



Meridian System Remote MSR+  
User Guide

**MERIDIAN**

## Preface

### About this guide

This guide consists of the following chapters:

**Introduction** provides a general overview of the MSR+ and explains how to install the batteries.

**Using the MSR+** describes how to use the MSR+ to control your Meridian equipment and other products.

**Programming your MSR+** describes how to program the MSR+ to control other products.

**Changing the source keycaps** describes how to change the MSR+ source keycaps to suit your other equipment.

**Troubleshooting** provides suggested solutions to problems that may occur when using the MSR+.

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This guide was produced by Human-Computer Interface Ltd, <http://www.interface.co.uk/>

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Part no: MSR+/3

# Introduction

## About the MSR+

The MSR+ is an advanced remote control that provides a comprehensive range of commands to allow you to control every product in your Meridian system straight out of the box. You can also program it to control your other equipment.

The MSR+ provides a total of 51 keys to give access to all the most frequently used commands of your Meridian products, and a **Function** (or shift) key for additional less frequently needed operations.

## Interchangeable Meridian source keys

For easy selection of sources the MSR+ provides 12 source keys corresponding to the sources provided by the Meridian digital surround controllers, preamplifiers, and integrated amplifiers.

The MSR+ is provided with a selection of alternative keycaps for the source keys which you can use to match the particular combination of units in your system. For example, if you own a DVDR, you can change the keycaps to provide a **DVDR** key.

## Control your other equipment

The MSR+ is pre-programmed to mimic the remote controls for many popular audio and video products from other manufacturers, and you can configure it to control up to nine other products simply by entering the appropriate device code on the numeric keypad. A complete list of the supported products is given at the back of this manual.

## Learning commands

Even if you own a product that is not supported by the device library built in to the MSR+, it includes a learning mode which allows it to learn up to 120 commands from other remote controls and assign them to a key on the MSR+.

## Backlight

For convenience the MSR+ keypad is backlit, so you can use it even in low-light conditions. The backlight automatically turns on as soon as you press a key in low light conditions.

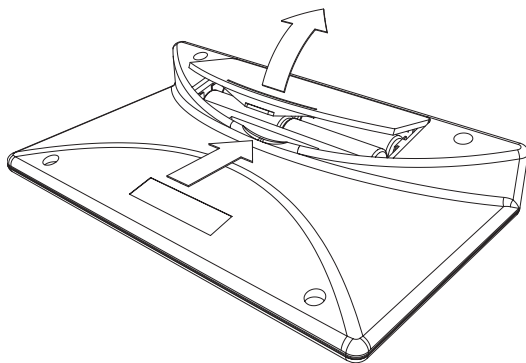
The MSR+ will have a battery life of over six months under normal conditions; slightly less if you use the backlight frequently.

## Installing the batteries

The MSR+ is supplied with four AA batteries, and these need to be installed before you can use it.

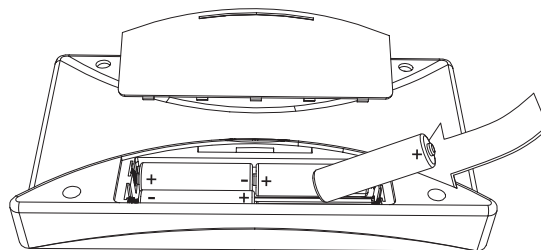
**Note:** Dispose of used batteries thoughtfully.

- Press the tab and remove the battery cover on the back of the MSR+:



- Make sure you observe the polarity of the batteries and the polarity marks + and – inside the battery compartment.

- Insert the four AA batteries accordingly:



- Push the battery cover back into place.

### Low battery indicator

The indicator normally lights up when you press a key. If it flashes twice after releasing a key, this indicates that the battery is low.

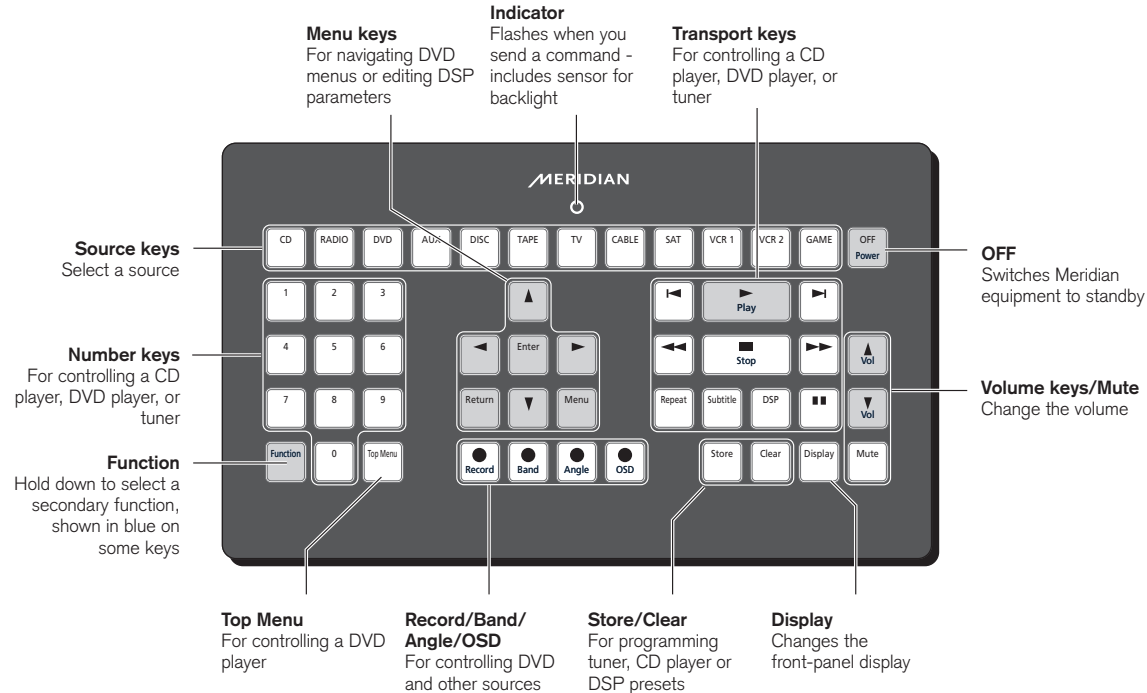
Always replace all four batteries at the same time. Do not mix old and new batteries.

Replace the batteries as soon as possible after the low battery indicator appears, and after removing the old batteries replace the new batteries within two minutes, or you risk losing any codes you have programmed.

# Using the MSR+

## Using the MSR+ to control your Meridian equipment

The following diagram gives a summary of the MSR+ commands used for controlling Meridian products:



## Controlling sources

The MSR+ provides 12 source keys to allow you to select one of the sources in your system.

### To select a source

- Press the appropriate source key.

The indicator will flash once to indicate that the command has been sent.

Your Meridian controller will select that source. In addition, the MSR+ keys will change so that they control that source.

To use your MSR+ to control a source without selecting the source on your Meridian system:

- Hold down **Function** and press the source key.

For example, to change the TV channel while listening to a CD press **Function TV**, and then use the numeric keys to select the channel.

### To use the function options

Many buttons on the MSR+ have a second function which enables access to some of the lesser used features of a Meridian product or system.

For more information see *Function keys*, page 13.

### To control your other equipment

The nine source keys: **AUX**, **DISC**, **TAPE**, **TV**, **CABLE**, **SAT**, **VCR1**, **VCR2**, and **GAME** can be programmed to control other equipment in your system as described in *Programming your MSR+*, page 5. The **CD**, **RADIO**, and **DVD** source keys are dedicated to controlling Meridian products and cannot be changed.

The volume keys, **Mute**, and **OFF** also always control Meridian products. To use these commands with other equipment hold down **Function** with them.

### To illuminate the MSR+ in low light conditions

- Press any key. Use **Function** to avoid sending a command.

The backlight will stay on for about five seconds.

# Programming your MSR+

## Introduction

For convenience the MSR+ provides three alternative programming options to allow you to control 'other products'; ie products from other manufacturers:

- You can look up the manufacturer of the product you want to control in the back of this manual, and specify the remote you want to mimic by entering a four digit device code on the numeric keypad.
- You can specify the type of product you want to control, and then search through the available remote controls until you find the appropriate one that controls your product.
- You can learn each of the commands for the product from the product's own remote control.

Learning is the most flexible method but also the most time-consuming. We recommend you start with one of the first two procedures and then use learning to supplement them with any other commands you want to add.

**Note:** There is no danger of damaging your MSR+ by using these procedures. A reset function is provided which will return your MSR+ to the factory settings; see *Resetting the MSR+*, page 10.

## Dedicated (punch through) Meridian keys

Some keys on the MSR+ are dedicated to controlling your Meridian system and cannot be reprogrammed for your other products:

Key	Description
<b>OFF</b>	Turns the Meridian system off.
Volume ▲, ▼, and <b>Mute</b>	Control the Meridian system volume.
<b>DSP</b>	Changes the preset on Meridian surround controllers.
<b>Function Menu</b> ▲, ▼, ◀, ▶, <b>Function Store</b> , and <b>Function Clear</b>	Control the DSP menus on Meridian surround controllers.
<b>Function Display</b>	Changes the display of the Meridian system.

You can program **Function OFF**, the **Function** volume keys, the menu keys, **Store**, **Clear**, and **Display** to control your other equipment.

## Programming options

### Specifying a device code

The simplest way to set up the MSR+ to control another product is to enter the appropriate device code for the product. A complete list of device codes for each of the supported products is given at the back of this manual.

Entering a device code erases any learnt commands for that source key.

#### To specify a device code

- Press the source key you want to use for the product; for example, **TV**.
- Hold down **0** and **Mute** simultaneously for two seconds until the indicator flashes twice and stays lit.
- Enter the appropriate device code on the numeric keypad.

