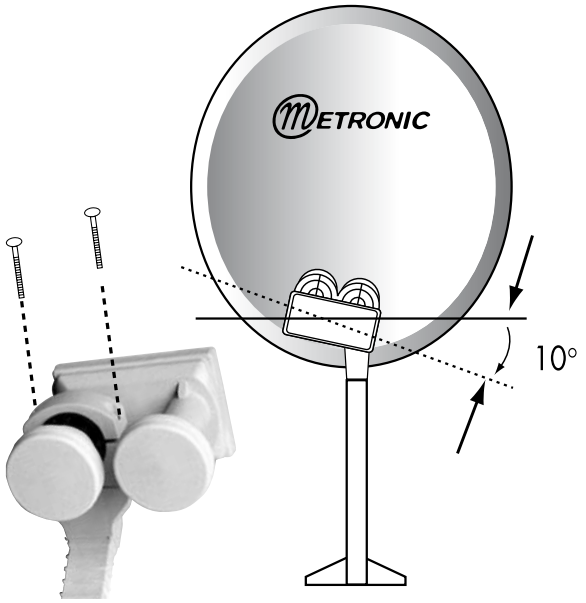


## B Installing / wedging

- Install the monobloc as shown on the picture below.
- Wedge on HotBird as indicated in the previous paragraph (fixed antenna on a satellite).
- Once you receive HotBird, you should automatically receive all Astra channels. Sometimes it is necessary to adjust the wedge in order to optimise the reception of both satellites.

*ATTENTION : Some monoblocs have a reversed remote. It would then be necessary to reverse 1 and 2 on* **DiSEqC 1.0**.

You are now able to watch pre-programmed Astra 19.2 and Hotbird (007 to 458) channels.




# 4 Installing a motorised equipment

## A Introduction

This section will explain how to install motorised equipment with the motor – item no 450907. If you already have another motor you should refer to its manual. In any case, you will have to do the following :

## 0 - Switching on the receiver

Plug the box on the sector. If the red light appears on the front, press the ⏻ button on the remote. This might take a little while. The screen will stay dark or 'No Signal' will appea.

## 1 - Receiving a satellite channel

Find out which is the reference of the satellite channel you wish to view. Enter the number and press 'OK' on the remote (i.e. 79 for HotBird).

## 2- Looking for the DiSEqC 1.2 Menu

- Go to MENU / CHANNEL LOOKUP / ANTENNA.
- On DiSEqC MODE , select DiSEqC 1.2 (with the arrow ▸ ).
- Press EXIT 3 times.

Once this is done, you can immediately access the Motor Adjusting menu by pressing the black button (motor).

## 3 - Reset the motor

In the DiSEqC 1.2 menu

- Go to MENU / MOTOR ADJUSTING (black button).
- On REMOTE , select REFERENCE with the arrow ▸
- Press OK.
- Wait for a minute.

## 4 - Continuous rotation

- Go to MENU / MOTOR ADJUSTING (black button).
- Go to ROTATION.
- For a rotation towards the West, press and hold the arrow ▸ until «towards West» appears.
- For a rotation towards the East, press and hold the arrow ◂ juntil «towards East» appears.
- Press 'OK' to stop the rotation.

## 5 - Step by step rotation

- Go to MENU / MOTOR ADJUSTING (black button).
- Go to ROTATION.
- For a rotation towards the West, press and hold the arrow ▸ until «towards West» appears then press «STOP».
- For a rotation towards the East, press and hold the arrow ◂ until «towards East» appears then press «STOP».

## 6 - Giving a reference number to a Satellite

- Go to MENU / MOTOR ADJUSTING (black button).
- Go to POSITION .
- With the arrows ◂ ▸ With the arrows.
- Press OK to confirm.

N.B. If you choose a number that is already being used by another satellite, an alert will appear. If you continue, ensure you find a new number for the satellite that currently used the one you have chosen.

## 7 - Memorising the position of a satellite

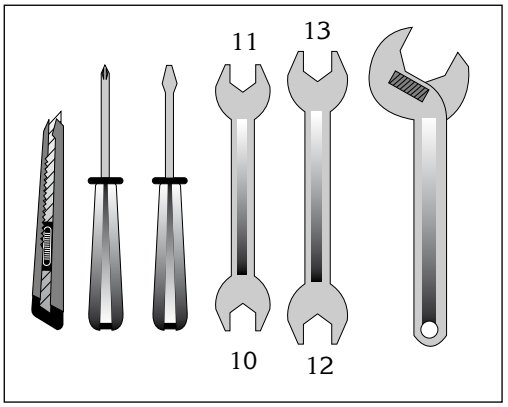
- Go to MENU / MOTOR ADJUSTING (black button).
- Go to REMOTE and select MEMORISE with the arrow ▸
- Press OK.
- Confirm by pressing OK.

## 8 - Displaying the signal indicator

Press 'INFO'. The indicator will appear in the shape of two horizontal bars. The left one shows the level quantity and the right one shows the quality. For wedging, you need to maximise the level and once it has increased, you should optimise the quality. If the level is high but the quality does not increase, this means you are on another satellite and you need to keep screening.

## B Necessary parts and tools :

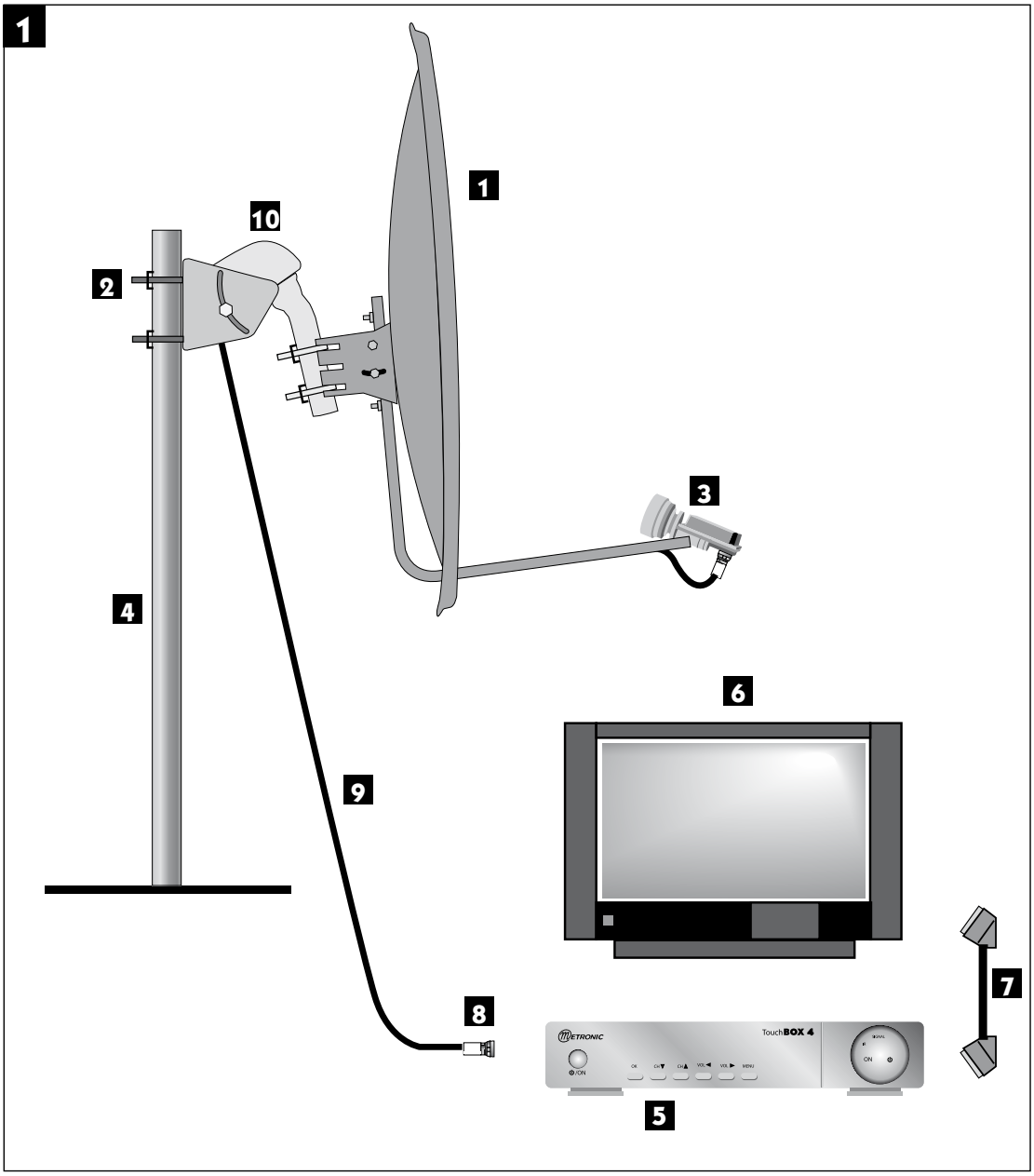
Tools




N.B Only a 13 key is necessary for the motor.

Parts

1 Antenna
2 Mounting accessory
3 Universal LNB
4 Mast or bracket (minimum diameter recommended: 40mm)
5 Digital terminal with remote
6 PAL/SECAM TV
7 Scart cable 21 pins
8 F sockets
9 Specific satellite cable
(a standard TV cable will not work) ⚠
10 Motor 450907


1
1
10
2
3
4
6
9
7
8
METRONIC
TouchBOX 4
5

## C Preparing the motor (see image 2)

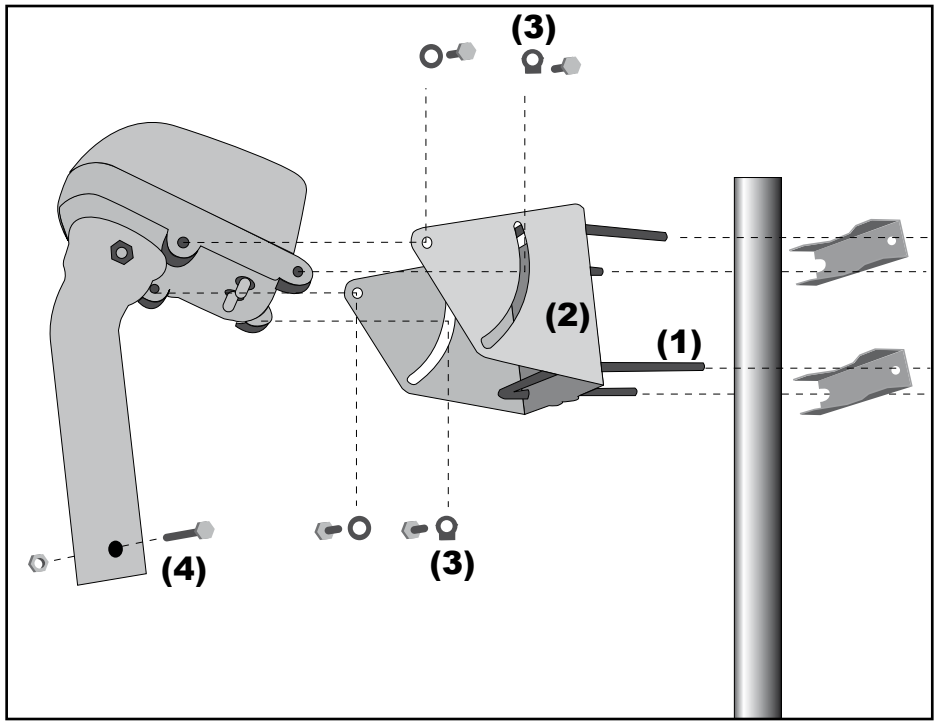
Assembling

• Make sure that the mounting accessory (bracket or tube) is stable enough and vertical. A gap of more than 1 degree (2cm by metre) can affect the good functioning of your motorised equipment. Double-check verticality with a steel string.

• Assemble the parts of the motor as indicated on the image below. Place the U-clamp (1) in the fixture (2) before assembling it on the motor. Pay attention to the type of discs. Those with 'DOWN' written on them (3) must allow you to read the motor elevation, as indicated on the following photo.

