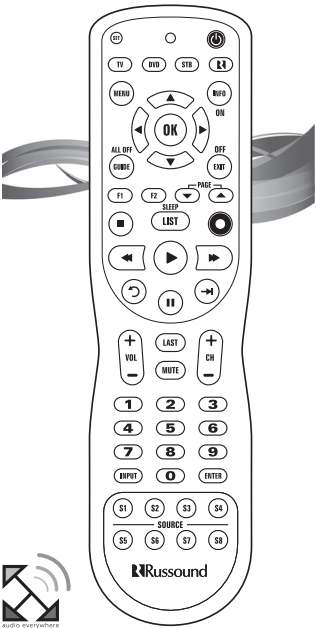




USRC  
Universal System  
Remote Control  
for Russound and A-BUS®  
Installation Manual

Introduction

The USRC Remote Control is the complete solution for all of your remote control requirements. It is designed to operate source devices and all Russound and A-BUS audio system keypads.

For Russound devices use code **31302**  
For A-Bus devices use code **31413**

Installing Batteries

- 1 Remove battery cover.
- 2 Insert 2 AA batteries. Match the + and - marks.
- 3 Replace battery cover.

**Note:** the LED will blink 5 times with each key press when batteries need replacement.

LED FEEDBACK FOR PROGRAMMING

2 BLINKS = ☺SUCCESS  
1 LONG BLINK = ☹FAILURE

Device Setup

- 1 Press the mode key for the device you wish to set up.

TV DVD STB R
- 2 Press and hold SET until the red LED blinks twice.

SET
- 3 Enter the 1st code for your brand from the code list.

1 2 3  
4 5 6  
7 8 9  
0
- 4 Press power key to test with your equipment. If the device turns off, setup is complete.

⏻
- 5 If device does not turn off, then repeat SETUP METHOD using the next code for your brand.

!

Code Search

- 1 Press the mode key for the device you wish to set up.

TV DVD STB
- 2 Press and hold SET until the red LED blinks twice.

SET
- 3 Enter in 9-9-1, then the device group number.

9 9 1

0 Cable (Cable Converters, Video Accessories, Satellite Receivers)  
1 TV (TVs)  
2 VCR (VCRs, DVD players)  
3 Audio (Audio Amplifiers, Audio Amp/Tuners, CD players)
- 4 Aim the remote at the device and press the Channel + key. If the device responds, go to step 5. If the device does not respond, press Channel - to try the next code and repeat until the device responds and go to step 5.

+ CH
- 5 Press the SET key to save the code. Repeat step 1-5 to search for other device codes.

SET

Checking the Code

- 1 Press the mode key for the device you wish to set up.

TV DVD STB R
- 2 Press and hold SET until the red LED blinks twice.

SET
- 3 Enter in 9-9-0

9 9 0
- 4 Press and release the digit 1 and count the number of times the LED flashes (e.g. three flashes =3) if the LED does not flash, this part of the code is 0. Repeat this process using digits 2-5 and record the code number:

1 2 3 4 5

Device Codes:

STB Code:

|                      |                      |                      |                      |                      |
|----------------------|----------------------|----------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
|----------------------|----------------------|----------------------|----------------------|----------------------|

TV Code:

|                      |                      |                      |                      |                      |
|----------------------|----------------------|----------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
|----------------------|----------------------|----------------------|----------------------|----------------------|

DVD Code:

|                      |                      |                      |                      |                      |
|----------------------|----------------------|----------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
|----------------------|----------------------|----------------------|----------------------|----------------------|

Learning

- 1 Press and hold SET until the red LED blinks twice.

SET
- 2 Enter in 9-7-5 the LED will flash twice after the 5.

9 7 5
- 3 Press and release the device in which you want to learn a command.

TV DVD STB
- 4 Aim the remotes head to head 1 to 2 inches apart and press the key to store the learned code followed by pressing the key on the original remote to be learned.

Position remotes 1-2 inches apart.

TV DVD STB

- 5 Repeat steps 3 and 4 to learn additional keys and press hold in the SET key to exit learning mode.

SET

Deleting a Learned Key

- 1 Press the mode key for the device you wish to set up.

TV DVD STB
- 2 Press and hold SET until the red LED blinks twice.

SET
- 3 Enter 9-7-6. the LED will flash twice after the 6.

9 7 6
- 4 Press and release twice the key with the learned data to be deleted. The LED will blink twice.

TV DVD STB
- 5 Repeat steps 1-4 to delete additional keys.

Deleting all Learned Keys for Specific Mode

- 1 Press and hold SET until the red LED blinks twice.

SET
- 2 Enter 9-7-6. LED will flash twice after 6.