For example, if your TV is a JVC enter 0051.

If you entered a valid device code the indicator will turn off and your MSR+ is ready to control the other product. If you entered an incorrect code, or pressed an invalid key, the indicator will flash six times and programming is abandoned.

For some products more than one device code is listed. Try each of the alternative device codes in turn until you find the one that controls your product.

To reset the source key to control Meridian products enter the device code 8888.

### Auto-programming

This procedure lets you step through the library of remote controls in the MSR+ until you find the one that switches your product to standby. This is likely to be the correct one for your product.

#### To auto-program

- Make sure your other product is switched on and out of standby.
- Press the source key you want to use for the product; for example **TV**.
- Hold down **0** and **Mute** simultaneously until the indicator flashes twice and then stays lit.
- Enter one of the following codes using the numeric keypad to indicate the type of product you want to control.

The indicator should flash once each time you press



a key, and then flash twice and stay off when you have entered the code correctly:

Product type	Code
TV	1000
VCR	2000
SAT/DVB-T	3000
CTV	4000
DVD/TER	5000
CD	6000
GAME	9000

For example, for a TV enter 1000.

- Point the MSR+ at the product you want to control, hold down **Function**, and press **OFF**.

Each time you press **Function OFF** the MSR+ will step to the next device in the library and send the corresponding **Power off** code to the other product.

- As soon as the other product turns off, indicating that this is the correct device, press the same source key again (eg **TV**) to store the currently selected device.

- To step back through the device library if you overshoot press **Mute** on the MSR+.

The indicator will flash twice to indicate that the operation has succeeded, and the MSR+ is now ready to control your other product.

### Problems when programming automatically

If you reach the end of the device library without finding one that switches off your product the indicator will flash six times.

- Press the source key again to resume the search from the beginning.

If the other product does not turn off, your product may not be supported by the device library. In this case you will need to program the MSR+ using your product's own remote control as described in *Learning commands*, page 8.

**Note:** When stepping through the device library, you can use the keys other than **Function OFF** on the MSR+ to test other commands in the currently selected device.

## Learning commands

The third and most flexible way of programming the MSR+ is to learn from your product's own remote control. This allows you to control products not supported by the device library, and gives you the flexibility to assign any command to a chosen key.

The MSR+ can learn up to 120 commands. If you try to program more than this the indicator will flash six times and the MSR+ exits from learning mode.

You can also use learning to add commands additional to those provided by the device library. Select the device code first, then learn the additional commands.

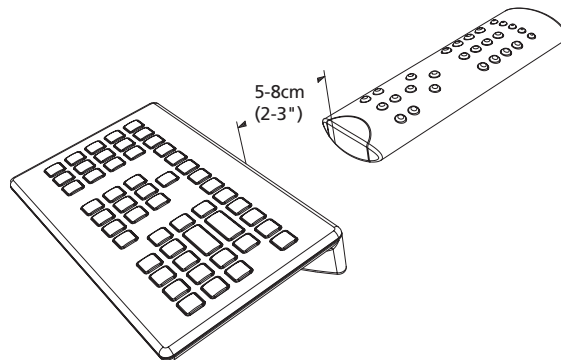
**Note:** You cannot program the dedicated Meridian keys; see *Dedicated (punch through) Meridian keys*, page 5. Also, you cannot learn commands if the battery level is low. In these cases the indicator will flash six times when you try to enter the learning code.

## To learn commands

- Press the source key you want to use for the product; for example, **TV**.
- Hold down **0** and **Mute** simultaneously for two seconds until the indicator flashes twice and stays lit.
- Enter the learning code 0000 on the numeric keypad.

The indicator will flash twice and go off. The MSR+ is then ready to learn commands.

- Aim the product's remote control at the front of the MSR+, at a distance of 5 to 8cm (2 to 3"):



- Press and release the key on the MSR+ that you want to use for a particular command.

The indicator will light up to show that the MSR+ is waiting to receive the code for that command.

- Press and hold down the corresponding key on the product's remote control to transmit the command.

When the command has been received and learnt correctly the indicator will flash twice and turn off. If there was a problem learning the command the indicator will flash six times.

- Press the MSR+ key followed by the product's remote control key to learn each of the command keys you want to use.

When you have finished learning commands from the third-party remote control:

- Press the source key again, eg **TV**.

The LED indicator will flash once and go off.

Alternatively if you leave the MSR+ without pressing a key for more than 20 seconds the LED indicator will flash six times and the MSR+ exits from learning mode, remembering any keys you have programmed up to that point.

### To learn dual signals

Some manufacturers use a sequence of two different remote control signals to operate their equipment. To learn the commands for these manufacturers you need to program each key twice so the MSR+ can store each of the two signals used for the command.

- Program the key using the standard procedure described above until the indicator flashes twice and turns off indicating that the first code has been learnt correctly.
- Press and release the same key on the MSR+ again so the indicator lights up again.
- Press and hold the same key on the product's remote control until the indicator flashes twice and turns off.

Both signals have now been learnt successfully and assigned to the MSR+ key.

- Repeat the dual-learning procedure for any other keys you want to program.
- Press the source key again to store the settings.

## Resetting the MSR+

You can reset the MSR+ to the programmed state it was in when you first received it.

**Warning:** This will erase any devices or learned commands you have programmed.

- Hold down **0** and **Mute** simultaneously until the indicator flashes twice and stays on.
- Enter the code 9990 on the numeric keypad.

The indicator will turn off, and all sources are reset to their default Meridian codes.

**Note:** You can reset an individual source by specifying device code 8888; see *Specifying a device code*, page 6

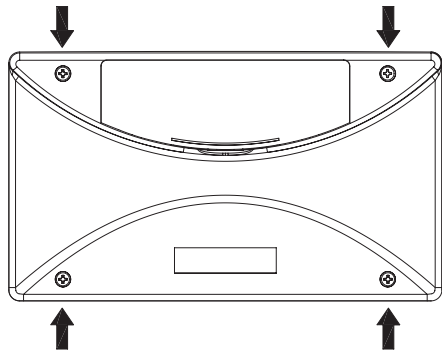
# Changing the source keycaps

## Introduction

The MSR+ is supplied with 12 standard source keycaps, corresponding to the 12 standard sources on the Meridian preamplifiers and controllers. Some additional keycaps are supplied with the MSR+ and you can substitute these for the standard keycaps to suit the particular combination of products in your system.

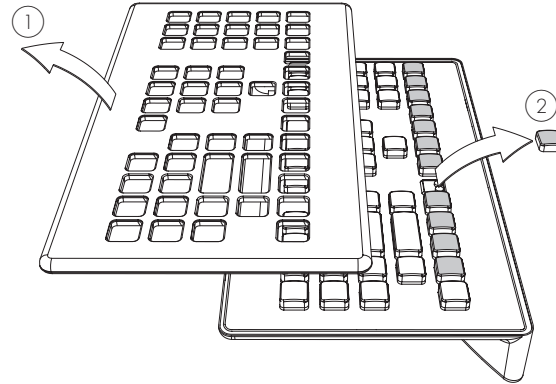
## To change the keycaps

- Undo the four screws at the back of the MSR+ using a #1 Pozidriv screwdriver:



- Carefully lift the front cover off the MSR+. ①

The top row of keycaps (except **OFF**) can then be removed. ②



The remaining keycaps are held in position and cannot be changed.

- Replace the keycaps in the required order, taking care to orient them correctly.
- Refit the front panel of the MSR+ by replacing the four screws. Take care not to overtighten the screws, or you may damage the threads.

# Troubleshooting

## **The indicator flashes twice after pressing any key**

The battery level is low. Replace the batteries as soon as possible for a new set of four AA type batteries; see *Installing the batteries*, page 2.

## **The LED indicator flashes six times when attempting to program the MSR+**

This indicates that the current operation you are performing was unsuccessful. For more information read the instructions for the appropriate programming procedure.

## **When I press the source key for one of my other products, my Meridian controller selects a different source**

Hold down **Function** while pressing the source key. This changes the MSR+ to the correct device for your other product without transmitting the source command to the Meridian system.

## **How do I control my television sound and power?**

The volume **▲** and **▼**, **Mute**, and **OFF** keys are dedicated to controlling the Meridian system even when the source key is programmed for another manufacturer's product. To control the television volume or power hold down **Function** when using the volume or **OFF** keys.

## **I can't change the television volume after changing the Meridian volume**

You control the volume of another product with the **Function** volume keys. To send a **Function** key combination immediately after the ordinary key you need to release and press the key again.

## **I can't find the manufacturer of my product in the device code list**

Try auto-programming; see *Auto-programming*, page 6. If this fails try learning commands from your product's remote control; see *Learning commands*, page 8.

## **Commands do not work reliably with my product**

Try dual-signal learning; see *To Learn dual signals*, page 9.

## **I can't learn successfully from my product's remote control**

If none of the programming methods succeed it may be that you have one of a small number of products that uses non-standard remote control signals not supported by the MSR+.

## **The indicator does not light up when I press a key**

Try removing and refitting the batteries. If this does not work replace the batteries with new ones; see *Installing the batteries*, page 2.

