

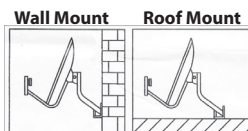
Free-to-Air Installation Kit

SET-UP GUIDE

This Free-to Air Installation Kit, can be fitted by a competent DIYer, but if you have any concerns we recommend you contact your local CAI approved Satellite Installer.

1) Identify your South Facing Wall: The dish needs to be on a South facing wall in order to pick up the Astra 2A, 2B, 2D and Eurobird1 satellites. Identify your south facing wall and look to mount your satellite dish on the outside of the wall, at the nearest point to your main TV. Tip: Look at your neighbours' houses someone is sure to have Sky, see which way their dish is facing. If none of your neighbours have Sky, you can use a compass to determine which wall faces south.

Please note that the mounting bracket can be mounted on either a wall or a flat roof.



2) Check line of sight: Make sure there are no obstructions (trees/tall buildings) in line between the dish and the satellites.

Useful website: http://www.ses-astra.com/consumer/azimuth/index.php?locale=en_GB

3) Assemble the Dish and Brackets:

Before assembly check that your kit contains all the items listed. Assemble the dish and brackets as shown in the diagram but do not yet attach to the wall mount arm (18).

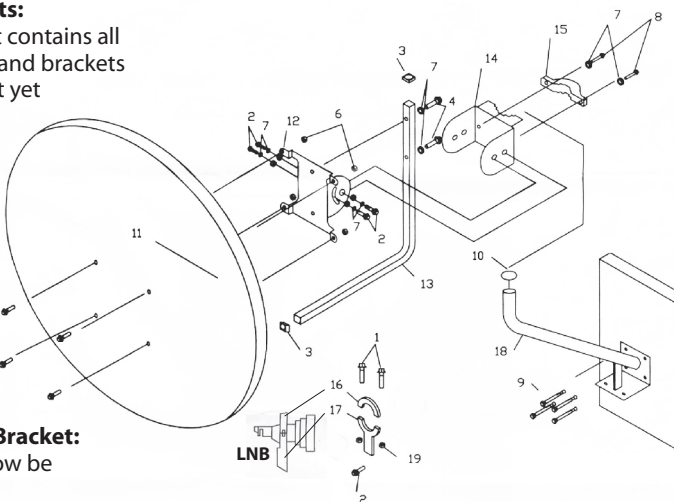
4) Mount the Wall Bracket:

Mount the wall bracket (18) using the expansion bolts (9). Make sure that the mounting holes are drilled into brick or stone and not into the mortar. Also ensure that the wall mount is horizontal and perfectly level (check using a spirit level).

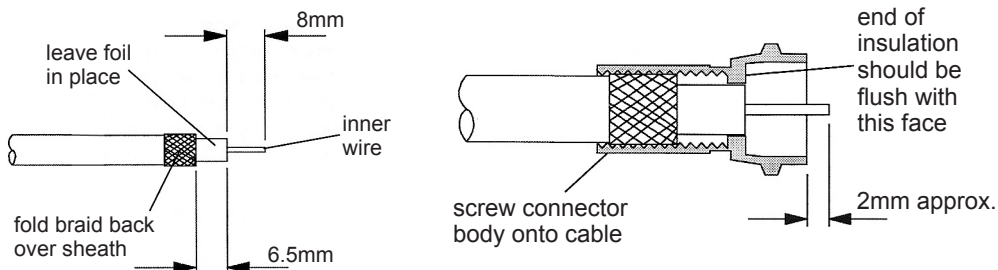
5) Attach Dish Assembly to Wall Bracket:

The complete dish assembly can now be attached to the wall bracket.

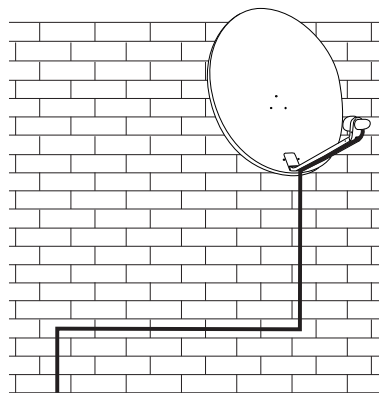
No.	Image	Description	Qty.
1		M6 x 20mm bolts for LNB holder	2
2		M6 x 12mm bolts for swivel bracket/LNB holder	5
3		PVC LNB arm inserts	2
4		M6 x 30mm bolts for LNB arm	2
5		M6 x 16mm bolts for dish fixing	4
6		M6 nuts for dish bracket	4
7		washers	9
8		M6 x 65mm bolts for mast clamp	2
9		M6 x 50mm expansion bolts	4
10		PVC cap for wall mount arm	1
11		satellite dish	1
12		dish bracket	1
13		LNB arm	1
14		mast bracket	1
15		mast clamp	1
16		upper part 40mm LNB holder	1
17		lower part 40mm LNB holder	1
18		wall mount arm	1
19		M6 nuts for LNB holder	2