9 7 6
- 3 Press the mode key twice for the device you wish to clear all learned codes from. The LED will blink twice.

TV DVD STB
- 4 Repeat steps 1-3 to delete all learned keys for the other models.

Codes: Cable Converters

|                            |                                                                                                                              |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------|
| ADB                        | 01481, 01585, 01920, 10927, 02347, 02586, 03028                                                                              |
| Changhong                  | 03108                                                                                                                        |
| Chungwa                    | 03647                                                                                                                        |
| Cisco                      | 01877, 03256, 03028, 02947, 02742, 02589, 02563, 02506, 02401, 02378, 02345, 02271, 02132, 02047, 01982, 01883, 01582, 00858 |
| Com Hem                    | 00660, 02015, 02447, 02382                                                                                                   |
| Darty Box                  | 02436                                                                                                                        |
| DASAN                      | 02683                                                                                                                        |
| Deutsche Telecom           | 02132                                                                                                                        |
| Digi                       | 02762                                                                                                                        |
| Digicable                  | 03382                                                                                                                        |
| DSD                        | 03340                                                                                                                        |
| DST                        | 03389                                                                                                                        |
| Du                         | 02401                                                                                                                        |
| Durabrand                  | 0171, 0178, 0463, 0180, 1570, 1665                                                                                           |
| Dynex                      | 2049, 1785, 1463, 2184                                                                                                       |
| Electrograph               | 1755                                                                                                                         |
| Electrohome                | 0463, 1570, 1670                                                                                                             |
| Echostar                   | 02995, 03452,                                                                                                                |
| Entone                     | 03048                                                                                                                        |
| Evolution                  | 02745, 02746                                                                                                                 |
| Fastway                    | 03382                                                                                                                        |
| Finnet                     | 02030, 02832                                                                                                                 |
| Freebox                    | 01482, 01976                                                                                                                 |
| Hikari TV                  | 03322                                                                                                                        |
| Hisense                    | 02887                                                                                                                        |
| Homecast                   | 02997, 03389                                                                                                                 |
| Huawei                     | 02894, 03317                                                                                                                 |
| Humax                      | 00660, 01981, 01983, 02043, 02165, 02447, 02620, 02683, 02762, 02832, 02889, 03075, 03101, 03560, 03670                      |
| HYA                        | 02989                                                                                                                        |
| J-COM                      | 02703                                                                                                                        |
| Kaon                       | 02746, 02889, 03389, 03407                                                                                                   |
| Kreatel                    | 01385, 02030                                                                                                                 |
| Linksys                    | 02271                                                                                                                        |
| Magio Sat                  | 02132                                                                                                                        |
| Mio                        | 02802                                                                                                                        |
| Mitsubishi                 | 03444                                                                                                                        |
| MOD                        | 03647                                                                                                                        |
| Motorola                   | 01376, 00858, 01562, 01982, 10998, 02030, 02378, 02401, 02437, 02894, 02952                                                  |
| Moviestar                  | 01585                                                                                                                        |
| Moxi                       | 02187                                                                                                                        |
| Neuf TV                    | 03107                                                                                                                        |
| Nex- Tech                  | 02482                                                                                                                        |
| NIB                        | 03322                                                                                                                        |
| NTL                        | 01060                                                                                                                        |
| Pace                       | 01376, 01877, 01060, 01582, 01883, 01982, 02401, 02620, 01582, 02294, 03560                                                  |
| Philips                    | 01877                                                                                                                        |
| Pioneer                    | 02620                                                                                                                        |
| Premiere                   | 02620                                                                                                                        |
| Primostar                  | 02030                                                                                                                        |
| Qrix                       | 03465                                                                                                                        |
| Reliance                   | 02452                                                                                                                        |
| Sagem                      | 02407, 02436                                                                                                                 |
| Segemcom                   | 02407, 02436, 02762, 03007, 03514                                                                                            |
| Samsung                    | 01877, 01060, 03783, 03415, 03477, 03407, 03340, 03322, 03319, 03265, 02955, 20889, 02683, 02610, 20589, 02407, 02015, 01987 |
| Scientific Atlanta         | 01877, 00858, 01982, 01987, 02047, 02345, 02401, 02436, 02506, 03028                                                         |
| Seans Media                | 02162                                                                                                                        |
| Seokyoung                  | 03340                                                                                                                        |
| Serbia Broadband           | 02506                                                                                                                        |
| SFR                        | 03170                                                                                                                        |
| Sky                        | 02620                                                                                                                        |
| Skyworth                   | 02982, 03492                                                                                                                 |
| Smartlabs                  | 03611                                                                                                                        |
| Smile Content              | 02437                                                                                                                        |
| SMT                        | 03527                                                                                                                        |
| SMTronics                  | 03319                                                                                                                        |
| Stofa                      | 02015                                                                                                                        |
| T-Home                     | 02132                                                                                                                        |
| Technicolor                | 01982                                                                                                                        |
| Tele2                      | 00660, 02447                                                                                                                 |
| Thomson                    | 01582, 01981, 10982, 0193, 02407, 03007                                                                                      |
| Tivo                       | 03265, 03560                                                                                                                 |
| Vector                     | 02030                                                                                                                        |
| VeeTV                      | 03231                                                                                                                        |
| Verizon                    | 02378                                                                                                                        |
| Virgin Media               | 01060, 01987, 02563, 03265                                                                                                   |
| Vodafone                   | 02401                                                                                                                        |
| Wbox                       | 02832                                                                                                                        |
| Ziggo                      | 00660, 02015, 02401, 02447, 02589, 02762, 03607                                                                              |
| Zinwell                    | 03139                                                                                                                        |
| Codes: Satellite Receivers |                                                                                                                              |
| @sat                       | 01300                                                                                                                        |
| @Sky                       | 01334                                                                                                                        |
| Acoustic Solutions         | 01284                                                                                                                        |
| ADB                        | 00642, 02553, 02743                                                                                                          |
| AG                         | 02738, 02813                                                                                                                 |
| Agora                      | 01284                                                                                                                        |
| Airis                      | 02813                                                                                                                        |
| Airtel                     | 02248                                                                                                                        |
| Akira                      | 02738                                                                                                                        |
| Akta                       | 01986                                                                                                                        |
| Akura                      | 01626                                                                                                                        |
| Alba                       | 01284, 02034                                                                                                                 |
| Alltech UEC                | 01959, 01775, 01662, 01693, 10848, 02467                                                                                     |
| Ansonic                    | 02418                                                                                                                        |
| Aonvision                  | 02279                                                                                                                        |
| Armon                      | 01300                                                                                                                        |
| ASA                        | 00740                                                                                                                        |
| ASCI                       | 01334                                                                                                                        |
| Astell                     | 01986, 02418                                                                                                                 |
| Atom                       | 02289                                                                                                                        |
| Austar                     | 00879, 00642, 01459                                                                                                          |
| Austrisat                  | 02631                                                                                                                        |
| Auvisio                    | 02738, 02813                                                                                                                 |
| Beijing                    | 03299                                                                                                                        |
| Blackdiamond               | 01284                                                                                                                        |
| Blapunkt                   | 00173                                                                                                                        |
| BskyB                      | 00847, 01175, 01662                                                                                                          |
| Bush                       | 01284, 01291, 01626, 01935, 02034, 02376, 02418, 02813, 03439, 03652                                                         |
| Cablecom                   | 01195, 01197                                                                                                                 |
| Canal+/Digital             | 00853, 02466, 02631, 02957, 01334, 01780, 02553, 01986, 01995, 01997, 02107, 02657                                           |
| Changhong                  | 03308                                                                                                                        |
| Chess                      | 01334, 01626, 02026                                                                                                          |