## Commands provided for each type of product

MSR+ key	TV	VCR	SAT, CTV	DVD	GAME	CD
<b>0-9</b>	0-9	0-9	0-9	0-9	0-9	0-9
<b>Top Menu</b>	-/--	-/--		+10		-/--
<b>Enter</b>	SELECT	SELECT	SELECT	ENTER	ENTER	ENTER
<b>Up</b>	UP	UP	UP	UP	UP	UP
<b>Down</b>	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN
<b>Left</b>	LEFT	LEFT	LEFT	LEFT	LEFT	LEFT
<b>Right</b>	RIGHT	RIGHT	RIGHT	RIGHT	RIGHT	RIGHT
<b>Return</b>	EXIT	1-/11	EXIT	EXIT	EXIT	EXIT
<b>Menu</b>	MENU	C/P	MENU	MENU	MENU	MENU
<b>Red</b>	RED		RED			
<b>Green</b>	GREEN		GREEN			
<b>Yellow</b>	YELLOW		YELLOW			
<b>Blue</b>	BLUE		BLUE			
<b>▶▶</b>	FF	FF	FF	FF	FF	FF
<b>◀◀</b>	REW	REW	REW	REW	REW	REW
<b>▶ Play</b>	PLAY	PLAY	PLAY	PLAY	PLAY	PLAY
<b>■ Stop</b>	STOP	STOP	STOP	STOP	STOP	STOP
<b>▶</b>	CH+	CH+	CH+	SKIP+	SKIP+	CH+
<b>◀</b>	CH-	CH-	CH-	SKIP-	SKIP-	CH-
<b>Repeat</b>				REPEAT	REPEAT	
<b>Subtitle</b>				SUBTITLE	SUBTITLE	SUBTITLE
<b>  </b>	PAUSE	PAUSE	PAUSE	PAUSE	PAUSE	PAUSE
<b>Store</b>				PROGRAM	PROGRAM	
<b>Clear</b>	SLEEP	TIME	SLEEP	TIME	TIME	SLEEP
<b>Display</b>	DISPLAY	DISPLAY	GUIDE	DISPLAY	DISPLAY	GUIDE

## Function keys

MSR+ key	TV	VCR	SAT, CTV	DVD	GAME	CD
<b>Power</b>	POWER	POWER	POWER	POWER		POWER
<b>Fn+Top Menu</b>				GOTO		
<b>Fn+Return</b>	BACK	2-/12	RECALL	PBC	RETURN	PRE CHAN
<b>Fn+Menu</b>				SETUP		
<b>Record</b>		RECORD	RECORD	RECORD		RECORD
<b>Band</b>	AV	TV/VCR	AV	AV		INPUT
<b>Angle</b>				ANGLE		
<b>Fn+▶▶</b>				SLOW		
<b>Fn+▶ Play</b>	AUDIO	AUDIO	AUDIO	AUDIO	AUDIO	
<b>Fn+■ Stop</b>		EJECT		EJECT		
<b>Fn+▶ </b>						SKIP+
<b>Fn+◀ </b>						SKIP-
<b>Fn+Repeat</b>	TEXT MIX	TEXT MIX	TEXT MIX	A-B	A-B	
<b>Fn+Subtitle</b>	TV MODE	TV MODE	TV MODE	TITLE	TITLE	
<b>Fn+DSP</b>	INDEX	INDEX	INFO			INFO
<b>Fn+  </b>	TEXT	TEXT	TEXT			
<b>Fn+Mute</b>	MUTE	MUTE	MUTE	MUTE	MUTE	MUTE
<b>Fn+Vol ▲</b>	VOL+	VOL+	VOL+	VOL+	VOL+	VOL+
<b>Fn+Vol ▼</b>	VOL-	VOL-	VOL-	VOL-	VOL-	VOL-
<b>Fn+1</b>	Brightness					
<b>Fn+2</b>	Color					
<b>Fn+3</b>	Contrast					
<b>Fn+4</b>	Brightness-					
<b>Fn+5</b>	Brightness+					
<b>Fn+6</b>	Color-					
<b>Fn+7</b>	Color+					
<b>Fn+8</b>	Contrast-					
<b>Fn+9</b>	Contrast+					
<b>Fn+Store</b>	Hold	Hold	Hold			
<b>Fn+Clear</b>	Expand	Expand	Expand			

# Device codes

## TV brands

ACCENT 0301 2551 2791  
 ACCUPHASE 2791  
 ACEC 2741  
 ACTION 0051 0301 2391  
 ADCOM 2711  
 ADMIRAL 0051 0301 0721  
 0981 1131 1571 2571  
 ADYSON 0051 2391  
 AEA 2551 2791  
 AGEF 2571  
 AIKO 0301 2551 2751 2791  
 AIM 2551 2791  
 AKAI 0051 0301 0671 0741  
 0851 0871 0991 1001 1491  
 2371 2391 2551 2751 2791  
 AKIBA 2551 2791  
 AKITO 2551 2791  
 AKURA 0051 0301 0881 0891  
 2551 2791  
 ALBA 0051 0301 1571 1681  
 2541 2551 2791  
 ALBIRAL 1691  
 ALFA 0051  
 ALLORGAN 1901  
 ALLSTAR 0051 2551 2791  
 AMSTRAD 0301 0981 1781  
 2381 2551 2791  
 ANAM 2551 2791  
 ANAM NATIONAL 2551 2791

ANGLO 0301  
 ANITECH 0051 0301 1111  
 2391 2551 2581 2791  
 ANSONIC 0301 2551 2581  
 2631 2741 2791  
 AOC 0051 2391  
 AR SYSTEM 1741 2551 2791  
 ARC EN CIEL 1991 2341  
 2591 2641 2681  
 ARCAM 2641  
 ARDEM 2551 2791  
 ARISTONA 0051 2471 2551  
 2741 2791  
 ART TECH 0051  
 ARTHUR-MARTIN 0771  
 ASA 1101 1371 1381 1471  
 2571  
 ASBERG 0051 1111 1571  
 2551 2581 2791  
 ASORA 0301  
 ASTRA 0301 2551 2791  
 ATLANTIC 0051 1901 2551  
 2791  
 ATORI 0301  
 ATORO 0301  
 AUCHAN 0771  
 AUDIOSONIC 0051 0301  
 2551 2591 2631 2791  
 AUDIOTON 0301  
 AUDIOVOX 0051  
 AUTOVOX 1891 1901 2481  
 2571 2771  
 AWA 0111 0301 2531 2541  
 2551 2631 2791  
 BAIRD 2591 2621 2801  
 BANG & OLUFSEN 2281  
 2571

BASIC LINE 0051 0061 0301  
 2551 2631 2791  
 BAUR 0051 0181 0301 0411  
 0421 0431 0441 0471 0791  
 1281 1291 1301 2551 2691  
 2721 2751 2771 2781 2791  
 BBK 3151 3161 3171 3181  
 BEC 0051  
 BECRESE 0051 2391  
 BEKO 0051 1361 1621 1651  
 2021 2551 2791  
 BELL & HOWELL 0051  
 BENCHMARK-BEAUMARK  
 0051 0301 2391  
 BEON 0051 1571 2551 2791  
 BESTAR 0051 0801 2551  
 2631 2791  
 BESTAR-DAEWOO 2631  
 BIGSTON 0301  
 BLACK DIAMOND 2791  
 BLACK PANTHER 2581  
 BLAUPUNKT 1231 1241 1251  
 1271 1281 1301 1321 1341  
 2371 2441 2451 2751  
 BLAUPUNLET 2781  
 BLUE SKY 0051 2551 2791  
 BONDSTEC 2481  
 BOSCH 2441  
 BPL 2551 2791  
 BRANDT 1991 2591 2601  
 2611 2621 2641 2661 2681  
 2711  
 BRANDT ELECTRONIQUE  
 1801 1851 1991 2341 2601  
 2611 2681  
 BRENDSTAR 0301  
 BRINKMANN 1571 2551 2791

BRIONVEGA 0051 0981 2551  
 2571 2791  
 BRIORRYEGA 0051  
 BROCKWOOD 2391  
 BROKSONIC 2391  
 BRUNS 2571  
 BSR 0621 0751  
 BUSH 0051 0621 0871 1681  
 2541 2551 2631 2771 2791  
 CAMERON 3021 3031 3061  
 CAMPLE 2391  
 CANDLE 2391  
 CAPEHART 0051 2391  
 CARAD 2551 2791  
 CARENA 2551 2791  
 CARREFOUR 0051 2541  
 2551 2791  
 CARVER 0051  
 CASCADE 2551 2791  
 CASIO 2551 2771 2791  
 CATHAY 0051 2551 2791  
 CCE 2551 2791  
 CENTURION 0051 2551 2791  
 CENTURY 2201 2571 2761  
 CGE 0301 0691 0871 1111  
 1571 2201 2461 2641  
 CGM 0301  
 CIE 0301  
 CIMLINE 0301  
 CIRCUIT CITY 2391  
 CITIZEN 0051 2391  
 CITY 0301  
 CLARIVOX 1601 2171 2551  
 2581 2791  
 CLATRONIC 0301 1111 1181  
 2191 2201 2551 2581 2791  
 COLORTYME 0051

COMPUTRON 0301  
 CONCORDE 0301  
 CONDOR 0051 0301 1181  
 1571 2551 2581 2791  
 CONIC 0051 2391  
 CONRAD 2551 2791  
 CONTEC 0301 2531 2541  
 2551 2791  
 CONTINENTAL EDISON 0331  
 1801 1991 2341 2601 2641  
 2681  
 CORONADO 2391  
 COSMEL 0301 2551 2791  
 CRAIG 0051  
 CROSLEY 0051 0701 1111  
 2201 2571  
 CROWN 0051 0301 1111  
 2391 2551 2791  
 CRYSTAL 0051  
 CTC CLATRONIC 1571  
 CURTIS MATHES 0051 2391  
 DAEWOO 0051 0271 0281  
 0291 0301 1751 2391 2551  
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 DAICHI 0301  
 DANSAI 2391 2541 2551  
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 DAWA 0051 2551 2791  
 DAYTRON 0301 2391 2551  
 2631 2791  
 DECCA 0051 1581 2141  
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 DENVER 0301 2551 2791  
 DER 2801  
 DESMET 0051 0301 2551  
 2571 2791