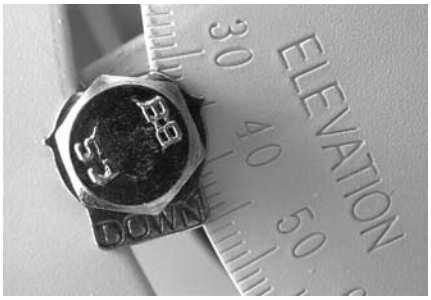
• When the motor is assembled, do not mount it on the mast or bracket straight away.

**2**



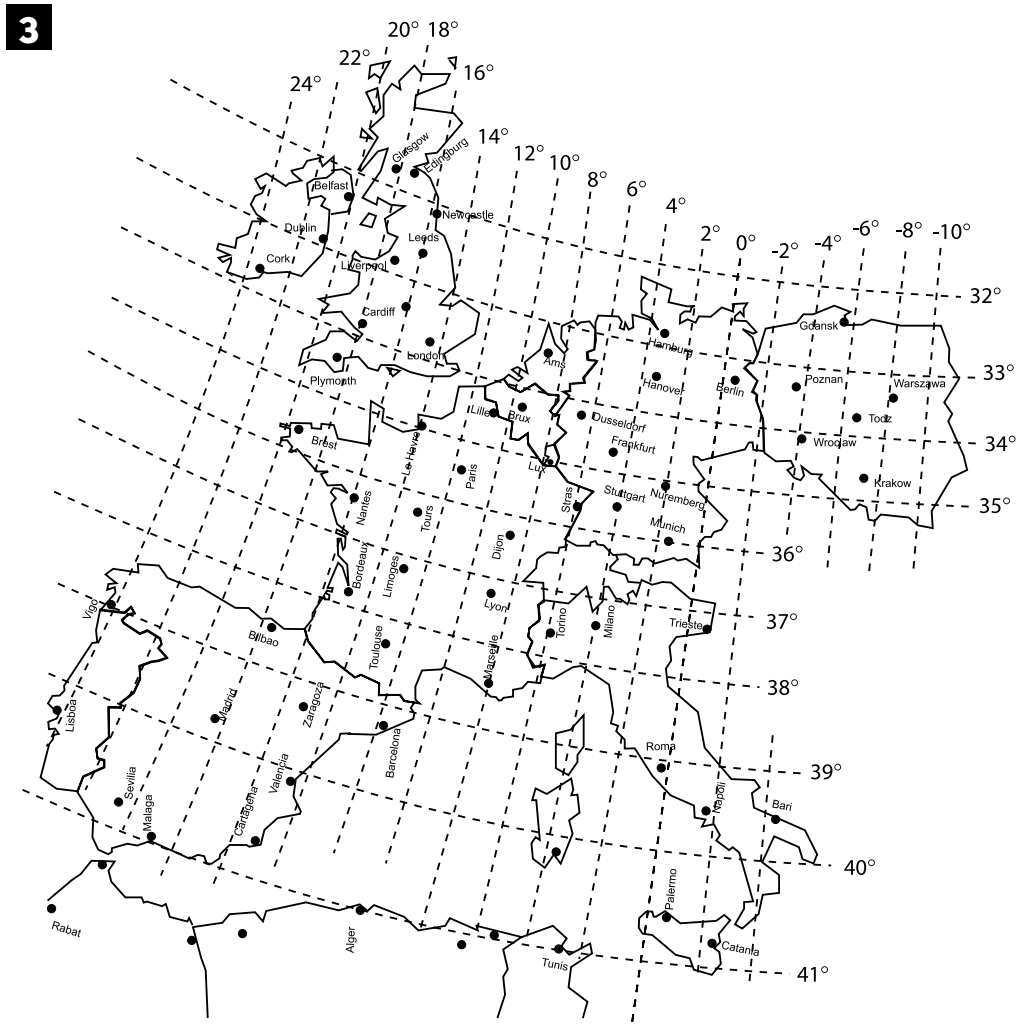
Adjusting the inclination

On the European card below (image 3), locate your area which will give you your elevation point (i.e. 31,5° for Glasgow, 38° for Bordeaux etc).



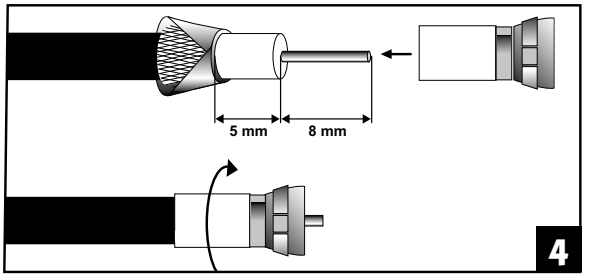

**Bruxelles**

**3**



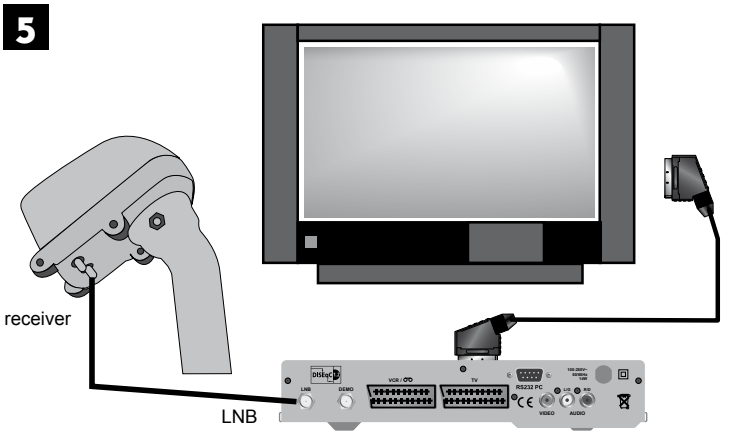
## D Connecting

In order to install this product, you will need 2 bits of cable. The first one should be about 1,5m long and will connect the LNB to the motor. The second one will connect the motor to the Touch-BOX 4, and should be as long as necessary.




Get the cables ready and mount the f sockets on each extremity.

You should follow picture 4: the socket must be screwed on the aluminium strapping. Ensure that no part of the braid should touch the cable.




Connect the terminal to the TV with a scart cable. Place the motor near the terminal, on a table or on the floor, and connect the LNB input of the terminal to the «Receiver» outlet of the motor with a 1,5m long cable. Then switch on the TV.

## E Resetting the motor and verifying thrusts

Resetting the motor means you must re-initialise its position. You should hence make sure it is at 0°, that is to say facing South.

Go to the «DiSEqC 1.2 MENU» and reset the motor.


info@metronic.com

## F Preparing the motor

You must now memorise the HotBird position and bring the motor back to 0° precisely in order to mount the antenna.

1) Place the receiver on the Hotbird reference channel (channel 79).
2) Give a number to the HotBird satellite (if in doubt, use number '4') and wait for the motor to stop turning.
3) Find your location on the European map (image 3) and find your angular reading of HotBird compared to the vertical lines. For example, 18°E is Glasgow, 13°E is Bordeaux etc
4) Go to the «DiSEqC 1.2 MENU» and, thanks to a continuous rotation, approximately bring the motor on the HotBird angle specific to your region. Then bring the motor to this angle specifically with a step-by-step rotation.

i.e. Le Havre = 14°E

The person using the remote must make the motor turn until the steel notch (indicating the angular reading) is positioned on 14°. When looking at the scales, the notch must go up to 14° towards the right (see image 6) so that the antenna is orientated towards the left, that is towards the East.

**6**

**Example for le Havre**

5) Memorise the position for HotBird.
6) Reset everything to bring the motor back to position 0°.
7) Switch off the terminal, unplug the cables and mount the motor on the mast.
8) Orientate approximately the motor towards the South. If you are mounting this product on a wall, ensure that the wall is orientated towards the South.
9) Connect the demodulator to the motor with the long cable prepared at step D.

## G Assembling the antenna

Assemble the various parts of the antenna by referring to the manual provided with it.

⚠ *ATTENTION : Handle the antenna with precaution as the edges can be sharp*

## H Mounting the antenna on the motor

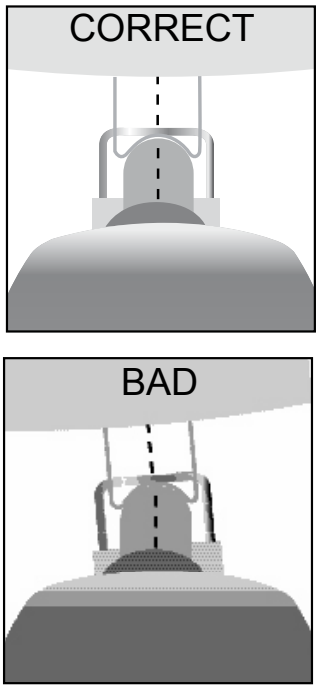
Connect the terminal to the TV with a scart cable. Place the motor near the terminal, on a table or on the floor, and connect the LNB input of the terminal to the 'Receiver' outlet of the motor with a 1,5m long cable. Then switch on the TV.

Resetting the motor and verifying thrusts.

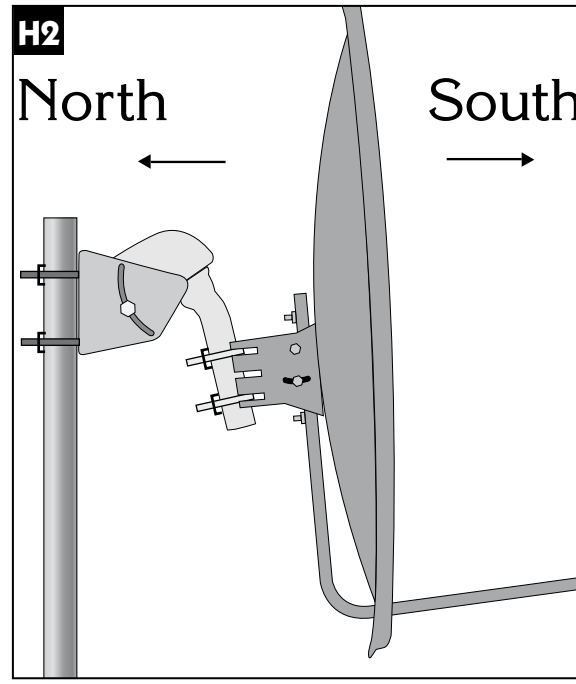
Resetting the motor means you must reinitialise its position. You should hence make sure it is at 0°, that is to say facing South.

Go to the «DiSEqC 1.2 MENU» and reset the motor.

**H1**




**H2**



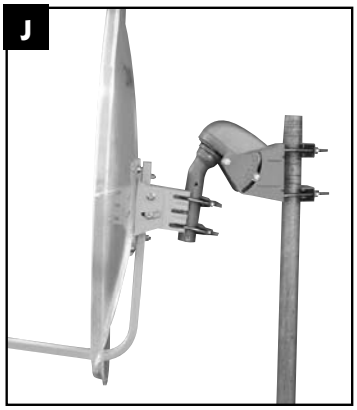

## I Mounting the LNB head

Refer to the LNB or terminal manual. Be careful, some LNBs must be mounted at 45° !

## J Verifying

Before getting to the final section (the wedging), ensure that your installation does indeed match that in the image below.

N.B. This image does not show the cable that runs from the motor to the terminal, nor the one connecting the LNB to the motor.




## K Wedging / Orientating the antenna

At the end of section K, you will receive the ZDF channel on your TV screen. DO NOT JUMP TO SECTION L (adjusting orientation) IF YOU DO NOT RECEIVE IT.

1) Place the terminal on the HotBird reference channel and look at the indicator signal.

2) Start a slow screening (about 20 seconds) with 1/4 turn right, then 1/4 turn left by manually swivelling the antenna and rotor around the mast whilst monitoring the level. If the level does not increase, increase the inclination of the antenna by 2 degrees and follow with a screening until the level increases. When you are on the right satellite, the image will appear in the background. Adjust it in order to get the maximum level and quality. In some regions, you might need to do up to 20 screenings, so please stay patient !

3) You should temporarily secure all nuts.