6) Prepare Digital Coax Cable: Firstly fit the LNB rubber weather boot provided, to the dish end of the cable. Fitting the F connector: Strip the end of the cable as shown below. Once you have stripped the cable, twist the braid and pull it back on itself, make sure that no braid is touching the copper core, this will cause a short on the cable and you will not get any signal. Now, simply twist on the 'F' connector and connect to the LNB making sure that the weather boot is correctly secured over the LNB connector.



7) Run Cable Down the Wall: Once you have installed the dish you need to run the cable to the room in which your receiver is going to be installed. Start at the top and work down, you should clip the cable every 50cm, always run the cable horizontally or vertically, never diagonally across a wall.



8) Connect Cable to Satellite Receiver: The cable can be run into the room by drilling a hole in through the window frame or the wall. Once you have run the cable through to where you intend to position the receiver, cut off any surplus cable and then fit the 'F' connector following the instructions in step 6. Screw the 'F' connector to the LNB-in terminal on your decoder.

9) Connect Satellite Receiver to your TV: Use a SCART lead and tune the TV into AV1.

10) Align Satellite Dish: To obtain accurate settings you can go to the Astra website: http://www.ses-astra.com/consumer/azimuth/index.php?locale=en_GB.

By locating your area on the Astra map on the website, the programme will give the precise settings that you will require to align to the satellites. If you do not have access to the internet we have enclosed a chart showing settings for the key areas in the UK and Republic of Ireland. Identify the town nearest to you and work on those settings.

Three settings are required:

a) Dish elevation - this is the angle that the dish has to be pointed at the sky. This is done by aligning to the correct angle on the elevation bracket.

b) Polarisation angle - this is the angle at which the LNB needs to set at on its mount. The LNB angle can be adjusted by moving the LNB to the required angle.

c) Azimuth angle - This is the compass direction required. You will need two people to do this, one person to align the dish and one to watch the TV screen for a signal. Switch

switch your satellite receiver on and follow your satellite receivers instructions to locate the channel search function.

A satellite finder and a compass have been included in the kit to help you locate the satellite and set your dish in the optimum position.

You will probably notice that there is some signal strength straight away, don't get excited, this is only reading 'noise' from the atmosphere. It is the signal quality that you need to concentrate on; this is reading a specific transponder from the Astra 2A, 2B, 2D and Eurobird satellites.

With one person watching the screen, the other person needs to move the dish slowly around until the signal strength display starts to read a decent signal level, about 50% should be fine. The dish needs to be within 0.1 of a degree of the satellite position (about 1mm in movement terms) when making these adjustments, the signal strength meter on the screen takes up to 5 seconds to register the signal, so you can't just sweep the dish around the sky, you need to make very precise, very subtle movements of the dish, stopping for a few seconds after each movement.

If the Signal Intensity and Strength readings are low on screen, but the satellite finder is indicating a strong signal then you are aligned to another satellite, select other available satellites that may be giving a high signal strength like Hotbird 13 E or Astra 1 19.2E, If Hotbird 13E shows high Signal and Quality level readings on screen, you need to turn the dish 14 degrees towards the East to find the Astra 2 satellite, you may find another satellite as you turn the dish, which is Astra 1 19.2E, If Astra 1 19.2E shows high Signal and Quality level readings on screen, you need to turn the dish 9 degrees towards the East to find Astra 2

Once you have some signal strength, make tiny movements of the dish horizontally and vertically to get the best signal quality possible. When you have at least 50% signal quality, tighten the dish up and you are ready to go.

Should you experience any difficulty in setting up your Free-to-Air Digital Satellite Kit, call our Customer Care Line on 08457 573 479

To locate a CAI approved Satellite Installer in you area you can either go onto the CAI website <http://www.cai.org.uk/asp/installer.asp> or phone 020 8902 8998.

Other useful websites:

<http://www.liveonsat.com>

<http://www.lyngsat.com>

<http://www.satcodx.com>

<http://www.dishpointer.com>

Suggested list of useful tools not included:

Masonry drill and bit, adjustable wrench or spanners, crosshead screwdriver, spirit level, hammer and cable strippers.

