



# RCX4 PRE-PROGRAMMED UNIVERSAL REMOTE CONTROL

RC026  
RC026SP

# USER GUIDE **RCX4**

Philex Customer Careline 08457 573479

*A single remote to operate  
Televisions  
DVD Players  
Video Recorders*

*Satellite Receivers including the latest Digital Satellite Receivers  
Cable Television Boxes*

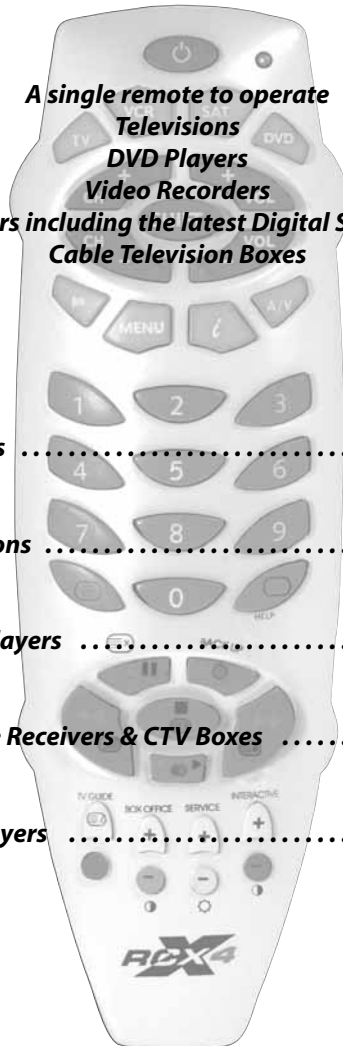
*Set up instructions ..... pages 2-5*

*Codes for Televisions ..... pages 6-9*

*Codes for Video Players ..... pages 9-11*

*Codes for Satellite Receivers & CTV Boxes ..... page 11*

*Codes for DVD Players ..... page 12*



## MAIN FEATURES

### FUNCTION KEYS

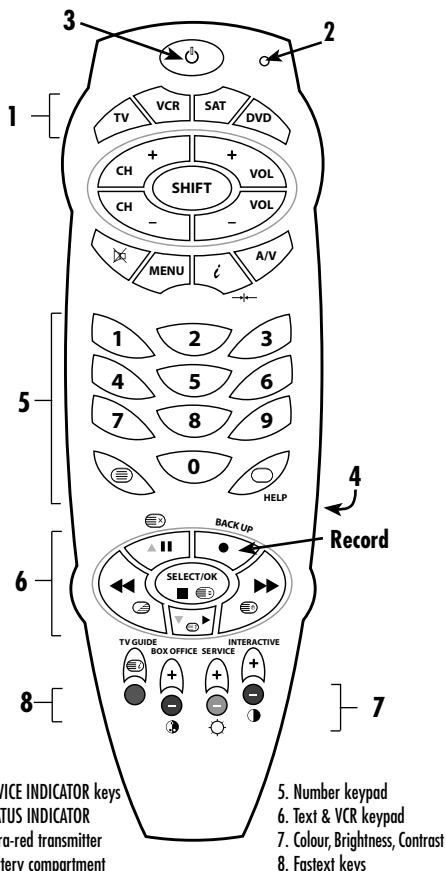
KEY SYMBOL	DESCRIPTION
	POWER ON/OFF
	MUTE
	VOLUME +/-
	CHANNEL +/-, C/P +/-
	CHANNEL 1/2 DIGIT MODE
	A/V SOURCE 1
	INFORMATION/INDEX
	NORMAL
	HELP
	PLAY
	STOP
	PAUSE
	FAST FORWARD (SKY™ MENU RIGHT)
	REWIND (SKY™ MENU LEFT)
	SKY™ MENU UP
	SKY™ MENU DOWN
	RECORD (red circle)
	TELETEXT ON
	TV ON (FROM TEXT TO TV)
	MIX (TV AND TELETEXT COMBINED)
	HOLD PAGE (TELETEXT)
	REVEAL (TELETEXT)
	UPDATE (TELETEXT)
	TIMER (TELETEXT)
	TOP OF PAGE (TELETEXT)
	BOTTOM OF PAGE (TELETEXT)
	FASTEXT RED
	FASTEXT GREEN
	FASTEXT YELLOW
	FASTEXT BLUE
	CHANNEL/PROGRAMME STORE
	CHANNEL/PROGRAMME STORE
	C/P (CHANNEL PROGRAMME)

### SHIFT KEY FUNCTIONS

KEY STROKES	FUNCTION
<b>SHIFT</b>	+/- (COLOUR)
<b>SHIFT</b>	+/- (BRIGHTNESS)
<b>SHIFT</b>	+/- (CONTRAST)

**SHIFT** ①...⑨ Shift 1-9 contain the following groups of functions  
 10+, 20+, 30+, 40+ ...  
 11, 12, 13, 14, 15 ...

**PLEASE NOTE:** You are advised to read the following instructions fully, before attempting to program your Universal Remote Control. The set-up procedure will cancel itself if no keys are pressed for more than 10 seconds in order to protect your code against accidental re-programming, and to conserve battery power. It would therefore be helpful to you to understand the required programming steps, before you carry out the actual set-up procedure.



1. DEVICE INDICATOR keys
2. STATUS INDICATOR
3. Infra-red transmitter
4. Battery compartment
5. Number keypad
6. Text & VCR keypad
7. Colour, Brightness, Contrast
8. Fastext keys

### RCx4 - UNIVERSAL REMOTE CONTROL

Congratulations! Your Universal Remote Control is a state-of-the-art device, which replaces the main functions of several separate remote controls to operate infra-red controlled televisions (TV), videos (VCR), Freeview™ & satellite receivers (SAT), cable TV boxes (CTV) & DVD players (DVD).

Your Universal Remote Control (URC) is pre-programmed in the factory. Simply enter the correct device codes for your equipment and your URC is ready to use. A DEVICE CODE LIST is included in the user's manual.

### INSTALLING BATTERIES

Your URC requires 2 fresh AAA-size (LR03) batteries (alkaline batteries recommended) :-

1. Remove the battery cover on the back of your URC.
2. Insert the batteries ensuring that the polarity corresponds with the markings in the battery compartment.
3. Push the battery cover back in place.

## HOW TO SET UP YOUR RCx4

The RCx4 has 4 Device Modes (TV, VCR, SAT & DVD)

Your RCx4 can be set-up either by entering the appropriate codes from the list of codes supplied or by using either the Auto or Manual code search facility. Instructions for all three methods follow.