*CAREFUL ! Screwing the nuts can affect the image quality.*

## L Adjusting the orientation

- Set up the receiver on the Atlantic Bird 3 reference channel (channel 001).
- Locate on the map below the angular reading of your area (i.e. Paris = 8° WEST).
- Number the Atlantic Bird 3 satellite (if in doubt, use «01»).
- If the motor has not stopped at the right place, bring it to that place by doing a continuous scanning followed by a step by step one.
- Memorise this position for Atlantic Bird 3.


info@metronic.com

Exit all menus and ensure that you are well receiving the Atlantic Bird 3 reference channel. If this is not the case, you will be faced with two situations :

You do not receive anything, even after slightly adjusting the wedging of the antenna. In this case, this means that the mounting of the product was not done properly (mast not vertical enough, mistaken West for East, wrong angular reading....). Restart the installation from the beginning and ensure you are following every step correctly.

You are experiencing bad reception and you need to slightly adjust the elevation (1 or 2 degrees) of the antenna in order to receive Atlantic Bird 3 well. In that case, we advise that you follow step K again and use 2 degrees more for the HotBird position in your area. If you are still not satisfied with the result, start again but with 2 degrees less.

**Angular reading for Atlantic Bird 3**

## M Satellites validation

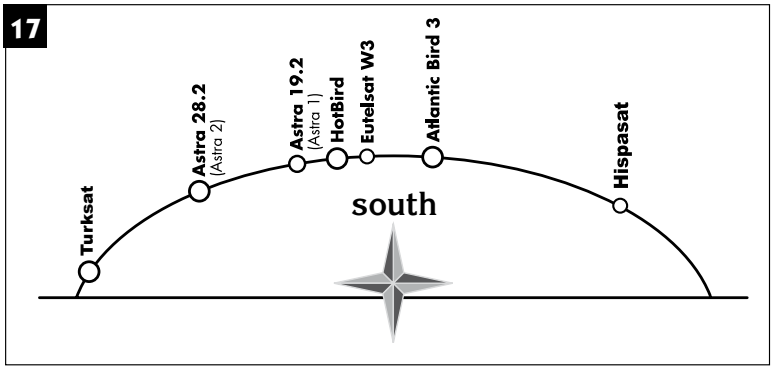
You must memorise the correct position of each satellite in the motor. We have explained how to do so with HotBird and Atlantic Bird 3 , so it is now necessary to do the same for Astra...

Example for Astra 19° E :

- Set up the receiver on the Astra reference channel (channel 331).
- Go to the DiSEqC 1.2 menu and number Astra 19° E (if in doubt, use «03»).
- Follow a continuous rotation and then a step by step one in order to receive the maximum level and quality.
- Memorise the position.
- Ensure that you are receiving all Astra channels. If this is not the case, you have probably memorised another satellite that emits channels at the same frequency. Start the process again while ensuring that the antenna points a little to the left of HotBird, as shown on Image 17. Do the same for the other satellites. Image 17 shows the relative position of the main satellites for which channels are pre-programmed in the Metronic receivers. When you are able to receive all satellites, secure the nuts. Your installation is done.

N.B. Reception for Hispasat or Turksat with a motorised installation is very different and needs to be wedged perfectly. In order to receive this satellite properly, we advise that you ensure this is a fixed installation, and that you pay particular attention to adjusting 'against-polarization.

17




## N Adjusting electronic thrusts

Mechanic thrusts represent impassable limits for the motor. Often, they cannot be adjusted.
Electronic thrusts represent limits that stop the motor from running when above a certain angle. You should adjust these electronic thrusts if there is a risk that your motor bumps into an obstacle if it runs too much on either side.

- Go to the «DiSEqC 1.2 MENU».
- On «COMMAND», select «LIMITS SUPP.» with the arrows ◂ ▸.
  Press 'OK' and confirm by pressing «OK» once more.
- Go up to «ROTATION».
- Make a rotation towards the West until you reach the left obstacle (go with mechanic thrust if there is no obstacle).
- On 'COMMAND', select 'WEST LIMIT' with the arrows ◂ ▸.
  Press 'OK' and confirm by pressing «OK» once more.

Repeat this process for the East limit («LIMIT SUPP.» / East rotation / «EAST LIMIT»).


info@metronic.com

# 5 Connecting a fixed antenna already wedged on a satellite

## A Connection

N.B. If your antenna is currently pointing towards Atlantic Bird 3 (i.e. 2C or 2B Telecom = national channels in clear analogue), you will only have access to a few digital channels. We therefore advise you to install another antenna in order to keep receiving national channels in analogue and to watch digital channels as well.

As the terminal is unplugged, directly connect the LNB to the LNB input of the terminal. Connect the TV to the scart TV outlet of the terminal. Switch on the TV, plug the terminal to the sector, and 'No signal' should appear on your screen.
Press 'OK' and the list of all pre-programmed channels should appear.

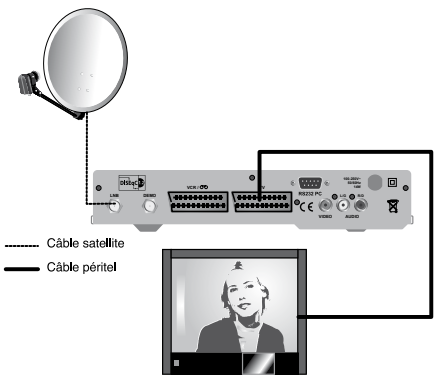
## B Connecting with a motorised DiSEqC 1.2 already wedged

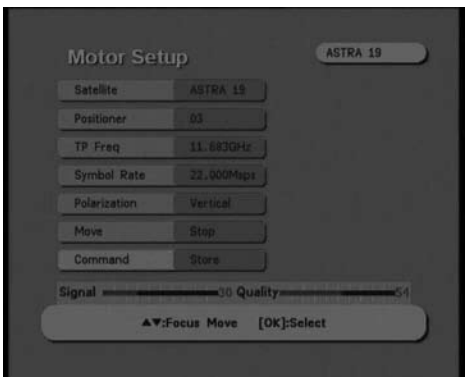
If you have a motorised DiSEqC 1.2 already installed, each satellite position should already be correctly programmed in the motor, which spots a satellite as a number. The notice of your previous demodulator should indicate the numbering used. If this is the case, it will be very easy for you to set up the Touch BOX 4. If you do not have access to this information, you should use the one following :

| | |
|---|---|
| Atlantic Bird 3 | 1 |
| Hot Bird | 79 |
| Astra 19 | 331 |
| Eutlesat W2 | 475 |
| Eutlesat W3 | 489 |
| Astra 28 | 583 |
| Sirius 2 | 785 |
| Hispasat 30.0 | 802 |
| Turk 1C 42.0 | 834 |

- Connect cables as shown on image 18 (below).
- For each channel, go to the reference channel and enter the correct satellite number. The motor should automatically go to the right position, which you would see represented in the high quality bar (see picture below).

**18**

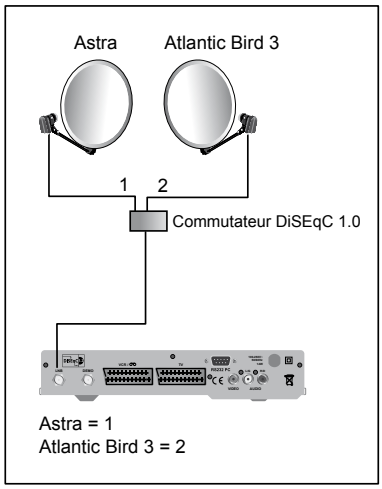


# 6 Installing on more than one satellite

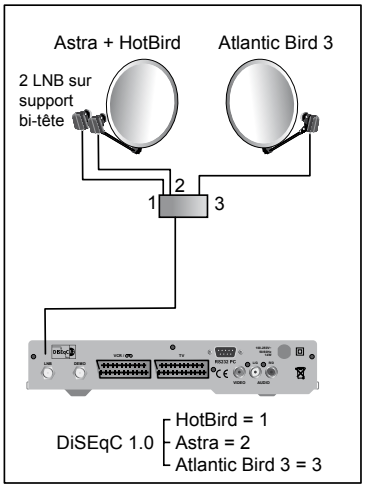
## A Installing on two satellites

The case of Astra + HotBird has been discussed in Chapter 3 (monobloc). This is based on a general case with a 'standard' connector.
In this case, install a connector at each input (Tone Burst or DiSEqC 1.0).




## B Installing on three satellites

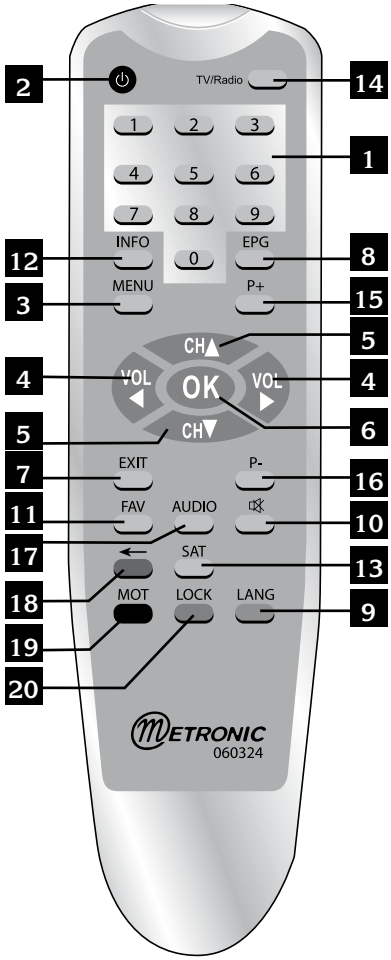
If you do not have a motorised installation, you might wish to get 3 satellites (i.e. Atlantic Bird 3, Astra and HotBird).




Please be aware that it will not be possible to bring even one cable down if Astra and Hotbird are received by a monobloc.


info@metronic.com

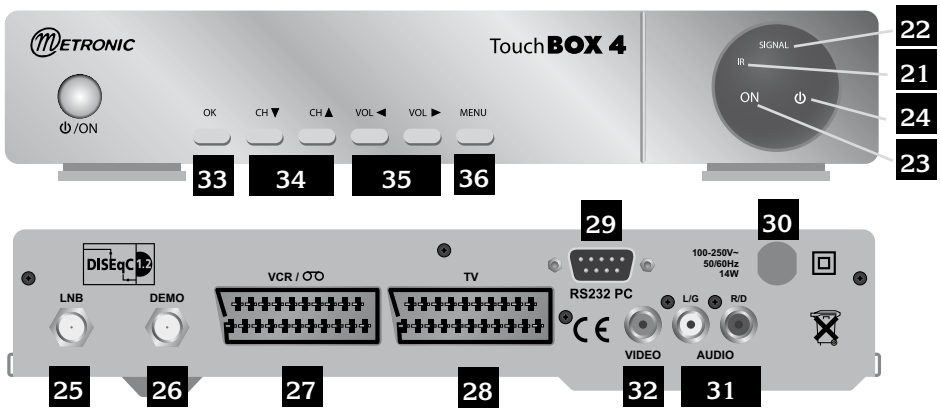
# 7 Remote description




1. Digital buttons. In normal use, they will allow you to enter the channel number you wish to view. In programming mode, they will allow you to enter digital values.
2. 'ON / OFF' button: allows you to set the terminal on standby or switch it on.
3. 'MENU' button: allows you to enter the main menu or to come back to the previous menu.
4. ◂ VOL ▸. buttons: allow you to adjust the volume in normal use. In the menu, they allow you to modify various parameters. You can also use these buttons to view the following ( ▸ ) or previous ( ◂ ) page in the long listings.
5. ▾ CH ▴. buttons: allow you to change channels in normal use. In the menus, they will allow you to go from one line to the other.
6. 'OK' button: allows you to list all channels and to validate in all menus.
7. 'EXIT' button: allows you to go back to the channel you were watching.
8. 'EPG' (Electronic Programs Guide) button: allows you to view the current program as well as the following ones when this information is transmitted by the channel. Press 'OK' to select the channel of program you wish to view.
9. 'LANG' button: when more than one voice is transmitted (i.e. on Euronews on HotBird), this allows you choose the language of the program.
10. 'MUTE' button: by pressing this once stop the sound, and by pressing it again the sound will come back to normal.
11. 'FAV' button: allows you to access your favourite channels.
12. 'INFO' button: allows you to view the technical parameters of the channel you are currently watching as well as the signal level.
13. 'SAT' button: Allows you to view the list of channels from one single satellite.
14. 'TV/RADIO' button: to go from TV mode to Radio mode and back.
15. 'P+' button: allows you to move to the next page in long listings as well as change parameters in programming menus.
16. 'P-' button: allows you to move to the previous page in long listings as well as change parameters in programming menus.
17. 'AUDIO' button: allows you to choose between Stereo mode, right or left mono. It is very rare to use anything other than Stereo.
18. 'RETURN' button: allows you to go back to the channel you were previously watching.
19. 'MOT' button: allows you to directly access the 'MOTOR ADJUSTING' menu. This function will not be activated if the DiSEqC mode is different from DiSEqC 1.2.
20. Allows you to move channels around in the 'ORGANISE CHANNELS' menu.


info@metronic.com

# 8 DualisBOX terminal description




21 Infra-red cell (detects the remote infra-red signal).

22 Signal indicator. Switched on if the reception is fine.

23 'ON' light. Green when the terminal is switched on.