DIAMANT 2551 2791  
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 DIGILINE 2551 2791  
 DIGITOR 2551 2791 2851  
 DIK 2551 2791  
 DIXI 0051 0301 2551 2571  
 2791  
 DORIC 2771  
 DSE 2861 2871 2881 2891  
 2901 2911 2921  
 DTS 0301  
 DUAL 0051 0301 0981 1161  
 2491 2551 2621 2641 2771  
 2791  
 DUMONT 1571 2391 2571  
 2581  
 DUX 2551 2741 2791  
 D-VISION 2551 2791  
 DYNAMIC 0301  
 DYNATECH 2391  
 DYNATRON 2551 2741 2791  
 EDISON 2591  
 ELBE 0711 0981 1151 2171  
 2551 2751 2761 2791  
 ELBIT 0051  
 ELCIT 2571 2581  
 ELECS 0051  
 ELECTRATUNE 2391  
 ELECTRO TECH 0301  
 ELECTROHOME 2391  
 ELECTRONIKA 0051  
 ELEKTA 0301 2551 2791  
 ELEKTRONIKA 0051  
 ELG 2551 2791  
 ELIN 0051 0301 2551 2771  
 2791  
 ELITE 0051 2391 2551 2791



ELMAN 2021 2581	2571 2581 2791	GENERAL ELECTRIC 2601	2781 2791	HUSPI ELEKTRONIK 1571	ITS 0301 2551 2791
ELENBERG 3001 3011 3051	FIRST LINE 0051 0301 2551	2621	GTT 0301 1571	HYPER 0301 2481	ITT 0721 0911 2771 2801
ELTA 0301 0801	2581 2631 2761 2771 2791	GENERAL TECHNIC 0301	HALLMARK 2391	HYPSON 0051 0301 2551	ITT NOKIA 2771
EMERSON 2391 2551 2571	FISHER 0261 2221 2311	GENEXXA 0051 2551 2791	HANSEATIC 0051 0301 1161	2761 2791	ITV 2551 2631 2791
2791	2541 2571 2771	GITEM 0051	2551 2571 2771 2791	IBERIA 2551 2791	JBL 0051
ENERGY SISTEM 2821 2831	FLINT 0051 2551 2791	GM 0301	HANTAREX 0051 0301 2161	ICE 0051 0301 2551 2791	JEAN 2541
ERRES 0051 2471 2551 2741	FNR 2581	GMG 0301 1571	2551 2581 2791	ICOS 2741	JETPOINT 0051
2791	FORGESTONE 2801	GOLDHAND 0301	HANTOR 2551 2791	ICT 2551 2791	JINLIPIU 0301
ESC 2551 2791	FORMENTI 0051 0821 2551	GOLDSTAR 0051 0301 0621	HARLEY DAVIDSON 2391	IMA 2391	JMB 2551 2631 2791
ETRON 0301 0861 2551	2571 2791	1131 1241 1631 2391 2481	2561	IMPERIAL 0051 0611 0691	JOCEL 0081 0091 0211 0221
2791	FORTRESS 2391 2571	2551 2591 2791	HARRAD 2391	0871 1111 1181 1571 2201	0231 0341
EUROMAN 2551 2791	FRABA 2551 2791	GOODMANS 0051 0301 1681	HARVARD 2391	2551 2771 2791	JULIBEE 2791
EUROMANN 0051	FRIAC 2551 2581 2791	1951 2321 2541 2551 2611	HARWOOD 2551 2791	INDIANA 0051 2551 2791	JUMBOTRONIC 0051
EUROPA 2551 2791	FRONTECH 0301 2401 2771	2621 2631 2701 2791	HAUPPAUGE 2551 2791	INFINITY 0051	JVC 0051 0491 0501 0511
EUROPHON 0051 2151 2551	FUBA 1641	GPM 0301	HCM 0301 2551 2791	INGELEN 1621	0521 0531 0541 0551 2541
2581 2791	FUJITSU 0751 1901 2391	GRADIENTE 2551 2791	HEATHKIT 0051	INGERSOLL 0301	2801
EXCEL 2551 2791	2551 2581 2791	GRADIN 0051 0301	HEDZON 2551 2791	INNO HIT 0051 0301 1131	KAISER 0051
EXPERT 0771 1901 2011	FUJITSU GENERAL 0751	GRAETZ 0661 0731 0861	HEMMERMANN 2771	2151 2551 2581 2791	KAISUI 0051 0301 2551 2791
EXPERT (F) 0771 2011	0981 1901	1051 2551 2791	HIFIFOX 1991 2341 2591	INNOHIT 0051 0301 1131	KAPSCH 0661 1901
EXQUISIT 2551 2791	FUNAI 0301 2391	GRANADA 0051 0361 0641	2641 2681	INNOVATION 2551 2791	KARCHER 0051 0301 2551
FAMILY LIFE 2551 2791	FUTURE 2551 2791	0931 0951 1511 1951 2411	HIGHLINE 2551 2791	INTERACTIVE 2551 2571	2581 2791
FENNER 0301 2631	GALAXI 2551 2581 2791	2541 2551 2611 2621 2701	HILINE 0301	2591 2681 2741 2791	KATHREIN 2551 2791
FERGUSON 1591 1841 1851	GALAXIS 1181 1571 2551	2741 2791	HINARI 0051 0301 0861 2321	INTERBUY 0301 2551 2791	KENDO 0051 0301 0711
1921 1931 1941 1951 2021	2581 2791	GRANDIN 0771 2011 2551	2541 2551 2791	INTERDISCOUNT 0051	0981 1901 2551 2581 2791
2061 2131 2171 2551 2591	GALAXY 1181 1571	2631 2791 3251 3261 3271	HIT 2571	INTERFUNK 0051 0661 0741	KENNEDY 0981 1901
2601 2611 2621 2661 2701	GALERIA 0301	3281 3291 3301 3311 3321	HITACHI 0051 0631 0661	0861 0901 1181 1571 2231	KENWOOD 2391
2711 2761 2791 2801	GBC 0301 0701 0721 2161	3331 3341 3351 3361 3371	0671 0781 0791 0921 0991	2241 2441 2451 2471 2551	KIOTA 0301
FIDELIS 0301	2631	3381 3391 3401 3411 3421	1051 1501 1791 1991 2391	2571 2591 2681 2741 2771	KITON 2791
FIDELITY 0841 2551 2791	GE 2591 2601 2611 2621	3431 3441 3451 3461 3471	2521 2541 2551 2561 2591	2791	KITON 2551
2801	2701	3481 3491 3501 3511 3521	2621 2771 2791	INTERNAL 2551 2631 2791	KLH 2391
FILSAI 0301	GEANT CASIONO 0771	3541 3551 3561 3571	HMV 2571	INTERVISION 0801 2551	KNEISSEL 1161 2551 2631
FINLANDIA 1051 1471 2601	GEC 0661 2551 2561 2771	GRENADEIR 0301	HORIZONT 0051 3091 3101	2581 2791	2761 2791
2621	2791	GRONIC 2581	3131 3141	IRRADIO 0051 0301 1081	KOBIC 0301
FINLUX 0051 0301 0621	GELOSO 0301 2201 2631	GRUNDIG 0331 1211 1221	HORNYPHON 0051	1131 2481 2551 2791	KOLSTER 0051 2551 2581
1081 1101 1371 1381 1441	GEMSOUND 0301	1231 1241 1251 1261 1271	HORNYPHONE 2551 2741	IST 0051	2771 2791
1451 1461 1471 1501 1521	GENERAL 0301 2591 2601	1281 1301 1311 1321 1331	2791	ISUKAI 0051 2551 2791	KONICHI 0301
1531 1571 1821 2141 2551	2661	1341 1351 2541 2551 2751	HUANYU 2631	ITL 0301	KÖNIG 1981