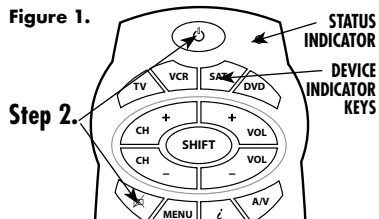
### SET-UP BY AUTO CODE SEARCH

Probably the easiest way to set-up your RCx4 for most devices, especially if there are a lot of codes listed for your particular brand, is by Auto Code Search.

#### TV SETUP BY AUTO CODE SEARCH

1. Turn on your TV
2. Hold down both  POWER and  MUTE keys on your RCx4 simultaneously until the STATUS INDICATOR LED lights up and stays red (about 4 seconds).

Figure 1.





3. Release the  POWER and  MUTE keys. The STATUS INDICATOR should still be lit. If not repeat step 2.
4. Press the TV DEVICE INDICATOR key once. The STATUS INDICATOR and the DEVICE INDICATOR should now both be lit RED.

Figure 2.



5. To search, aim your RCx4 at your TV.
6. Hold down the power key for about 8 seconds until the STATUS INDICATOR lights up.
7. The STATUS INDICATOR will repeatedly flash twice then remain unlit for 1 second, flash twice and remain unlit for 1 second. The DEVICE INDICATOR key will also flash repeatedly.
8. When a suitable code is found the TV will switch off. When the TV switches off the TV DEVICE INDICATOR key must be pressed **immediately** to store the correct code (**Please Note:** if the TV DEVICE INDICATOR key is not pressed immediately the search will continue).
9. Now press the POWER key. If the TV switches on the code has been stored and you can check that other functions work properly.
10. To stop the Auto Code Search at any time press any key and the remote will go to Manual Code Search.

If you are unable to find a correct code or cannot store the code fast enough try finding the code either using Manual Code Search or by using Setup by Entering Device Code

#### VCR, SAT/CTV & DVD SETUP BY AUTO CODE SEARCH

Simply turn on your VCR, SAT/CTV or DVD and repeat the above procedure to search for the Device Codes for your VCR, SAT/CTV or DVD but instead of the TV DEVICE INDICATOR key press either the VCR, SAT or DVD DEVICE INDICATOR key in steps 4 & 8.

## SETUP BY ENTERING DEVICE CODE

(Note: If no keys are pressed on the RCx4 for a period longer than 10 seconds during set-up, the RCx4 will automatically exit the set-up process and revert to the last entered code. This feature reduces accidental erasure of your codes)

#### SET UP FOR TV



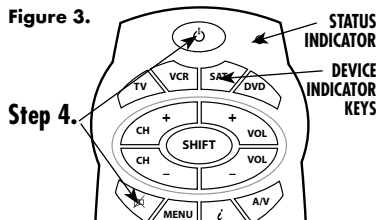
1. Turn on your TV
2. Look up the brand name of your TV in the DEVICE CODE LIST (See pages 7-11).
3. Look up the 3-digit Device Code next to the brand name of your equipment. If there is more than one code listed for your brand, start with the first code listed and follow the instructions below:
4. Hold down both  POWER and  MUTE keys on your RCx4 simultaneously until the STATUS INDICATOR LED lights up and stays red (about 4 seconds).

Figure 3.





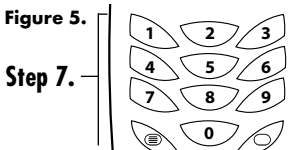
5. Release the  POWER and  MUTE keys. The STATUS INDICATOR LED should still be lit. If not repeat step 4.
6. Press the TV DEVICE INDICATOR key once. The STATUS INDICATOR LED and the DEVICE INDICATOR should now both be lit.

Figure 4.



7. Use the number keys on your RCx4 enter the 3-digit Device Code. If you have entered a valid code, the STATUS INDICATOR will blink once. If you have entered a wrong code, the STATUS INDICATOR will blink twice.

Figure 5.



8. Try the keys on your RCx4 that correspond to similar keys on your original remote control, especially those you use most. (Note that the RCx4 will exit the set-up procedure if you do not press any keys on the RCx4 for more than 10 seconds). If your TV works on all or most of the keys on your RCx4, you have entered a suitable Device Code. Go to step 11. (Note: Your RCx4 will only operate functions controlled by your original remote nor are the supplied codes guaranteed to operate all these functions)
9. If the Device Code does not work properly on your TV, press the TV INDICATOR KEY once. The STATUS INDICATOR LED will flash briefly, and remain lit. The TV INDICATOR key should still be RED. (If either of the indicators switch off whilst you are still programming your RCx4, you should start again from step 3.)
10. Repeat steps 7-9 with the other codes listed for your brand of TV until your RCx4 operates most or all of the functions that correspond with the keys on your original remote control.

## SETUP BY ENTERING DEVICE CODE *continued*

- Once you have found a suitable code, to store it, press the TV INDICATOR key twice. The TV INDICATOR key will flash twice and then go out as will the STATUS INDICATOR.
- If none of the TV codes listed for your brand of TV work correctly, select the code that provides the best results. Alternatively, try the Library Search method, which is fully explained further on in these instructions.

### SET UP FOR VCR AND SAT

Repeat the same set-up method for your VCR and SAT, but remember to press the VCR, SAT or DVD DEVICE INDICATOR key, and select the corresponding Device Code listing.

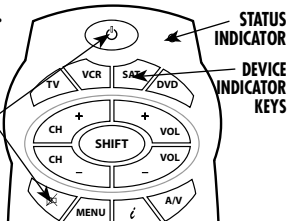
## SET-UP BY MANUAL CODE SEARCH

If you cannot identify a suitable Device Code for your equipment from the Device Code List and have been unable to store a code when using Auto Code Search you may try our library search method. (For many lesser known brands codes may be present but not listed under that brand.) During the search the selected DEVICE INDICATOR will flash at various speeds. The entire search procedure may take several minutes to complete. The following instructions use your television as an example for set-up using the Manual Code Search method.

### TV SETUP BY MANUAL CODE SEARCH

- Turn on your TV
- Hold down both  $\odot$  POWER and  $\boxtimes$  MUTE keys on your RCx4 simultaneously until the STATUS INDICATOR LED lights up and stays red (about 4 seconds).

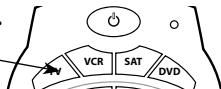
Figure 6.



### Step 2.

- Release the  $\odot$  POWER and  $\boxtimes$  MUTE keys. The STATUS INDICATOR should still be lit. If not repeat step 2.
- Press the TV DEVICE INDICATOR key once. The STATUS INDICATOR and the DEVICE INDICATOR should now both be RED.

Figure 7.



