





Your

USER GUIDE



Welcome to Freesat.

INCLUDED WITH YOUR SMART TV BOX

- ✓ Quality state of the art satellite TV receiver
- ✓ Over 200 of your favourite channels
- Picture perfect High Definition on selected channels
- ✓ BBC iPlayer, ITV Hub, All 4, Demand 5, YouTube, BBC News and BBC Sport app
- ✓ Pay for a little extra telly if you want with Netflix, Curzon Home Cinema and Hopster
- Catch up on the last 7 days of TV with a unique Roll Back TV Guide
- ✓ Showcase (specially selected editorial TV picks)
- ✓ Easy plug and play set up
- Free, expert customer support visit freesat.co.uk/help or call 0345 313 0051

NEED A HAND?

If you need help anywhere along the way, just go to the **Help & info** menu on the **Home** screen or visit **freesat.co.uk/help**

Contents

Basics

Your remote control	2
On screen icons	3
Home. It's where it all happens.	4
The TV Guide	5
Your main controls	6

See what's on TV

Seeing what's on – Now & Next	7
Watching something on earlier	8
Planning what to watch later	9
Browsing whilst watching TV	10
Find out more about a programme	11
Find programmes by channel category	12
Finding and listening to radio channels	13
Setting a reminder	14

Extras

Connect to the Internet	15
On Demand	16
Recordings – Only accessible if paired with an USB Hard Drive (HDD)	17
Search	18
Controlling your children's viewing	19
Hiding Adult channels	20
Accessibility	21
Safety Instructions	22
Warning	24
Troubleshooting	25
Setting the universal remote control	27
Specification	42
Open source software notice	44

Your remote control

Skip backward – skips backwards

Stop – stops On Demand playback

Rewind – rewinds up to x32 times faster

Search – brings up the Search screen

Back – goes back one step

MAIN CONTROLS

Up, down, left, right arrows – moves around the TV Guide and menus

OK – confirms your selection

Number buttons – to enter channel numbers

SUB - turns subtitles on or off



Standby – puts the box into standby, and on again

Skip forward –skips forwards

Fast forward – fast forwards up to x32 times faster

List – sort the TV Guide into channel categories

Pause – pauses On Demand playback

TV Guide – opens and closes the TV Guide

Exit - returns to live TV

Home – takes you anywhere

i – gives you more info about a programme

Colour buttons – gives you more options on-screen

AD - turns audio description on or off

This is a dual remote control for our HB-1100S and HDR-1100S.

On screen icons

ON SCREEN ICONS

- **G** may contain material with adult themes
- **SUB** subtitles available
- AD audio description available
- shown with sign language
- Dolby surround sound available
- High Definition
- SD/HD an HD version also available
- reminder
- part of a series
- film

Home



The Home screen will take you anywhere you want to go. Press HOME

Home takes you to:

TV Guide

See whats on Now & Next.

Showcase

The Freesat team's picks of what to watch this week and what's available On Demand.

On Demand

The best Catch up TV and On Demand services full of TV favourites ready to watch when you are. Your Freesat box will need to be connected to the Internet. (see page 15).

Search

Quickly find a programme without trawling the TV listings.

Help & info

Tips on making the most of your Freesat box, and info about services for visually impaired and hard of hearing viewers.

The TV Guide



See what's on the minute you sit down with our at a glance 'Now & Next' view.
Press TYGUIDE)

riess (



- what's on 'Now & Next'
- what's coming up in the next 7 days



 what's been on already but is available for catch up



Your main controls

These buttons can get you everywhere.

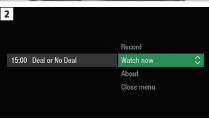
Press on a programme in the TV Guide and all the available options for that specific programme will be listed.

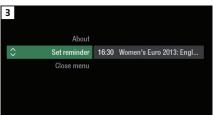
So if a programme is on live TV now, highlight it in the TV Guide, press and the Action Menu will look like screen 2.

If the programme is on later, you'll be able to Set reminder (Screen 3).

Press \Leftrightarrow to scroll through the options and 9 to select.







TOP TIP

Pressing on a programme brings up all the available options.

Seeing what's on – Now & Next



The TV Guide shows what's on now and next in an 'at a glance' view.

Press TVGUIDE

To move through the channels, use 🖎 😂

To move through the programmes a page at a time, press **P** and **P**

To move forward and back 24 hours, press and and

As you browse through the guide, you can find out more about a programme and see a full description by pressing ①

Highlight a programme and press and choose Watch now (Screen 2).

At any stage to go back to watching TV full screen, press EXIT



TOP TIP

If you know the channel number, jump straight to it in the TV Guide with the number buttons.

Watching something on earlier <

You can catch up on the last 7 days of TV with our Roll Back TV Guide.

This is available on selected channels with On Demand services on Freesat. Look out for earlier highlighted in the TV Guide where this is available.

Press & to see programmes from earlier on today, ready to watch whenever you are (Screen 2).

You can go back up to 7 days by continuing to press **(** (Screen 3).

Highlight a programme you want to watch and press (11)

To go back to the live TV Guide, continue to press **3**

To go back to watching TV full screen, press EXIT







Planning what to watch later >

To plan your viewing a bit further ahead, the full TV Guide has listings for the next 7 days.

Use **b** to browse programmes that are on 'later' (Screen 1).

For the full TV guide press **3** again (Screen 2).

To move forward and back 24 hours, press and D

You can plan your viewing for up to a week in advance, by setting reminders.

To clear the Guide press **EXIT**





TOP TIP

To fast scroll through the TV Guide, press and hold () ()

Browsing whilst watching TV



You don't have to stop watching TV to see what else is on. For a quick snapshot of what's on now and next, press any of the \(\mathbb{O} \) \(\approx \) \(\text{\text{\text{buttons}}} \)

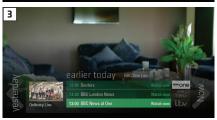
To see what's on other channels, press ⇔ ❤ (Screen 2).

Browse programmes on earlier today by pressing and what's on later by pressing (Screen 3).

You can set reminders here by pressing

To go back to watching live TV full screen, press EXIT





TOP TIP

Press to see the programme description.

Find out more about a programme

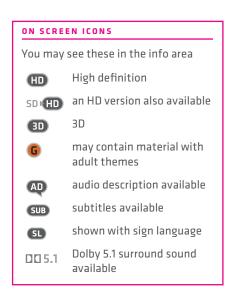
Programmes come with extra info to help you decide whether to watch them.

To see the programme info, highlight the programme in the TV Guide and press the button. A short description will then show in the info area next to the mini TV (Screen 1).

To see more info about the programme, press of for the Action Menu (Screen 2).

Select About

Here you'll find a longer description of the programme including when it is showing again and other episodes (Screen 3).

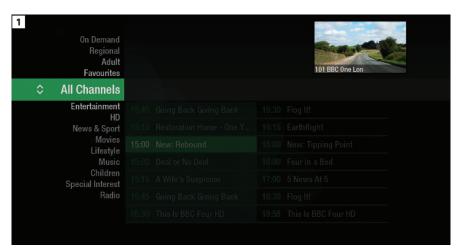








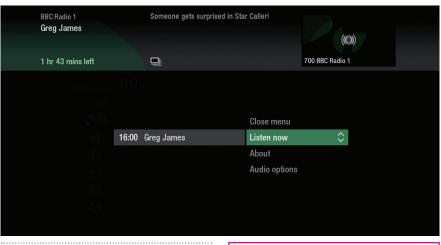
Find programmes by channel category



In the mood for a movie, or need your next news fix? Jump straight to that group of channels in the TV Guide by pressing ust on your remote control (Screen 1).



Finding and listening to radio channels



Find the radio channels in the TV Guide quickly by pressing ust, then use and select Radio.

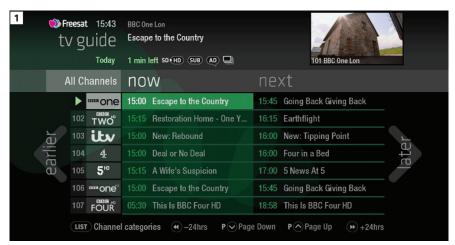
To listen to a radio programme, highlight it in the TV Guide and press (18)

You can choose to Listen now or Set reminder just like a TV programme.

TOP TIP

Radio channels start at Channel 700

Setting a reminder



Worried you'll miss a programme? Well worry no more. You can set a reminder from the TV Guide or while watching live TV.

From the TV Guide (Screen 1).

Highlight the programme, you want to set a reminder for, press and select

Set reminder

While watching live TV (Screen 2).

Highlight a programme, press and select Set reminder

The reminder prompt will appear on screen 30 seconds before the programme starts, and will then auto tune to the channel (Screen 3).

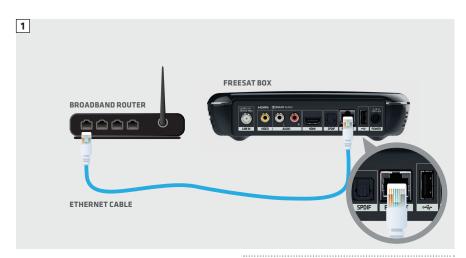




TOP TIP

To cancel a reminder, press when the prompt is on screen.

Connect to the internet



Connect to the Internet and open up a whole new part of the TV Guide.

You'll be able to Roll Back through the TV Guide on some channels to catch up on programmes you've missed over the last 7 days. You'll also be able to enjoy the On Demand services on Freesat.

Minimum 2Mps broadband speed required.

The best way to connect is with an Ethernet cable. Slot one end into the Ethernet port on the back of the box, and the other end into an Ethernet port on your router (Illustration 1). That's it, you're connected.

If your router is too far away to use a cable, you can connect to your home Wi-Fi network. The box will automatically display available Wi-Fi networks and you'll just need to enter your password.

Or, try using a pair of Homeplug Adapters. They're a safe and convenient way to access the Internet around your house using the electrical wiring.

Free On Demand Players

















Optional Pay On Demand Players









On Demand



Find hundreds of hours of programmes ready to watch whenever you want.

Press HOME on your remote control.

Go to On Demand, and press (9) to see all available On Demand services. (Screen 2).

Use 🐧 🔊 👄 to browse through the On Demand services and 🚳 to select.

Whilst watching an On Demand programme, you can use the playback buttons D D and D.

NEED TO KNOW

Your Freesat box needs to be connected to the Internet.



Recording

This Freesat box allows you to plug in a USB Hard Drive (HDD) and record programmes.

If you choose to record you will need to dedicate a USB Hard Drive for this. Therefore once the hard drive is formatted and paired to your box it won't be able to play recorded content on other Freesat boxes or be used on computers. If you choose to reformat or unpair the USB Hard Drive from your box all your recordings will be wiped.

Connect a USB Hard Drive for recording

You will need a USB Hard Drive that is FAT32, NTFS or EXT2/3 format.