| Cisco                      | 00842                                                                                                                        |
| Claro                      | 03787                                                                                                                        |
| CMX                        | 02205                                                                                                                        |
| Com Hem                    | 01176, 01915                                                                                                                 |
| Crown                      | 01284                                                                                                                        |
| Cyfra+                     | 00853, 00253, 02262, 02527                                                                                                   |
| D-Box                      | 01114                                                                                                                        |
| Dantax                     | 01626                                                                                                                        |
| DASAN                      | 03321                                                                                                                        |
| Delta                      | 02442                                                                                                                        |
| Digi                       | 02026                                                                                                                        |
| Digihome                   | 01284, 01935, 02034                                                                                                          |
| DigitalBox                 | 01100, 01631, 02289, 02540                                                                                                   |
| Digiturk                   | 02097                                                                                                                        |
| DirecTV                    | 01377, 00099, 01442                                                                                                          |
| DishNetwork                | 00775                                                                                                                        |
| DishTV                     | 01300, 01780                                                                                                                 |
| Dream Multimedia           | 01237, 00853, 01923, 01284, 02034                                                                                            |
| DSE                        | 02418, 02813                                                                                                                 |
| Durabrand                  | 01284, 02034                                                                                                                 |
| Echostar                   | 00775, 00853, 01409, 02262, 02572                                                                                            |
| Elless                     | 00740                                                                                                                        |
| Embratel                   | 02796                                                                                                                        |
| Engel                      | 01631, 02289, 02418, 02813                                                                                                   |
| Eurphon                    | 00299, 01334                                                                                                                 |
| Eversham Technology        | 02034                                                                                                                        |
| Ferguson                   | 01291, 01935, 02638                                                                                                          |
| Foxtel                     | 00879, 01176, 01356                                                                                                          |
| Fubu                       | 00173, 00299, 02750                                                                                                          |
| Fuji Onkyo                 | 01631, 02728                                                                                                                 |
| General Instrument         | 00869                                                                                                                        |
| Goodmans                   | 01284, 02034, 02376, 03439, 03652                                                                                            |
| Gradiente                  | 00856, 00099                                                                                                                 |
| Gran Prix                  | 00740                                                                                                                        |
| Grandin                    | 01626                                                                                                                        |
| Grundig                    | 00847, 00853, 00173, 00879, 01284, 01291, 01672, 01780, 02034, 02376                                                         |
| Haier                      | 02418                                                                                                                        |
| Hanseatic                  | 01099, 01100                                                                                                                 |
| Hirschman                  | 00173, 00299, 00740, 02026                                                                                                   |
| Hitachi                    | 101284, 02034                                                                                                                |
| Huawei                     | 03787                                                                                                                        |
| Hughes Network System      | 01377, 01442                                                                                                                 |
| Humax                      | 01377, 01176, 01427, 01808, 01915, 02144, 02231, 02289, 02408, 02443, 02754, 03140, 03321                                    |
| Icecrypt                   | 02538                                                                                                                        |
| Illusion                   | 01631                                                                                                                        |
| Imagin                     | 01195, 01197                                                                                                                 |
| Imperial                   | 01195, 01197, 01334, 01429, 01672                                                                                            |
| Inverto                    | 03095                                                                                                                        |
| IPM                        | 03567                                                                                                                        |
| IQ                         | 02813                                                                                                                        |
| ITI Neovision              | 02743                                                                                                                        |
| Codes: TV                  |                                                                                                                              |
| A.R. Systems               | 10556, 10037                                                                                                                 |
| Aacount                    | 10037                                                                                                                        |
| Acoustic Systems           | 11037, 11523, 11585, 11667                                                                                                   |
| Action                     | 10650                                                                                                                        |
| Addison                    | 10635                                                                                                                        |
| ADL                        | 11217                                                                                                                        |
| Admiral                    | 10093                                                                                                                        |
| Advent                     | 11570                                                                                                                        |
| AGE                        | 11037, 12197                                                                                                                 |
| Affinity                   | 13577, 13717                                                                                                                 |
| Aiko                       | 10037                                                                                                                        |
| Aim                        | 10037                                                                                                                        |
| Aiwa                       | 11362                                                                                                                        |
| Aikai                      | 10812, 10702, 10765, 10556, 10037, 10714, 10208, 10672, 11362, 11385, 11523, 12414, 12676, 13067, 13183                      |
| Akiba                      | 10037                                                                                                                        |
| Akito                      | 10037                                                                                                                        |
| Akura                      | 10171, 10037, 10714, 11037, 10443, 115851, 11667, 11687                                                                      |
| Alba                       | 10037, 10714, 11037, 10443, 11585, 11667, 11687, 11983                                                                       |
| Alfide                     | 10672                                                                                                                        |
| Alien                      | 11037                                                                                                                        |
| Allstar                    | 10037                                                                                                                        |
| Amstrad                    | 10171, 10037, 11037                                                                                                          |
| Anam                       | 110250, 10037, 10650                                                                                                         |
| Andersson                  | 11585, 12676                                                                                                                 |
| Anitech                    | 10037                                                                                                                        |
| Ansonic                    | 10037                                                                                                                        |
| AOC                        | 10093, 10625, 11589, 12087                                                                                                   |
| Apex Digital               | 10765, 11217, 12397                                                                                                          |
| Ardem                      | 10037, 10714                                                                                                                 |
| Arena                      | 10037                                                                                                                        |
| Ario                       | 12397                                                                                                                        |
| Aristona                   | 10556, 10037                                                                                                                 |
| ART                        | 11037                                                                                                                        |
| Art Mito                   | 11585                                                                                                                        |
| Asberg                     | 10037                                                                                                                        |
| Astra                      | 10037                                                                                                                        |
| ATD                        | 10698                                                                                                                        |
| Atlantic                   | 10037                                                                                                                        |
| Audioasonic                | 10037, 10714, 11983, 12104                                                                                                   |
| Audiovox                   | 11564                                                                                                                        |
| Auria                      | 12087                                                                                                                        |
| Autovox                    | 12676                                                                                                                        |
| Aventura                   | 10171                                                                                                                        |
| Axxon                      | 10714                                                                                                                        |
| Baird                      | 10208                                                                                                                        |
| Barco                      | 10556                                                                                                                        |
| Base                       | 10698, 11570                                                                                                                 |
| Basic Line                 | 10556, 10037, 11037                                                                                                          |
| Bauer                      | 12197                                                                                                                        |
| BBK                        | 11523                                                                                                                        |
| Beijing                    | 10812, 10208                                                                                                                 |
| Beko                       | 10037, 10714, 12125                                                                                                          |
| Bell & Howell              | 10017                                                                                                                        |
| Belson                     | 10698                                                                                                                        |
| Belstar                    | 11037                                                                                                                        |
| BenQ                       | 11523, 11756                                                                                                                 |
| Bensten                    | 11326, 11570                                                                                                                 |
| Beon                       | 10037                                                                                                                        |
| Berthen                    | 10556                                                                                                                        |
| Bestar                     | 10037                                                                                                                        |
| Bestwell                   | 11326                                                                                                                        |
| Bexa                       | 12493                                                                                                                        |