24 'OFF' light. Red when the terminal is switched off.

25 LNB input to connect with the satellite cable.

26 'DEMO' outlet to connect a demodulator or another digital terminal in series.

27 VCR scart input/outlet. When you are viewing a tape, the VCR automatically takes over the terminal that should be on standby. You can use this scart plug to connect an analogue demodulator.

28 TV scart outlet: to connect the terminal to the TV.

29 RS232 connector for SAV only.

30 Power source.

31 Audio outlet.

32 Composite video outlet. This will be active if the video is adjusted to CVBS in the 'OPTION' menu ('TV MODE'/'VIDEO MODE').

33 Same as button 6 of the remote ('OK').

34 Same as button 5 of the remote (▲ ▼)

35 Same as button 4 of the remote (◄ ►).

36 Same as button 3 of the remote (MENU).

# 9 Daily use

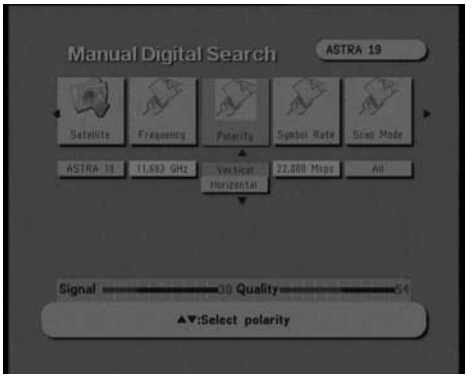
On an daily basis you should normally only use the following buttons (the function of each is explained in the previous paragraph) :

- ◄ ► buttons allow you to adjust the sound leve.
- ▲ ▼ buttons allow you to change channels.
- 'MUTE' button to stop and start the sound again.
- Digital buttons or 'OK' button to go directly to a channel.
- 'TV/RADIO' button to listen to radios in digital quality. We advise you to connect your Touch BOX 4 to your Hi-Fi with a 2RCA males / 2RCA males cable.
- 'EPG' button to view the electronic guide of programs.

# 10 Adding channels

You can either add a specific channel for which you know the technical characteristics, or simply add new unknown channels (update).

## A Adding a specific digital channel




A channel is emitted by what we call a 'transponder'. This is a relay satellite of which you must know the 4 following parameters :

- Its frequency (i.e. 12551 MHz)
- Its polarity (i.e. Vertical)
- Its SR power supply symbol (i.e. 22000)
- The satellite that emits this channel (i.e. Astra 19.2)

You will find these parameters on the following websites :

www.lyngsat.com
www.satcodx.com

To add a channel, go to the main menu.

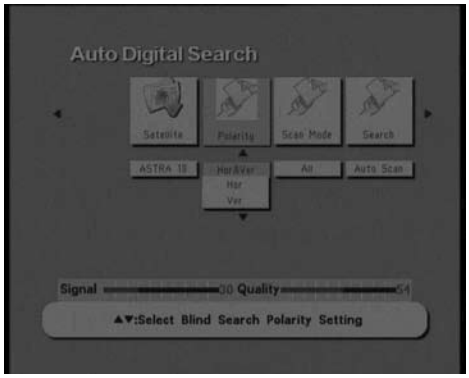
- Go to MENU/CHANNELS LOOKUP/MANUAL SEARCH.
- The option on the left (SATELLITE) allows you to select the satellite on which you wish to add channels using the ▲▼ arrows. Once you have made your choice, press the ▶ arrow.
- In the FREQUENCY option, enter the correct transponder with the ▲▼. arrows. If the frequency does not appear, enter the 5 digits of the frequency en then press OK.
- In the POLARITY option, select either VERTICAL or HORIZONTAL depending on the case.
- In the POWER SUPPLY SYMBOL option, leave the option offered or enter the 5 digits of the power supply (SR) if you have had to enter the frequency.
- In the SCANNER option, select ALL if you also wish to add some of the transponder crypted channels. Otherwise, select FTA.

  N.B. Your Touch BOX 4 does not allow you to view paying channels. However, this option is useful to add channels that have some clear emissions.

- In the SEARCH option, press OK and the terminal will look up channels of the specific transponder, and will add them on the memory if they were not already there.
- Press EXIT 3 times.


info@metronic.com

## B Updating a satellite




N.B. Before starting an automatic search for channels on a satellite, it is best to empty the list of channels. In order to do so, go to MENU/TV CHANNELS MANAGEMENT, press on the black button and then on the MUTE button.

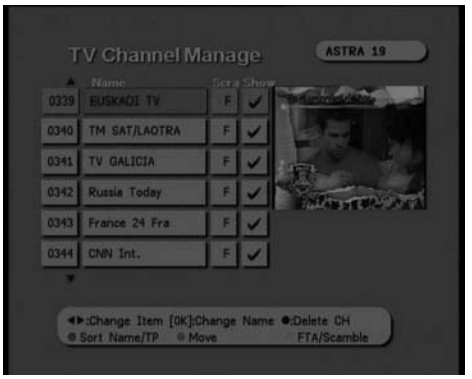
- Go to MENU/CHANNELS LOOKUP/AUTOMATIC SEARCH.
- The SATELLITE option allows you to select the satellite on which you wish to add channels using the ▲▼ arrows. Once you have made your choice, press the ▶ arrow.
- In the POLARITY option, leave 'HOR&VER' so that all channels are added.
- In the SCANNER option, select ALL if you also wish to add some of the transponder crypted channels. Otherwise, select FTA.

  N.B. Your Touch BOX 4 does not allow you to view paying channels. However, this option is useful to add channels that have some clear emissions.
- In the SEARCH option, select TP to lookup channels on the transponders in memory (quickest way). Select NETWORK for transponders in memory as well as new transponders referred to by the satellite signal. Select SCANNER to make a complete search (the slowest but most powerful).
- Press OK to start the search. This can take a few minutes.
- Press EXIT 3 times.


info@metronic.com

# 11 Organising channels

The TV CHANNELS MANAGEMENT menu allows you to delete, mask, rename channels or reorganise the channels listing. The explanations below can also be followed for radios, through the RADIOS MANAGEMENT menu.




## A Masking a channel

A masked channel is a channel that is no longer accessible with the ▲CH▼. . You can still access it by entering the channel number or by selecting it on the channels listing ('OK' button).
To mask a channel :

- Select and view the channel that you wish to mask.
- Go to MENU/ TV CHANNELS MANAGEMENT.
- Press on the ▶ arrow to move the cursor in the VIEW column.
- Press OK to remove the type of selection.
- You can select other channels with the ▲▼ arrows and modify the VIEW parameter the same way.
- Press EXIT to leave the screen and save the changes.

## B Selecting a favourite channel

- Go to MENU/ TV CHANNELS MANAGEMENT.
- Press twice on the ▶ arrow to show the 'FAV' column.
- Select the channel you wish to place in your favourites list with the ▲▼ arrows and press OK. A symbol will appear in the box.
- Press EXIT to leave the screen and save the changes.

N.B. Your favourite channels are directly accessible with the 'FAV' button.


info@metronic.com

## C Parental lock

- Go to MENU/ TV CHANNELS MANAGEMENT.
- Press three times on the ▸ arrow to show the LOCK column.
- Select the channel you wish to lock with the ▲▼ arrows and press OK. A padlock will appear in the box.
- Press EXIT to leave the screen and save the changes.

N.B. You must activate the parental lock to ensure the channel is not accessible :

- Go to MENU/ SYSTEMS ADJUSTING.
- On 'PARENTAL LOCK' select 'YES' wit the ▸arrow.
- Press 'EXIT' to leave the screen and save the changes,

Of course, please ensure you change the parental code (0000 when sold).

## D Classifying channels

Be careful: if you classify the channels you will not be able to come back to the initial classification. We therefore advise that you use this function only after you have personalised the channels listing.

- Go to MENU/ TV CHANNELS MANAGEMENT.
- Press the yellow button to place free-to-air channels at the top of the list, and the crypted ones at the bottom.
- Press the red button to sort the channels by alphabetical order (this will take a few minutes).

## E Moving a channel

- Go to MENU/ TV CHANNELS MANAGEMENT.
- Select the channel you wish to move with the ▲▼ arrows and press the green button.
- Select the new position of the channel with the ▲▼ arrows and press OK.
- Press EXIT to leave the screen and save the changes.


info@metronic.com

# 12 Advanced options

## A Changing the secret code

Your Touch BOX 4 is delivered with a secret code (PIN) which is '0000'. This code allows to lock channels that you do not wish others to view, or to protect the configuration of the terminal.

- Go to MENU/ ADJUSTING SYSTEMS.
- Enter the current 4 digit code (0000).
- On NEW PIN, enter the new 4 digit code.
- On CONFIRM PIN , re-enter the 4 digit code.
- A message will confirm that the modification has been made.Press EXIT twice.

*N.B. Make sure you remember your PIN code.*

## B Resetting the terminal

Resetting via the factory can be useful if you are modifying the programming of your terminal and that some functions do not work anymore. By resetting the terminal, you will go back to a configuration identical to that of the brand new product. Everything you have personalised will be lost.

In order to avoid the unintentional loss of data, a password is requested in order to allow you to reset the terminal.

- Go to MENU/ ADJUSTING SYSTEMS.
- On RESET, press OK.
- Enter your 4 digit PIN.
- Press OK to confirm and wait for a few seconds.

## C Timing and programming a recording

Your Touch BOX 4 has an internal clock that allows you to program a recording.
To adjust the time :

- Go to MENU/ ADJUSTING SYSTEMS.
- On GMT, leave 0.00 which is the difference between the UK time and the time of the Greenwich Meridian.
- On Summer Time, select YES or NO depending on the season.
- Press EXIT to leave the screen and save the changes.

Programming a recording :

- Select the channel you wish to view on the screen.
- Go to MENU/ TIMERS.
- Select a free timer with the ▲▼ arrows and press 'OK'.
- Go down to TIMER STATE and select ACTIVATED with the ▶ arrow.
- On FREQUENCY, leave 'ONCE' if you wish to record this program only once.
  N.B. You can also select a DAILY or WEEKLY timer.
- On TIMER TYPE, select VCR in order to set up a recording on your VCR.


info@metronic.com

- On DATE, press the ▸ arrow in order to view the calendar.
- Pick the right day with the arrows (to change the month or the year, go all the way up) and then confirm with OK.
- On START TIME and END TIME, simply enter the time of the beginning and the end of the program, followed by 'OK.
- On CHANNEL, press the ▸ arrow to view the channels listing and select the channel you want with the ▲ ▼ arrows.
- Press OK and ensure the information is correct.
- Press EXIT to leave all menus.
- **You can now program your VCR.**

## D Adjusting the screen

The TV ADJUSTING menu (in the OPTION menu) allows you to adjust various parameters of the image :

- **Screen forma :** (4:3 or 16:9).
  Do not use 16:9 if your TV has a standard format of 4:3.
- **Transparency**. Allows you to adjust the transparency of the information bar (visible whenever you change channel) and the menus contrast.
- **TV system.** Forces the standard video signal. We advise you to leave PAL.
- **Video outlet**. The RGB mode gives a clearer image than the video-composite mode.