Wavs to record

1) one touch record from live TV

To record the programme you're watching now, press ®

2) from the Now & Next banner

Highlight the programme you want to record, press **R**

3) from the TV Guide

Highlight the programme you want to record, press ®

4) from Showcase

Record any of the upcoming programmes in Showcase by pressing and selecting Record

5) from Search

Record straight from the Search results, by pressing (III) and selecting (Record)

Record from when you started watching

Your Freesat HD box automatically saves up to 30mins of the channel you're watching, even if you're not recording.

So if you decide that you want to record a programme part way through, press and it will record from the point you tuned to that channel.

NEED TO KNOW

If you unplug your USB Hard Drive (HDD) you won't be able to access your recordings. As soon as you plug the USB Hard Drive back in they will reappear.

RECORDING ICONS

to be deleted soon

kept (won't be deleted)

unwatched

part watched

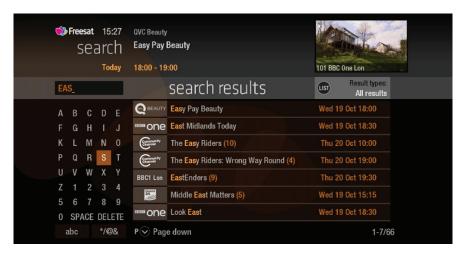
series recording set

R recording set

recording failed

) watch from the start

Search



With so much great TV to choose from, we've made it easy to find what you're looking for.

Press SEARCH) on your remote control.

You can filter the search results by TV or Radio, or by any channel category.

Once you've found the programme you're looking for, highlight it and press .
You'll be given all the options available for that specific programme, including

Watch now .

TOP TIP

- You can leave out common words from the search, like 'the', 'a', 'an, 'with' 'of'.
- There's no need to include hyphens or apostrophes.
- To clear the search bar and start again, press Back

Controlling your children's viewing



Some programmes may not be suitable for children. By setting a four digit PIN you can restrict On Demand programmes and stop them being played back without your permission.

Setting your four digit PIN

When you first set up your box, you'll be asked to create your four digit PIN.

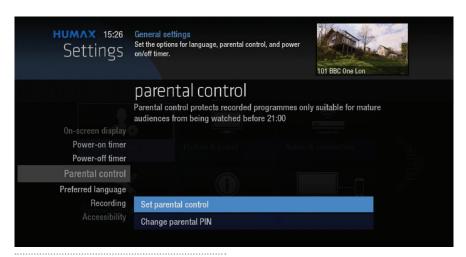
You can change your PIN code at any time by selecting HOME, followed by Settings and then Parental Controls.

This can either be done by following the prompts during the first time installation process, or by visiting Home, Settings then going to General Settings.

TOP TIP

Once you've set your PIN, you can also block adult channels from appearing in the TV Guide.

Hiding Adult channels



You can hide all channels classified as 'Adult' from the TV Guide. Press and then select Settings and then

Parental controls

Here you have the option to hide all Adult channels from the TV Guide.

Turning off all PIN controlled restrictions

You can turn off all PIN restrictions by selecting HOME, followed by Settings and then Parental Controls.

Accessibility

These services make programmes available to visually impaired and hard of hearing customers.

Digital subtitles, audio description and signed programmes are provided by the broadcasters, but whenever they are available Freesat customers can use them.

Digital subtitles

Subtitles are a text version of the dialogue in a programme. Look out for SUB in the TV Guide which indicates they are available for that programme.

To turn subtitles on while watching live TV, press SUB. To turn them off, press SUB again.

Audio description

Audio description is an additional audio service which describes what is happening on screen, including language, movements, actions and expressions. Look out for AD icon in the TV Guide which indicates they are available for that programme.

To turn audio description on while watching live TV, press AD. To turn it off, press AD again.

Signed programmes

Some broadcasters provide a signed version of popular programmes for hard of hearing viewers. Look out for SL in the TV Guide which indicates it is a signed programme.

Safety Instructions

1. Mains Supply

- a) Operate this product only from the type of power supply indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your local power company.
- b) Disconnect the product from the mains before you start any maintenance or installation procedures.

2. Overloading

Do not overload a wall outlet, extension cord or adapter as this may result in electric fire or shock.

3. Liquid

The product should not be exposed to liquid of any kind. In addition, no objects filled with liquid should be placed on the apparatus.

4. Cleaning

- a) Disconnect the product from the wall outlet before cleaning
- b) Use a light damp cloth (no solvents) to dust the product.

5. Ventilation

- a) The slots on top of the product must be left uncovered to allow proper airflow into the unit.
- b) Do not stand the product on soft furnishings or carpets.
- c) Do not stack electronic equipment on top of the product.

6. Attachments

Do not use any unsupported attachments as these may be hazardous or cause damage to the product.

7. Lighting, storm or not in use

Unplug the product from the wall outlet and disconnect the antenna during a thunderstorm or when left unattended and unused for long periods of time. This will prevent damage to the unit due to lightning and power-surges.

8. Extraneous objects

Do not insert anything through the openings in the unit, where they can touch dangerous voltage points or damage parts.

9. Replacement of parts

When replacement of parts is required, be sure the service technician uses replacement parts specified by the manufacturer or those that have the same characteristics as the original part. Unauthorized substitution may result in additional damage to the unit.

10. Connection to the aerial

Disconnect the product from the mains before connecting or disconnecting the cable from the aerial. Failure to do so can damage the aerial.

11. Connection to the TV

Disconnect the product from the mains before connecting or disconnecting the cable from the TV. Failure to do so can damage the TV.

Safety Instructions

12. Location

- a) Place the product indoors to avoid exposing it to lightning, rain or sun. Do not place it near a radiator or heat register.
- b) We recommend that the product has 10 cm clearance from any other appliances susceptible to electromagnetic influences, such as a TV or a VCR.
- c) Do not block the openings with any object, and do not place the product on a bed, sofa, rug, or other similar surface.
- d) If you place the product on a rack or a bookcase, ensure that there is adequate ventilation and that you have followed the manufacturer's instructions for mounting.
- e) Do not place the product on an unstable cart, stand, tripod, bracket, or table where it can fall. A falling product can cause serious injury to a child or adults, and serious damage to the appliance.

Warning

1. To avoid damage of the power cord or plug

- a) Do not modify or process the power cord or plug arbitrarily.
- b) Do not bend or twist the power cord.
- c) Make sure to disconnect the power cord holding the plug.
- d) Keep heating appliances as far as possible from the power cord in order to prevent the cover vinyl from melting.
- e) The mains plug, as a disconnection device, shall remain readily accessible by the user.

2. To avoid electrical shock

- a) Do not open the main body.
- b) Do not insert metal or inflammable objects inside the product.
- c) Do not touch the power plug with wet hands.
- d) Disconnect the power cord in case of lightning.
- e) Unplug power cable to install the antenna cable.

3. To avoid damage of product

Do not use the product when it is out of order. If you continue to use the product when defective, serious damage can be caused. Make sure to contact your local product distributor if the product is out of order.

4. To avoid damage of the USB hard drive

- a) Do not turn the power off suddenly while the USB hard drive is running.
- b) The company shall not be liable for any corruption of data on USB hard drive caused by carelessness or misuse.

Troubleshooting

Before contacting your local service centre, please read the tips below carefully. If the problem persists after completing the following procedure, please contact your local product distributor or service centre for further instructions.

1. The product will not switch on.

- a) Check the main power cable and make sure it is plugged into a suitable power outlet.
- b) Check that the mains supply is switched on.
- c) Connect the power cable to a different power outlet.

2. No picture

- a) Make sure that the product is powered on and in operation mode. (Press the STANDBY button)
- b) Make sure that the AV cables is firmly connected to the TV.
- C) Make sure that the antenna cable is properly connected to the product.
- d) Be sure to activate channel search.
- e) Check the brightness level of the TV.
- f) Check if the channel is currently on air.

3. Poor picture/sound quality

- a) Make sure there is no mobile phone or microwave oven near the product.
- b) Keep the power cable and the RF cable apart from each other.

Note: If the antenna is covered with snow or the RF is weakened by heavy rain, the condition of the sound and picture may temporarily be poor. However, poor sound and picture quality due to weather conditions cannot be accepted as a malfunction of product.

- c) Change the satellite dish for a larger one as this will increase the signal levels received.
- d) Replace the LNB with a lower noise factor in case the noise factor is too high.
- e) Replace the LNB with a new one in case it is damaged or out of order.
- f) Install the antenna in an obstacle-free place.
- h) Check the signal levels and adjust your antenna if the level is too low. The signal level may be affected by weather conditions.

Troubleshooting

4. No or poor sound

- a) Check that your AV cable is connected correctly.
- b) Check the volume levels of your TV set and the product.
- c) Check if the product or TV is on mute.

5. Remote control does not operate

- a) To control the product, make sure that the STB mode is selected on the remote control.
- b) To control the product, the top end of the remote control should point directly towards the receiving part of the product.
- c) Remove and reinsert the batteries in the remote control.
- d) Replace the batteries in the remote control for a new set.

6. Cannot make reservations

a) Check that no previous reservations are conflicting with the new reservation.

7. Channel search does not work

a) Make sure that the antenna setting in the menu is correct.

8. Cannot record progammes

- a) Check if the USB hard drive is connected for recording purpose.
- b) The USB hard drive is full. Delete unnecessary programmes and make space for new recording.
- c) Check if the recording conflicts with another channel. Stop the current recording or wait until the recording is finished.
- d) Check that the product is switched on when the recording starts.

Factory Reset

To perform a complete reset of your box go to Settings, then System Settings.

Select Factory default and Reset system.

You will need to enter your PIN to proceed (the default pin is 0000)

Once you've entered your PIN the box will restart and you will need to begin the installation process.

- 1. Select the button on the remote control. The button will blink once.
- 2. Keep pressing the button for 3 seconds until the button lights on.
- 3. Enter the 3-digit code. Every time a number is entered, the button will blink. When the third digit is entered, the button will blink twice.
- 4. If a valid 3-digit code is entered, the product will power off.
- 5. Press the button and the mode button will blink three times. The setup is complete.

6. If the product does not power off, repeat the instruction from 3 to 5.

TOP TIP

When no code is entered for one minute, the universal setting mode will switch to normal mode.

Try several setting codes and select the code that has the most functions.

Remote Control Function List

The keys on the remote control function as in the list below. Some keys may not function depending on the product.