### Step 4.

- To search, aim your RCx4 at your TV.
- Press the  $\odot$  POWER key repeatedly for 2 seconds ON and 2 seconds OFF, until your TV goes into standby mode (i.e. the TV switches OFF). Then continue with step 7. If the TV INDICATOR key flashes twice and then goes out before your TV goes into standby mode you have reached the end of the code library. Return to step 2 and repeat library search one more time.
- Try the number keypad to see if your device switches ON again and the keys work correctly. If your device does not switch ON, press the  $\boxtimes$  Mute key and then the  $\odot$  Power key to repeat the code so that the Device comes ON. Now try the number keypad. (NOTE: If you accidentally skipped a code that turned your TV ON or OFF, you can return to the skipped code by pressing the  $\boxtimes$  Mute key.)
- If the code you have found does not work correctly, make sure that the TV

INDICATOR key and STATUS INDICATOR LED are still lit, before you repeat steps 6 and 7 until you find a better code. If the indicator lights have gone out, repeat the set-up procedure from step 2.

- Once you are happy with the code found, press the TV INDICATOR key once to store the code. The STATUS INDICATOR LED and DEVICE INDICATOR key will turn off and set-up is complete.

### VCR/DVD/SAT SETUP BY MANUAL CODE SEARCH

Simply repeat the above procedure to search for the Device Codes for your VCR/SAT/DVD but instead of the TV DEVICE INDICATOR key press either the VCR, SAT or DVD DEVICE INDICATOR key in step 4

## OPERATING YOUR RCx4

Once you have set up your RCx4, it should operate similarly to your original remote control and perform most or all of the main functions. To operate, just aim it at your equipment, press the appropriate DEVICE INDICATOR key and press the required function key. The DEVICE INDICATOR flashes during signal transmission to confirm that a function key is in operation.

Please Note: The RCx4 can only duplicate functions that are on your original remote control. Any extra keys on the RCx4 which are not on the original will not function.

### SHIFT Functions

To operate a secondary function, press SHIFT followed by the corresponding function key. The SHIFT key remains functional for as long as any other key is operated, or until 5 seconds have elapsed after the last key was pressed. When the SHIFT key is operated, the STATUS INDICATOR lights up green and the DEVICE INDICATOR key red while the SHIFT key is pressed down. The STATUS INDICATOR then stays ON for another 5 seconds. The SHIFT key can be cancelled before the 5 seconds time-out period by pressing the SHIFT key again.

## DEVICE CODE RECALL - 888

The RCx4 has a special code which can be entered to find the code that has been set for each device. ( e.g. after Code Search set-ups )

- Press  $\odot$  POWER and  $\boxtimes$  MUTE keys together until STATUS INDICATOR RED LED lights up.
- Then press the required DEVICE INDICATOR key [TV, SAT, VCR or DVD], STATUS INDICATOR LED & DEVICE INDICATOR key will light up RED.
- Key in Device Code Recall code 888 the STATUS INDICATOR RED LED lights up and flashes 3 times.
  - To find the first digit of your code, press 1 and then count the number of times the STATUS INDICATOR LED flashes red.
  - To find the second digit of your code, press 2 and then count the number of times the STATUS INDICATOR LED flashes red.
  - To find the third digit of your code, press 3 and then count the number of times the STATUS INDICATOR LED flashes red.

[Note: If the STATUS INDICATOR LED does not flash at all the digit is zero (duration between flashes is 1 sec.)]

E.G. Code=106, Number 1=1 flash, Number 2=no flash, Number 3=6 flashes.

- Press Any Device key [TV, SAT, VCR or DVD] once to exit Device Code Recall. (Note that the RCx4 will exit the Recall procedure if no key is pressed for 30 seconds)

## KEY RECONFIGURATION - 777

- Press  $\odot$  POWER and  $\boxtimes$  MUTE keys together until STATUS INDICATOR RED LED lights up.
- If you are reconfiguring a SHIFT Function key, you must next press the SHIFT key and the STATUS LED will change to GREEN.

3. Press the required DEVICE KEY and the DEVICE KEY will light up.
  4. Enter the Key Reconfiguration activation code 777.
  5. Press slowly and repeatedly the key you wish to re-program until your device performs the required/correct function.
- NB During the search, your RCx4 will transmit the code of every key command programmed into the device code you are reconfiguring to find the key function you want. If you reach the end of the command set without finding the required function, the STATUS LED will flash twice red and the RCx4 will exit reconfiguration mode.
6. Press the relevant DEVICE KEY [TV, VCR, SAT, DVD] to store the corrected code. The DEVICE INDICATOR key will flash twice.
  7. Repeat 4 and 5 for any other keys you wish to modify.
  8. Press the relevant Device key 2 times to exit the reconfiguration function.

**Please Note:**

A maximum of 4 keys can be reconfigured for each Device (TV, VCR, SAT and DVD). After the 4 keys are reconfigured for one Device, if you try to reconfigure a fifth key, the DEVICE INDICATOR key will blink several times and then go out (exiting Reconfiguration Mode).

If no other key is pressed for more than 20 seconds, the RCx4 will automatically exit Reconfiguration Mode.

During key reconfiguration, only the key you are reconfiguring and the DEVICE INDICATOR key will function.

Not all key functions may be relevant to your device or be programmed into the Device code selected. If there are no functions programmed for a particular key instead of the DEVICE INDICATOR key flashing twice it will remain lit for one second and then go out and the RCx4 will exit reconfiguration mode.

You can clear reconfigured codes by entering a new Device code. When a new Device code is entered all Key functions will be reset to the default key settings for the new code including any that may have been previously reconfigured.

### RECORDING DEVICE CODES

It is recommended that you record your device codes in case they are lost from storage when the batteries run out or are changed.

DEVICE KEY	DEVICE	CODE
TV		
VCR		
SAT/CTV		
DVD		

### MAINTENANCE

#### LOW BATTERY LEVEL

If the indicator flashes twice slowly after pressing a key function, the battery level is low & you must fit new batteries. If the batteries are removed, your RCx4 will retain its memory for approximately 10 minutes only.

- Do not use old and new batteries together as old batteries tend to leak.
- We do not recommend the use of rechargeable batteries.
- Please follow manufacturers instructions when disposing of used batteries
- Do not expose the RCx4 to dust, strong sunlight, humidity, high temperature or mechanical shock.
- Do not use corrosive or abrasive cleansers on your RCx4.
- Keep the unit dust free by wiping it with a soft, dry cloth.
- Do not disassemble your RCx4, it contains no user serviceable parts.