KONKA 2551 2791 2971 2981 2991	1901 2551 2631 2791 LUMATRON 2551 2791	MAXELL 0301 MCE 0301	MYRYAD 2551 2791 NAIKO 2551 2791	1991 2021 2051 2341 2551 2591 2601 2611 2621 2641 2661 2681 2701 2791	2371 PACIFIC 0091 0101 2551 2791
KORPEL 0051 2551 2791	LUX MAY 0051 2551 2791	MCMICHAEL 2561	NAKIMURA 2551 2631 2791	NORMEREL 2551 2791	PAEL 1081
KORTING 2211 2241 2571	LUXOR 0631 0671 0741 0781 0791 0811 0901 0991	MEDIATOR 0051 2471 2551 2741 2791	NAMSUNC 0301 NAONIS 0721	NOVABEAM 0051 NOVAK 2741	PALLADIUM 0051 1281 2551 2571 2691 2721 2751 2771 2781 2791
KÖRTING 2211 2241	1001 1021 1031 1041 1051 1131 1371 1441 1471 1501	MEDION 0201 2551 2791	NATIONAL 0051 0351	NOVATRONIC 0051 0301 2551 2631 2791	PALSONIC 2551 2791
KOSMOS 2551 2791	1521 2771	MELECTRONIC 1411 1541 2551 2591 2601 2621 2631 2751 2771 2791	NEC 0301 2531 2541 2551 2631 2791	O GENERAL 0301	PANAMA 0301 2551 2791
KRAKING 2761	LUXOR SALORA 2001	MEMOREX 0301	NECKERMANN 0051 0301 0431 0441 0501 0791 0921	OCEANIC 0771 0811 0991 1051 1501 1521 2011	PANASHIBA 0301
KRIESLER 2741	LUXOR/SKANTIC 0991	MEMPHIS 0301	0981 1181 1241 1261 1281 1301 1331 2151 2441 2451	OKANO 0301 2551 2791	PANASONIC 0051 0351 0361 0371 0381 0391 1191 2361 2371 2551 2791
KTV 2391	LXI 0051	MERCURY 0301 2551 2791	1301 1331 2231 2261 2551 2571 2751 2781 2791	OLYMPIC 0301	PANAVISION 2551 2791
KUASHO 0051 2391	M ELECTRONIC 0301 1501	METZ 1191 1201 1241 1281 1301 1331 2231 2261 2551 2571 2751 2781 2791	NEI 0051 1721 2551 2791	ONCEAS 0301	PANAVOX 0301
KUBA 2771	M ELECTRONICS 0051 0301 1471 2021	MICROMAXX 2551 2791	NETSAT 2551 2791	ONWA 2581	PANORAMA 0301
KUBA ELECTRONIC 2771	MACYS 2391	MIDLAND 2391	NEUFUNK 2551 2791	OPERA 0051 2551 2791	PATHE CINEMA 1161 2761 2771
LEADER 0301	MADISON 2551 2791	MINATO 2551 2791	NEWTECH 0051 0301 2551 2621 2791	ORBIT 0051 2551 2791	PATHE MARCONI 1991 2341 2591 2641 2681
LECSON 2551 2791	MAGNADYNE 0051 0301 0701 1571 2151 2191 2201 2571 2581	MINERVA 1241 1301 2751 2781	NIKKAI 0051 2391 2541 2551 2791	ORIENT 0301	PAUSA 0301
LEGEND 0301	MAGNAFON 2151 2581	MINOKA 0051 2551 2791	NIKKO 1711	ORION 0051 0121 0131 0141 0151 0301 0961 0971 2111 2391 2531 2551 2581 2791	PCE/PEC 2391
LENCO 0051 0301 0321 2551 2631 2791	MAGNASONIC 0051 0301 2391	MISTRAL ELECTRONIC 2801	NOBLEX 0261 0301	OSAKI 2551 2631 2791	PENNEY 2391
LENOIR 0301	MAGNUM 0171 2551 2791	MITSUBISHI 0051 0301 2301 2311 2411 2421 2511 2541 2551 2571 2791 2801	NOGAMATIC 1991 2341 2591 2641 2681	OSIO 2551 2791	PERDIO 2551 2791
LEVIS AUSTRIA 2551 2791	MANESTH 0051 2551 2791	MIVAR 1091 1121 1131 1151 1161 1611 2161 2181	NOKIA 0241 0301 0631 0661 0671 0721 0731 0741 0811 0831 0861 0901 0931 0991	OSUME 2541 2551 2791	PERFEKT 0051 2551 2791
LEYCO 0051 2551 2791	MANHATTAN 2551 2791	MORGAN'S 2551 2791	1001 1041 1051 1391 1401 1421 1431 1481	OTF 0301	PHILCO 0051 0301 0691 0701 1111 1181 1571 2201 2551 2571 2791
LG 2551 2591 2791 2931 2941 2951 2961	MARANTZ 0051 2551 2791	MOTOROLA 0051	1501 1511 1521 1541 1571 1821 2591 2631 2771	OTTO VERSAND 0051 0301 0411 0421 0431 0441 0451 0621 0791 0801 1261 1271 1281 1331 2021 2371 2481 2491 2541 2551 2591 2621 2691 2721 2751 2771 2781 2791	PHILEX 2801
LIESENK & TTER 2551 2791	MARELLI 2571	MTC 2391 2771	NOKIA AKAI 0851	ORLINE 2551 2791	PHILLIPS 2551 2561 2571 2621 2631 2651 2741 2751 2761 2781 2791 2801 2811
LIESENKÖTTER 0051 2551 2741 2791	MARK 0051 2551 2631 2791	MULTIBROADCAST 2801	NONAME 0051	ORMOND 2551 2791	PHILLIPS (F) 0051 2471
LIESENKÖTTER 0051 2441	MASUDA 2551 2791	MULTISTANDARD 2581	NORDMENDE 1791 1811 1851 1861 1871 1921 1961	OSAKI 2551 2631 2791	PHONOLA 0051 2471 2551 2571 2741 2791 2801
LIFE 0301	MATSUJI 0051 0301 0311 0331 0611 1241 1731 2531 2541 2551 2611 2751 2771 2791	MULTITEC 2551 2791		OSIO 2551 2791	
LIFETEC 0301 2551 2631 2791	MAYA 2391	MULTITECH 0051 0301 1111 2391 2551 2581 2771 2791		OSUMI 2541 2551 2791	
LINITRON 2391	MAXAM 0301	MUSIKLAND 2551 2791		OTF 0301	
LLOYD 2391				OTTO VERSAND 0051 0301 0441 0471 0561 0801 1241 1261 1301 1631 2021 2111	
LLOYD'S 0301					
LOEWE 0051 2251 2551 2571 2791					
LOGIK 2531 2551 2791 2801					
LÖGIK 0251 2351					
LUMA 0051 0301 0721 0981					

PILOT 2551 2791	1281 1301 1331 1371 1381	ROADSTAR 0301 2551 2791	2311 2531 2541 2551 2791	SIEMENS 0051 1241 1251	STARLITE 0301 2551 2791
PIONEER 0051 0761 1791	1451 1471 1521 1661 1671	ROBOTRON 2571	SAVE 2551 2791	1261 1271 1281 1291 1301	STARLUX 0301
2551 2591 2601 2621 2651	1901 2311 2371 2391 2441	RODEX 2551 2791	SBR 0051 2471 2551 2561	1331 2291 2391 2441 2451	STERN 0711 0751 0981
2791	2451 2461 2481 2531 2541	ROSITA 0301	2741 2791 2801	2551 2751 2781 2791	1161 1901
PLANTRON 0051 0301 2551	2551 2591 2681 2691 2721	ROWA 0301	SCHAUB LORENZ 0991 1051	SIERA 2551 2741 2791	STRATO 2551 2791
2791	2751 2771 2781 2791	ROYAL 0301	2631 2771	SIERRA 0051 2471	SUNIC LINE 2551 2791
POLAR 3081	QUESTA 2541	ROYAL LUX 2611	SCHNEIDER 0051 0161 0171	SILMA 0051	SUNKAI 2551 2791
POLICOM 2571 2581 2591	R LINE 0051 2551 2791	RUBIN 3071 3101 3141	0301 0861 0941 0981 1161	SILVA 0301 2551 2791	SUNSTAR 0301 2551 2791
2681 2761	RADIALVA 2551 2591 2601	RUKOPIR 2551 2791	2471 2481 2491 2551 2621	SILVER 2541 2551 2791	SUNWOOD 0051 0301 2551
POPPY 0301	2791	SABA 0661 0861 1061 1791	2741 2771 2791	SINGER 0051 0301 0941	2791
PORTLAND 2391 2631	RADIO SHACK 2391 2551	1801 1811 1851 1991 2021	SCHNEIDER (F) 2471	2011 2191 2201 2551 2571	SUPERTEC 0301
PRANDONI PRINCE 0721	2791	2031 2041 2151 2331 2341	SCOTT 2391	2581 2611 2791	SUPERTECH 0301 0871
1081	RADIOLA 0051 2471 2551	2571 2591 2601 2611 2621	SEG 0301 0471 1111 2391	SINUDYNE 0051 0471 0721	2551 2791
PRANDONI-PRINCE 2151	2741 2791	2641 2661 2681 2701 2711	2541 2551 2581 2771 2791	0941 0981 2111 2551 2571	SUPRA 0301 2631
PRIMA 0051 0301 2391	RADIOMARELLI 2151 2551	SACCS 2761	SEI 2551 2571 2581 2691	2581 2691 2721 2771 2791	SUPREMACY 2391
PRINCESS 0301	2571 2791	SADKO 3141	2721 2771 2791	SKY 2551 2791	SUSUMU 2601 2611
PRINZ 2771	RADIOSTONE 2791	SAISHO 0051 2531	SEI-SINUDYNE 0051 0701	SMARAGD 0331	SUTRON 0301
PROELCO 0051	RADIOTONE 0051 0301 2551	SAIVOD 2551 2791	2551 2571 2581 2691 2721	SNEYDER 0051	SYC LINE 0301
PROFEX 0301 0801 1111	RADUGA 3141	SAKURA 0301	2791	SOKOL 3111 3141	SYLVANIA 0051
PROFITRONIC 0051 2551	RANK ARENA 2541	SALORA 0631 0641 0741	SELECO 0681 0711 0721	SOLAVOX 0861 2551 2791	SYMPHONIC 2391
2581 2791	RANK/BUSH/MURPHY 1141	0791 0811 0921 0991 1001	0751 0981 1011 1161 1561	SONIKO 2551 2791	SYSLINE 2551 2791
PROLINE 2551 2711 2741	RCA 2611 2621 2701 2711	1041 1051 1131 1391 1471	1761 1881 1891 1901 2001	SONNECLAIR 2551 2791	TANDBERG 0981 1191 2591
2791	RECOR 2551 2791	1491 1501 1521 1541 1821	2311 2541	SONOKO 0051 0301 2551	TASHIKO 2321 2541 2561
PROSONIC 2551 2631 2791	RECORD 0051 3141	2771	SEMUA 2391	2791	TATUNG 0051 0191 2531
PROTEC 0051 0301	RECTILIGNE 2551 2791	SALSA 2611	SENCORA 0301	SONOLOR 0771 0811 0991	2551 2791
PROTECH 2551 2581 2771	REDIFFUSION 2541	SAMBERS 1081 1111 1131	SENTRA 0861 2771	2011 2691 2721	TEAC 2551 2771 2791
PROTECT 2791	REDSTAR 2551 2791	2151 2581	SHARP 0561 0571 0581	SONTEC 0051 2551 2791	TEAK 0301
PROTON 0301 2391	REFLEX 2551 2791	SAMPO 2391	0591 0601 2311 2391 2541	SONY 2531 2541 2551 2581	TEC 0301 0751 0871 0981
PROVISION 2551 2791	REGENTE 0301	SAMSUNG 0051 0161 0181	2801 2841	2691 2721 2731 2791	1721 2551 2611 2661 2791
PULSER 0051 0301 2391	REVOX 0051 2551 2791	0261 0301 1131 1661 2391	SHINTOSHI 2551 2791	SOUND & VISION 2551 2581	TECH LINE 2551 2791
PYE 0051 2551 2571 2631	REVOX/STUDER 0051	2401 2551 2791	SHIVAKI 0051 2551 2631	2631 2791	TECHNICS 0051 0351
2741 2771 2781 2791	REX 0711 0751 0981 1161	SAMSUX 2391	2791	SOUNDESIGN 2391	TECHNILAND 0051
PYMI 0301	1901 2201	SANELA 2761	SHOW 0301	SOUNDMASTER 0301	TECHNISAT 1771 2551 2791
QUELLE 0051 0301 0411	RFT 1161 1171 2551 2571	SANKY 2391	SIAREM 0701 2161 2571	SOUNDWAVE 2551 2791	TECHNOL 0301
0421 0431 0441 0451 0471	2791	SANSUI 0051 0301 2391	2581	SPECTRICIAN 0051 2391	TECHWOOD 3481 3531
0501 0621 0871 0981 0991	RICOH 2551 2791	2551 2791	SICATEL 1181 1551	STANDARD 0301 2551 2631	TECNISON 0301
1081 1101 1131 1241 1271	RMB 2391	SANYO 0301 1161 1671	SICATEL-FRANCE-S 1551	2791	TEDELEX 0301 2551 2791