| BGH                        | 10898, 12414                                                                                                                 |
| Black Diamond              | 11037                                                                                                                        |
| Blapunkt                   | 10195, 12426                                                                                                                 |
| Blue Sky                   | 10556, 10037, 10625, 10714, 11037, 13997                                                                                     |
| BlueDiamond                | 12426                                                                                                                        |
| Bluetech                   | 12561, 12844                                                                                                                 |
| bogo                       | 10898, 12414                                                                                                                 |
| BPL                        | 10037, 10208                                                                                                                 |
| Brandt                     | 10625, 10714, 11585                                                                                                          |
| Brinkmann                  | 10037                                                                                                                        |
| Brionvega                  | 10037                                                                                                                        |
| Britania                   | 12414                                                                                                                        |
| Broksonic                  | 11892                                                                                                                        |
| Bush                       | 10556, 10037, 10714, 11037, 10698, 10208, 10443, 11585, 11589, 11667, 11983, 12104, 12125, 12676                             |
| Cameron                    | 11523                                                                                                                        |
| Camper                     | 10037                                                                                                                        |
| Canca                      | 11326                                                                                                                        |
| Carad                      | 11037                                                                                                                        |
| Carena                     | 10037                                                                                                                        |
| Carrefour                  | 10037                                                                                                                        |
| Cascade                    | 10037                                                                                                                        |
| Casio                      | 10037                                                                                                                        |
| Cathay                     | 10037                                                                                                                        |
| CCE                        | 10037, 13782                                                                                                                 |
| Celcus                     | 11585, 12676                                                                                                                 |
| Celera                     | 10756                                                                                                                        |
| Centrum                    | 11037                                                                                                                        |
| Centurion                  | 10037                                                                                                                        |
| Champion                   | 11362                                                                                                                        |
| Changhong                  | 10156, 10765, 10508, 11498, 13434, 13538                                                                                     |
| CHL                        | 13067                                                                                                                        |
| Chun Yun                   | 11687, 11756                                                                                                                 |
| Cinema                     | 10672                                                                                                                        |
| Clarivox                   | 10037                                                                                                                        |
| Clatronic                  | 10037, 10714                                                                                                                 |
| Clayton                    | 11037                                                                                                                        |
| CMX                        | 13067, 13327                                                                                                                 |
| Coby                       | 12344, 13478, 13627                                                                                                          |
| Commercial Solutions       | 11447                                                                                                                        |
| Condor                     | 10037                                                                                                                        |
| Conia                      | 11498, 11523, 11687                                                                                                          |
| Conrowa                    | 10156, 10698                                                                                                                 |
| Contec                     | 10037                                                                                                                        |
| Coradir                    | 12844                                                                                                                        |
| Cosmel                     | 10037                                                                                                                        |
| CPTEC                      | 10625                                                                                                                        |
| Crown                      | 10037, 12352, 12397, 12855, 13382, 13577                                                                                     |
| Crown Mustang              | 10672                                                                                                                        |
| Crypton                    | 11667                                                                                                                        |
| CTX                        | 11756                                                                                                                        |
| Curtis                     | 11326, 12352, 12397, 12855, 13382, 13577                                                                                     |
| Curtis Mathis              | 10093, 10702, 11661, 11959                                                                                                   |
| Cyperpix                   | 11667                                                                                                                        |
| Cyrton                     | 11326                                                                                                                        |
| D-Vision                   | 10556, 10037, 12197                                                                                                          |
| Daenryx                    | 10672                                                                                                                        |
| Daewoo                     | 11661, 19556, 10037, 10634, 10672                                                                                            |
| Dansai                     | 10037                                                                                                                        |
| Dantax                     | 10037, 10208                                                                                                                 |
| Datsura                    | 10714, 11037, 12676                                                                                                          |
| Dawa                       | 10208                                                                                                                        |
| Daytek                     | 10037                                                                                                                        |
| Daytron                    | 10037                                                                                                                        |
| De Graaf                   | 10208                                                                                                                        |
| DEC                        | 11326                                                                                                                        |
| Decca                      | 10037                                                                                                                        |
| Dell                       | 11863                                                                                                                        |
| Denver                     | 10037, 12197, 13067                                                                                                          |
| Demet                      | 10037                                                                                                                        |
| Diamant                    | 10037                                                                                                                        |
| Diamond                    | 10698, 10672                                                                                                                 |
| Digatron                   | 10037                                                                                                                        |
| Digihome                   | 11667, 12676                                                                                                                 |
| Digiline                   | 10037                                                                                                                        |
| Digitor                    | 10037, 10698                                                                                                                 |
| Digitrex                   | 13067                                                                                                                        |
| Dikom                      | 12561                                                                                                                        |
| dIvIsion                   | 12197                                                                                                                        |
| Dixi                       | 10037                                                                                                                        |
| DL                         | 11326                                                                                                                        |
| Drean                      | 10037                                                                                                                        |
| DSE                        | 10698, 11326                                                                                                                 |
| Dual                       | 10037, 10714, 11037, 11570                                                                                                   |
| Dumont                     | 10017                                                                                                                        |
| Durabrand                  | 01071, 10714, 11037, 11570                                                                                                   |
| Dux                        | 10037                                                                                                                        |
| Dynatron                   | 10037                                                                                                                        |
| Dynex                      | 12049                                                                                                                        |
| e-motion                   | 12426                                                                                                                        |
| E.S.C.                     | 10037                                                                                                                        |
| Easy Living                | 11217, 12005, 12104                                                                                                          |
| ECE                        | 10037                                                                                                                        |
| ECG                        | 12125, 12197                                                                                                                 |
| Elbe                       | 10556, 10037                                                                                                                 |
| Electrograph               | 11755                                                                                                                        |
| Electrohome                | 11570, 11670                                                                                                                 |
| Electron                   | 12855                                                                                                                        |
| Elektra                    | 10017, 11661                                                                                                                 |
| Element                    | 11687, 11886, 12183, 12964, 13559                                                                                            |
| Elfunk                     | 11037, 11208                                                                                                                 |
| ELG, Elin, Elite           | 10037                                                                                                                        |
| Emerson                    | 10171, 11661, 10037, 10714, 11394, 11864, 11886, 11944, 11963, 12183, 13559                                                  |
| Envision                   | 11506, 11589, 12087                                                                                                          |
| Erres                      | 10037                                                                                                                        |
| ESA                        | 10812, 10171, 11944, 11963                                                                                                   |
| Essentials                 | 12486                                                                                                                        |
| Euroman, Europa            | 10037                                                                                                                        |
| Evesham Technology         | 11667                                                                                                                        |
| Evolution                  | 11756                                                                                                                        |
| Evotell                    | 12561                                                                                                                        |
| Excello                    | 11037, 11326                                                                                                                 |
| Exquisit                   | 10037                                                                                                                        |
| F&J                        | 12676                                                                                                                        |
| Fair Mate                  | 11326                                                                                                                        |
| Faltec                     | 115                                                                                                                          |