### FREQUENTLY ASKED QUESTIONS

- Q. I am unable to program or operate my RCx4, but the indicator lights on my RCx4 operate correctly.
- A. Check your A/V device. If the device's mains switch is turned off, your RCx4 can not operate your device.
- A. Check if the batteries are low and replace the batteries.
- A. If several Device Codes are listed under the brand name of your A/V device, try each code one by one until most or all of the keys work correctly.
- Q. The STATUS INDICATOR light does not stay ON when entering set up mode.
- A. Make sure both the POWER and MUTE buttons are pressed simultaneously
- Q. My A/V equipment responds only to some commands.
- A. You may have selected a code for which only some commands work correctly. Try the other codes listed for your brand.
- A. Try the Library Search if you are still unsuccessful.
- Q. Some of my equipment will not work with any of the codes listed.
- A. Make sure that you have selected the correct device listing
- A. Try the Library Search function as some more recent codes may be available on the RCx4 but have not been listed yet or have not been listed under all applicable brands.

**Disclaimer:** Whilst we have tried to supply a comprehensive library of codes we cannot guarantee that your RCx4 will be fully compatible with all equipment. Some brands, models or functions may not be available in the code library due to differences in operation to your original remote or where the code has not yet been added to the library.

The manufacturer cannot accept any liabilities resulting from incorrect use of this product.

### SPECIFICATIONS

Operating system:- Pre-programmed infra-red remote control system.

Compatibility:- Operates most brands of infra-red remote controlled TVs, VCRs, Satellites, Cable boxes and DVD players.

Power requirement:- 2 x AAA-size alkaline batteries.

Effective range:- 7.65M (25 feet), +/- 25 degrees.

Alkaline battery life:- Normal operation 6 months.

Dimensions:- 199 (L) x 56 (W) x 24 (H) mm.

Weight without batteries:- 105g

### TECHNICAL SUPPORT

Customer Care Line - Tel: 08457 573 479 (UK only)

Technical Support Web Site: <http://technical.philex.com>

Technical Web Site Enquiries: [technical@philex.com](mailto:technical@philex.com)

### ENVIRONMENTAL POLICY

Waste electrical and electronic products must not be disposed of with household waste.

Please recycle where facilities exist.

Check with your Local Authority or Retailer for recycling advice.



**DEVICE CODES**

<b>BRAND</b>	<b>CODE</b>	<b>BRAND</b>	<b>CODE</b>	<b>BRAND</b>	<b>CODE</b>	<b>BRAND</b>	<b>CODE</b>
<b>TV codes</b>							
ACTION	049 063 086 090 137 139 196	BEC	144 147 151 153 025 049 086 196	CONDOR	154 196 139 049 063 114 196	EUROMAN	196 134 087 196
ACURA	017	BECESE	025 033 045 196 047 049	CONIC	196	FENNER	139
ADMIRAL	024 033 196 083 101 102 134 146	BEKO	007 289 174 196 220 278 277 246	CONTEC	107 111 114 139	FERGUSON	071 078 085 097 285 174 269 251 215 244 249
ADVENTURA	144	BELL&HOWELL	042 146 196	CONTINENTAL EDIS.	090 094 096	FIDELITY	014
ADYSON	063 196	BENCHMARK- BEAUMARK	063 137 139 196	CORONADO	063	FINLANDIA	023
AGAZI	134	BESTAR	196	COSMEL	139	FINLUX	003 018 046 043 104 196 078 040 088 101
AKAI	010 012 013 025 028 029 033 039 047 063 086 114 117 121 017 132 139 208 114 145 196	BLACKSTRIPE	042 045 177 114 137	CRAIG	196	FIRST LINE	062 196 139 014 042 045 188 113 114 101 111
AKIBA	117	BLAUPUNKT	244	CROSLEY	049 196 144 114 101 102 033 063 017 196 146 139 087	FISHER	062 196 139 014 042 045 188 113 114 101 111
AKURA	196 117 121 134	BLUE SKY	117 196	CROWN	033 063 017 196 146 139 087	FLINT	196
ALBA	059 017 083 117 121 067 139 196 266 164	BPL	118	CS ELECTRONICS	117	FORMENTI-PHOENIX	101 196
ALLORGAN	062	BRANDT ELECTRON	090 094 096 249	CURTIS MATHES	042 196 063 114 137	FORTRESS	063 101 111 114 146
ALLSTAR	196	BRINKMANN	083	DAEWOO	063 160 139 143 147 196 202 274 017 115 073 082 117	FRONTECH	025 035 064 139 134
AMBASSADOR	145	BRIONVEGA	102	DANSAI	063	FUJITSU	033 063 086 114 145 144
AMERICAN HIGH	137	BRIORRYEGA	101 196	DAYTRON	045 063 139	FUNAI	033 062 063 114 134 144 145 066
AMSTRAD	058 255 031	BROKSONIC	033 063 114 144 145	DE GRAAF	021 033	GALAXIS	039 083
ANGA	145	BROKWOOD	033 063 114 144 145	DECCA	088 108 109 065 196	GBC	024 139
ANGLO	139	BROTHER	134	DESMET	196	GEC	009 020 049 088
ANITECH	063 196 134 139	BRUNS	029 102 101	DIXI	139 196	GELOSO	025 139 117
ANSONIC	139 087	BSR	003 062	DORIC	103	GENEXXA	117 121 196
AOC	063 196	BTC	117	DUAL	139	GOLDHAND	139
ARC EN CIEL	090 094	BUSH	003 025 035 059 196 065 114 117 121 061 142 067 118 266 017 115 164	DUMONT	014 093 117 033 063 145 078 144 087 011 102 114 018	GOLDSTAR	003 035 049 063 026 017 086 090 119 134 137 139 154 196
ARISTONA	110 159 187 196	CAMPLE	033 063 114 144 145	DUMONT-FINLUX	018	GOODMANS	067 139 143 154 196 266 115 129 017 164
ARTHUR MARTIN	152 126 132 135	CANDLE	063	DYNATECH	033 063 114 145 144	GORENJE	188 122
ASA	104 101 078 102	CAPEHART	086 114 196	EATON	137	GPM	117
ASBERG	176	CAPSONIC	134	ECR	114	GRANDIN	196 117 139
ASORA	139	CARREFOUR	196	ELBIT	109 196	GRAETZ	023 025 027 029 135 152 158 161 197
ASUKA	117 134 121	CDMARCYS	114	ELCIT	101 087	GRANADA	033 047 086 103 110 067 070 196
ATLANTIC	196	CENTURION	196	ELECTRATUNE	063	GRUNDIG	033 092 078 081 195 244 261 120
ATORO	139	CENTURY	101 102 188	ELECTROBAND	144	HALIFAX	134
AUDIO TECHNICA	176	CGE	188 083	ELECTROHOME	033 042 049 063 114 144 145	HALLMARK	033 063 104 114
AUDIOSONIC	090 117 196 134	CIE	058 143	ELEKTRA	237	HANSEATIC	014 139 025
AUDIOVOX	196	CIHAN	109	ELEKTRONSKA	196		
AUTOVOX	014 101 078	CIMLINE	059 139	ELIN	196 104 154 137 042 196		
BAIRD	208	CIRCUIT CITY	033 063 114 144 145	ELITE	063 114 117		
BANG & OLUFSEN	101	CITIZEN	196 063 137	ELMAN	087		
BASIC LINE	117 121 139 196	CITY	139	ELTA	139		
BAUR	013 014 025 029	CLATRONIC	139 087 117	EMERSON	033 063 102 114 144 145 114 137		
	033 034 045 244 196 139	COLORTYME	137 196	EON	110 196		
		COMTEL	109	ERRES	041 139		
		CONCORDE	139	ETRON	041 139		
				EURO-FEEL	134		