Kit Contents:

- 60 cm satellite dish with fixings and wall mount
- Digital Low Noise Block (LNB)
- 10 Metres of Digital Coaxial Cable
- Cable clips
- 2x F type connectors
- Weather boot
- Satellite finder
- Compass

Satellite alignment settings for Astra 2A, 2B, 2D and Eurobird 1

28.2 Degrees East for the UK and Ire (English Language Channels)

For other satellite settings see www.dishpointer.com

Mainland UK

Town	County	Elevation	Azimuth	Polarization
Aberdeen	Aberdeenshire	19.76	145.17	-10.55
Abergavenny	Gwent	23.96	142.37	-14.66
Aberystwyth	Dyfed	23.05	141.46	-14.84
Alnwick	Northumberland	21.39	145.06	-11.48
Amphill	Bedfordshire	24.77	145.24	-13.03
Athlone	West Meath	20.62	137.71	-16.14
Aviemore	Highland	19.12	143.34	-11.37
Ayr	Ayrshire	20.32	141.85	-13.04
Banff	Aberdeenshire	19.16	144.87	-10.43
Barnstaple	Devon	24.16	140.96	-15.81
Basingstoke	Hampshire	25.22	144.29	-13.92
Bath	Avon	24.61	142.91	-14.61
Belfast	Antrim	20.53	140.27	-14.24
Berwick-Upon-Tweed	Northumberland	20.96	144.86	-11.38
Birmingham	West Midlands	23.84	143.83	-13.57
Blackpool	Lancashire	22.27	143.06	-13.28
Bodmin	Cornwall	24.38	139.98	-16.66
Boston	Lincolnshire	24.10	146.10	-12.12
Bournemouth	Dorset	25.37	143.19	-14.80
Brecon	Powys	23.71	142.02	-14.79
Brighton & Hove	East Sussex	25.95	145.16	-13.65
Bristol	Avon	24.44	142.68	-14.70
Bude	Cornwall	24.17	140.33	-16.29
Burnley	Lancashire	22.59	143.95	-12.84
Bury Saint Edmunds	Suffolk	25.02	146.66	-12.16
Caernarfon	Gwynedd	22.36	141.52	-14.41
Cambridge	Cambridgeshire	24.85	145.97	-12.56
Campbeltown	Argyll & Bute	19.96	140.89	-13.47
Cardiff	Mid Glamorgan	24.19	142.06	-15.01
Cardigan	Ceredigion	23.08	140.69	-15.41
Carlisle	Cumbria	21.40	143.56	-12.48
Carmarthen	Carmarthenshire	23.42	140.98	-15.39
Cavan	Cavan	20.41	138.52	-15.41
Chelmsford	Essex	25.37	146.21	-12.64
Chester	Cheshire	22.86	143.01	-13.63
Colwyn	Clwyd	22.43	142.12	-14.03
Cork	Cork	21.57	136.57	-17.60
Coventry	West Midlands	24.05	144.26	-13.37
Crainlarich	Stirlingshire	19.53	142.26	-12.31
Dingwall	Highland	18.58	142.81	-11.40
Dolgellau	Gwynedd	22.84	141.78	-14.49
Douglas	Isle of Man	21.44	141.64	-13.81
Dover	Kent	26.23	146.91	-12.53
Dublin(Baile Atha Cliath)	Dublin	21.36	139.47	-15.30
Dundee	Angus	20.02	144.02	-11.43
Edinburgh	Midlothian	20.39	143.60	-11.91
Elgin	Grampian	18.91	144.01	-10.83
Exeter	Devon	24.69	141.40	-15.76
Felixstowe	Suffolk	25.51	147.27	-11.96
Fishguard	Dyfed	23.02	140.32	-15.65