Button	TV	Button	TV
STANDBY	POWER	Exit	EXIT
TV			VOLUME UP
STB			VOLUME DOWN
RECORDINGS		Home	MENU
MUTE	MUTE	i	INFO
TEXT	TEXT	P ^	PAGE UP
I ◀◀	TEXT MIX	Pν	PAGE DOWN
	PIP INPUT	RED	RED
>>	TEXT OFF,	GREEN	GREEN
44	PIP OFF	YELLOW	YELLOW
>	TEXT EXPAND	BLUE	BLUE
>>	PIP	1	1
R	PIP MOVE	2	2
II	TEXT HOLD	3	3
List		4	4
Search		5	5
TV Guide	GUIDE	6	6
ОК	ОК	7	7
UP	UP	8	8
LEFT	LEFT	9	9
RIGHT	RIGHT	0	0
DOWN	DOWN	SUB	SUBTITLE
Back	LAST	AD	

TV Code List

Brand	Code
A.R. Systems	102, 006, 080, 066
Accent	006
Acer	261, 278, 305
Acoustic Solutions	210, 312, 324, 370, 386, 428, 477
Acura	002
ADL	224
Admiral	043, 014, 015, 023
Advent	192, 342
Adyson	034, 035
AEG	211, 256, 327, 489
Agashi	043, 034, 035
AGB	094
Agef	014
Aiko	006, 061, 043, 074, 002, 004, 011, 028, 034, 035, 065
Aim	006, 171
Airis	316, 413, 473
Aiwa	139, 141, 445
Akai	102, 006, 098, 144, 145, 111, 061, 043, 074, 148, 232, 280, 128, 122, 461, 109, 462, 489, 094, 084, 083, 065, 035, 034, 033, 028, 023, 011, 004, 002, 154, 321
Akiba	006, 036, 080, 045
Akito	006, 044
Akura	006, 144, 134, 204, 043, 036, 002, 026, 045, 071, 298, 327, 376, 451
Alaron	034
Alba	006, 144, 134, 204, 087, 064, 036, 005, 108, 473, 455, 447, 388, 099, 084, 077, 072, 065, 059, 034, 023, 002
AlfaView	220
All-Tel	190, 238
Allorgan	032, 035
Allstar	006
Amitech	131, 241
Amoi	315
Amplivision	064, 035, 049
Amstrad	006, 204, 043, 036, 074, 002, 023, 026, 062, 065, 071, 094, 128, 410, 436, 451

Anam	006, 002
Anam National	006, 129
Andersson	210, 211
Anglo	043, 002
Anitech	006, 043, 002, 045
Ansonic	006, 134, 064, 002, 017, 023, 042, 048, 066, 070, 285
AOC	120, 266, 335
Apollo	083
Apro	420
Arc En Ciel	020
Arcam	034, 035
Ardem	006, 144
Arena	006
Aristona	102, 006
ART	204
Arthur Martin	023
ASA	010, 014, 017, 018, 055
Asberg	006
Asora	002
Asuka	043, 036, 034, 035, 045
Atec	340, 387
Atlantic	006, 032, 034, 042, 049
Atori	002
Auchan	023
Audiosonic	006, 144, 086, 145, 043, 064, 036, 002, 020, 035, 066, 190, 250, 405, 473
Audioton	086, 043, 064, 035
Audiovox	079
Aumark	009
Autovox	014, 032, 035, 056, 097
AVC	472
Avious	352
Awa	111, 005, 019, 002, 003, 035, 079, 271
Axxent	002
Baier	192

Baird	011, 012, 020, 033, 035, 054, 218
Bang & Olufsen	014
Barco	023
Basic Line	102, 006, 134, 204, 036, 080, 002, 023, 035, 045, 053, 066, 211
Bastide	035
Bauer	171, 344
Baur	006, 030, 061, 028, 056, 093, 096, 097, 101
Bazin	035
Beaumark	027
Beko	006, 144, 086, 145, 111, 064, 072, 172, 361, 405
Belson	138, 201, 215
Belstar	204
BenQ	223, 328, 329
Bensten	258, 436, 437
Beon	006, 072
Berthen	134
Best	064
Bestar	006, 064, 066
Bestar-Daewoo	066
Binatone	035
Black Diamond	444, 204, 211
Blackway	036, 045
Blaupunkt	030, 005, 080, 025, 028, 096, 101
Blue Media	340, 387
Blue Sky	102, 006, 144, 134, 204, 145, 087, 036, 080, 091, 119, 045, 215, 229, 254, 265, 310, 361, 380, 445
Blue Star	045
BlueH	391
Воса	361
Boman	256
Boots	002, 035, 044
Bork	265
Bosch	049
BPL	006, 033, 045, 202
Brandt	120, 144, 103, 020, 046, 052
Brimax	380
Brinkmann	006, 134, 086, 072, 095

Brionvega	006, 014, 062
Britannia	034, 035
Brother	043
Bruns	014
BSR	023
втс	036
Bush	102, 006, 144, 134, 204, 138, 087, 061, 043, 036, 005, 108, 376, 373, 370, 361, 355, 352, 327, 388, 439, 431, 432, 440, 448, 451, 473, 476, 477, 478, 002, 033, 035, 044, 045, 056, 059, 065, 065, 095, 133, 164, 210, 213, 229, 232, 250
Canton	036
Capsonic	043
Carad	134, 204, 113
Carena	006, 080
Carrefour	006, 005, 010
Carver	025
Cascade	006, 002
Casio	006
Cat	373, 504
Cathay	006, 386
CCE	006
cello	397, 410, 418, 419, 420
Centrum	204
Centurion	006
Century	014
CGE	064, 023, 072
Changhong	180
Chimei	475, 415
Cimline	036, 002
Cineral	079
Cinex	128, 213, 327
Citizen	009
City	002
Clarivox	006, 010, 072
Classic	091
Clatronic	006, 144, 043, 064, 036, 002, 035, 049, 065, 256
Clayton	204
CMS	034

CMS Hightec	035
Concorde	002
Condor	006, 043, 064, 002, 034, 045, 049, 070, 072
Conia	179, 201, 298, 376
Conrac	172
Contec	006, 005, 002, 034
Continental Edison	087, 020, 046
Cosmel	006, 002
Crosley	014, 023
Crown	006, 144, 134, 204, 086, 145, 087, 111, 143, 064, 361, 135, 072, 071, 053, 033, 002
Crown Mustang	135
CS Electronics	036, 034
CTX	395
Curtis Mathes	009, 015, 021, 024, 079
Cybertron	036
Cytronix	246
D-Vision	102, 006, 451
Daewoo	102, 006, 124, 444, 036, 441, 406, 341, 338, 271, 249, 195, 192, 190, 164, 133, 119, 091, 079, 066, 035, 034, 002
Dainichi	036, 034
Daitsu	237
Dansai	006, 005, 002, 004, 033, 034, 035
Dansette	071
Dantax	144, 204, 086, 145, 064, 361, 445, 450
Datsura	033
Dawa	006
Daytek	221, 269, 271
Dayton	002, 221, 269
Daytron	006, 002, 066
De Graaf	098, 007, 023, 033
DEC	258
Decca	006, 011, 035, 044, 094, 118
Dell	235, 278
Denko	043
Denon	021

Denver	NNG 108 214 256 352 410 453
Deliver	006, 108, 214, 256, 352, 410, 453, 473, 489
Desmet	006, 002, 014, 049
DGM	436
Diamant	006
Diamond	181
DiBoss	293
Digatron	006
Digihome	210, 370
Digiline	006, 134, 018
Digimate	198
Digital Device	340
Digitek	310, 380
Digitrex	478
Digix Media	195
Dixi	006, 002, 014, 035
DL	199, 258
DMTech	260, 438, 449, 454, 456
Domeos	134
Dream Vision	379
DTS	002
Dual	006, 204, 208, 035, 042, 054, 056, 095, 097, 164, 210, 219, 237, 468
Dual Tec	035
Dumont	010, 011, 014, 017, 035
Durabrand	285, 361, 453
Dux	006
Dynatech	035
Dynatron	006
e-motion	380
E:max	256, 316
Easy Living	230, 326, 402
Ессо	162
ECE	006
Edison-Minerva	087
Eiki	150
Elba-Sharp	094

Elbe	102, 006, 113, 036, 028, 035, 042, 048, 062, 070, 075, 094, 099, 121
Elcit	014, 023, 094
Elekta	043, 045
Element	376
Elfunk	204, 222
ELG	006
Elin	006, 098, 061, 002, 017, 056
Elite	006, 036, 049
Elta	043, 002
Emerson	006, 144, 134, 444, 086, 061, 064, 010, 014, 027, 045, 049, 065, 119
Emperor	045
Envision	266
Epson	243, 184, 186
Erae	267
Erres	006
ESC	006, 035
Etron	002, 023
Eurofeel	043, 035
Euroman	006, 043, 064, 034, 035
Europa	006
Europhon	006, 035, 094
Evesham	230, 340, 370, 382, 387
Evesham Technology	387
Evolution	395
Excors	467
Expert	023, 032, 042
Exquisit	006
FairTec	268
Fenner	002, 066
Ferguson	006, 120, 098, 103, 030, 204, 012, 020, 029, 046, 052, 054, 077, 292, 447, 476
Fidelity	006, 061, 043, 023, 026, 029, 034, 065, 071, 093, 097
Filsai	035
Finlandia	098, 061, 011, 023, 033, 055
Finlux	102, 006, 144, 145, 333, 327, 172, 122, 118, 094, 089, 084, 083, 070, 055, 035, 023, 018, 017, 014, 011, 010

Firstline	102, 006, 144, 134, 204, 061, 341, 267, 265, 250, 275, 172, 119, 097, 070, 066, 056, 050, 035, 034, 033, 011, 002
Fisher	061, 064, 005, 008, 011, 014, 017, 033, 035, 056, 097
Flint	006, 113, 043, 036, 080, 011
Force	210
Forgestone	029
Formenti	006, 014, 023, 034, 049
Formenti-Phoenix	034, 049
Fortress	014, 015
Fraba	006, 064
Friac	006, 113, 064, 002, 091
Frontech	043, 002, 023, 035
Fujimaro	190
Fujitsu	002, 011, 032, 035, 042, 137, 173, 187
Fujitsu General	002, 032, 035, 137
Fujitsu Siemens	172, 211, 230, 246, 268, 369
Funai	144, 134, 043, 275, 336, 369, 407
Galaxi	006
Galaxis	006, 064
Gateway	394
GBC	036, 002, 023, 066
GE	015, 027, 045, 052, 079, 150, 442
GEC	006, 061, 011, 023, 035, 056, 094
Geloso	002, 023, 066
General	020, 046, 082
General Technic	002
Genexxa	006, 036, 002, 023, 071
Gericom	172, 190, 195, 220, 224, 246, 340, 388
Go Video	009
Gold	397, 413, 484, 485
Goldfunk	134
GoldHand	034
GoldStar	006, 144, 145, 111, 061, 001, 007, 020, 023, 027, 034, 035, 047, 067
Gooding	087