# 13 Radios

Apart from TV channels, satellites also emit radio channels in digital quality. We then advise that you connect the terminal to your HI-Fi with a 2RCA male / 2RCA male cable/ This can also be done for TV channels!
After leaving the factory, or after being reset, the list of TV channels is pre-programmed, but the list of radios is sometimes limited to the national radios available on Astra and HotBird. If you wish to add more radio channels, follow the same process as the one for adding TV channels.

# 14 Using the terminal with a VCR

Simply connect your VCR on the VCR scart of the terminal.
To record digital quality, the terminal must be switched on the right channel.
Start recording on the AV channel of your VCR (0, AV, EXT...). Refer to the VCR manual to ensure all is done correctly.
To play a tape, simply press 'PLAY' and the VCR will automatically take over the terminal. If this is not the case, press the 'TV/VCR' button on the remote of your VCR.

**ATTENTION : It is crucial that you start recording on the VCR.**


info@metronic.com

# 15 Universal remotes

Universal remotes must be programmed with a code (usually 3 digits) in order to function with a specific product. The manufacturer of the remote is the one who chooses this code. Your terminal was created recently which means that some universal remotes may not work with it, even if the manufacturer provides the Metronic code. If none of the Metronic codes work we advise that you start an automatic search. If this fails, it probably is due to your terminal codes not having been entered in your universal remote.
Please be aware that Metronic will be unable to help with the codes for a universal remote that is not branded Metronic. We advise you to contact the manufacturer of the universal remote you purchased.

N.B. The code for the Metronic ZAP 3 Evolution universal remote is 209.
With the ZAP 2/3/4/5 Evolution 3 universal remotes the code is 2177.

# 16 FAQ

- ***Why is there no image on my screen?***
  The channel you are watching is probably crypted. For your information, an operator can transmit a crypted channel whilst sending signals to your terminal to make it think that this channel is clear. The opposite is possible too.

- ***Why is my motor not working?***
  This can happen and is not abnormal.
  Simply reset it

- ***Why is my motor not running its full course anymore?***
  You must ensure that the electronic nuts are positioned at the same place as the mechanic nuts (see chapter 4N).

- ***Where can I find out which channels I can view on each satellite?***
  You will find all the information you need on :
  www.lyngsat.com
  www.lyngsat.com
  www.satcodx.com

# ASSISTANCE AND ADVICE

**THIS PRODUCT HAS A 12-MONTH WARRANTY FROM THE DATE OF PUCHASE. DURING THIS PERIOD, IN AN EVENT OF ANY PROBLEMS, PLEASE RETURN TO THE RETAILER WITH PROOF OF PURCHASE**



info@metronic.com

info@metronic.com

# Channels Guide

| # | Name | Freq | Pol | SR |
|---|---|---|---|---|
| | **Atlantic Bird 3** ---------- | | | |
| 1 | France 2 | 11590 | V | 20000 |
| 2 | France3 | 11590 | V | 20000 |
| 3 | France 5 | 11590 | V | 20000 |
| 4 | ARTE | 11590 | V | 20000 |
| 5 | LCP | 11590 | V | 20000 |
| 6 | France 4 | 11590 | V | 20000 |
| | **Hot Bird** ---------- | | | |
| 7 | RAI1 | 11765 | V | 27500 |
| 8 | RAI2 | 11765 | V | 27500 |
| 9 | RAI3 | 11765 | V | 27500 |
| 10 | RaiMed | 11765 | V | 27500 |
| 11 | Rai Edu1 | 11804 | V | 27500 |
| 12 | RaiEdu2 | 11765 | V | 27500 |
| 13 | Senato | 11765 | V | 27500 |
| 14 | RaiUtile | 11765 | V | 27500 |
| 15 | RaiNotizie24 | 11804 | V | 27500 |
| 16 | Camera Deputa | 11804 | V | 27500 |
| 17 | RaiSportSat | 11804 | V | 27500 |
| 18 | RaiNettunoSat | 11804 | V | 27500 |
| 19 | RaiNettunoSat | 11804 | V | 27500 |
| 20 | Rai Doc-Futur | 11804 | V | 27500 |
| 21 | Italia 1 | 11919 | V | 27500 |
| 22 | Retequattro | 11919 | V | 27500 |
| 23 | Canale 5 | 11919 | V | 27500 |
| 24 | NT1 | 11681 | H | 27500 |
| 25 | DIRECT 8 | 12538 | H | 27500 |
| 26 | TV8 Mt Blanc | 12538 | H | 27500 |
| 27 | Canal+ clair | 11238 | V | 27500 |
| 28 | DEMAIN | 11031 | V | 27500 |
| 29 | France 24 (en | 11238 | V | 27500 |
| 30 | ARTE | 11621 | V | 27500 |
| 31 | KTO | 12596 | V | 27500 |
| 32 | BFM TV | 11583 | V | 27500 |
| 33 | La Locale | 11727 | V | 27500 |
| 34 | EURONEWS FRAN | 11031 | V | 27500 |
| 35 | TVE Internaci | 11784 | H | 27500 |
| 36 | Canal 24 Hora | 11784 | H | 27500 |
| 37 | Real Madrid T | 11784 | H | 27500 |
| 38 | Words of Peac | 11784 | H | 27500 |
| 39 | VIP.TV | 11784 | H | 27500 |
| 40 | TV BIZNES | 10717 | V | 27500 |
| 41 | 4fun.TV | 10717 | V | 27500 |
| 42 | RTPi | 10721 | H | 29900 |
| 43 | MTA INTL | 10721 | H | 29900 |
| 44 | Mediatel | 10947 | V | 27500 |
| 45 | Noursat | 10947 | V | 27500 |
| 46 | ANB | 10947 | V | 27500 |
| 47 | Al Hiwar TV | 10947 | V | 27500 |
| 48 | DMC TV | 10947 | V | 27500 |
| 49 | Al Forat | 10947 | V | 27500 |
| 50 | TRT-INT | 10969 | H | 27500 |
| 51 | Music Box Rus | 10969 | H | 27500 |
| 52 | The Word Netw | 10969 | H | 27500 |
| 53 | MRTV / Univ T | 10969 | H | 27500 |
| 54 | VenetoSat | 10969 | H | 27500 |
| 55 | 3 Channel | 10969 | H | 27500 |
| 56 | Telenova | 10969 | H | 27500 |
| 57 | NTD TV | 10969 | H | 27500 |
| 58 | Russia Today | 10969 | H | 27500 |
| 59 | GOD TV | 10969 | H | 27500 |
| 60 | Wind int. tv | 10969 | H | 27500 |
| 61 | Suryoyo Sat | 10969 | H | 27500 |
| 62 | France 24 (in | 11238 | V | 27500 |
| 63 | Roma Uno | 11135 | H | 27500 |
| 64 | Gospel Channe | 11011 | H | 27500 |
| 65 | Telecolore | 11011 | H | 27500 |
| 66 | Retecapri | 11011 | H | 27500 |
| 67 | Videolook | 11135 | H | 27500 |
| 68 | RTVi NASHE KI | 11011 | H | 27500 |
| 69 | Iran TV | 11135 | H | 27500 |
| 70 | QURAN TV | 11011 | H | 27500 |
| 71 | CCTV9 | 11031 | V | 27500 |
| 72 | RTR | 11031 | V | 27500 |
| 73 | GEM TV | 11135 | H | 27500 |
| 74 | Al Jazeera In | 11031 | V | 27500 |
| 75 | Denaro Tv | 11294 | H | 27500 |
| 76 | VOX CH | 11051 | H | 27500 |
| 77 | IMC | 11294 | H | 27500 |
| 78 | DAS VIERTE | 11051 | H | 27500 |
| 79 | ZDF | 11051 | H | 27500 |
| 80 | VIVA Polska | 11073 | V | 27500 |
| 81 | Lazio Ch | 11294 | H | 27500 |
| 82 | Canal+ Decale | 11238 | V | 27500 |
| 83 | TV5 FBS | 11135 | H | 27500 |
| 84 | TV5 EUROPE | 11135 | H | 27500 |
| 85 | Ulisse | 11294 | H | 27500 |
| 86 | ANN | 11135 | H | 27500 |
| 87 | Kurdistan Tv | 11135 | H | 27500 |
| 88 | Videolina | 11135 | H | 27500 |
| 89 | RTB | 11135 | H | 27500 |
| 90 | starMarket | 11135 | H | 27500 |
| 91 | Polsat2 | 11156 | V | 27500 |
| 92 | Zdrowie i Uro | 11156 | V | 27500 |
| 93 | LIBERA | 11294 | H | 27500 |
| 94 | Nostradamus | 11177 | H | 27500 |
| 95 | AB Channel | 11294 | H | 27500 |
| 96 | TV Moda | 11177 | H | 27500 |
| 97 | Studio Europa | 11177 | H | 27500 |
| 98 | NEW TELEVISIO | 11177 | H | 27500 |
| 99 | GBR | 11177 | H | 27500 |
| 100 | Canale Italia | 11177 | H | 27500 |
| 101 | Telemarket | 11177 | H | 27500 |
| 102 | Telenord | 11197 | V | 27500 |
| 103 | Sat9 | 11197 | V | 27500 |
| 104 | ELITE SHOPPIN | 11197 | V | 27500 |
| 105 | Made In Italy | 11197 | V | 27500 |
| 106 | ODEON SAT | 11197 | V | 27500 |
| 107 | MagicTV | 11197 | V | 27500 |
| 108 | Sat8 | 11197 | V | 27500 |
| 109 | TLC SAT | 11197 | V | 27500 |
| 110 | STARSAT | 11197 | V | 27500 |
| 111 | Italia.TV Ch | 11197 | V | 27500 |
| 112 | PLAY TV ITALI | 11197 | V | 27500 |
| 113 | Family Life T | 11197 | V | 27500 |
| 114 | D'ANNA SAT | 11197 | V | 27500 |
| 115 | EBC.1 | 11197 | V | 27500 |
| 116 | ARTE | 11621 | V | 27500 |
| 117 | Cartomanzia L | 11621 | V | 27500 |
| 118 | EDUSAT | 11276 | V | 27500 |
| 119 | ALL TV | 11294 | H | 27500 |

# Channels Guide

| # | Name | Freq | Pol | SR |
|---|---|---|---|---|
| 120 | Napoli Mia | 11294 | H | 27500 |
| 121 | Challenger Tv | 11294 | H | 27500 |
| 122 | Radio Italia | 11294 | H | 27500 |
| 123 | TVA Vicenza | 11294 | H | 27500 |
| 124 | Punto Sat | 11294 | H | 27500 |
| 125 | julie | 11294 | H | 27500 |
| 126 | LA 9 | 11294 | H | 27500 |
| 127 | SKY Assist | 11353 | V | 27500 |
| 128 | Al-Hayat | 11784 | H | 27500 |
| 129 | Channel One | 11784 | H | 27500 |
| 130 | Mango 24 | 11391 | V | 27500 |
| 131 | TVN Gra | 11391 | V | 27500 |
| 132 | TVN PLONTA | 11485 | H | 27500 |
| 133 | Tele5 | 11485 | H | 27500 |
| 134 | Polonia 1 | 11485 | H | 27500 |
| 135 | ITV | 11485 | H | 27500 |
| 136 | TVP Kultura | 11485 | H | 27500 |
| 137 | TVE Internaci | 11784 | H | 27500 |
| 138 | TBNEspain | 11563 | H | 27500 |
| 139 | TBN ITALIA | 11563 | H | 27500 |
| 140 | Church Channe | 11563 | H | 27500 |
| 141 | JCTV | 11563 | H | 27500 |
| 142 | EL SHAFAA | 11563 | H | 27500 |
| 143 | TBN RUSSIA | 11563 | H | 27500 |
| 144 | Smile of a Ch | 11563 | H | 27500 |
| 145 | Inspiration | 11563 | H | 27500 |
| 146 | DAYSTAR | 11563 | H | 27500 |
| 147 | RTS SAT | 11583 | V | 27500 |
| 148 | Holyday in Gr | 11583 | V | 27500 |
| 149 | MAHARISHI | 11583 | V | 27500 |
| 150 | BET NAHRAIN | 11583 | V | 27500 |
| 151 | EWTN | 11583 | V | 27500 |
| 152 | SPIRIT CHANNE | 11583 | V | 27500 |
| 153 | Iran Music | 11602 | H | 27500 |
| 154 | TLA | 11602 | H | 27500 |
| 155 | ARD Das Erstt | 11602 | H | 27500 |
| 156 | DW-TV | 11602 | H | 27500 |
| 157 | RTL 2 CH | 11602 | H | 27500 |
| 158 | Super RTL CH | 11602 | H | 27500 |
| 159 | RTL 102.5 TV | 11621 | V | 27500 |
| 160 | Best of Shopp | 11621 | V | 27500 |
| 161 | TV ROMANIA | 11621 | V | 27500 |
| 162 | Telegenova | 11621 | V | 27500 |
| 163 | K+ | 11621 | V | 27500 |
| 164 | Bloomberg Eur | 11640 | H | 27500 |
| 165 | Bloomberg Ger | 11640 | H | 27500 |
| 166 | Bloomberg Eng | 11640 | H | 27500 |
| 167 | Miracle TV | 11640 | H | 27500 |
| 168 | ERTSAT Europe | 11640 | H | 27500 |
| 169 | TRSP | 11727 | V | 27500 |
| 170 | MARE TV | 11784 | H | 27500 |
| 171 | Telefortune | 11727 | V | 27500 |
| 172 | Sardegna Uno | 11727 | V | 27500 |
| 173 | Sicilia Inter | 11727 | V | 27500 |
| 174 | Dubai TV. | 11746 | H | 27500 |
| 175 | Dubai Sports | 11746 | H | 27500 |
| 176 | Sama Dubai | 11746 | H | 27500 |
| 177 | AL-AQARIYA | 11746 | H | 27500 |
| 178 | PMC | 11746 | H | 27500 |
| 179 | SHARQIYA | 11746 | H | 27500 |
| 180 | INFINITY | 11746 | H | 27500 |
| 181 | AL ARABIYA | 11746 | H | 27500 |