Town	County	Elevation	Azimuth	Polarization
Folkestone	Kent	26.24	146.76	-12.64
Fort William	Highland	19.00	141.86	-12.26
Gairloch	Highland	18.08	141.56	-11.90
Galway/Gaillimh	Galway	20.28	136.52	-16.80
Glasgow	Lanarkshire	20.09	142.45	-12.50
Gloucester	Gloucestershire	24.24	143.22	-14.20
Great Yarmouth	Norfolk	25.04	147.96	-11.29
Grimsby	Lincolnshire	23.61	146.25	-11.78
Guildford	Surrey	25.45	144.84	-13.64
Hastings	East Sussex	26.22	146.01	-13.17
Hereford	Hereford and Worcester	23.89	142.79	-14.33
Holyhead	Gwynedd	22.09	141.17	-14.51
Ipswich	Suffolk	25.35	147.08	-12.02
Kendal	Cumbria	21.95	143.56	-12.77
Killarney	Kerry	20.99	135.57	-17.99
Kilmarnock	Ayrshire	20.22	142.13	-12.79
King's Lynn	Norfolk	24.45	146.46	-12.04
Kingston upon Hull	Humberside	23.30	145.98	-11.82
Kyle of Lochalsh	Highland	18.42	141.37	-12.23
Lancaster	Lancashire	22.17	143.40	-12.99
Largs	Ayrshire	19.97	141.80	-12.86
Larne	Antrim	20.35	140.47	-14.00
Leeds	Yorkshire	22.83	144.69	-12.45
Leicester	Leicestershire	24.00	144.74	-13.00
Limerick	Limerick	20.93	136.72	-17.07
Lincoln	Lincolnshire	23.70	145.62	-12.26
Liverpool	Merseyside	22.63	142.99	-13.52
London	Greater London	25.37	145.48	-13.15
Londonderry	Londonderry	19.65	138.93	-14.64
Ludlow	Shropshire	23.63	142.89	-14.12
Luton	Bedfordshire	24.93	145.26	-13.09
Lyme Regis	Dorset	24.92	142.04	-15.41
Maidstone	Kent	25.83	146.07	-12.95
Mallaig	Highland	18.59	141.16	-12.47
Manchester	Greater Manchester	22.87	143.85	-13.05
Middlebrough	North Yorkshire	22.30	145.38	-11.73
Moffat	Dumfries and Galloway	20.85	143.14	-12.46
Montrose	Angus	20.01	144.64	-11.02
Newark upon Trent	Nottinghamshire	23.74	145.24	-12.53
Newcastle upon Tyne	Tyne and Wear	21.78	145.03	-11.69
Newhaven	East Sussex	26.07	145.35	-13.57
Newry	Down	20.70	139.69	-14.75
Newtown	Isle of Wight	25.58	143.72	-14.51
Northampton	Northamptonshire	24.45	144.93	-13.09
Norwich	Norfolk	24.89	147.45	-11.56
Nottingham	Nottinghamshire	23.69	144.81	-12.81
Oban	Argyll & Bute	19.21	141.36	-12.71
Oxford	Oxfordshire	24.75	144.27	-13.71
Peebles	Borders	20.69	143.56	-12.09
Pembroke	Pembrokeshire	23.30	140.27	-15.84
Penrith	Cumbria	21.68	143.70	-12.53
Perth	Perth & Kinross	19.94	143.52	-11.71
Peterborough	Cambridgeshire	24.40	145.70	-12.54
Peterhead	Aberdeenshire	19.54	145.63	-10.16
Pitlochry	Perth & Kinross	19.57	143.31	-11.65

Town	County	Elevation	Azimuth	Polarization
Plymouth	Devon	24.69	140.59	-16.37
Portree	Skye	18.13	140.90	-12.37
Reading	Berkshire	25.10	144.44	-13.76
Rosslare	Wexford	22.20	138.93	-16.21
Scarborough	Yorkshire	22.82	146.12	-11.49
Settle	Yorkshire	22.35	144.00	-12.68
Sevenoaks	Kent	25.70	145.72	-13.13
Sheffield	South Yorkshire	23.22	144.63	-12.70
Shrewsbury	Shropshire	23.32	143.02	-13.87
Sligo	Sligo	19.74	137.48	-15.74
Southampton	Hampshire	25.40	143.80	-14.37
Stafford	Staffordshire	23.49	143.74	-13.45
Stirling	Stirlingshire	19.99	142.84	-12.18
Stoke on Trent	Staffordshire	23.28	143.71	-13.36
Stranraer	Dumfries and Galloway	20.61	141.31	-13.56
Stratford-upon-Avon	Warwickshire	24.18	143.95	-13.65
Swansea (Abertawe)	Swansea	23.76	141.28	-15.35
Swindon	Wiltshire	24.24	143.41	-14.06
Tain	Highland	18.54	143.28	-11.08
Thirsk	North Yorkshire	22.55	145.07	-12.06
Thurso	Highland	18.05	144.11	-10.28
Torquay	Devon	24.92	141.31	-15.96
Tralee (Tra Li)	Kerry	20.73	135.45	-17.92
Truro	Cornwall	24.40	139.56	-17.00
Uig	Skye	17.20	140.31	-12.17
Ullapool	Highland	18.08	142.14	-11.54
Waterford	Waterford	21.90	138.12	-16.62
Watford	Hertfordshire	25.13	145.20	-13.24
Westport	Mayo	19.65	136.21	-16.62
Weymouth	Dorset	25.22	142.51	-15.22
Wick	Highland	18.32	144.51	-10.19
Worcester	Hereford and Worcester	23.97	143.38	-13.95
Workington	Cumbria	21.37	142.79	-12.98
Yeovil	Somerset	24.86	142.45	-15.08
York	North Yorkshire	22.88	145.25	-12.10



For further information, please contact

Philex Customer Careline: 08457 573 479

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