Goodmans	102, 006, 120, 144, 103, 134, 124, 444, 204, 087, 043, 036, 005, 478, 271, 232, 477, 250, 476, 271, 445, 355, 370, 373, 440, 376, 382, 383, 386, 002, 004, 011, 035, 047, 052, 054, 065, 066, 084, 091, 094, 119, 121, 133, 172, 195, 210
Gorenje	064
GPM	036
Gradiente	006, 025, 207
Graetz	144, 087, 061, 023, 053, 065, 211
Gran Prix	128
Granada	006, 098, 103, 005, 019, 038, 011, 023, 033, 035, 053, 054, 060, 081, 083, 094, 008
Grandin	102, 006, 144, 134, 204, 145, 113, 036, 080, 272, 270, 269, 246, 220, 215, 195, 190, 119, 066, 049, 045, 023, 002
Gronic	035
Grundig	102, 006, 030, 087, 142, 005, 108, 498, 476, 448, 447, 445, 430, 405, 370, 271, 267, 250, 225, 135, 121, 010, 101, 096, 028, 077
Grunkel	211
H & B	172, 456
Haier	138, 344, 392, 339
Halifax	043, 034, 035
Hallmark	027
Hampton	034, 035
Hanimex	036, 443
Hanns.G	402
Hannspree	262, 263, 264, 342, 401, 402, 463
Hanseatic	102, 006, 120, 144, 124, 061, 064, 172, 133, 097, 095, 091, 067, 056, 049, 048, 045, 035, 014, 002
Hantarex	006, 002, 094, 190, 260, 289
Hantor	006
Harsper	190
Harwa	162, 218, 238
Harwood	006, 087, 002, 071
Hauppauge	006
Havermy	015
НСМ	006, 043, 036, 002, 035, 045, 071, 072
Hema	002, 035
Hemmermann	056, 097

Hifivox	020
Higashi	034
Highline	006, 043
Hikona	036, 452
Hinari	006, 043, 036, 005, 002, 033, 059, 077, 443
Hisawa	144, 113, 036, 080, 045
Hisense	102, 092, 165, 254, 265, 366, 491
Hit	014
Hitachi	006, 098, 124, 204, 208, 005, 019, 037, 146, 152, 153, 163, 169, 193, 197, 007, 206, 210, 217, 227, 295, 296, 330, 377, 399, 424, 483, 020, 021, 023, 027, 035, 054, 056, 060, 076, 081, 083, 084, 085, 089, 091, 094, 018, 106, 107, 011
Hitachi Fujian	019
Hitsu	113, 036, 080, 002
HMV	014
Hoeher	144, 190, 211, 327
Home Electronics	111
Hornyphon	006
Hoshai	036, 080, 045
Huanyu	034, 066
Hugoson	198, 224
Humax	505, 299, 506, 507, 245, 319, 322, 411, 433, 479
HYD	271
Hygashi	034, 035
Hyper	002, 034, 035
Hypersonic	061
Hypson	102, 006, 144, 134, 204, 086, 145, 043, 080, 035, 045, 118
Hyundai	164, 190, 192, 241, 244, 271, 291, 317, 338, 340, 341, 439
Iberia	006
ICE	006, 043, 036, 034, 035, 065
ICeS	036, 034
IDEAL	327
Igo	226
IISonic	271, 308, 342
liyama	193, 198, 224
Imperial	006, 064, 056, 072, 121, 487

Indiana	006
InFocus	212, 220, 283
Ingelen	144, 113, 087, 023
Ingersol	002
Inno Hit	036, 002, 011, 035, 045, 047, 094, 211
Innovation	095
Innowert	190, 246
Interbuy	006, 043, 002
Interfunk	006, 061, 014, 020, 023, 056, 093
Internal	102, 444, 119
Intervision	006, 086, 087, 043, 036, 080, 002, 035, 045, 067, 095
Irradio	006, 036, 002, 047, 065, 147
Isukai	006, 036, 080, 045
ITC	035, 049
ITS	006, 043, 036, 034, 045, 065
ITT	098, 113, 061, 023, 029, 033, 053 055, 056, 083, 084, 097
ITT Nokia	098, 113, 111, 061, 023, 033, 053 055, 056, 083, 084
ITV	006, 043, 066
JDV	451
Jean	005, 307, 308
JEC	004
JMB	102, 124, 077, 091
JNC	378
Jocel	143
Jouge	284
Jubilee	102
JVC	111, 036, 005, 129, 130, 015, 029 065, 072, 137, 149, 207, 264, 362 408, 496
Kaisui	006, 036, 080, 002, 034, 035, 045
Kamp	034
Kapsch	061, 017, 023, 032, 042
Karcher	144, 113, 111, 043, 064, 045, 164, 327, 451
Kathrein	102, 195
Kawa	065
Kawasho	034

KB Aristocrat	023
Kendo	006, 204, 113, 064, 062, 067, 070, 095, 099, 128, 210, 285, 333
Kennedy	023, 032, 075
Kennex	204
Keymat	258, 300, 398, 436, 437
Kingsley	034
Kioto	142
Kiss	170
Kiton	006, 134
Kneissel	102, 006, 113, 064, 042, 048, 062 066, 070, 075, 091
Kobra	290
Kolster	006, 036, 056
Konig	006, 016
Konka	006, 144, 036, 065, 072, 126, 158, 201
Kontakt	087
Korpel	006
Korting	064, 014, 049
Kosmos	006
Kotron	071, 440
Koyoda	002
Kreisen	192, 293
KTV	035
Kuba	056
Kyoshu	071, 072
Kyoto	023, 034, 035
L&S Electronic	144, 172, 190
LaSAT	086
Lava	293
Lavis	204
Leader	002
Lecson	006
Lemair	070
Lenco	006, 108, 017, 066, 352, 452
Lenoir	002, 214
Lentec	316
Lexsor	218, 303