| # | Name | Freq | Pol | SR |
|---|---|---|---|---|
| 182 | MBC Maghreb A | 11746 | H | 27500 |
| 183 | Coming Soon | 11334 | H | 27500 |
| 184 | SAT2000 | 11084 | V | 27500 |
| 185 | Nova Promo | 11938 | H | 27500 |
| 186 | IQRAA - ARABE | 12014 | H | 27500 |
| 187 | BBC World | 11334 | H | 27500 |
| 188 | Ceramicanda | 12110 | V | 27500 |
| 189 | AL JAZEERA | 12110 | V | 27500 |
| 190 | Sicilia Chann | 12110 | V | 27500 |
| 191 | UNOSAT | 12110 | V | 27500 |
| 192 | Telemarket 2 | 12110 | V | 27500 |
| 193 | Radio Radio T | 12110 | V | 27500 |
| 194 | MediterraneoS | 12110 | V | 27500 |
| 195 | Puglia Channe | 12110 | V | 27500 |
| 196 | m2 | 12144 | H | 3333 |
| 197 | DunaTV | 12149 | V | 27500 |
| 198 | TV7 Tunis | 12149 | V | 27500 |
| 199 | Khabar TV | 12149 | V | 27500 |
| 200 | LIDER TV AZE | 12149 | V | 27500 |
| 201 | Nessuno TV | 12149 | V | 27500 |
| 202 | Mediaset Prem | 11334 | H | 27500 |
| 203 | CCTV4 | 12168 | H | 27500 |
| 204 | Boy®Øa | 12168 | H | 27500 |
| 205 | Music Box Ita | 12206 | H | 27500 |
| 206 | Fashion TV | 12206 | H | 27500 |
| 207 | F men | 12206 | H | 27500 |
| 208 | 3ABN | 12206 | H | 27500 |
| 209 | CH 3 Arabic I | 12206 | H | 27500 |
| 210 | VTV4 | 12206 | H | 27500 |
| 211 | CNL | 12206 | H | 27500 |
| 212 | Rojhelat | 12206 | H | 27500 |
| 213 | BK TV Sat | 12206 | H | 27500 |
| 214 | Thai Global N | 12206 | H | 27500 |
| 215 | TCT | 12206 | H | 27500 |
| 216 | Arirang TV | 12206 | H | 27500 |
| 217 | KURDsat | 12206 | H | 27500 |
| 218 | BVN-TV | 12302 | V | 27500 |
| 219 | NAPOLI INT. | 12302 | V | 27500 |
| 220 | COUNTDOWN | 12302 | V | 27500 |
| 221 | TV SLJEME | 12302 | V | 27500 |
| 222 | OASI.TV | 12302 | V | 27500 |
| 223 | Canal Algerie | 12538 | H | 27500 |
| 224 | MLive | 12360 | H | 27500 |
| 225 | A3 | 12538 | H | 27500 |
| 226 | Syria Satelli | 12379 | V | 27500 |
| 227 | SAT 7 | 12379 | V | 27500 |
| 228 | Abu Dhabi TV | 12379 | V | 27500 |
| 229 | Al-Baghdadiya | 12379 | V | 27500 |
| 230 | RTV Montenegr | 12379 | V | 27500 |
| 231 | Yemen TV | 12379 | V | 27500 |
| 232 | SFi | 12398 | H | 27500 |
| 233 | IRIB1 PER | 12436 | H | 27500 |
| 234 | IRIB1 ENG | 12436 | H | 27500 |
| 235 | IRIB2 PER | 12436 | H | 27500 |
| 236 | IRIB2 ENG | 12436 | H | 27500 |
| 237 | IRINN | 12436 | H | 27500 |
| 238 | IRIB QURAN | 12436 | H | 27500 |
| 239 | SAHAR | 12436 | H | 27500 |
| 240 | AL-ALAM | 12436 | H | 27500 |
| 241 | ALKAWTHAR | 12436 | H | 27500 |
| 242 | Komala TV | 12475 | H | 27500 |
| 243 | ROJ | 12475 | H | 27500 |

# Channels Guide

| # | Name | Freq | Pol | SR |
|---|---|---|---|---|
| 244 | 2M MAROC | 12475 | H | 27500 |
| 245 | MEZOPOTAMIA | 12475 | H | 27500 |
| 246 | Canal Algerie | 12538 | H | 27500 |
| 247 | Bulgaria TV | 12538 | H | 27500 |
| 248 | PTV | 12538 | H | 27500 |
| 249 | Nile TV Inter | 12538 | H | 27500 |
| 250 | MEDIOLANUM | 12538 | H | 27500 |
| 251 | Children's Ch | 12558 | V | 27500 |
| 252 | T R Padre Pio | 12558 | V | 27500 |
| 253 | Hope Channel | 12577 | H | 27500 |
| 254 | LibertyTV FR | 12577 | H | 27500 |
| 255 | LibertyTV NL | 12577 | H | 27500 |
| 256 | ARM 1 | 12577 | H | 27500 |
| 257 | Planeta Sport | 12596 | V | 27500 |
| 258 | BBC World | 12596 | V | 27500 |
| 259 | Channel 1 Rus | 12596 | V | 27500 |
| 260 | EuroNews Eng | 12596 | V | 27500 |
| 261 | SHARJAH TV | 12653 | H | 27500 |
| 262 | QATAR TV | 12653 | H | 27500 |
| 263 | SAUDI 1 | 12653 | H | 27500 |
| 264 | KUWAIT | 12653 | H | 27500 |
| 265 | LIBYA | 12653 | H | 27500 |
| 266 | SUDAN | 12653 | H | 27500 |
| 267 | OMAN | 12653 | H | 27500 |
| 268 | ESC | 12653 | H | 27500 |
| 269 | AL IRAQIA | 12653 | H | 27500 |
| 270 | JORDAN | 12653 | H | 27500 |
| 271 | RETE ORO | 12538 | H | 27500 |
| 272 | AL NILE | 12538 | H | 27500 |
| 273 | AL MUSTAKILLA | 12653 | H | 27500 |
| 274 | ARRABIA | 12673 | V | 27500 |
| 275 | TISHK | 11681 | H | 27500 |
| 276 | PEOPLE TV-RET | 11197 | V | 27500 |
| 277 | eurotic TV | 10851 | H | 27500 |
| 278 | Mediterraneo | 11294 | H | 27500 |
| 279 | eurotic TV 2 | 10851 | H | 27500 |
| 280 | PLEASURE TV | 12302 | V | 27500 |
| 281 | TOP SEXY TV | 11011 | H | 27500 |
| 282 | DANCE TV | 12302 | V | 27500 |
| 283 | GALAXY EROTIC | 11011 | H | 27500 |
| 284 | VIC 01 | 11011 | H | 27500 |
| 285 | Diva Futura | 11177 | H | 27500 |
| 286 | SEXY SAT 3 | 11621 | V | 27500 |
| 287 | ALL SEX | 11197 | V | 27500 |
| 288 | ROMA SAT | 11197 | V | 27500 |
| 289 | Sixty-Nine | 11197 | V | 27500 |
| 290 | ITALIASAT/MCT | 12091 | H | 27500 |
| 291 | FULL X4 Free | 12577 | H | 27500 |
| 292 | Videosexy TV | 11621 | V | 27500 |

**ASTRA 19 ----------**

| # | Name | Freq | Pol | SR |
|---|---|---|---|---|
| 293 | RAI 1 | 11565 | V | 22000 |
| 294 | RTPI | 11565 | V | 22000 |
| 295 | ZIK/XXL | 12285 | V | 27500 |
| 296 | Bibel TV | 10830 | H | 22000 |
| 297 | TV TRWAM | 10830 | H | 22000 |
| 298 | CT24 | 12383 | H | 27500 |
| 299 | SportsWin.TV | 10830 | H | 22000 |
| 300 | Ocko TV | 10830 | H | 22000 |
| 301 | 24.CZ | 10830 | H | 22000 |
| 302 | Top TV | 10830 | H | 22000 |
| 303 | RTBF SAT | 10830 | H | 22000 |
| 304 | TV Polonia | 10859 | H | 22000 |
| 305 | TVP Kultura | 10859 | H | 22000 |
| 306 | EHS | 10977 | V | 22000 |
| 307 | TV CANARIA | 10977 | V | 22000 |
| 308 | DEMAIN! | 11506 | V | 22000 |
| 309 | TELIF | 11506 | V | 22000 |
| 310 | REAL MADRID T | 11506 | V | 22000 |
| 311 | CUBAVISION | 11506 | V | 22000 |
| 312 | REDERECORD | 11506 | V | 22000 |
| 313 | ARIRANG TV | 11506 | V | 22000 |
| 314 | ARTE | 11565 | V | 22000 |
| 315 | BFM TV | 11506 | V | 22000 |
| 316 | DIRECT 8 | 11536 | V | 22000 |
| 317 | LCP | 12285 | V | 27500 |
| 318 | CANAL ALGERIE | 11565 | V | 22000 |
| 319 | TV5MONDE | 11565 | V | 22000 |
| 320 | Al Masriya | 11565 | V | 22000 |
| 321 | TV7 | 11565 | V | 22000 |
| 322 | Al Jazeera | 11565 | V | 22000 |
| 323 | Al Jazeera In | 11506 | V | 22000 |
| 324 | TVEi | 11565 | V | 22000 |
| 325 | 2M Maroc | 11565 | V | 22000 |
| 326 | RTM Maroc | 11595 | V | 22000 |
| 327 | TRT Internati | 11595 | V | 22000 |
| 328 | DW TV | 11595 | V | 22000 |
| 329 | CNBC Europe | 11595 | V | 22000 |
| 330 | BBC World | 11595 | V | 22000 |
| 331 | TV5Europe | 11595 | V | 22000 |
| 332 | Sky News | 11595 | V | 22000 |
| 333 | EuroNews | 12226 | H | 27500 |
| 334 | MTV AUSTRIA | 12226 | H | 27500 |
| 335 | ALEGRIA | 11536 | V | 22000 |
| 336 | DIRECT 8 | 11536 | V | 22000 |
| 337 | TVC INT. | 11683 | V | 22000 |
| 338 | ANDALUCiA TV | 11683 | V | 22000 |
| 339 | EUSKADI TV | 11683 | V | 22000 |
| 340 | TM SAT/LAOTRA | 11683 | V | 22000 |
| 341 | TV GALICIA | 11683 | V | 22000 |
| 342 | Russia Today | 11536 | V | 22000 |
| 343 | France 24 Fra | 11536 | V | 22000 |
| 344 | CNN Int. | 11777 | V | 27500 |
| 345 | EURONEWS | 11817 | V | 27500 |
| 346 | Das Erste | 11836 | H | 27500 |
| 347 | Bayerisches F | 11836 | H | 27500 |
| 348 | hr-fernsehen | 11836 | H | 27500 |
| 349 | Arte Deutsch | 11836 | H | 27500 |
| 350 | WDR K®Øln | 11836 | H | 27500 |
| 351 | BR-alpha | 11836 | H | 27500 |
| 352 | S®πDWEST Ferns | 11836 | H | 27500 |
| 353 | Phoenix | 11836 | H | 27500 |
| 354 | KTO | 11895 | V | 27500 |
| 355 | 3sat | 11953 | H | 27500 |
| 356 | KiKa | 11953 | H | 27500 |
| 357 | ZDF | 11953 | H | 27500 |
| 358 | ZDFinfokanal | 11953 | H | 27500 |
| 359 | ZDFdokukanal | 11953 | H | 27500 |
| 360 | ZDFtheaterkan | 11953 | H | 27500 |
| 361 | VIVA | 11973 | V | 27500 |
| 362 | VIVA PLUS | 11973 | V | 27500 |
| 363 | NICK | 11973 | V | 27500 |
| 364 | PREMIERE DIRE | 12031 | H | 27500 |