**DEVICE CODES**

<b>BRAND</b>	<b>CODE</b>	<b>BRAND</b>	<b>CODE</b>	<b>BRAND</b>	<b>CODE</b>	<b>BRAND</b>	<b>CODE</b>
	062 196	ISUKAI	117 139		208 068 086	NEC	114 137
HANTAREX	139	ITS	117 139		126 132 171	NECKERMANN	025 033 034
HARLEY DAVIDSON	033 063 114	ITT	024 025 033		158		196 188 101
	137 144 145		045 218 017	LXI	042 146 177		102 154 132
HARRAD	033 063 114	ITT-NOKIA	135 152 158		196		144 147 151
	144 145		161 171 197	M. ELECTRONIC	139 196 090		153
HARVARD	033 063 114		208		104 174	NEI	117 196
	144 145	ITV	017 077	MACYS	063 114	NEW WORLD	117
HCM	139 117 134	JASON	088	MAGNADYNE	014 102 087	NEWTECH	139 196
HEATHKIT	144 196	JBL	196		101	NIKKAI	196 063 086
HEMMERMANN	014	JCB	144	MAGNAFON	087		117 134 121
HIFIVOX	090 094	JET POINT	137	MAGNASONIC	042 063 139	NIKKO	154
HINARI	041 114 117	JUMBOTRONIC	196		146 154 177	NISSAN	137
	121 132 139	JVC	114 121 067		196	NOBLIKO	078
	142 154 196		142 169 176	MAGNAVOX	049 114 196	NOGAMATIC	090 094
	208 067 017		193 196	MANDOR	134	NOKIA	004 009 012
HISAWA	117	KAIDO	035	MANESTH	134 059 196		013 015 016
HIT	102	KAISUI	117 196 121	MARK	196		022 023 024
HITACHI	004 005 009		139	MATSUI	065 014 035		025 027 028
	012 018 020	KAPSCH	009 015 016		058 059 085		029 030 033
	021 023 025		025 033		108 067 017		036 038 039
	033 034 045	KARCHER	216 196		066 139 031		041 042 045
	276 047 049	KATHREIN	122	MATSUI	142 154 196		068 110 134
	050 051 052	KENDO	025 059 087		123 081 228		135 137 284
	053 054 055		154 196		231 259 261		152 271 212
	056 057 063	KENWOOD	063		262 001		158 197 161
	264 043 086	KLH	033 063 086	MAYA	063		219
	090 094 095		114 144 145	MCMICHAEL	049		
	104 114 060	KLOSS	137	MEDIATOR	196	<b>TV codes</b>	
	125 126 142	KOLSTER	196	MEGATRON	047	NORDMENDE	015 090 094
	144 175 180	KONKA	117	MEMOREX	042 134 139		095 101 174
	196 205 217	KORPEL	196		145		185 215 217
	222 223 225	KORTING	101	MEMPHIS	086 139		249 061
	067 252 260	KRIESLER	110 159 187	METZ	244 102 101	NOVA	800
HORIZONT	196	KTV	033 063 114	MGA	145	NOVABEAM	196
HORNYPHON	196		145 144	MIDLAND	063	OCEANIC	016 023 025
HOSHAI	117	KUASHO	063 196	MINERVA	244 078		029 033 036
HUSPI ELEKTRONIK	083	KUBA ELECTR.	014 033	MINOKA	196		042 062
HYPER	139	LENCO	134 139 143	MITSUBISHI	011 091 101	ONWA	117
HYPSON	196 134		196		102 103 074	OPERA	196
ICE	117 196 139	LENOIR	139		113 114 122	OPTANKA	146
	134	LEYCO	062 086 134		072 070 142	ORBIT	196
IMA	033 063 114		196	MITSUBISHI	145 151 153	ORION	014 123 033
	144 145	LG	003 035 049		163 189 196		058 059 062
IMPERIAL	196 025 188		063 124 119		221 232 244		063 107 108
	083 001		086 090 026		257 279 280		114 130 139
INGELEN	135 152 158		134 137 139	MITSUBISHI	281 282 092	ORION	144 145 196
	161 197		154 196 077		067 131		201 017 031
INGERSOL	139		017	MONITOR	137		066
INNO HIT	216 086 117	LIFETEC	134 139	MOTOROLA	146 196	OSAKI	086 117
	196 139	LINTON	063 111 114	MRELLI	101	OSUME	086 111
INTERBUY	134 139		146	MTC	033 063 137	OTTO VERSAND	003 014 174
INTERFUNK	009 015 016	LLOYD'S	033 063 114	MULTISTANDARD	087		025 029 033
	025 028 029		144 145	MULTITECH	025 033 035		034 035 045
	030 033 041	LOEWE	101 102 153		063 087 114		059 062 244
	068 158 090		196 089 091		188 145 139		154 196 090
	101 102 110	LOGIK	107 108		144		114 186 139
	151 152 153	LUMA	024 132 196	MURPHY	266 103		144 146 147
INTERVISION	134 087 117	LUXOR	004 013 023	NAD	114 177		151 153
IRRADIO	196 139 117		025 028 029	NAONIS	024	OVP	196
IST	117 196		033 034 047	NATIONAL	155 196	P.T. ACTRON	109