|                            |                                                                                                                                            |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Plantron                   | 10037                                                                                                                                      |
| Playsonic                  | 10037, 10714                                                                                                                               |
| Polaroid                   | 10765, 11326, 11385, 11498, 11523, 11687, 12125, 12676                                                                                     |
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| Protech                    | 10037, 11037                                                                                                                               |
| Proview                    | 11498, 11687                                                                                                                               |
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| Rowa                       | 10037, 10698, 10898                                                                                                                        |
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| Sampo                      | 10093, 10171, 10650, 10898, 11385, 11755, 13419                                                                                            |
| Samsung                    | 10156, 10812, 10702, 10556, 10037, 10650, 10208, 11458, 11632, 11959, 12051, 12953                                                         |
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| Sanyo                      | 10156, 11037, 10508, 10208, 11142, 11208, 11362, 11498, 11585, 11667, 12461, 12676                                                         |
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| Telefunken            | 10702, 10037, 10625, 10714, 10698, 11326, 11585, 11667, 12414, 12676                             |
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| Teletech              | 10037, 11037                                                                                     |
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| Thorn                 | 10037, 10512                                                                                     |
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| V7 Videoseven         | 11217, 11755                                                                                     |
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| Videocon              | 10037, 10508                                                                                     |
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| Vivax                 | 11326                                                                                            |
| Vizio                 | 10864, 10885, 11756, 11758, 12512, 12707, 12757, 13415, 13758                                    |
| Voxson                | 10037, 11667, 12197                                                                              |
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| Walker                | 11585, 11667, 12676                                                                              |
| Waltham               | 10037, 11037, 10443                                                                              |
| Wards                 | 10017, 10156                                                                                     |
| Watson                | 10037, 10714, 11037                                                                              |
| Waycon                | 10156                                                                                            |
| Westinghouse          | 10885, 11217, 11712, 11755, 12293, 12397, 13094, 13382, 13470, 13579                             |
| Westwood              | 11585                                                                                            |
| Wharfedale            | 10556, 10037, 11667, 11983                                                                       |
| White Westinghouse    | 11661, 10037, 10556                                                                              |
| Wilson                | 10556                                                                                            |
| Windy Sam             | 10556                                                                                            |
| Wintel                | 10714                                                                                            |
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| Xenius                | 10634                                                                                            |
| Xiahua                | 10698                                                                                            |
| Xiron                 | 11037, 10983                                                                                     |
| XLogic                | 10698                                                                                            |
| Xococo                | 10037, 12461                                                                                     |
| Xoro                  | 11217                                                                                            |
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| Yapsh                 | 10250                                                                                            |
| Yokan, Yoko, YU-MA-TA | 10037                                                                                            |
| Zenith                | 10017, 11661, 11423, 12358                                                                       |
| Zepto                 | 11585                                                                                            |
| Zonda                 | 10698                                                                                            |