Leyto	Levco	006, 043, 011
Liesenk 6 Tter 006 Lifetec 006, 144, 134, 204, 208, 036, 002 Lifetec 006, 144, 134, 204, 208, 036, 002 Lloyd's 002 Local India TV 002, 033, 109, 280 Lodos 204, 210 Loewe 006, 064, 014, 048, 093, 094, 123 131, 167, 414, 434 434 Logik 292, 376, 464, 465, 466 Logix 134, 095 Luker 451 Luma 204, 002, 023, 032, 042, 062, 066, 070 066, 070 006, 002 Luxor 098, 204, 061, 023, 033, 035, 047, 055, 056, 060, 083, 084, 122, 211 LXI 022 M Electronic 096, 144, 124, 030, 061, 361, 133, 035, 034, 023, 020, 013, 361, 361, 133, 035, 084, 070, 066, 056, 056, 055, 054, 046, 035, 034, 023, 020, 018, 017, 002 Madison 006 MAG 298, 376 Magnadyne 014, 023, 094, 097 Magnafon 012, 034, 094 Magnaron 005, 003 Magnum 006, 144, 145, 128, 242 Mandor 043 Manesth 006, 043, 004, 035, 049	Leyco	
Liesenkotter 006 Lifetec 006, 144, 134, 204, 208, 036, 002 Lloyd's 002 Local India TV 002, 033, 109, 280 Lodos 204, 210 Loewe 006, 064, 014, 048, 093, 094, 123 131, 167, 414, 434 Logic 494 Logik 292, 376, 464, 465, 466 Logix 134, 095 Luker 451 Luma 204, 002, 023, 032, 042, 062, 066, 070 Lumatron 006, 043, 012, 023, 032, 035, 047 055, 056, 060, 083, 084, 122, 211 LXI 022 M Electronic 098, 204, 061, 023, 033, 035, 047, 055, 056, 060, 083, 084, 122, 211 MAG 298, 376 Magnadyne 014, 023, 094 Magnaron 012, 034, 094 Magnaron 043 Magnum 006, 144, 145, 128, 242 Mandor 043 Manesth 006, 043, 074, 075, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Magma 290, 340, 378, 404 Marantz 102, 006, 071, 140, 277, 317	LG	102, 006, 144, 145, 138, 061, 064, 248, 281, 354, 367, 368, 384, 396, 416, 417, 425, 426, 215, 209, 067, 047, 035, 034, 027, 023, 002, 001, 236, 257
Lifetec 006, 144, 134, 204, 208, 036, 002 Cloyd's 002 Lodos 204, 210 Loewe 006, 064, 014, 048, 093, 094, 123 131, 167, 414, 434 494 Logik 292, 376, 464, 465, 466 Logix 134, 095 Luker 451 Luma 204, 002, 023, 032, 042, 062, 066, 070 Lux May 006, 002 Lux May 006, 060, 002 Lux May 006, 002 M Electronic 006, 144, 124, 030, 061, 361, 133, 033, 034, 022, 211 MS Electronic 006, 144, 124, 030, 061, 361, 133, 033, 084, 022, 020, 018, 017, 002 Madison 006 MAG 298, 376 Magnadyne 014, 023, 094, 097 Magnafon 012, 034, 094 Magnavox 005, 003 Magnum 006, 144, 145, 128, 242 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 073, 071, 140, 277, 317	Liesenk & Tter	006
Lloyd's 002 Local India TV 002, 033, 109, 280 Lodos 204, 210 Loewe 006, 064, 014, 048, 093, 094, 123 131, 167, 414, 434 434 Logic 494 Logik 204, 001, 003, 029, 162, 195, 224, 292, 376, 464, 465, 466 Logix 134, 095 Luker 451 Luma 204, 002, 023, 032, 042, 062, 066, 070 066, 070 006, 043, 012, 023, 032, 035, 042 Lux May 006, 002 Luxor 098, 204, 061, 023, 033, 035, 047, 055, 056, 060, 083, 084, 122, 211 LXI 022 M Electronic 096, 144, 124, 030, 061, 361, 133, 093, 089, 084, 070, 066, 056, 056, 020, 018, 017, 002 Madison 006 MAG 298, 376 Magnadyne 014, 023, 094, 097 Magnafon 012, 034, 094 Magnaron 012, 034, 094 Magnum 006, 144, 145, 128, 242 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Magnattz	Liesenkotter	006
Local India TV Lodos 204, 210 Loewe 006, 064, 014, 048, 093, 094, 123 131, 167, 414, 434 Logic 494 Logik 204, 001, 003, 029, 162, 195, 224, 292, 376, 464, 465, 466 Logix 134, 095 Luker 451 Luma 204, 002, 023, 032, 042, 062, 066, 070 Lumatron 006, 043, 012, 023, 032, 035, 042 Lux May 006, 002 Lux May 006, 002 Lux May 022 M Electronic 006, 144, 124, 030, 061, 361, 133, 033, 084, 122, 211 M Electronic 006, 144, 124, 030, 061, 361, 133, 093, 084, 077, 0066, 056, 020, 018, 017, 002 Madison 006 MAG 298, 376 Magnadyne 014, 023, 094, 097 Magnafon 012, 034, 094 Magnavox 005, 003 Magnin 442 Magnum 006, 144, 145, 128, 242 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Maqma 290, 340, 378, 404 Marantz 102, 006, 071, 140, 277, 317	Lifetec	006, 144, 134, 204, 208, 036, 002 066, 095, 137
Lodos 204, 210 Loewe 006, 064, 014, 048, 093, 094, 123 131, 167, 414, 434 Logic 494 Logik 204, 001, 003, 029, 162, 195, 224, 292, 376, 464, 465, 466 Logix 134, 095 Luker 451 Luma 204, 002, 023, 032, 042, 062, 066, 070 Lumatron 006, 043, 012, 023, 032, 035, 042 Lux May 006, 002 Lux May 006, 002 Lux May 022 M Electronic 098, 204, 061, 023, 033, 035, 047, 055, 056, 060, 083, 084, 122, 211 LXI 022 M Electronic 098, 376 Madison 006 MAG 298, 376 Magnadyne 014, 023, 094, 097 Magnafon 012, 034, 094 Magnavox 005, 003 Magnin 442 Magnum 006, 144, 145, 128, 242 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Maqma 290, 340, 378, 404 Marantz 102, 006, 071, 140, 277, 317	Lloyd's	002
Loewe 006, 064, 014, 048, 093, 094, 123 Logic 494 Logik 204, 001, 003, 029, 162, 195, 224, 292, 376, 464, 465, 466 Logix 134, 095 Luker 451 Lumatron 006, 043, 012, 023, 032, 042, 062, 066, 070 Lux May 006, 002 Luxor 098, 204, 061, 023, 033, 035, 047, 055, 056, 060, 083, 084, 122, 211 LXI 022 M Electronic 006, 144, 124, 030, 061, 361, 133, 093, 083, 084, 070, 066, 056, 056, 055, 054, 046, 035, 034, 023, 020, 078, 017, 002 Madison 006 MAG 298, 376 Magnadyne 014, 023, 094, 097 Magnafon 012, 034, 094 Magnavox 005, 003 Magnin 442 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Magnattz 102, 006, 071, 140, 277, 317	Local India TV	002, 033, 109, 280
Logic 494 Logik 204, 001, 003, 029, 162, 195, 224, 292, 376, 464, 465, 466 Logix 134, 095 Luker 451 Luma 204, 002, 023, 032, 042, 062, 066, 070 Lumatron 006, 043, 012, 023, 032, 035, 042 Lux May 006, 002 Luxor 098, 204, 061, 023, 033, 035, 047, 055, 056, 060, 083, 084, 122, 211 LXI 022 M Electronic 006, 144, 124, 030, 061, 361, 133, 093, 084, 070, 066, 056, 056, 055, 054, 046, 035, 034, 023, 020, 018, 017, 002 Madison 006 MAG 298, 376 Magnadyne 014, 023, 094, 097 Magnaron 012, 034, 094 Magnavox 005, 003 Magnin 442 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Magnatz 102, 006, 071, 140, 277, 317	Lodos	204, 210
Logik 204, 001, 003, 029, 162, 195, 224, 292, 376, 464, 465, 466 Luker 451 Luma 204, 002, 023, 032, 042, 062, 066, 070 Lux May 006, 043, 012, 023, 032, 035, 042 Lux May 006, 002 Lux May 006, 043, 014, 023, 033, 035, 047, 055, 056, 060, 083, 084, 122, 211 LXI 022 M Electronic 006, 144, 124, 030, 061, 361, 133, 093, 089, 084, 070, 066, 056, 055, 054, 046, 035, 034, 023, 020, 018, 017, 002 Madison 006 MAG 298, 376 Magnadyne 014, 023, 094, 097 Magnafon 012, 034, 094 Magnavox 005, 003 Magnin 442 Magnum 006, 144, 145, 128, 242 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Maqma 290, 340, 378, 404 Marantz 102, 006, 071, 140, 277, 317	Loewe	006, 064, 014, 048, 093, 094, 123 131, 167, 414, 434
Logix 134, 095 Luker 451 Luma 204, 002, 023, 032, 042, 062, 066, 070 Lumatron 006, 043, 012, 023, 032, 035, 042 Lux May 006, 002 Luxor 098, 204, 061, 023, 033, 035, 047, 055, 056, 060, 083, 084, 122, 211 LXI 022 M Electronic 006, 144, 124, 030, 061, 361, 133, 093, 089, 084, 070, 066, 056, 056, 020, 018, 017, 002 MAG 298, 376 Magnadyne 014, 023, 094, 097 Magnaron 012, 034, 094 Magnaron 005, 003 Magnum 006, 144, 145, 128, 242 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Magnatz 102, 006, 071, 140, 277, 317	Logic	494
Luker 451 Luma 204, 002, 023, 032, 042, 062, 066, 070 Lumatron 006, 043, 012, 023, 032, 035, 042 Lux May 006, 002 Luxor 098, 204, 061, 023, 033, 035, 047, 055, 056, 060, 083, 084, 122, 211 LXI 022 M Electronic 006, 144, 124, 030, 061, 361, 133, 093, 084, 070, 066, 056, 055, 054, 046, 035, 034, 023, 020, 018, 017, 002 MAG 298, 376 Magnadyne 014, 023, 094, 097 Magnarox 005, 003 Magnin 442 Magnum 006, 144, 145, 128, 242 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Magnatz 102, 006, 071, 140, 277, 317	Logik	204, 001, 003, 029, 162, 195, 224, 292, 376, 464, 465, 466
Luma 204, 002, 023, 032, 042, 062, 066, 070 Lumatron 006, 043, 012, 023, 032, 035, 042 Lux May 006, 002 Lux Or 098, 204, 061, 023, 033, 035, 047, 055, 056, 060, 083, 084, 122, 211 LXI 022 M Electronic 006, 144, 124, 030, 061, 361, 133, 093, 084, 070, 066, 055, 056, 055, 034, 046, 035, 034, 023, 020, 018, 017, 002 MAG 298, 376 Magnadyne 014, 023, 094, 097 Magnafon 012, 034, 094 Magnavox 005, 003 Magnum 006, 144, 145, 128, 242 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Marantz 102, 006, 071, 140, 277, 317	Logix	134, 095
Lumatron 006, 043, 012, 023, 032, 035, 042 Lux May 006, 002 Luxor 098, 204, 061, 023, 033, 035, 047, 055, 056, 060, 083, 084, 122, 211 LXI 022 M Electronic 006, 144, 124, 030, 061, 361, 133, 093, 089, 084, 070, 066, 056, 055, 054, 046, 035, 034, 023, 020, 018, 017, 002 Madison 006 MAG 298, 376 Magnadyne 014, 023, 094, 097 Magnaron 012, 034, 094 Magnavox 005, 003 Magnum 006, 144, 145, 128, 242 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Maqma 290, 340, 378, 404 Marantz 102, 006, 071, 140, 277, 317	Luker	451
Lux May 006, 002 Luxor 098, 204, 061, 023, 033, 035, 047, 055, 056, 060, 083, 084, 122, 211 LXI 022 M Electronic 006, 144, 124, 030, 061, 361, 133, 093, 083, 084, 070, 066, 055, 054, 046, 035, 034, 023, 020, 018, 017, 002 Madison 006 MAG 298, 376 Magnadyne 014, 023, 094, 097 Magnarox 005, 003 Magnin 442 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Magnatz 102, 006, 071, 140, 277, 317	Luma	204, 002, 023, 032, 042, 062, 066, 070
Luxor 098, 204, 061, 023, 033, 035, 047, 055, 056, 060, 083, 084, 122, 211 LXI 022 M Electronic 006, 144, 124, 030, 061, 361, 133, 093, 089, 084, 070, 066, 056, 055, 055, 054, 046, 035, 034, 023, 020, 018, 017, 002 Madison 006 MAG 298, 376 Magnadyne 014, 023, 094, 097 Magnarox 005, 003 Magnin 442 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Magnatz 102, 006, 071, 140, 277, 317	Lumatron	006, 043, 012, 023, 032, 035, 042
LXI 022 M Electronic 006, 144, 124, 030, 061, 361, 133, 093, 084, 070, 066, 056, 056, 055, 054, 046, 035, 034, 023, 020, 018, 017, 002 Madison 006 MAG 298, 376 Magnadyne 014, 023, 094, 097 Magnafon 012, 034, 094 Magnin 442 Magnum 006, 144, 145, 128, 242 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Maqma 290, 340, 378, 404 Marantz 102, 006, 071, 140, 277, 317	Lux May	006, 002
M Electronic 006, 144, 124, 030, 061, 361, 133, 093, 084, 070, 066, 056, 056, 055, 083, 084, 070, 066, 055, 020, 018, 017, 002 Madison 006 MAG 298, 376 Magnadyne 014, 023, 094, 097 Magnarox 005, 003 Magnin 442 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Magmatz 102, 006, 071, 140, 277, 317	Luxor	098, 204, 061, 023, 033, 035, 047, 055, 056, 060, 083, 084, 122, 211
Madison 006 MAG 298, 376 Magnadyne 014, 023, 094, 097 Magnafon 012, 034, 094 Magnavox 005, 003 Magnin 442 Magnum 006, 144, 145, 128, 242 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Maqma 290, 340, 378, 404 Marantz 102, 006, 071, 140, 277, 317	LXI	022
MAG 298, 376 Magnadyne 014, 023, 094, 097 Magnafon 012, 034, 094 Magnavox 005, 003 Magnin 442 Magnum 006, 144, 145, 128, 242 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Maqma 290, 340, 378, 404 Marantz 102, 006, 071, 140, 277, 317	M Electronic	006, 144, 124, 030, 061, 361, 133, 093, 089, 084, 070, 066, 056, 055, 054, 046, 035, 034, 023, 020, 018, 017, 002
Magnadyne 014, 023, 094, 097 Magnafon 012, 034, 094 Magnavox 005, 003 Magnin 442 Magnum 006, 144, 145, 128, 242 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Maqma 290, 340, 378, 404 Marantz 102, 006, 071, 140, 277, 317	Madison	006
Magnafon 012, 034, 094 Magnavox 005, 003 Magnin 442 Magnum 006, 144, 145, 128, 242 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Maqma 290, 340, 378, 404 Marantz 102, 006, 071, 140, 277, 317	MAG	298, 376
Magnavox 005, 003 Magnin 442 Magnum 006, 144, 145, 128, 242 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Maqma 290, 340, 378, 404 Marantz 102, 006, 071, 140, 277, 317	Magnadyne	014, 023, 094, 097
Magnin 442 Magnum 006, 144, 145, 128, 242 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Maqma 290, 340, 378, 404 Marantz 102, 006, 071, 140, 277, 317	Magnafon	012, 034, 094
Magnum 006, 144, 145, 128, 242 Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Maqma 290, 340, 378, 404 Marantz 102, 006, 071, 140, 277, 317	Magnavox	005, 003
Mandor 043 Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Maqma 290, 340, 378, 404 Marantz 102, 006, 071, 140, 277, 317	Magnin	442
Manesth 006, 043, 004, 035, 049 Manhattan 006, 134, 204, 164, 192, 237, 293 Maqma 290, 340, 378, 404 Marantz 102, 006, 071, 140, 277, 317	Magnum	006, 144, 145, 128, 242
Manhattan 006, 134, 204, 164, 192, 237, 293 Maqma 290, 340, 378, 404 Marantz 102, 006, 071, 140, 277, 317	Mandor	043
Maqma 290, 340, 378, 404 Marantz 102, 006, 071, 140, 277, 317	Manesth	006, 043, 004, 035, 049
Marantz 102, 006, 071, 140, 277, 317	Manhattan	006, 134, 204, 164, 192, 237, 293
	Maqma	290, 340, 378, 404
Marelli 014	Marantz	102, 006, 071, 140, 277, 317
	Marelli	014