**DEVICE CODES**

<b>BRAND</b>	<b>CODE</b>	<b>BRAND</b>	<b>CODE</b>	<b>BRAND</b>	<b>CODE</b>	<b>BRAND</b>	<b>CODE</b>
PACIFIC	236 237 238 266		029 030 035 045 058 059		114 197 208 142 188	STERN	025
PALLADIUM	025 196 101 151		062 063 114 244 147 196	SASO	090	SUNKAI	059 062 117
PANAMA	139 134		186 078 144	SBR	110 196	SUNSTAR	139
PANASONIC	015 025 037 075 116 136 148 150 155 186 196 198 290 291 292 293 294 092 296 128 149	QUESTAR	114	SCHAUB LORENTZ	023 025 135 152 158 161 197	SUNWOOD	196
PATHE MARCONI	090 094	R.LINE	196	SCHNEIDER	014 041 159 154 141 093 110 117	SUPREME	144
PAUSA	139	RADIALVA	090	SCOTT	196 134 154 212 187	SUPERTECH	014 139
PCE/PEC	042 045 177 063 114 137 045	RADIOLA	110 159 187	SEARS	042 177	SUTRON	139
PENNEY	137 063	RADIOMARELLI	103 101	SEG	063 087 114 117 139 134	SYLVANIA	111 196
PERFEKT	196	RADIOSHACK	042 063 146	SEI-SINUDYNE	014 024 025 058 059 062 087 101 102	SYMPHONIC	033 063 114 144 145
PERFORMANCE	107 114 144	RADIOTONE	134 139 154 196	SELECO	024 067 093 113 249	TADISTAR	154
PHILCO	049 196 083 188 101 102 114	RANK	003 025 035 059 266 142 114 117 121 196	SEMUA	063	TANDY	086 117 146 121
PHILIPS	049 115 086 095 098 101 109 110 114 144 147 151 154 159 187 196 216 079 263 077	RCA	137	SENCORA	139	TASHIKO	035 049 114 142
PHOENIX	101 196	REALISTIC	042	SENTURA	041 117	TATUNG	048 057 086 107 109 065 283 275 196 253 273
PHONOLA	101 110 159 187 196	REDIFFUSION	103	SHARP	063 111 113 114 142 146 067 214 002 256 156 069	TEC	143 139
PILOT	137	REDIFUSION	103	SHINTOM	144 154	TECHLINE	087
PIONEER	032 090 095 217 196	REVOX	196	SHORAI	062	TECHNICS	155 196
PLANTRON	134 196	REX	025 249 093 102 101	SIAREM	087 101 102	TECHNIMAGEN	236
POPPY	139	RFT	102 101	SIEMENS	021 063 244 111 196 110 159 187	TECHWOOD	137 144
PORTLAND	063 144	RICE CLUB	137	SIERA	196	TECNISON	154
PRANDONI-PRINCE	024 025	RMB	063	SIERRA	137	TEKNIKA	063 137 145
PRIMA	042 196 063 114 137 139	ROADSTAR	117 134 139 017	SIGMAX	144	TEKON	137 139
PRINZ	086	RUNCO	137	SIGNATURE	114 117	TELEAVIA	090 094 099
PROELCO	196	SABA	009 025 033 041 090 094 095 096 101 249 132 174 185 217	SILVER	087 101 102	TELECOM	154
PROFEX	035 139	SAISHO	058 059 108 031 017 196	SINGER	087 101 102	TELEFUNKEN	090 145 174 217 249
PROFILO	164	SAKIO	134	SINOTEC	154	TELETECH	139
PROFITRONIC	154 196	SALORA	004 208 013 022 023 025 028 029 033 034 042 152	SKANTIC	025	TELETON	025 033
PROLINE	164	SALORA	171 086 126 132 135	SKY	297	TELIVA	090
PROSCAN	137	SAMBERS	087	SNYDER	196	TENSAI	030 196 062 066 104 117 017 046 139 154
PROTECH	025 087 196 134	SAMPO	063	SOLAVOX	041	TENSON	139
PROTECH	139	SAMSUNG	064 106 162 086 140 134 137 154 188 195 196 206 216 017 080	SONITRON	045	TESLA	196
PROTON	063 139	SAMSUX	063	SONOKO	196 134 139	THOMAS	049 063 086 090 137 139 144 196
PROVISION	154	SANSUI	107 137 196	SONOLOR	016	THOMSON	006 100 033 090 094 095 096 099 174 185 217 229 233 249 073
PULSER	049 063 086 090 137 139 196	SANYO	042 113 044 045 069 046 043 086 088 107 111 067	SONTEC	196	THORN	020 028 029 030
PYE	110 159 187 265			SONY	112 107 113 114 017 076 144 069 067 270	THORN-FERGUSON	041 044 045 196 049 054 070 046 174 088 090 097 107 113 114 153 138 144 071 078
PYMI	139			SOUND&VISION	087 117	TKM	137
QUELLE	003 014 025			SOUNDDESIGN	033 063 114 137 144 145	TOKAI	086 196
				SPECTRA	143	TOKYO	137
				SPECTRICIAN	063 196		
				SR2000	042 177		
				STANDARD	139 117		