TEKNANT 0051 0301	2681 2701 2711 2771 2791	UNIMOR 0051	WEGA 2221 2541 2551 2571	AMSTRAD 0132 0152	GOLDSTAR 0512 0652
TEKNIKA 2391	3041	UNITED 2551 2791	2791	ANITSCH 0702	GOODMANS 0132 0202
TEKON 0301	THORN 0041 0051 0251	UNIVERSUM 0051 0301 1281	WEGAVOX 0051 0301 1571	ASA 0002	GRANADA 0002 0232 0272
TELEAVIA 1991 2121 2341	0741 0861 0921 1081 1591	1411 1471 1541 1681 1901	2551 2791	BAIRD 0192	GRANADA (UK) 0002 0012
2591 2601 2621 2641 2671	1971 2131 2171 2311 2351	2441 2531 2541 2551 2591	WELTBlick 0051 2551 2791	BAUR 0002 0512	0162 0302 0512 0522
2681	2411 2471 2551 2591 2611	2681 2691 2721 2771 2781	WESTON 2551 2791	BLACK DIAMOND 0622 0672	GRUNDIG 0002 0012 0452
TELECOR 2551 2791	2621 2631 2691 2721 2761	2791	WHARFEDALE 2551 2791	BLAUPUNKT 0012 0162	0502 0942 0952 0962 0972
TELEFAC 0301	2791 2801	UNIVOX 2551 2571 2761	WHITE WESTINGHOUSE	0372 0692	0982 0992 1002
TELEFUNKEN 1701 1851	THORN-FERGUSON 0051	2791	0051 1571 2551 2791	BUSH 0032 0042 0212 0672	HANSEATIC 0002 0512
1911 1951 1961 1971 2021	0251 0981 1591 2021 2131	URANYA 0301	WINSTON 0051 0301	BUSH (UK) 0512	HARMAN/KARDON 0622
2041 2091 2431 2461 2551	2171 2351 2591 2611 2761	VANGUARD 0301	WINTERNITZ 0301	CGE 0132 0462	HINARI 0112 0142 0222
2591 2601 2611 2621 2641	2801	VECO 0301	WORLDVIEW 0051 0301	CRAIG 0182	HITACHI 0132 0302 0362
2661 2681 2711 2791	TOBO 0301	VESTEL 0051 0061 0071	CRYPTON 2551 2791	CROWN 0322	0512 0722
TELEFUSION 2551 2791	TOKAI 0051 2551 2631 2791	1681 2551 2791	YAMISHI 2551 2791	DAEWOO 0322	IMPERIAL 0132
TELEGAZI 2551 2791	TOSHIBA 0001 0011 0021	VEXA 0051 0301 2551 2791	YOKAN 2551 2791	DECCA 0002 0132 0642	INGERSOL 0142
TELEMEISTER 2551 2791	0031 0041 1141 2541 2581	VIDEO SYSTEM 0051 2551	YOKO 0051 0301 2201 2551	DECCA (UK) 0002	INNO HIT 0002
TELEOPTA 0301	2591 2671 2751	2791	2791	DEGRAAF 0002 0132 0232	INNOVATION 0842 0862 0872
TELESONIC 2551 2791	TOSONIC 2391	VIDEOTECHNIC 2631	YORK 0051	0302	INTERFUNK 0002
TELESTAR 0301 2551 2791	TOTEVISION 2391	VIDEOTON 0631 0651 0961	ZANUSSI 0721 1901	DIXI 0142	ITT 0192 0232 0272 0462
TELETECH 0301 2551 2791	TOWADA 2581 2771	1571 1791 2081 2121	ZENITH 0051	DUAL 0332	ITT-NOKIA 0192 0232 0272
TELETON 0751 1901 2541	TRANS CONTINENS 2551	VIDIKRON 2581		DUMONT 0002 0132 0232	0462
2771	2791	VIDION 0301	<b>LCD/Plasma</b>	DYNATECH 0132	JVC 0442 0462 0482 0602
TELEVIEW 2551 2791	TRANSONIC 2551 2791	VIDTECH 2541	<b>TV brands</b>	EMERSON 0132 0212 0222	KARCHER 0002 0512
TELEVISIO 2011	TREVI 0301	VISION 0301 2551 2791		FERGUSON 0412 0422 0552	KENDO 0192
TELEXA 2581	TRIAD 0051 2551 2791	VISON 0051	LG 3191	0602 0712 0722 0782	KENWOOD 0272
TEMPEST 0301 2551 2791	TRILUX 0051	VITYAZ 3121 3141	PIONEER 3201	FIDELITY 0132	LIFETEC 0842 0862 0872
TENNESSEE 2551 2791	TRISTAR 2801	VORTEC 0051 2551 2791	SAMSUNG 3211	FINLANDIA 0002 0232	LLOYD 0132
TENSAI 0051 0301 0621	TRIUMPH 2551 2791	VOXSON 0051 0721 2551	PANASONIC 3221	FINLUX 0002 0082 0132	LOEWE OPTA 0002 0012
1631 2551 2631 2791	TRIVISION 0301	2571 2791	SHARP 3231	0162 0192 0232 0272 0302	0022
TENSON 0301	TVTEXT 95 2791	WALTHAM 0631 0961 1071	TOSHIBA 3241	0612	LOGIK 0142
TESLA 0051	UHER 0051 0461 1901 2551	2121 2551 2591 2601 2671		FIRST LINE 0612	LUXOR 0192 0272 0512
TESLA ORAVA 0051	2631 2791	2791	<b>VCR Brands</b>	FISHER 0182 0232 0242	M ELECTRONIC 0132
TEVION 2551 2791	ULTRAFOX 2201	WARDS 0051		0272 0292	MAGNADYNE 0002
TEXET 2631	ULTRAVOX 0701 2191 2201	WATSON 0051 0301 2551	AIWA 0052 0132	FORMENTI-PHOENIX 0002	MAGNASONIC 0272
THOMAS 0051 0301 2391	2551 2571 2581 2631 2791	2791	AKAI 0122 0192 0282 0312	FUNAI 0132	MARANTZ 0002 0012 0202
THOMSON 2551 2591 2601	UMA 0051	WATT RADIO 0701 1571	0342 0352 0462 0512 0612	GEC (UK) 0002	MATSUI 0002 0142 0212
2611 2621 2641 2661 2671	UNIC LINE 2551 2771 2791	2581 2771	ALBA 0032 0042 0672	GENERAL TECHNICK 0872	0222 0512 0672 0902 0912