Mark	006, 144, 145, 002, 034, 035, 066
Marks and Spencer	420
Marquant	478
Mascom	327, 432
Master's	091
Masuda	036
Matsui	102, 006, 144, 030, 204, 087, 005, 080, 074, 153, 195, 097, 094, 369, 445, 077, 447, 065, 059, 056, 052, 044, 035, 033, 028, 011, 008, 004, 003, 002
Matsushita	129
Maxent	394, 160
Maxim	213, 327, 451
Medialine	220, 449
Mediator	102, 006
Medion	102, 006, 144, 134, 204, 138, 208, 172, 195, 093, 040, 210, 213, 219, 230, 285, 327, 370, 440, 456
Megas	113
Megatron	021, 027
MEI	204
Memorex	204, 002, 009, 027
Memphis	002, 011
Mercury	006, 002
Metronic	120
Metz	006, 134, 030, 108, 014 ,028, 063 096, 101, 211, 318
MGA	027, 442
Micromaxx	006, 134, 204, 121, 172, 256, 456
Microspot	343
Microstar	172
Mikomi	204, 153, 210
Minato	006
Minerva	030, 087, 019, 010, 028, 094, 096, 101
Minoka	006, 071
Mirai	369, 423, 482
Mirror	440
Mistral Electronics	029
Mitsai	327
Mitsubishi	102, 006, 204, 005, 019, 014, 015, 027, 093, 096, 191, 311

Mivar 034, 035, 047, 048, 094, 112 Mogen 374, 410 Monaco 002 Motorola 015 MTC 064, 009, 034, 056, 093 MTEC 044 MTlogic 144, 473 Multibroadcast 029 Multitech 006, 134, 204, 086, 327 Murphy 017, 023, 034 Murphy 017, 023, 034 Mx Onda 298, 376 MyCom 271 Myrica 369 Myryad 102 NAD 006, 061, 190 Naiko 006, 111, 157, 451 Nakimura 006, 066 Narita 451 NAT 038 NEC 005, 002, 003, 025, 035, 040, 049, 049, 066, 140, 239, 379, 040, 049, 066, 140, 239, 379, 040, 049, 066, 140, 239, 379, 040, 049, 066, 140, 239, 379, 040, 049, 066, 140, 239, 379, 040, 049, 066, 140, 239, 379, 040, 049, 066, 140, 239, 379, 040, 049, 066, 140, 239, 379, 040, 049, 066, 140, 239, 379, 040, 049, 066, 140, 239, 379, 040, 049, 066, 140, 239, 379, 040, 049, 066, 140, 239, 379, 040, 049, 066, 140, 239, 379, 040, 049, 066, 140, 239, 379, 040, 049, 066, 140, 239, 379, 040, 049, 066, 140, 239, 379, 040, 049, 066, 140, 239, 379, 040, 049, 066, 140, 239, 379, 040, 049, 066, 140,		
Monaco 002 Morgan's 006 Motorola 015 MTC 064, 009, 034, 056, 093 MTEC 044 MTlogic 144, 473 Multibroadcast 029 Multitec 006, 134, 204, 086, 327 Multitech 006, 086, 043, 064, 002, 034, 034 Murphy 017, 023, 034 Musikland 036 Mx Onda 298, 376 Myroa 102 NAD 006, 061, 190 NAI 102 NAD 006, 061, 190 Naiko 006, 111, 157, 451 Nakimura 006, 066 Narita 451 NAT 038 NEC 005, 002, 003, 025, 033, 025, 035, 040, 049, 049, 056, 140, 239, 379 NEC 005, 002, 003, 025, 033, 049, 049, 056, 070, 072, 101 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Netsat 006 NetTV 160 <	Mivar	034, 035, 047, 048, 094, 112
Morgan's 006 Motorola 015 MTC 064, 009, 034, 056, 093 MTEC 044 MTlogic 144, 473 Multibroadcast 029 Multitec 006, 134, 204, 086, 327 Multitech 006, 086, 043, 064, 002, 034, 035, 044, 002, 034, 035, 034 Murphy 017, 023, 034 Musikland 036 Mx Onda 298, 376 MyCom 271 Myrica 369 Myryad 102 NAD 006, 061, 190 Naiko 006, 111, 157, 451 Nakimura 006, 066 Narita 451 NAT 038 NEC 005, 002, 003, 025, 033, 025, 035, 040, 049, 066, 140, 239, 379 NEC 005, 002, 003, 025, 034, 049, 066, 140, 239, 379 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Nesx 389 Netsat 006 NewTulk 102, 006, 144, 113, 036, 0	Mogen	374, 410
Motorola 015 MTC 064, 009, 034, 056, 093 MTEC 044 MTlogic 144, 473 Multibroadcast 029 Multitec 006, 134, 204, 086, 327 Multitech 036, 086, 043, 064, 002, 034, Murphy 017, 023, 034 Murphy 017, 023, 034 Mx Onda 298, 376 MyCom 271 Myrica 369 Myryad 102 NAD 006, 061, 190 Naiko 006, 111, 157, 451 Nakimura 006, 066 Narita 451 NAT 038 NEC 005, 002, 003, 025, 033, 025, 035, 040, 049, 056, 140, 239, 379, 379, 040, 049, 066, 140, 239, 379, 379, 040, 055, 070, 072, 101 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 272, 101 Nesx 389 Netsat 006 NetTV 160 New Tech 102, 006, 002, 035, 054 New World 036	Monaco	002
MTC 064, 009, 034, 056, 093 MTEC 044 MTIogic 144, 473 Multibroadcast 029 Multitec 006, 134, 204, 086, 327 Multitech 006, 086, 043, 064, 002, 034, 035, 086, 043, 064, 002, 034, 035, 086, 043, 064, 002, 034, 035, 044, 043, 064, 002, 034, 035, 044, 043, 066 Murphy 017, 023, 034 Musikland 036 Mx Onda 298, 376 MyCom 271 Myrica 369 Myryad 102 NAD 006, 061, 190 Naiko 006, 111, 157, 451 Nakimura 006, 066 Narita 451 NAT 038 NEC 005, 002, 003, 025, 035, 035, 040, 044, 049, 066, 140, 239, 379, 040, 049, 066, 140, 239, 379, 072, 101 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Nesx 389 Netsat 006 NetTV 160 New Tech 102, 006, 002, 035, 054 New World	Morgan's	006
MTEC 044 MTIogic 144, 473 Multibroadcast 029 Multitec 006, 134, 204, 086, 327 Multitech 035, 086, 043, 064, 002, 034, 035, 086, 043, 064, 002, 034, 035, 086, 043, 064, 002, 034, 035, 086, 043, 064, 002, 034, 035, 086, 043, 064, 002, 034, 035, 086, 043, 064, 002, 034, 035, 086, 043, 064, 002, 034, 036, 086, 043, 064, 002, 034, 036, 086, 043, 064, 002, 034, 086, 086, 086, 086, 086, 086, 086, 086	Motorola	015
MTlogic 144, 473 Multibroadcast 029 Multitec 006, 134, 204, 086, 327 Multitech 006, 086, 043, 064, 002, 034, 035, 034 Murphy 017, 023, 034 Musikland 036 Mx Onda 298, 376 MyCom 271 Myrica 369 Myryad 102 NAD 006, 061, 190 Naiko 006, 111, 157, 451 Nakimura 006, 066 Narita 451 NAT 038 NEC 005, 002, 003, 025, 033, 025, 035, 040, 049, 049, 066, 140, 239, 379 Neckermann 102, 006, 064, 014, 028, 049, 056, 070, 072, 101 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Netsat 006 NetTV 160 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	MTC	064, 009, 034, 056, 093
Multibroadcast 029 Multitec 006, 134, 204, 086, 327 Multitech 036, 086, 043, 064, 002, 034, Murphy 017, 023, 034 Musikland 036 Mx Onda 298, 376 MyCom 271 Myrica 369 Myryad 102 NAD 006, 061, 190 Naiko 006, 111, 157, 451 Nakimura 006, 066 Narita 451 NAT 038 NEC 005, 002, 003, 025, 033, 025, 035, 040, 049, 064, 140, 239, 379 Neckermann 102, 006, 064, 401, 329, 373, 379 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	MTEC	044
Multitec 006, 134, 204, 086, 327 Multitech 035, 086, 043, 064, 002, 034, Murphy 017, 023, 034 Musikland 036 Mx Onda 298, 376 MyCom 271 Myrica 369 Myryad 102 NAD 006, 061, 190 Naiko 006, 111, 157, 451 Nakimura 006, 066 Narita 451 NAT 038 NEC 005, 002, 003, 025, 035, 040, 049, 065, 140, 239, 379, 379 Neckermann 1052, 006, 064, 014, 228, 049, 056, 070, 072, 101 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	MTlogic	144, 473
Multitech 006, 086, 043, 064, 002, 034, 035 Murphy 017, 023, 034 Musikland 036 Mx Onda 298, 376 MyCom 271 Myrica 369 Myryad 102 NAD 006, 061, 190 Naiko 006, 111, 157, 451 Nakimura 006, 066 Narita 451 NAT 038 NEC 005, 002, 003, 025, 035, 035, 040, 043, 065, 140, 239, 379, 040, 049, 066, 140, 239, 379, 040, 056, 070, 072, 101 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Nesx 389 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	Multibroadcast	029
Murphy 017, 023, 034 Musikland 036 Mx Onda 298, 376 MyCom 271 Myryad 102 NAD 006, 061, 190 Naiko 006, 111, 157, 451 Nakimura 006, 066 Narita 451 NAT 038 NEC 005, 002, 003, 025, 035, 035, 040, 049, 066, 140, 239, 379 NEC 005, 0070, 072, 101 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	Multitec	006, 134, 204, 086, 327
Musikland 036 Mx Onda 298, 376 MyCom 271 Myrica 369 Myryad 102 NAD 006, 061, 190 Naiko 006, 111, 157, 451 Nakimura 006, 066 Narita 451 NAT 038 NEC 005, 002, 003, 025, 035, 035, 040, 049, 066, 140, 239, 379 Neckermann 102, 006, 064, 014, 028, 049, 056, 070, 072, 101 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Nesx 389 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	Multitech	006, 086, 043, 064, 002, 034, 035
Mx Onda 298, 376 MyCom 271 Myrica 369 Myryad 102 NAD 006, 061, 190 Naiko 006, 111, 157, 451 Nakimura 006, 066 Narita 451 NAT 038 NEC 005, 002, 003, 025, 035, 040, 049, 065, 140, 239, 379, 040, 049, 066, 140, 239, 379, 040, 056, 070, 072, 101 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Nesx 389 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	Murphy	017, 023, 034
MyCom 271 Myrica 369 Myryad 102 NAD 006, 061, 190 Naiko 006, 111, 157, 451 Nakimura 006, 066 Narita 451 NAT 038 NEC 005, 002, 003, 025, 035, 040, 049, 066, 140, 239, 379 NEC 005, 0070, 072, 101 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Nesx 389 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	Musikland	036
Myrica 369 Myryad 102 NAD 006, 061, 190 Naiko 006, 111, 157, 451 Nakimura 006, 066 Narita 451 NAT 038 NEC 005, 002, 003, 025, 035, 040, 049, 066, 140, 239, 379 Neckermann 102, 006, 064, 014, 028, 049, 056, 070, 072, 101 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Nesx 389 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	Mx Onda	298, 376
Myryad 102 NAD 006, 061, 190 Naiko 006, 111, 157, 451 Nakimura 006, 066 Narita 451 NAT 038 NEC 005, 002, 003, 025, 035, 040, 049, 066, 140, 239, 379 Neckermann 102, 006, 064, 014, 028, 049, 056, 070, 072, 101 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Nesx 389 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	MyCom	271
NAD 006, 061, 190 Naiko 006, 111, 157, 451 Narita 451 NAT 038 National 038 NEC 005, 002, 003, 025, 035, 040, 049, 066, 140, 239, 379, 040, 049, 066, 140, 239, 379, 072, 101 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Nesx 389 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	Myrica	369
Naiko 006, 111, 157, 451 Nakimura 006, 066 Narita 451 NAT 038 National 038 NEC 005, 002, 003, 025, 035, 040, 049, 066, 140, 239, 379 Neckermann 102, 006, 064, 014, 028, 049, 056, 070, 072, 101 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Nesx 389 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	Myryad	102
Nakimura 006, 066 Narita 451 NAT 038 National 038 NEC 005, 002, 003, 025, 035, 040, 049, 066, 140, 239, 379 Neckermann 102, 006, 064, 014, 028, 049, 056, 070, 072, 101 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Nesx 389 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	NAD	006, 061, 190
Narita 451 NAT 038 National 038 NEC 005, 002, 003, 025, 035, 040, 049, 066, 140, 239, 379 Neckermann 102, 006, 064, 014, 028, 049, 056, 070, 072, 101 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Nesx 389 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	Naiko	006, 111, 157, 451
NAT 038 National 038 NEC 005, 002, 003, 025, 035, 040, 049, 066, 140, 239, 379 Neckermann 102, 006, 064, 014, 028, 049, 056, 070, 072, 101 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Nesx 389 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	Nakimura	006, 066
National 038 NEC 005, 002, 003, 025, 035, 040, 049, 066, 140, 239, 379 Neckermann 102, 006, 064, 014, 028, 049, 056, 070, 072, 101 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Nesx 389 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	Narita	451
NEC 005, 002, 003, 025, 035, 040, 049, 066, 140, 239, 379 Neckermann 102, 006, 064, 014, 028, 049, 056, 070, 072, 101 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Nesx 389 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	NAT	038
Neckermann 102, 006, 064, 014, 028, 049, 056, 070, 072, 101 NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Nesx 389 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	National	038
NEI 006, 204, 065 Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Nesx 389 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	NEC	005, 002, 003, 025, 035, 040, 049, 066, 140, 239, 379
Neon 237, 389 Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Nesx 389 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	Neckermann	102, 006, 064, 014, 028, 049, 056, 070, 072, 101
Neovia 190, 192, 220, 260, 267, 268, 271, 273, 449, 454 Nesx 389 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	NEI	006, 204, 065
Nesx 389 Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	Neon	237, 389
Netsat 006 NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	Neovia	190, 192, 220, 260, 267, 268, 271, 273, 449, 454
NetTV 160 Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	Nesx	389
Neufunk 102, 006, 144, 113, 036, 002 New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	Netsat	006
New Tech 102, 006, 002, 035, 054 New World 036 Nextier 338	NetTV	160
New World 036 Nextier 338	Neufunk	102, 006, 144, 113, 036, 002
Nextier 338	New Tech	102, 006, 002, 035, 054
	New World	036
NFREN 170	Nextier	338
	NFREN	170