# Channels Guide

| # | Name | Freq | Pol | SR |
|---|---|---|---|---|
| 365 | ProSieben | 12480 | V | 27500 |
| 366 | ProSieben Sch | 12051 | V | 27500 |
| 367 | ProSieben Aus | 12051 | V | 27500 |
| 368 | Kabel 1 Schwe | 12051 | V | 27500 |
| 369 | Kabel 1 Austr | 12051 | V | 27500 |
| 370 | SAT.1 A | 12051 | V | 27500 |
| 371 | EinsExtra | 12109 | H | 27500 |
| 372 | EinsFestival | 12109 | H | 27500 |
| 373 | EinsPlus | 12109 | H | 27500 |
| 374 | MDR FERNSEHEN | 12109 | H | 27500 |
| 375 | rbb Brandenbu | 12109 | H | 27500 |
| 376 | rbb Berlin | 12109 | H | 27500 |
| 377 | ARD-TEST-2 | 12109 | H | 27500 |
| 378 | NDR FS MV | 12109 | H | 27500 |
| 379 | NDR FS HH | 12109 | H | 27500 |
| 380 | NDR FS NDS | 12109 | H | 27500 |
| 381 | NDR FS SH | 12109 | H | 27500 |
| 382 | MDR SACHSEN | 12109 | H | 27500 |
| 383 | MDR S-ANHALT | 12109 | H | 27500 |
| 384 | MDR TH®πRINGEN | 12109 | H | 27500 |
| 385 | S®πDWEST Ferns | 12109 | H | 27500 |
| 386 | SAT.1-CH | 12148 | H | 27500 |
| 387 | Q TV SHOP | 12148 | H | 27500 |
| 388 | RNFplus | 12148 | H | 27500 |
| 389 | TV TRAVEL SHO | 12148 | H | 27500 |
| 390 | GOD Channel | 12148 | H | 27500 |
| 391 | Franken SAT | 12148 | H | 27500 |
| 392 | RTL Televisio | 12187 | H | 27500 |
| 393 | RTL2 | 12187 | H | 27500 |
| 394 | Super RTL | 12187 | H | 27500 |
| 395 | VOX | 12187 | H | 27500 |
| 396 | RTL Shop | 12187 | H | 27500 |
| 397 | n-tv | 12187 | H | 27500 |
| 398 | Traumpartner | 12187 | H | 27500 |
| 399 | NICK | 12226 | H | 27500 |
| 400 | RTL Austria | 12226 | H | 27500 |
| 401 | VOX Austria | 12226 | H | 27500 |
| 402 | RTL2 Austria | 12226 | H | 27500 |
| 403 | Super RTL A | 12226 | H | 27500 |
| 404 | Eurosport | 12226 | H | 27500 |
| 405 | HSE24 Digital | 12226 | H | 27500 |
| 406 | Radio Bremen | 12265 | H | 27500 |
| 407 | SR S®πDWEST Fe | 12265 | H | 27500 |
| 408 | TERRA NOVA | 12285 | V | 27500 |
| 409 | France 24 Eng | 11536 | V | 22000 |
| 410 | WDR Aachen | 12421 | H | 27500 |
| 411 | WDR Bielefeld | 12421 | H | 27500 |
| 412 | WDR Dortmund | 12421 | H | 27500 |
| 413 | WDR D®π1Bsseldor | 12421 | H | 27500 |
| 414 | WDR Essen | 12421 | H | 27500 |
| 415 | WDR M®π1Bnster | 12421 | H | 27500 |
| 416 | WDR Siegen | 12421 | H | 27500 |
| 417 | WDR Wuppertal | 12421 | H | 27500 |
| 418 | NDR FS HH+ | 12421 | H | 27500 |
| 419 | NDR FS MV+ | 12421 | H | 27500 |
| 420 | NDR FS SH+ | 12421 | H | 27500 |
| 421 | KTO | 11536 | V | 22000 |
| 422 | EWTN Europe | 11536 | V | 22000 |
| 423 | tv.gusto | 12460 | H | 27500 |
| 424 | 1-2-3.tv | 12460 | H | 27500 |
| 425 | DELUXE MUSIC | 12460 | H | 27500 |
| 426 | lastminute.TV | 12460 | H | 27500 |
| 427 | JobTV24 | 12460 | H | 27500 |
| 428 | imusic TV | 12460 | H | 27500 |
| 429 | GIGA | 12460 | H | 27500 |
| 430 | MEGAVISION | 12460 | H | 27500 |
| 431 | DAS VIERTE | 12460 | H | 27500 |
| 432 | JAMBA! TV | 12460 | H | 27500 |
| 433 | Sonnenklar TV | 12480 | V | 27500 |
| 434 | HSE24 | 12480 | V | 27500 |
| 435 | SAT.1 | 12480 | V | 27500 |
| 436 | N24 | 12480 | V | 27500 |
| 437 | TELE 5 | 12480 | V | 27500 |
| 438 | AstroTV | 12480 | V | 27500 |
| 439 | 9Live | 12480 | V | 27500 |
| 440 | KABEL1 | 12480 | V | 27500 |
| 441 | DSF | 12480 | V | 27500 |
| 442 | QVC Deutschla | 12551 | V | 22000 |
| 443 | LibertyTV FR | 12551 | V | 22000 |
| 444 | M6 Boutique | 12551 | V | 22000 |
| 445 | L1MBURG TV | 12551 | V | 22000 |
| 446 | Bloomberg TV | 12551 | V | 22000 |
| 447 | Chamber TV | 12551 | V | 22000 |
| 448 | BVN | 12574 | H | 22000 |
| 449 | Bahn TV | 12633 | H | 22000 |
| 450 | K-TV | 12633 | H | 22000 |
| 451 | XXP | 12633 | H | 22000 |
| 452 | rhein main tv | 12633 | H | 22000 |
| 453 | K1010 | 12633 | H | 22000 |
| 454 | Entertainment | 12633 | H | 22000 |
| 455 | HITRADIO OE3 | 12692 | H | 22000 |
| 456 | ORF2E | 12692 | H | 22000 |
| 457 | eUrotic TV | 10830 | H | 22000 |
| 458 | SexySat | 12633 | H | 22000 |
| **Eutelsatw2 ----------** | | | | |
| 459 | TELEMARKET | 10960 | H | 3146 |
| 460 | TTVI | 11009 | V | 27500 |
| 461 | 7 dni | 11009 | V | 27500 |
| 462 | Estate TV | 11009 | V | 27500 |
| 463 | Hot TV | 11009 | V | 27500 |
| 464 | 7 GOLD | 11023 | H | 2894 |
| 465 | National TV | 11044 | H | 10555 |
| 466 | National 24 | 11044 | H | 10555 |
| 467 | Favorit TV | 11044 | H | 10555 |
| 468 | My Music | 11089 | V | 32000 |
| 469 | Antena 1 | 11128 | V | 12222 |
| 470 | Antena 2 | 11128 | V | 12222 |
| 471 | Antena 3 | 11128 | V | 12222 |
| 472 | Antena 4 | 11128 | V | 12222 |
| 473 | KURDISTAN TV | 11182 | H | 2667 |
| 474 | M2 | 11301 | V | 30000 |
| 475 | Kanal 3 | 11301 | V | 30000 |
| 476 | Zdrave | 11301 | V | 30000 |
| 477 | Hit TV | 11301 | V | 30000 |
| 478 | TVR1 | 11469 | V | 29950 |
| 479 | TVR2 | 11469 | V | 29950 |
| 480 | TVRi | 11469 | V | 29950 |
| 481 | Balkanika | 11594 | V | 28800 |
| 482 | Evropa TV | 11594 | V | 28800 |
| 483 | Kanal 8 | 11594 | V | 28800 |
| 484 | eTV | 11594 | V | 28800 |
| 485 | FANTV | 11594 | V | 28800 |

# Channels Guide

| # | Name | Freq - Pol - SR |
|---|---|---|
| 486 | CHANNEL-I | 11679 V 3061 |
| 487 | TVSH-SAT | 12656 V 4883 |
| 488 | TV7 | 12682 H 2894 |
| **Eutelsatw3 ----------** | | |
| 489 | M6 Suisse | 11281 V 27500 |
| 490 | TV Polonia | 11174 V 27500 |
| 491 | TV5 Orient | 11281 V 27500 |
| 492 | TVP Kultura | 11174 V 27500 |
| 493 | MARE TV | 11305 H 27500 |
| 494 | TAXI channel | 11305 H 27500 |
| 495 | ITALY¶≈ITALY | 11305 H 27500 |
| 496 | Toscana Chann | 11305 H 27500 |
| 497 | Noello Sat | 11305 H 27500 |
| 498 | TV7 LOMBARDIA | 11305 H 27500 |
| 499 | M-Three video | 11305 H 27500 |
| 500 | ARCOIRIS TV | 11305 H 27500 |
| 501 | Tiziana Sat | 11305 H 27500 |
| 502 | 50 Canale | 11305 H 27500 |
| 503 | Jolly sat | 11305 H 27500 |
| 504 | Telelombardia | 11305 H 27500 |
| 505 | Cinque Stelle | 11305 H 27500 |
| 506 | Venice Channe | 11305 H 27500 |
| 507 | TeleTirreno | 11305 H 27500 |
| 508 | TRT1 | 11490 V 30000 |
| 509 | TRT2/TRT3 | 11490 V 30000 |
| 510 | TJK TV | 11594 H 30000 |
| 511 | TV Chile | 11614 V 30000 |
| 512 | SHOWROOM | 11635 H 30000 |
| 513 | SKYTURK | 11677 H 30000 |
| **Astra 2A ----------** | | |
| 514 | BBC 1 London | 10771 H 22000 |
| 515 | BBC 2 England | 10771 H 22000 |
| 516 | BBC NEWS 24 | 10771 H 22000 |
| 517 | BBC TES 3 | 10771 H 22000 |
| 518 | CBBC Channel | 10771 H 22000 |
| 519 | CBeebies | 10771 H 22000 |
| 520 | ETV | 10771 H 22000 |
| 521 | BBC 1 NI | 10771 H 22000 |
| 522 | BBC THREE | 10771 H 22000 |
| 523 | BBC TES Test | 10771 H 22000 |
| 524 | BBC TES 2 | 10771 H 22000 |
| 525 | BBC FOUR | 10771 H 22000 |
| 526 | BBC 1 W Mids | 10786 V 22000 |
| 527 | BBC 1 N West | 10786 V 22000 |
| 528 | BBC 1 Yrks¶≈Li | 10786 V 22000 |
| 529 | BBC 1 Yorks | 10786 V 22000 |
| 530 | BBC 1 E Mids | 10786 V 22000 |
| 531 | BBC 1 East (E | 10786 V 22000 |
| 532 | ITV1 London | 10756 V 22000 |
| 533 | ITV2 | 10756 V 22000 |
| 534 | CITV | 10756 V 22000 |
| 535 | ITV1 Granada | 10756 V 22000 |
| 536 | ITV1 Anglia E | 10756 V 22000 |
| 537 | ITV1 Central | 10756 V 22000 |
| 538 | ITV4 | 10756 V 22000 |
| 539 | ETV5 | 10786 V 22000 |
| 540 | ETV2 | 10800 H 22000 |
| 541 | BBC 1 Wales | 10800 H 22000 |