0922 0932	0772	SYMPHONIC 0132 0612	CGV FREEVIEW 1653 1663	MULTICHOICE 0733	1503 1513
MEDION 0842 0862 0872	PHONOLA 0002 0022	TANDBERG 0222 0632	1683 1843 1833 2273 2283	NEUF TV 2533	SKY+ (SKY Digital +) 1543
MEMOREX 0132 0182 0232	PIONEER 0002 0072 0172	TASHIKO 0132	2293	NETGEM 2563	SKY (NZ) 1363 1423 1503
0272	PROLINE 0132	TATUNG 0002 0132 0622	DARTY 2543	NEXTWAVE+ 1763	1513 1953
METZ 0012 0632	PYE 0002 0022	TCM 0842 0862 0872	DGTECH 1753 1783	NIKKO 0123 0133	SONY 1573
MGA 0612	QUARTZ 0272	TEAC 0132	DSE 1823	NOKIA 0143 0803 0883 0893	STRONG 0073 1173 1183
MICROMAXX 0842 0862 0872	QUELLE 0002 0012 0162	TECHNICS 0162	D-BOX 0153 0903	0913 0943 1133 1153 1163	1193 1203 1213 1223 1233
MINERVA 0012	0222 0642	TEKNIKA 0132	ECHOSTAR 0093	1523	1243 1253 1263 1273 1283
MINOLTA 0302	REALISTIC 0132 0182 0202	TELEFUNKEN 0332 0432	ELTA 0273	NOOS 2571	1293 1303 1313 1323 1333
MITSUBISHI 0002 0612 0622	0232 0272	0442 0462 0482 0582 0592	ENERGY SISTEM 1753	NUMERICABLE 2593	SUN/MOON/STAR 0463
0672	RET 0772	TEMPEST 0732 0742 0752	EURODEC 0213 0223 0233	ONDIGITAL 0513 0853 0863	TANDBERG 0103
MTC 0132	REX 0442 0482	THOMSON 0102 0332 0462	FERGUSON 0013	1373 1383 1523 1553 1563	TEAC 1813
MULTITECH 0002 0132	RICOH 0652	THORN 0602	FORCE 1093 1123	ORANGE TV 2513 2523	TELE+ 0833
MURPHY 0132	SABA 0092 0332 0432 0442	THORN-FERGUSON 0412	FOXTEL 0453 0483 0743	OURALIS 1043	TELEVES 0003 0033 0043
N.E.I. 0002	0462 0472 0482 0492 0572	0422 0442 0462 0552 0562	0813 1533 2263	PACE 0513 0563 0613 0623	0053 0303 0473 0493 0503
NATIONAL 0162	SAISHO 0142 0212 0222	0572 0602	FREEBOX 2553	0783 0793 0803 0873 1373	0543 0643 0653 0703 0713
NECKERMANN 0002 0012	0672	TMK 0222	FREEBOX TV 2493 2503	1573 1593	0823 1063 1073 1403 1413
0222 0272 0462 0512	SALORA 0272 0512 0522	TOSHIBA 0322 0612	GRADIENTE 1593	PANASONIC 0453 1573	1453 1463 1493 1693 1703
NOBLIKO 0012	0612	TRIUMPH 0622	GRUNDIG 0673 0683 0693	PANSAT 0063	1713 1723 1733 1743
NOKIA 0192 0232 0272 0462	SAMSUNG 0002 0322 0352	VIDEON 0862 0872	1573	PHILIPS 0113 0173 0183	THOMSON 1143 1603
0852	0892		HIRSCHMANN 0393 0403	0193 0523 0753 0763 0773	THORN-FERGUSON 0013
NORDMENDE 0092 0102	SANYO 0182 0232 0262		0413 0423 0433	0803 0843 0853 0863 1553	TOPFIELD 1863 1873 1883
0332 0432 0442 0462 0482	0272	<b>SAT brands</b>	HOMECAST 1803	1563 1943	TOSHIBA 1383
0492 0532 0542 0572	SBR 0002 0022	ALICE TV / ORANGE TV 2483	HUMAX 1053 1893 1903	PROSAT 0163	TPS 0363 1413 1603 1613
OLYMPUS 0162	SCHNEIDER 0002 0132	AKAI 0263	1913 1923 1933	SAGEM 0243 0923 1113	1623
OPTIONICA 0202	SEI-SINUDYNE 0142	ALBA 0263	JVC 0263	1393 1603	TRIAD 1143
ORION 0142 0212 0222 0682	SHARP 0202 0402	AMSTRAD 0283 0573 0583	KATHREIN 0383	SAMSUNG 0553 1103	TRIAX 2303 2313 2323 2333
OSAKA 0132	SIEMENS 0012 0272	1573	KYOSTAR 0073	SATELLITE 0533	2343 2353 2363 2393 2403
OSAKI 0132	SINUDYNE 0002 0082 0142	ASTRO 0663	LEGEND DIGITAL 1793	SECTOR 0253	2413 2423 2433 2443 2453
OTTO VERSAND 0002 0512	0632	AJUSTER 0463 0723	LENSON 2313 2323 2353	SEDEA 0083	UPC 2583
PAENTAX 0302	SONITRON 0232 0272	AVANDIS 1003	2373 2383 2403 2463	SMARTBOX 1853	VORTEC 0063
PANASONIC 0162 0372 0692	SONY 0132 0252 0382 0392	BRITISH TELECOM 0263	LIFESAT 0313 0333 0343	SKY (SKY Digital) 0443 1573	WINTAL 1773
0792 0802 0882	0642 0652 0662 0822 0832	BSKYB 1573	MACAB 0933	1583 1593	WORLDWIDE 0593 0603
PERDIO 0132	STS 0302	BT 0293 0633	MEDION 0313 0333	SKY ITALY 1673	XSAT 0373 0953
PHILCO 0762	SUNKAI 0212	CAMBRIDGE 0023 0263	METRONIC 0963 0973 0983	SKY MASTER 1343 1353	ZEHNDER 0203 0323
PHILIPS 0002 0012 0022	SUNSTAR 0132	CANALSAT MEDIASAT MAX	0993 1013 1023 1033	1433 1443 1473 1483	ZENITH 1583
0062 0072 0082 0172 0202	SYLVANIA 0132 0612	2473	MICROMAXX 0313 0333	SKY SATELLITE 1363 1423	ZINWEL 1083
		CANAL+ 0353 1633 1643			

## DVB-T brands

ALBA 2003 2103  
 BUSH 2003 2183  
 CYBERMAXX 2133 2243  
 CYTRON 2133 2243  
 DIGENIUS 2243  
 DIGIFUSION 2113  
 ECHOSTAR 2173  
 FREEVIEW 1993 2003 2013  
 2033 2043 2053 2063 2083  
 2103 2113 2123 2143 2193  
 2203 2223 2253  
 GERICON 1983  
 GOODMANS 2003 2063  
 GRUNDIG 2043  
 HAUPPAUGE 2033  
 HITACHI 2063  
 HUMAX 2143  
 JVC 2063  
 LABGEAR 2053  
 LIDCOM 2003  
 LIFETEC 2133 2243  
 MARMITEK OCTOPUS 2153  
 MATSUI 2003 2063 2253  
 MEDION 2133 2243  
 METRONIC 2603  
 MICROMAXX 2133 2243  
 MICROSTAR 2133 2243  
 NETGEM 2613  
 NOKIA 2203 2213  
 OPTEX 2163  
 ON-DIGITAL 2073 2213 2233  
 PACE 2013 2073  
 PANASONIC 1973  
 PHILIPS 2223  
 PIONEER 2193 2233

PREMIERE 2203 2223  
 PRO2 2133 2243  
 REBOX 2023  
 SAGEM 2123  
 SCHWAIGER 2093  
 SHARP 1963  
 SONY 1993  
 TEVION 2133 2243  
 THOMSON 2083  
 TOP-UP TV 2073 2173 2213

## CTV brands

AUSTAR 0194  
 CABLETIME 0084 0094 0114  
 CLYDE CABLEVISION 0064  
 FILMNET 0034 0074  
 FOXTEL 0154 0164 0174  
 FRANCE TELECOM 0024  
 GEC 0064  
 G.I. 0194 0214  
 HK CABLE 0204 0254  
 JERROLD 0054  
 MOVIE TIME 0104  
 NOW BROADBAND TV 0244  
 NSC 0104  
 OPTUSVISION 0184  
 PHILIPS 0024  
 SAMSUNG 0134  
 SCIENTIFIC ATLANTA 0124  
 0144  
 SKYMASTER 0224 0234  
 STARCOM 0054  
 STS 0104  
 TELE 0074  
 TELE+1 0074  
 TELESERVICE 0044 0114  
 TUDI 0014

UNITED CABLE 0054  
 ZENITH 0044

## DVD brands

3DLAB 0155  
 ACOUSTIC SOLUTIONS 0545  
 AEG 0505  
 AIWA 0565 0545  
 AKAI 0035 0435 0505  
 ALBA 0515 0525 0585  
 AMSTRAD 0585  
 ANSONIC 0355  
 APEX DIGITAL 0405  
 AWA 0375  
 A-TREND 0555  
 BBK 1045 1055 1065 1075  
 1085 1095 1105 1115 1125  
 1135  
 BLACK DIAMOND 0585  
 BLUE SKY 0405 0455 0525  
 0585  
 BOMAN 0395  
 BRANDT 0685  
 BUSH 0355 0425 0515 0525  
 0585 0635  
 CAMBRIDGE AUDIO 0495  
 CAMERON 1025  
 CENTRUM 0585  
 cineULTRA 0525  
 CGV 0325 0415 0695 0705  
 0715  
 CLASSIC 0545  
 Clas Ohlson 0815 0825  
 CLATRONIC 0505  
 CONIA 0405  
 CORTLAND 1005 1015  
 CROWN 0345 0685

CYBERCOM 0355  
 CYBER HOME 0265 0555  
 CYTRON 0365 0685  
 DAEWOO 0345 0365  
 DANSAI 0345 0395  
 DECCA 0345  
 DENON 0025  
 DENVER 0505 0525 0775  
 0785 0795  
 DENZEL 0385  
 DIAMOND 0535 0685  
 DIGITOR 0805  
 digiRED 0515  
 Digitrex 0405  
 DIK 0355  
 DiViDo 0365  
 DMTECH 0395  
 DSE 0845 0855 0865 0875  
 0885 0895 0905 0915 0925  
 0935 0945 0955 0965 0975  
 DUAL 0385 0395 0545 0585  
 0685  
 ELENBERG 0985 0995 1035  
 ELTA 0425  
 EMERSON 0365  
 ENERGY SYSTEM 0725 0735  
 0745 0755 0765  
 ENZER 0385  
 FERGUSON 0685  
 FINLUX 0345 0395 0575  
 GE 0515  
 GLOBAL SPHERE 0535  
 GOLDSTAR 0125 0575  
 GOODMANS 0395 0425 0435  
 0685  
 GO VIDEO 0395  
 GRAETZ 0385