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| Denon              | 30272, 32706                                                         |
| Harmon/Kardon      | 33045                                                                |
| Logitech           | 31408                                                                |
| Marantz            | 32138                                                                |
| Onkyo              | 32878                                                                |
| Vision Plus        | 12426                                                                |
| Visual Innovations | 12106                                                                |
| Vivax              | 11326                                                                |
| Vizio              | 10864, 10885, 11756, 11758, 12512, 12707, 12757, 13415, 13758        |
| Voxon              | 10037, 11667, 12197                                                  |
| Vue                | 11570                                                                |
| Walker             | 11585, 11667, 12676                                                  |
| Waltham            | 10037, 11037, 10443                                                  |
| Wards              | 10017, 10156                                                         |
| Watson             | 10037, 10714, 11037                                                  |
| Waycon             | 10156                                                                |
| Westinghouse       | 10885, 11217, 11712, 11755, 12293, 12397, 13094, 13382, 13470, 13579 |
| Westwood           | 11585                                                                |
| Wharfedale         | 10556, 10037, 11667, 11983                                           |
| White Westinghouse | 11661, 10037                                                         |
| Wilson             | 10556                                                                |
| Windy Sam          | 10556                                                                |
| Wintel             | 10714                                                                |
| World-of-Vision    | 11217                                                                |
| Xenius             | 10634                                                                |
| Xiahua             | 10698                                                                |