**DEVICE CODES**

<b>BRAND</b>	<b>CODE</b>	<b>BRAND</b>	<b>CODE</b>	<b>BRAND</b>	<b>CODE</b>	<b>BRAND</b>	<b>CODE</b>
TOSHIBA	042 045 287 157 085 114 127 137 138 067 177 288 286		107 128 144 159 007 011 014 040	DAEWOO	064 174 016 065 067 068 072 073 163 173	GRUNDIG	057 090 095 101 102 103 113 138 145 114
AKIBA		AKIBA	040	DANSAI	040	HANSEATIC	029
AKURA		AKURA	031 116 144	DAYTRON	065	HARVARD	040
ALBA		ALBA	007 043 064 031 065 077 118 129 124 125 008 060 059	DE GRAAF	020 041 052 057	HCM	040
ALLORGAN		ALLORGAN	160	DECCA	041 047 004 007	HEADQUARTER	016
AMSTRAD		AMSTRAD	041 004 076 078	DENON	138	HIFIVOX	047 048 094 013 031 040
ANITECH		ANITECH	040	DIGITAL	024 029 144	HINARI	077 082 097 116 121 125 147 008 114
ARC EN CIEL		ARC EN CIEL	047 048 094	DTS	160	HITACHI	020 021 023 024 027 028 029 039 041 047 179 091 142 144 099 106 004 007
ARISTONA		ARISTONA	052 095 113	DUAL	047 094 138 142		
ASA		ASA	029 057 058	DUMONT	016 029 040 041		
ASTRA		ASTRA	029 160	DYNATECH	040 041	HYPSON	040
ASUKA		ASUKA	029 040 138	ECONOMIC	148	IMPERIAL	041 100 148
AUDIO DYNAMICS		AUDIO DYNAMICS	144	ELECTROHOME	029 160	INGELEN	047 048 094 110
AUDIOVOX		AUDIOVOX	029	ELECTROPHONIC	029	INGERSOL	082 147
AVIS		AVIS	040 160	ELIN	160	INNO HIT	097 148
BAIRD		BAIRD	047 107 144 004 007 011	EMERSON	013 029 034 041 077	INTERBUY	029 040
BANG & OLUFSEN		BANG & OLUFSEN	142	ESC	148	INTERFUNK	016 138
BASIC LINE		BASIC LINE	031 040 065 077	ETZUKO	040	INTERVISION	040
BEAUMARK		BEAUMARK	160	FERGUSON	002 005 047 087 089 094 178 104 133 112 126 007 141 144 152 153 171	IRRADIO	029 040
BELL & HOWELL		BELL & HOWELL	016	FIDELITY	040 041	ITT	010 016 036 047 088 107 144 007 011 130 132
BLAUPUNKT		BLAUPUNKT	090 095 102 111 113 138 145 146	FINLANDIA	057 099	ITT-NOKIA	047 048 094 110
BONDSTEC		BONDSTEC	040	FINLUX	016 020 024 041 057 004 007 011 099	ITV	029
BRANDT ELECTRON		BRANDT ELECTRON	047 048 094 142 143 144	FIRST LINE	024 029 040	JENSEN	047 144
BRIONVEGA		BRIONVEGA	010	FISHER	016	JVC	001 009 012 047 048 050 089 094 116 119 129 142 143 144 007 132 133 139 140 108
BROKSONIC		BROKSONIC	029	FUNAI	029 040 041 169 181 004	KAISUI	040
BRUNS		BRUNS	040	GAB	040	KENDO	036
BUSH		BUSH	030 031 065 077 123 124 125 008 114 059 060	GBC	097	KENWOOD	016 047 050 116 144
CALIN		CALIN	029	GE	160	KLH	029 040
CAPEHART		CAPEHART	065	GELOSO	097	KODAK	029
CARRERA		CARRERA	160	GOLDHAND	040	KORPEL	040
CARVER		CARVER	138	GOLDSTAR	016 029 058 160 004	KRIESLER	052 095 113 143 144 148
CGE		CGE	041 047 094 144	GOODMANS	064 031 040 041 045 053 057 058 065 077 071 004	KUBA ELECTRONIC	016 029 058 160 004
CIE		CIE	040	COLT	016 047 048	LG	160 004
CITIZEN		CITIZEN	029 040 160	CONTINENTAL EDIS.	040 047 048 094 142 143 144	LEYCO	040
CLASSIC		CLASSIC	029	CRAIG	029 040 045 160	LOYD'S	029 040 041 160
COLORTYME		COLORTYME	160	CROSLEY	029 138 145 160	LOEWE	029 069 138 098 105
COLT		COLT	040	CROWN	040 064		
CONTINENTAL EDIS.		CONTINENTAL EDIS.	040 047 048 094 142 143 144				
CRAIG		CRAIG	029 040 045 160	GRANADA	016 024 057 113 129 099		
CROSLEY		CROSLEY	029 138 145 160	GRANDIN	029 040		
CROWN		CROWN	040 064				

**VCR codes**

ACTION	016 029 160
ADMIRAL	029 040
ADVANTZ	029
ADVENTURA	016 029 160
ADYSON	040
AGHA	160
AIWA	029 041 047 058 077 116 120 125 144 167 170 007 008 004
AKAI	003 024 029 030 032 036 037 038 047 074 094 164

DEVICE CODES

BRAND	CODE	BRAND	CODE	BRAND	CODE	BRAND	CODE
<b>VCR codes</b>							
LOEWE OPTA	057 086 095		110 130 071	PYE	052 057 086	SENTRA	065
	113		115 117 142		095 113	SETRON	040
LOGIK	031 040 045		143 144 148	QUARTER	016	SHARP	016 052 053
	077 082 107		149 150 151	QUARTZ	029 160		062 079 175
	147 160 071		160 007 011	QUASAR	138 145		015
LORWD	024		180 163 164	QUELLE	010 013 017	SHINTOM	031 040
LUXOR	016 036 107	NORDMENDE	168		024 028 038	SHIVAKI	029
	110 150 151		001 009 012		040 051 102	SHOGUN	160
LXI	016 024 029		018 022 025		113 142 143	SHORAI	147
	058		047 048 094		144 147 148	SIEMENS	016 017 029
M. ELECTRONIC	160		153 101 144	RADIALVA	029 040 138		090 095 102
MAGNASONIC	017 029 040	OCEANIC	143 142	RADIOLA	052 095 113		110 113
	110 160	OKANO	036 117	RADIX	029	SIERA	052 095 113
MAGNAVOX	029 160 145		040	RCA	024 029 036	SILVA	029
	138	OLYMPUS	145		160	SINGER	040 160
MAGNIN	029 160	OPTONICA	052 053	REALISTIC	016 029 041	SINUDYNE	082
MANESTH	040	ORION	013 029 033		045 052 053	SONTEC	029
MARANTZ	053 057 077		034 035 063		160	SONY	051 054 055
	095 113		077 082 147	REX	001 047 048		081 085 061
MARQUANT	040		008 059		094 142 144		070 096
MARTA	029	OSAKI	041 058	RICOH	029	SR1000	160
MATSUI	013 034 045	OTTO VERSAND	138	ROADSTAR	031 040 045	STERN	047 048 094
	058 077 082	PACIFIC	181		058 160 071	STS	020 024
	118 122 125	PALLADIUM	029 040 144	ROYAL	040	SUNKAI	077
	137 138 147	PANASONIC	019 075 092	SABA	001 009 018	SUNWOOD	040
	008		093 111 134		025 047 048	SYLVANIA	041 056 138
MEMPHIS	040		135 136 138		094 153 142	SYMPHONIC	029 040 041
MENOREX	016 029 041		145 146 156	SAISHO	143 144		056 138
	052 058 160	PANASONIC	157 161 098		013 034 077	TAISHO	147
METZ	095 102 145		105		082 091 118	TANDY	016
	113 138	PATHE MARCONI	047 048 094	SALORA	147 008	TASHIKO	041
MGA	056 160		142 144		150 016 017	TATUNG	041 047 138
MINERVA	090 102 113	PAXSONIX	160		036 056 129		144 004 007
MINOLTA	020 024 027	PENNEY	024 029 138		149	TEAC	041 047 144
MITSUBISHI	050 056 080	160		SAMEX	160	TECHLINE	040
	127 138 144	PENTAX	020 024 027	SAMSUNG	045 071 160	TECHNICS	138 156
	004 133	PERDIO	041		148 100	TEKNIKA	029 041
MTC	040 041 045	PHILCO	029 138 145	SANKYO	040	TELEAVIA	047 048 094
	160		160	SANSUI	047 050 144		142 144
MTS	016 024 029	PHILIPS	006 029 044	SANWA	147	TELEFUNKEN	009 018 153
MULTITECH	041 029 031		046 049 052	SANYO	016 017 042		047 048 094
	040		053 057 069		077 110 131		144 142 143
MURPHY	041	PHILIPS	113 132 145	SBR	109	TELEORDER	160
NAD	160	PHILIPS	160		057 083 086	TELERENT	144
NAONIS	047 048 094	PHONOLA	052 057 086	SCHAUB LORENTZ	138	TELETECH	040
NATIONAL	111 145		095 113 138		010 016 036	TENOSAL	031
NEC	047 050 094	PILOT	029		047 048 088	TENSAI	029 040 147
	143 144	PIONEER	024 050 057	SCHNEIDER	094 110 144	THOMAS	160
NECKERMANN	010 013 017		138		024 028 029	THOMSON	018 022 047
	024 047 094	PIONEER	133		031 040 041		048 094 144
	113 144 147	PORTLAND	065		052 095 100		142 143 026
	148	PRIMA	144 160		113 138 148		132 133 139
NESCO	040	PROFEX	040		064 169 008		007
NIKKAI	029 064	PROFILE	160	SCOTT	004	THORN	032 047 089
NOBLIKO	113	PROLINE	041 004 114	SEARS	029		094 007 141
NOGAMATIC	047 048 094	PROSCAN	024 029 036	SEG	016 024 029	THORN FERGUSON	142 143 144
NOKIA	010 016 017		160		040 100 148		089 094 112
	036 047 048	PROTECH	040	SEI-SINUDYNE	160		104
	088 094 107	PULSAR	029 160	SELECO	082 138 147	TIVO HDD	026
		PULSER	016 029 160		047 048 094	TOKAI	029 040
					142 143 144		