Nicam	097
Nicamagic	034
Nikkai	006, 043, 036, 005, 002, 004, 011, 034, 035
Nikkei	144
Nikko	027
Nobliko	010, 034
Nogamatic	020
Nokia	098, 113, 111, 061, 023, 033, 049, 053, 055, 056, 066, 083, 084, 089, 122
Norcent	266, 335
Nordic	035
Nordmende	006, 144, 103, 030, 020, 046, 054, 242, 280, 499
Normerel	006
Northern Star	220
Novatronic	006, 018, 066
Novita	273
Oceanic	098, 061, 023, 033, 083
Odeon	043
Okano	006, 043, 064, 002, 011
Olidata	271
Omega	043
Onida	207, 226
Onimax	144
Onn	380, 465, 477, 495, 497, 500, 501
Onwa	036, 074, 065, 109
Onyx	380, 397
Opera	006
Optimus	129, 024
Optoma	234, 346, 371
Orbit	006
Orcom	300
Orion	102, 006, 144, 204, 467, 458, 457, 456, 448, 445, 443, 385, 218, 195, 131, 097, 094, 077, 071, 059, 050, 049, 003
Orline	006, 036
Ormond	134, 204
Orsowe	094

Osaki	102, 006, 043, 036, 011, 035, 044, 059, 066, 071
Osio	006, 047
Oso	036
Osume	006, 036, 005, 011
Otic	298, 376
Otto Versand	102, 006, 030, 061, 005, 038, 028, 020, 035, 049, 054, 056, 015, 093, 096, 097, 101
Pacific	102, 144, 204, 208, 077, 256
Packard Bell	254, 293
Pael	034
Palladium	102, 006, 144, 064, 208, 035, 056, 028, 070, 072, 095, 101, 023, 121, 131,014
Palsonic	006, 138, 043, 001, 035, 072, 218, 238, 303
Panama	006, 043, 002, 034, 035
Panasonic	006, 098, 061, 129, 038, 023, 063, 094, 187, 251, 294, 353, 359, 279, 306
Panavision	006, 070
Pathe Cinema	023, 034, 048, 049
Pathe Marconi	020
Pausa	002
Penney	009, 022, 027, 442
Perdio	006, 011, 023, 034, 045, 049
Perfekt	006
Petters	006
Philco	006, 064, 014, 021, 072
Philex	029
Philharmonic	035
Philips	102, 006, 061, 459, 435, 429, 395, 310, 302, 297, 247, 125, 110, 101, 073, 066, 054, 029, 014, 002
Phocus	144, 242, 250, 361, 405
Phoenix	006, 086, 064, 011, 014, 023, 034, 049
Phonola	102, 006, 014, 029, 034
Pilot	142
Pioneer	006, 086, 061, 064, 020, 023, 024, 046, 073, 093, 136, 159, 233, 277, 286, 381
Pionier	086, 064, 327
Plantron	006, 043, 002

Playsonic	006, 144, 145, 035, 053, 361, 405
Polaroid	298, 312, 355, 376, 383, 390, 240
Рорру	002
Portland	066, 119
Powerpoint	006, 138, 087, 201
Prandoni-Prince	061, 094
Precision	035
Premier	199
Prima	043, 002, 071, 218, 238, 303
PrimeView	340
Prinston	204, 145
Prinz	061, 011, 056, 097
Profex	061, 002, 023
Profi	002
Profilo	327
Profitronic	006
Proline	006, 120, 124, 204, 011, 050, 070, 118, 121, 271, 324, 386, 450
Prosco	002
Prosonic	006, 144, 134, 064, 034, 035, 065, 066, 389, 403, 428, 437, 467, 486
Protech	006, 134, 204, 086, 043, 002, 035, 045, 056, 072
Proton	027
ProVision	102, 006, 144, 256
Proxima	150, 152
Pvision	192, 310, 456
Pye	102, 006, 014, 056, 066, 101
Pymi	002
QONIX	352
Quadral	036
Quasar	002, 190
Quelle	006, 134, 030, 204, 061, 101, 097, 096, 093, 056, 028, 020, 017, 010, 003
Questa	005
R-Line	006
Radialva	036, 023
Radiola	102, 006, 035
Radiomarelli	006, 014, 094

RadioShack	006, 027
Radiotone	006, 134, 204, 043, 064, 002, 071, 072, 128
Rank	010
Rank Arena	005
RBM	010
RCA	120, 015, 442
RealiTV	237
Reality	237
Recor	006
Rectiligne	006
Rediffusion	098, 061, 005, 055
Redstar	006
Reflex	006, 134, 204
Relisys	190, 192, 193, 194, 220, 221, 271, 310, 333, 338, 341, 355, 390
Remotec	006, 015, 021, 026
Reoc	144
Revox	006
Rex	043, 023, 032, 042, 070, 099
RFT	006, 043, 011, 014
Roadstar	006, 144, 134, 204, 145, 043, 036, 002, 045, 072, 214, 440
Robotron	014
Rolson	178, 267
Rover	193
Royal Lux	064, 052, 071
Saba	120, 098, 144, 103, 061, 014, 020, 023, 046, 052, 054, 090, 094, 335
Sagem	113, 080, 182, 253, 337
Saisho	043, 002, 003, 023, 035, 094, 097
Saivod	006, 134, 204, 143, 211, 327, 451
Sakai	023
Salora	098, 061, 023, 033, 047, 056, 060, 084, 094, 118, 122, 213, 219, 327
Salsa	052
Sambers	094
Sampo	394, 160
Samsung	102, 006, 043, 064, 108, 115, 231, 252, 276, 287, 332, 345, 350, 351, 372, 442, 474, 488, 490, 492, 228, 176, 175, 127, 095, 047, 035, 034, 033, 027, 023, 011, 009, 002

Sandra	034, 035
Sansui	006, 142, 131, 148, 189, 267, 326
Santon	002
Sanyo	204, 064, 005, 019, 442, 370, 363, 358, 357, 356, 222, 200, 150, 140, 097, 053, 048, 035, 034, 033, 025, 023, 017, 011, 008, 003, 002, 240
SBR	102, 006, 029
Schaub Lorenz	098, 144, 086, 111, 061, 056, 066, 215, 256, 267
Schneider	102, 006, 144, 134, 204, 061, 208, 036, 451, 450, 293, 128, 097, 095, 065, 056, 054, 042, 035, 023, 010
Scotch	027
Scotland	023
Scott	214
Sears	022, 026, 027
Seaway	124
Seelver	204
SEG	006, 134, 204, 087, 043, 036, 005, 285, 211, 210, 119, 062, 056, 035, 034, 002
SEI	006, 014, 023, 032, 056, 094, 097
Sei-Sinudyne	006, 014, 032, 094, 097
Seleco	023, 032, 042, 055, 062, 065, 070, 075, 099
Semp	022
Sencora	002
Sentra	004
Serino	113, 080, 015, 034
Sharp	005, 130, 216, 015, 029, 088, 094, 177, 274, 334, 365, 409, 166, 288
Shintoshi	006
Shivaki	006, 077
Siarem	014, 023, 094
Siemens	006, 030, 028, 096, 101
Siera	102, 006
Siesta	064
Silva	006, 061, 034, 128
Silva Schneider	006, 213, 327, 451
Silvano	108
Silver	145, 061, 005
SilverCrest	204
Singer	006, 074, 002, 014, 052, 075