| Codes: Audio Accesories |       |
|-------------------------|-------|
| Harman/Kardon           | 33517 |
| JBL                     | 33235 |
| LG                      | 33217 |
| Panasonic               | 33409 |
| Polk Audio              | 33249 |
| Samsung                 | 32660 |
| Sharp                   | 33097 |
| Sony                    | 32610 |
| Toshiba                 | 33267 |
| VIZIO                   | 32454 |
| Yamaha                  | 32458 |
| ZVOX                    | 32332 |

| Codes: CD's           |                     |
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| AH!                   | 30157               |
| Aiwa                  | 30157               |
| Arcam                 | 30157               |
| Audio Research        | 30157               |
| Audition              | 30157               |
| AVI                   | 30157               |
| Cairn                 | 30157               |
| California Audio Labs | 30303               |
| Cambridge Audio       | 10037               |
| Carver                | 30157               |
| CCE                   | 30157               |
| Cyrus                 | 30157               |
| Denon                 | 30626               |
| DKK                   | 30000               |
| DMX Electronics       | 30157               |
| Dynaco                | 30157               |
| Genexxa               | 30000               |
| Goldmund              | 30157               |
| Harman/Kardon         | 30157               |
| JVC                   | 30072               |
| Kenwood               | 30626, 30157, 30036 |
| Krell                 | 30157               |
| Linn                  | 30157               |
| Loewe                 | 30157               |
| Magnavox              | 30157               |
| Marantz               | 30626, 30157        |
| Matsui                | 30157               |
| Meridian              | 30157               |
| Micromega             | 30157               |
| Miro                  | 30000               |
| Mission               | 30157               |
| Myrrad                | 30157               |
| NAD                   | 30000, 30721        |
| Naim                  | 30157               |
| NSM                   | 30157               |
| Optimus               | 30000               |
| Panasonic             | 30303               |
| Philips               | 30636, 30721        |
| Polk Audio            | 30157               |
| Primare               | 30157               |
| Proton                | 30157               |
| QED                   | 30157               |
| Quad                  | 30157               |
| Radiola               | 30157               |
| Restek                | 30157               |
| Revox                 | 30157               |
| Rotel                 | 30157               |
| SAE                   | 30157               |
| Sansui                | 30157               |
| SAST                  | 30157               |
| Siemens               | 30157               |
| Silsonic              | 30036               |
| Simaudio              | 30157               |
| Sonic Frontiers       | 30157               |
| Sony                  | 30490, 30000        |
| Sylvania              | 30157               |
| TAG McLaren           | 30157               |
| Technics              | 30303               |
| Thule Audio           | 30157               |
| Traxdata              | 30626               |
| Uiversum              | 30157               |
| Victor                | 30072               |
| Wards                 | 30000, 30157        |
| Yamaha                | 30490, 30036        |
| Zonda                 | 30157               |