**DEVICE CODES**

<b>BRAND</b>	<b>CODE</b>	<b>BRAND</b>	<b>CODE</b>	<b>BRAND</b>	<b>CODE</b>	<b>BRAND</b>	<b>CODE</b>
TOSHIBA	132 029 047 048 056 084 094 138 144 160 007	LG	039	<b>DVD codes</b>		OTHERS	033 066
TOWADA	040	LORRAINE	039	3DLAB	017	PACIFIC	032
TOWIKA	040	LUXOR	110 012 013	AIWA	027 050	PANASONIC	002 006 011
TRIX	029	MANHATTAN	002	AKAI	031	PHILIPS	068 055 024 012 017 051 052 056
UHER	024 029 047 100 142 144 148	MEDIASTAR	035	ALBA	065 066 067	PIONEER	004 014 020 048 053 058 054 059
ULTRAVOX	010	METRONIC	153	APEX	047 035		
UNITECH	045 160	MOVIE TIME	018	BUSH	065 066 067		
UNIVERSUM	029 036 138 169	MURATTO	039	CLASSIC	029		
		NOKIA	008 003 012 013 001 110	COBY	029	PROFILO	066 067
UNIVERSUM	160	NORDEMENDE	153	CYBERCOM	032	PROLINE	066 067
VICTOR	047 050 144	ORBITECH	153	DAEWOO	038 040	RAITE	044
VIDEOSONIC	160	PACE	034	DANSAI	065	RCA	005
VIEWMARK	029	PANASONIC	036	DENON	006 016	REVOX	055
WARDS	024 040 160	PHILIPS	023 038 010 004 006 007	DIK	032	REVOY	039
WELTBlick	029	PIONEER	021 029 011	DK DIGITAL	032	ROADSTAR	037
WHITE		SALORA	110 012 013	DMTECH	072	ROTEL	018
WESTINGHOUSE	010	SAMSUNG	153 154	DRAGON	032	SAMSUNG	022 059 060
XR-1000	040 160	SAT	021	DUAL	032 029	SCHAUB LORENZ	055
YAMAHA	047	SATPARTNER	153 039	ELTA	075	SCHNEIDER	072 073 074
YAMASHI	040	SCHAUB LORENTZ	110	ENZER	044	SHARP	070 011
YOKO	160 029 040 148	SCIENTIFIC ATLANTA	015 201	FISHER	041	SHINCO	015
ZANUSSI	047 048 094	SEG	153	GOODMANS	065 066 067	SILVASCHNEIDER	032
ZENDER	094	SILVA	039	GRUNDIG	068 055 069	SINUDYNE	025
ZOPPAS	047 048	SKY	151	HARMAN KARDON	036 060 061	SKYMASTER	029 075
		SKY PLUS	212	HE	029	SKYWORTH	034 049
		SONY	170	HITACHI	020 021 022	SONY	001 045
		STAR TRAK	153	HOME ELECTRONICS	029	TCM	032 070 071
		STRONG	039 153	INNOVATION	032 070 071	TEAC	020 015
		TELE+1	016	IRRADIO	019	TEVION	032 070 071
		TELEFUNKEN	153	JVC	007 018 057 063 058	THETA DIGITAL	058 059
		TELEKA	154	KENDO	032	THOMSON	013 023
		THOMSON	014 019	KENWOOD	046 006 054	TOSHIBA	003 0051 052
		TOSHIBA	168	KLH	010	UNK	028
		TRIAD	039	LENCO	039	VOXSON	032
		VISIOPASS	028	LENCO	039 032	WELKIN	032
		VORTEC	153 154	LG (GOLDSTAR)	009	WHARFEDALE	076
		WITTENBERG	021	LIFE	070 071	YAMAHA	006 030 056 057
				LIFETEC	032 070 071	ZENITH	009 051 061 062 052
				LOEWE	068		
				LOEWE OPTA	055 615		
				LUXMAN	022		
				MAGNAVOX	051 052		
				MARANTZ	017 024		
				MBO	029		
				MEDION	032 070 071		
				MEDION	072		
				MEMOREX	032		
				MICROMAXX	032 070 071		
				MICROSTAR	032 070 071		
				mitsubishi	053		
				MUSTEK	029		
				NAD	074 043		
				NAKAMICHI	042		
				NORDMENDE	032		
				ONKYO	026 062 051 064		

**SAT/CTV codes**

ALBA	153
AMSTRAD	021
ARCON	021 154
AXIS	021
BIRMINGHAM CABLE	035
CABLETIME	035
CARLTON	035
CRUPTOVISION	024
ECHOSTAR	020 022 025 031 065 017 082 088 108
FIDELITY	021
FILMNET CABLECRYPTO	016
FILMNET COMCRYPT	016
FREECOM	039 153
GOLDSTAR	039
GRAETZ	110
GRUNDIG	021
HANTOR	153
HUMAX	033
INGELEN	110
ITT	085
ITT-NOKIA	025 110
JERROLD	202 203 211 210
KOSMOS	039
KYOSTAR	153
LENCO	153 039