Sinotec	162
Sinudyne	006, 061, 014, 023, 032, 056, 094, 097
Skantic	060
SKY	006, 195, 271, 300, 307, 308, 340, 341, 342, 343, 344, 391, 400, 421
SKY Brazil	195
Sliding	170, 190, 195, 256, 269, 270, 272
SLX	134
Smaragd	087
Soemtron	190, 246
Sogera	049
Sogo	271, 473
Solavox	006, 098, 061, 011, 023
Sonawa	036
Soniko	006
Sonitron	064, 033, 035, 053
Sonix	271, 389
Sonneclair	006
Sonoko	006, 043, 002, 035, 045
Sonolor	098, 061, 023, 033, 045
Sontec	006, 064, 002
Sony	006, 301, 005, 446, 412, 393, 375, 360, 325, 255, 203, 185, 174, 058, 003
Sound & Vision	036, 066
Soundesign	027
Soundwave	006, 204, 145, 049, 072, 420
Spectra	002
Squareview	026
Ssangyong	002
Standard	006, 204, 036, 002, 035, 049, 066, 380
Starlite	006, 043, 002, 023
Stenway	036, 045
Stern	043, 023, 032, 042, 070, 099
Strato	006, 043, 002, 403
Strong	210, 211
Stylandia	035
SunBrite	284

-	
Sungoo	470
Sunkai	113, 087, 036, 080, 050, 059, 190
Sunstar	006, 043, 002, 065
Sunstech	456
Sunwood	006
Superla	034, 035, 094
SuperTech	102, 006, 036, 002, 034
Supra	002, 066
Susumu	036, 046, 052
Sutron	002
SVA	108, 190
Swedx	340
Swissflex	481
Swisstec	481, 480, 422, 421, 401, 400, 391, 344, 343, 342, 341, 340, 308, 307, 300, 271, 195, 190
Sydney	034, 035
Sylvania	026, 275, 427
Sysline	006
Sytong	034
Tactus	044
Tandberg	061, 020, 063
Tandy	036, 011, 015, 023, 035
Targa	237, 267
Tashiko	005, 023, 025, 034, 035
Tatung	006, 003, 011, 035, 044, 094, 118, 215, 230, 256, 267, 326, 327, 382, 383, 395
TCL	142, 321
тсм	144, 172, 242, 456
Teac	006, 144, 134, 138, 143, 043, 080, 002, 025, 026, 027, 056, 093
Tec	006, 002, 035, 042, 052, 082
Tech Line	006, 134, 211, 285
Tech Lux	214
Techica	036
Technema	049
Technica	118, 451
Technics	102, 129
Technika	422, 428, 465, 468, 480, 493

TechniSat	102, 131, 237
Technisson	144, 242, 361
Technosonic	102, 120, 091, 195, 256, 258, 436, 437, 451, 468
Technotrend	316, 378
Techwood	204, 211
Teckton	271
Tecnimagen	102
Teco	205
Tedelex	002, 035, 380
Teiron	002
Tek	168
Teknika	009
TELE System	192
Teleavia	046, 054
Telecor	006, 036, 023, 035, 042
Telefunken	006, 120, 144, 103, 086, 320, 202, 105, 090, 082, 055, 054, 052, 046, 020, 016, 012, 348
Telefusion	006
Telegazi	006, 043, 036, 023, 042
Telemagic	150
Telemeister	006, 049
Telesonic	006
Telestar	102, 006
Teletech	006, 134, 204, 002
Teleton	005, 032, 035, 042, 056
Televideon	023, 034, 049
Teleview	006
Tempest	002
Tennessee	006
Tensai	006, 204, 145, 036, 002, 017, 018, 035, 049, 065, 066, 067
Tenson	002, 049
Tevion	102, 006, 144, 134, 204, 208, 468, 405, 403, 376, 355, 327, 298, 246, 242, 232, 230, 172, 128
Texet	036, 002, 034, 035, 066
Texla	165
Thes	467, 469, 471
Thomson	006, 120, 103, 020, 046, 052, 054, 056, 082, 335

Thorn	006, 061, 005, 100, 096, 093, 091, 054, 052, 044, 029, 020, 017, 012, 011, 004
Thorn-Ferguson	012, 029, 052, 054, 091
Time	378, 454, 455
Tiny	238
TMK	027
Tobishi	310
Tokai	006, 134, 204, 002, 011, 023, 035, 066
Tokaido	204
Tokyo	004, 034
Tomashi	036, 045
Topline	134, 204
Toshiba	030, 204, 005, 115, 129, 092, 447, 364, 313, 304, 242, 212, 211, 183, 100, 039, 022, 020, 010, 009, 004, 236, 257
Tosumi	451
Towada	035, 056
Toyoda	002
Trakton	043
TRANS-continents	102, 006, 134, 204, 035, 118, 190, 269, 272
Transonic	006, 108, 002
Transtec	034
Trident	035, 094
Trio	298, 376
Tristar	043, 036, 029
Triumph	102, 006, 055, 094
Tsoschi	045
TVTEXT 95	102
TWF	432
Uher	006, 086, 064, 032, 042, 049, 066, 072, 084
Ultravox	006, 014, 023 034, 066
UMC	308, 340, 343, 391, 400, 422, 480, 481, 493
Unic Line	006, 080, 083
United	006, 144, 204, 145, 108, 397, 445, 451
Universal	006

Universum	006, 134, 030, 204, 061, 043, 064, 005, 115, 070, 072, 083, 084, 089, 093, 096, 097, 101, 122, 172, 211, 285, 062, 056, 055, 047, 035, 025, 020, 018, 017, 010, 003, 002
Univox	006, 014, 023
V2max	190
V7 Videoseven	195, 224, 237, 271, 369, 394
Venturer	324, 386, 428
Vestel	006, 134, 204, 035, 211, 333, 370
Vexa	006, 002
Vibrant	044
Victor	005
Videocon	092
Videologic	036, 034
Videologique	036, 034, 035
VideoSystem	006
Videotechnic	034, 035, 049, 066
Videoton	023, 060
Vidikron	150, 277
Vidtech	027
Viewpia	192
Viewsonic	307, 308, 323, 335, 349, 391, 394, 259, 331
Visiola	034
Vision	006, 035, 049
Vistar	032
Vistron	265, 460
Vivax	250, 258
Vivid	250
Vortec	006
Voxson	006, 014, 023, 072
Waltham	006, 134, 204, 020, 035, 060, 072, 077
Wards	009, 022, 024, 027
Watson	006, 144, 134, 204, 036, 002, 023, 049, 095, 271, 285
Watt Radio	023, 034, 056, 097
Wega	006, 005, 014
Wegavox	002
Welltech	014

Weltblick	035, 049
Weltstar	204
Westinghouse	189
Wharfedale	102, 006, 095, 189, 256, 327, 370, 452, 453, 477, 502
White Westinghouse	006, 034, 049, 119
Wilson	102
Windsor	134, 204
Windstar	045
Windy Sam	102
World-of-Vision	190, 193, 195, 198, 224, 242, 246, 340, 389
X-View	215
Xenius	124, 133
XLogic	188
Xomax	397
Xoro	218, 224, 229, 303, 404, 503
Xrypton	006
Yakumo	342
Yalos	398
Yamaha	169, 314, 330, 184
Yamishi	006, 036, 080, 035, 045
Yokan	006
Yoko	006, 043, 064, 036, 002, 034, 035, 053
Yorx	036
Ytawai	316
Zanussi	032, 035
Zenith	119, 236
Zenor	053
TV/VCR Combo	
Aiwa	445
Amstrad	026
Beko	086
Black Diamond	444
Blue Sky	119, 445
Daewoo	444, 119
Dantax	445
Emerson	444, 119

Ferguson	120, 012
Fidelity	026
Finlux	017
Firstline	119
GE	015, 442
GoldStar	006
Goodmans	444, 066, 119, 445
Grandin	119
Grundig	102, 006, 030, 101, 445
Hanimex	443
Hinari	005, 443
Internal	444, 119
Irradio	147
LG	027
Magnin	442
Matsui	445
MGA	442
Mitsubishi	102, 015
Orion	443, 445
Penney	442
Philips	102, 006
Portland	119
Radiola	102
RCA	015, 442
Saba	120
Samsung	442
Sanyo	442
Schneider	102, 006
SEG	119
Sharp	015
Siemens	006
Sony	301, 446
Teac	026
Technics	102
Thomson	120
United	445
Universum	018
White Westinghouse	119

TV/VCR/DVD Combo		
Bush	448	
Ferguson	447	
Grundig	448	
Matsui	447	
Orion	448	

If the code for your equipment is not listed, visit the following website and download the remote control code list.

http://uk.humaxdigital.com

Specification

Power Supply

Power Type: External Adaptor

Power Consumption: 12V == 2A

Input Voltage: 100-240V ~ 50/60Hz

Protection: Separate Internal Fuse & Lightning protection

Physical Specification

Size (W x H x D): 206mm x 42mm x 168.5mm

Weight: 446g

'WEEE' Instructions



This product should not be disposed with other household wastes at the end of its working life. Please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. This will prevent possible harm to the environment or human health from uncontrolled waste disposal.

Domestic users:

Please contact either the retailer where you purchased this product or their local government office for details of where and how they can take this item for environmentally safe recycling.

Business users:

Contact your supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

Trademarks

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- HDMI, the HDMI Logo, and High-Definition Multimedia interface are trademarks and registered trademarks of HDMI Licensing LLC.

Note: The model name is located on the bottom of the product.

Specification

SIMPLIFIED EU DECLARATION OF CONFORMITY

The simplified EU declaration of conformity referred to in Article 10(9) shall be provided as follows:

Hereby, HUMAX declares that the radio equipment type HB-1100S is in compliance with Directive 2014/53/EU and relevant directives.

The full text of the EU declaration of conformity is available at the following internet address:

- United Kingdom: http://uk.humaxdigital.com/ec
- Germany: http://de.humaxdigital.com/ec

Wireless equipment use information

1. In France

Authorization for outdoor usage is limited to Channels 1~7 (2.400 ~ 2.454 GHz).

2. In Italy

For outdoor usage a general authorization is required from the national spectrum authorities.

3. In Latvia

For outdoor usage an authorization is required from the Electronic Communications Office.

- 4.5GHz Radio Local Area Networks (RLANs) Band only indoor use.
- 5. This equipment may be operated in all European Union member countries and Turkey.

Product RF specifications	
Frequency mode (band)	Wi-Fi b/g/n (20/40MHz)
RF output power	Maximum power level is not exceeding 20dBm
Frequency range (MHz)	2.4GHz

And

Frequency mode (band)	Wi-Fi a, n(20/40MHz), ac(20/40/80MHz)
RF output power (EIRP)	Maximum power level is not exceeding 23dBm (for TPC) / 20dBm (for without TPC)
Frequency range (MHz)	5150MHz to 5350MHz

And

Frequency mode (band)	Wi-Fi a, n(20/40MHz), ac(20/40/80MHz)
RF output power (EiRP)	Maximum power level is not exceeding 14dBm
Frequency range (MHz)	5725MHz to 5875MHz

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