| # | Name | Freq - Pol - SR |
|---|---|---|
| 542 | BBC 2W | 10800 H 22000 |
| 543 | BBC 1 Scotlan | 10800 H 22000 |
| 544 | BBC 2 Scotlan | 10800 H 22000 |
| 545 | BBC 2 NI | 10800 H 22000 |
| 546 | BBC 1 West | 10815 V 22000 |
| 547 | BBC 1 S East | 10815 V 22000 |
| 548 | BBC 1 South | 10815 V 22000 |
| 549 | BBC 1 S West | 10815 V 22000 |
| 550 | BBC 1 NE ¶≈C | 10815 V 22000 |
| 551 | BBC 1 Oxford | 10815 V 22000 |
| 552 | ETV6 | 10815 V 22000 |
| 553 | ITV1 Central | 10830 H 22000 |
| 554 | ITV1 Central | 10830 H 22000 |
| 555 | ITV1 Wales | 10830 H 22000 |
| 556 | ITV1 West | 10830 H 22000 |
| 557 | ITV1 W Countr | 10830 H 22000 |
| 558 | ITV1 Border | 10830 H 22000 |
| 559 | G49 | 10830 H 22000 |
| 560 | BBC 1 East (W | 10845 V 22000 |
| 561 | BBC 1 CI | 10845 V 22000 |
| 562 | ITV1 BorderSc | 10889 H 22000 |
| 563 | ITV1 Meridian | 10889 H 22000 |
| 564 | ITV1 Meridian | 10889 H 22000 |
| 565 | ITV1 Mer SE | 10889 H 22000 |
| 566 | ITV1 Mer N | 10889 H 22000 |
| 567 | ttg53 | 10889 H 22000 |
| 568 | ITV1 Yorks W | 10889 H 22000 |
| 569 | ITV1 Yorks E | 10889 H 22000 |
| 570 | G53 | 10889 H 22000 |
| 571 | BBC PARL'MNT | 11953 H 27500 |
| 572 | Zee Music | 11972 V 27500 |
| 573 | Babeworld | 11972 V 27500 |
| 574 | Ideal World | 12031 H 27500 |
| 575 | QVC | 12031 H 27500 |
| 576 | Q_I | 12031 H 27500 |
| 577 | Q_I dir | 12031 H 27500 |
| 578 | QVC Barker | 12031 H 27500 |
| 579 | QVC TSVNOW | 12031 H 27500 |
| 580 | bid tv | 12031 H 27500 |
| 581 | speedauctiont | 12031 H 27500 |
| 582 | price-drop tv | 12031 H 27500 |
| 583 | CNN | 12050 V 27500 |
| 584 | Travel Channe | 12050 V 27500 |
| 585 | Thomson TV | 12050 V 27500 |
| 586 | S4C~ Digidol | 12128 V 27500 |
| 587 | B4U Music | 12128 V 27500 |
| 588 | Vitality | 12128 V 27500 |
| 589 | Create¶≈Craf | 12128 V 27500 |
| 590 | iBuy TV | 12128 V 27500 |
| 591 | TTV2 | 12128 V 27500 |
| 592 | Sky News | 12206 V 27500 |
| 593 | Sky News UK ( | 12206 V 27500 |
| 594 | Sky News Eire | 12206 V 27500 |
| 595 | CommunityChnl | 12226 H 27500 |
| 596 | 4301 | 12382 H 27500 |
| 597 | Reality TV. | 12401 V 27500 |
| 598 | TV SHOP | 12401 V 27500 |
| 599 | Shop Vector+ | 12401 V 27500 |
| 600 | Gems.tv | 12401 V 27500 |
| 601 | Record TV | 12401 V 27500 |
| 602 | TVW Select | 12401 V 27500 |
| 603 | TV Warehouse | 12401 V 27500 |

# Channels Guide

| # | Name | Freq | Pol | SR |
|---|---|---|---|---|
| 604 | Vector 24/7 | 12401 | V | 27500 |
| 605 | eeZee tv | 12401 | V | 27500 |
| 606 | Babestation | 12401 | V | 27500 |
| 607 | Price Crash | 12401 | V | 27500 |
| 608 | Life TV | 12401 | V | 27500 |
| 609 | Teachers' TV | 12421 | H | 27500 |
| 610 | Men¶≈ Motors | 12421 | H | 27500 |
| 611 | ITVi Stream | 12421 | H | 27500 |
| 612 | Teletext Holi | 12421 | H | 27500 |
| 613 | Extreme Sport | 11678 | V | 27500 |
| 614 | EuroNews | 11678 | V | 27500 |
| 615 | GOD Channel | 11678 | V | 27500 |
| 616 | GOD REVIVAL | 11678 | V | 27500 |
| 617 | AJI | 11678 | V | 27500 |
| 618 | TBN Europe | 11678 | V | 27500 |
| 619 | HollywoodTV | 11678 | V | 27500 |
| 620 | GOD UK | 11678 | V | 27500 |
| 621 | revelation | 11678 | V | 27500 |
| 622 | ACTIONMAX | 11221 | V | 27500 |
| 623 | Legal TV | 11221 | V | 27500 |
| 624 | Pitch TV Plus | 11221 | V | 27500 |
| 625 | DoveVision TV | 11221 | V | 27500 |
| 626 | Classic FM TV | 11221 | V | 27500 |
| 627 | Pitch TV | 11221 | V | 27500 |
| 628 | UCB TV | 11220 | H | 27500 |
| 629 | Reality Extra | 11220 | H | 27500 |
| 630 | YouPlay TV | 11220 | H | 27500 |
| 631 | Golf Pro-Shop | 11220 | H | 27500 |
| 632 | Get Lucky TV | 11220 | H | 27500 |
| 633 | Wonderful | 11220 | H | 27500 |
| 634 | Musicians Chn | 11220 | H | 27500 |
| 635 | Chat Box | 11220 | H | 27500 |
| 636 | CelebrityShop | 11220 | H | 27500 |
| 637 | You TV 2 | 11257 | V | 27500 |
| 638 | Passion TV | 11257 | V | 27500 |
| 639 | TWC | 11257 | V | 27500 |
| 640 | Star Bazaar T | 11257 | V | 27500 |
| 641 | Quiz TV | 11257 | V | 27500 |
| 642 | Gospel Channe | 11257 | V | 27500 |
| 643 | GDTV | 11257 | V | 27500 |
| 644 | Open Access | 11257 | V | 27500 |
| 645 | Audi Channel | 11257 | V | 27500 |
| 646 | Turn on TV | 11257 | V | 27500 |
| 647 | Reality TV +1 | 11262 | H | 22000 |
| 648 | Fizz | 11262 | H | 22000 |
| 649 | Max TV | 11262 | H | 22000 |
| 650 | HorrorChannel | 11262 | H | 22000 |
| 651 | Gay Network | 11262 | H | 22000 |
| 652 | Life2 | 11262 | H | 22000 |
| 653 | Lucky Star | 11262 | H | 22000 |
| 654 | DM Digital | 11262 | H | 22000 |
| 655 | We Deliver TV | 11305 | H | 27500 |
| 656 | OneTV | 11305 | H | 27500 |
| 657 | propeller | 11305 | H | 27500 |
| 658 | ChoicesUK TV | 11305 | H | 27500 |
| 659 | Apna Bazaar | 11305 | H | 27500 |
| 660 | Aastha TV | 11305 | V | 27500 |
| 661 | Simply Shop. | 11305 | V | 27500 |
| 662 | Quiz Nation | 11305 | V | 27500 |
| 663 | Jewellery Ch. | 11305 | V | 27500 |
| 664 | Shop Vector | 11305 | V | 27500 |
| 665 | Simply Ideas | 11305 | V | 27500 |

| # | Name | Freq | Pol | SR |
|---|---|---|---|---|
| 666 | B4 | 11341 | V | 27500 |
| 667 | True Movies | 11341 | V | 27500 |
| 668 | True Movies 2 | 11341 | V | 27500 |
| 669 | GEO UK | 11341 | V | 27500 |
| 670 | Wine TV | 11341 | V | 27500 |
| 671 | LOVEWORLD TV | 11341 | V | 27500 |
| 672 | BIG GAME TV! | 11341 | V | 27500 |
| 673 | ARY Oneworld | 11341 | V | 27500 |
| 674 | ARY QTV | 11341 | V | 27500 |
| 675 | LifeShowcase | 11342 | H | 27500 |
| 676 | Rapture TV | 11342 | H | 27500 |
| 677 | 2ShopTV | 11342 | H | 27500 |
| 678 | Bangla TV | 11342 | H | 27500 |
| 679 | Raj TV | 11342 | H | 27500 |
| 680 | 53240 | 11342 | H | 27500 |
| 681 | Real Estate T | 11342 | H | 27500 |
| 682 | treasures.tv | 11342 | H | 27500 |
| 683 | Price Crash 2 | 11342 | H | 27500 |
| 684 | Broadband UK | 11342 | H | 27500 |
| 685 | DM Gold | 11342 | H | 27500 |
| 686 | MATV National | 11386 | H | 27500 |
| 687 | Performance | 11386 | H | 27500 |
| 688 | channel U | 11386 | H | 27500 |
| 689 | Gems.tv 2 | 11386 | H | 27500 |
| 690 | Bonanza | 11386 | H | 27500 |
| 691 | Golf Channel | 11386 | H | 27500 |
| 692 | Travel Ch +1 | 11386 | H | 27500 |
| 693 | PokerZone | 11386 | H | 27500 |
| 694 | Sport Nation | 11386 | H | 27500 |
| 695 | Best Direct | 11388 | V | 27500 |
| 696 | BestDirect+ | 11388 | V | 27500 |
| 697 | Playboy One | 11388 | V | 27500 |
| 698 | POP | 11424 | V | 27500 |
| 699 | Chart Show TV | 11424 | V | 27500 |
| 700 | The Vault | 11424 | V | 27500 |
| 701 | Channel 'S' | 11424 | V | 27500 |
| 702 | OBE | 11424 | V | 27500 |
| 703 | Tiny Pop | 11424 | V | 27500 |
| 704 | Venus TV | 11424 | V | 27500 |
| 705 | Eat Cinema | 11424 | V | 27500 |
| 706 | Thomas Cook | 11525 | V | 27500 |
| 707 | ATN Bangla | 11525 | V | 27500 |
| 708 | Al Jazeera | 11525 | V | 27500 |
| 709 | Thane Direct | 11544 | H | 27500 |
| 710 | AVAGO | 11544 | H | 27500 |
| 711 | AVAGO (Cable) | 11544 | H | 27500 |
| 712 | Stop + Shop | 11544 | H | 27500 |
| 713 | VHR | 11544 | H | 27500 |
| 714 | cso | 11544 | H | 27500 |
| 715 | Channel 854 | 11544 | H | 27500 |
| 716 | Deal TV | 11582 | H | 27500 |
| 717 | Jackpot TV | 11582 | H | 27500 |
| 718 | Racing World | 11621 | H | 27500 |
| 719 | Abu Dhabi TV | 11621 | H | 27500 |
| 720 | PCNE Chinese | 11621 | H | 27500 |
| 721 | Fashion TV | 11621 | H | 27500 |
| 722 | Channel M | 11640 | V | 27500 |
| 723 | Cyprus Direct | 11640 | V | 27500 |
| 724 | ARY The Musik | 11640 | V | 27500 |
| 725 | mta-muslim tv | 11659 | H | 27500 |
| 726 | CCTV-9 | 11659 | H | 27500 |
| 727 | Inspiration | 11659 | H | 27500 |

Metronic Ltd
Park House
15-23 Greenhill Crescent
Watford
WD18 8PH

www.metronic.com

Product made in Asia.