GRUNDIG 0155 0365 0435  
 0455 0585 0685  
 GRUNKEL 0345  
 HANSEATIC 0575  
 HARMAN/KARDON 0205  
 HDT 0365  
 HITACHI 0095 0195 0225  
 0275 0385  
 HITEKER 0405  
 HYUNDAI 0395  
 ISP 0455  
 JAMO 0595 0605  
 JMB 0455  
 JOCEL 0615  
 JVC 0015 0135 0145 0155  
 0485  
 KARCHER 0395  
 KENDO 0525  
 KENWOOD 0025 0085  
 KISS 0385  
 LASONIC 0115  
 LAWSON 0365  
 LECSON 0625  
 LENCO 0345 0355 0525  
 0685  
 LENOXX 0425  
 LEXIA 0525  
 LG 0125 0575 0835  
 LIFETEC 0355 0685  
 LIMIT 0535  
 LINN 0245  
 LOEWE 0155 0255  
 LOGIC LAB 0535  
 LOGIX 0365 0395  
 LUMATRON 0365  
 LUXMAN 0095  
 MAGNAVOX 0015 0055 0445  
 0485  
 MANHATTAN 0365  
 MARANTZ 0155  
 MATSUI 0455 0685  
 MBO 0425  
 MEDION 0355 0395 0685  
 METZ 0185 0585 0665  
 MICROMEDIA 0015 0155  
 0485  
 MICROMEGA 0155  
 MICROSOFT 0655  
 MICROSTAR 0355  
 MINAX 0585  
 MITSUBISHI 0005 0585  
 MONYKA 0385  
 MUSTEK 0545  
 Mx ONDA 0685  
 NAD 0215 0575  
 NAIKO 0345  
 NEUFUNK 0385  
 NORDMENDE 0355  
 ONKYO 0015 0055 0105  
 0485  
 OPTIMUS 0175 0185 0665  
 ORION 0455  
 ORITRON 0685  
 PACIFIC 0305 0335 0355  
 0435 0535  
 PALLADIUM 0455  
 PALSONIC 0405 0635  
 PANASONIC 0025  
 PHILIPS 0015 0055 0155  
 0255 0485  
 PHONOTREND 0525  
 PIONEER 0175 0185 0665  
 PROLINE 0615 0685  
 PROSCAN 0655

PROSONIC 0525  
 PROVISION 0525  
 RADIONETTE 0575  
 RAITE 0385  
 RCA 0655  
 REC 0025 0635  
 RED STAR 0345 0505  
 REOC 0535  
 REVOY 0525  
 ROADSTAR 0425 0525 0635  
 ROTEL 0145  
 SABA 0685  
 SALORA 0575  
 SANSUI 0455 0505  
 SAMSUNG 0095 0225  
 SCAN 0365  
 SCHAUB LORENZ 0505  
 SCHNEIDER 0365 0395 0435  
 0685  
 SCIENTIFIC LABS 0535  
 SCOTT 0405 0685  
 SEG 0385 0535 0585  
 SHARP 0645  
 SHANGHAI 0405  
 SHERWOOD 0575  
 SHINCO 0515  
 SHINSONIC 0075  
 SILVA 0505  
 SILVASCHNEIDER 0355  
 SINGER 0425  
 SKYMASTER 0545  
 SLIM ART 0345  
 SM ELECTRONICS 0425  
 0535 0545  
 SONY 0045 0095 0235 0285  
 0675  
 SONY-PS2 0165

SOUNDMASTER 0535  
 SOUNDWAVE 0395  
 STANDARD 0535 0685  
 SUNWOOD 0505  
 SVA 0405  
 TATUNG 0345  
 TEAC 0185 0435 0515 0535  
 0575  
 TECHNICS 0025  
 TECHNIKA 0345  
 TECHWOOD 0585  
 TENSAI 0425 0685  
 TEVION 0685  
 THETA DIGITAL 0185  
 THOMSON 0015 0135 0655  
 TOKAI 0385 0505  
 TOKIWA 0365  
 TOSHIBA 0015 0055 0465  
 0475 0485  
 UNITED 0505  
 UNIVERSUM 0125 0575 0585  
 VENTURER 0435  
 VIETA 0365  
 VOXSON 0355 0545  
 WALKVISION 0515  
 WESDER 0525  
 WHARFEDALE 0615 0625  
 XMS 0505 0635  
 X-BOX 0295  
 YAMAHA 0025 0065 0155  
 YAMAKAWA 0385  
 YUKAI 0545  
 ZENITH 0015 0055 0125  
 0485 0575

## TER Brands

Canal + 'MEDIASAT' 1235

Canal + 'SYSTER+' 1225  
 Canal + 'TNT+' 1215  
 Canal sat PILOTIME 1245  
 Canal+ 'MEDIASAT MAX' 1255  
 METRONIC 1145 1155 1165  
 PHILIPS 1175 1185 1195  
 SAGEM 1145 1215  
 STRONG 1205 1285 1295  
 1305  
 THOMSON 1205 1215  
 TPS 'HD SAT' 1275  
 TPS 'Platinum' 1265

## CD Brands

ADC 0516  
 ADCOM 0026 0776  
 AIWA 0356 0986 1006 1706  
 1846 1966 2086  
 AKAI 0166 0376 0756  
 APPLE IPOD 1306  
 AUDIO TECHNICA 0116  
 BOSE 2006  
 CALIFORNIA AUDIO LABS  
 0266  
 CAPETRONIC 0526  
 CARVER 0196 0206 0316  
 0416  
 CASIO 0396  
 CENTRIOS 1096 2236  
 CITIZEN 0276  
 CURTIS MATHES 0396  
 DELPHI 1496  
 DENON 0636 1436 2096  
 2166  
 EMERSON 0776 1016  
 FISHER 0126 0216 0316

0326 0456 1146 1946  
 GENEXXA 0426 0576 1016  
 GOLDSTAR 0686 1336  
 HARMAN KARDON 0646  
 0796 1136 1556  
 HITACHI 0426  
 INKEL 0786  
 IPOD 1186  
 JC PENNEY 0396 0656  
 JVC 0896 1106 1686 1796  
 2176  
 KENWOOD 0136 0366 0466  
 0496 0536 1026 1366 1546  
 1736 2076 2136  
 KRELL 0206  
 KYOCERA 0516  
 LUXMAN 0226 0336 0476  
 0586  
 LXI 0396  
 MAGNAVOX 0206 0736 0836  
 1146 1326 1346  
 MARANTZ 0206 0436 0546  
 0946 1156  
 MCS 0396 0656  
 MGA 0796  
 MISSION 0206  
 MITSUBISHI 0796 0906 1486  
 NAD 0826 1086 1616 1886  
 2146  
 NAKAMICHI 0006 0876 1036  
 NEC 0656  
 NEO 1196  
 NEXXTECH 0096 0486 0606  
 0616 0726 0886 0966 1656  
 1696 1786 1976 2036 2236  
 NIKKO 0116 0216 1016  
 NSM 0206

ONKYO 0146 0236 0866  
 0936 1236 1936 2056 2116  
 OPTIMUS 0056 0316 0346  
 0386 0416 0426 0446 0536  
 0556 0666 0856 1126 1506  
 1626 1896 2016 2156  
 PANASONIC 0256 0706 0746  
 0996 1076 1176 1246 1806  
 1866 1916 1996 2186 2216  
 PHILIPS 0196 0206 0836  
 1146 1156 2186  
 PIONEER 0306 0406 0426  
 0576 0716 0806 0916 1386  
 1476 1596 2226  
 PROTON 0206  
 QUASAR 0256  
 RADIO SHACK 0106 0246  
 0266 0306 0416 0506 0556  
 0716 1126 1286 1296 1356  
 1386 1476 1596 1746 2156  
 RCA 0086 0106 0186 0306  
 0316 0716 0776 1046 1066  
 1116 1266 1296 1316 1386  
 1396 1446 1476 1596 1606  
 1746 1856 1906 1986 2026  
 2106  
 REALISTIC 0316 0346 0426  
 0526 0546 0556 0776 1016  
 2066  
 ROTEL 0206  
 SAE 0206  
 SAMSUNG 0846  
 SANSUI 0016 0046 0206  
 1066  
 SANYO 0156 0176 0316  
 0456 0956  
 SCOTT 0776 1016 1516

SEARS 0396 0536 0546  
 SHARP 0536 0546 1676  
 1876  
 SHERWOOD 0246 0446 0546  
 0626 0786 1356 1586 1726  
 SHURE 0656  
 SKYFI 1196  
 SONY 0076 0356 0736 0976  
 1166 1226 1256 1376 1416  
 1526 1536 1646 1666 1756  
 2126 2196 2206  
 STS 0516  
 SYLVANIA 0206  
 SYMPHONIC 0566  
 TAO 1196  
 TEAC 0216 0296 0546 0556  
 0566 0676 0816 1276 1426  
 1466 1766  
 TECHNICS 0256 0746 0996  
 1076 1176 1246 1816 1916  
 2186 2216  
 THETA DIGITAL 0836  
 TOSHIBA 0826  
 VENTURER 1206  
 VICTOR 0896  
 XM RADIO 1496  
 YAMAHA 0036 0116 0286  
 0926 1056 1196 1456 1566  
 1576 1716 1826 1926 1956  
 2046  
 ZENITH 0066 0216 0596  
 0696 0766 1146 1216 1336  
 1406 1626 1636 1776 1836

## GAME Brands

SONY-PS2 0009  
 X-BOX 0019

## My devices table

Key	Device code	Device
AUX		
DISC		
TAPE		
TV		
CABLE		
SAT		
VCR1		
VCR2		
GAME		