| Codes: Receivers |                                          |
|------------------|------------------------------------------|
| Bose             | 31229                                    |
| Cambridge Audio  | 31647                                    |
| Daewoo           | 31293                                    |
| Denon            | 31360, 32516, 32681, 32857, 32861        |
| Digeo            | 32861                                    |
| Fonmix           | 31360                                    |
| Harman/Kardon    | 31304                                    |
| Integra          | 30135, 31320, 31805                      |
| JBL              | 31304                                    |
| JVC              | 30074                                    |
| Kenwood          | 31313, 31293                             |
| LG               | 31293, 32197                             |
| Logitech         | 32436                                    |
| Magnavox         | 31269, 31831                             |
| Marantz          | 31269, 31289, 32114                      |
| McIntosh         | 31289                                    |
| Medion           | 31297                                    |
| NAD              | 30320                                    |
| Nakamichi        | 31313                                    |
| Onkyo            | 31035, 31320, 31805, 33259               |
| Optimus          | 31023                                    |
| Palladium        | 31293                                    |
| Panasonic        | 31518, 31763, 31779, 31831, 33309, 33425 |

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| Pioneer       | 31023, 31123, 31459, 31935                                           |
| Polk Audio    | 31289                                                                |
| Radionette    | 31293                                                                |
| RCA           | 31023, 31123, 31459                                                  |
| Samsung       | 31295, 31304, 31868, 32809                                           |
| Silsonic      | 30176                                                                |
| Sony          | 31441, 31579, 31622, 31112, 31158, 31454, 31758, 31822, 31858, 32809 |
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| Sunre         | 31313                                                                |
| Sungoo        | 31313                                                                |
| Targa         | 31293                                                                |
| Technics      | 31518, 31763                                                         |
| Toshiba       | 31123                                                                |
| Victor        | 30074                                                                |
| Yamaha        | 30176, 31276, 31776, 31815, 32061, 32467, 33030                      |
| Zenith        | 31293, 32197                                                         |

| Codes: VCR's    |                            |
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| Admiral         | 20048                      |
| Aiwa            | 2037, 20032, 20742, 21137  |
| Akai            | 20037, 20240               |
| Alba            | 20081                      |
| Allegro         | 21137                      |
| Allorgan        | 20240                      |
| Allstar         | 20240                      |
| Anam            | 20037, 20240, 21562        |
| Aristona        | 20081                      |
| ASA             | 20037, 20081               |
| Asha            | 20240                      |
| Asuka           | 20037, 20081               |
| Asudiab         | 20081                      |
| Audiovox        | 20037                      |
| Awa             | 20037                      |
| Beaumark        | 20240                      |
| Blaupunkt       | 20081                      |
| Blue Sky        | 20037, 20742, 21137        |
| Broksonic       | 20742                      |
| Bush            | 20081, 20742               |
| Calix           | 20037                      |
| Carena          | 20081                      |
| Carver          | 20081                      |
| Changhong       | 20048, 20081               |
| CineVision      | 21137                      |
| Citizen         | 20037                      |
| Craig           | 2037, 20081                |
| Crosley         | 20081                      |
| Crown           | 20037                      |
| Curtis Mathis   | 20240                      |
| Cybernex        | 20240                      |
| Cyrus           | 20081                      |
| Daewoo          | 21137                      |
| Dantax          | 20742                      |
| De Graaf        | 20048, 20081               |
| Decca           | 20081, 20067               |
| Diamant         | 20037                      |
| Dual            | 20081                      |
| Dumont          | 20081                      |
| E.S.C           | 20240                      |
| Electrohome     | 20037                      |
| Electroponic    | 20037                      |
| Elin            | 20240                      |
| Emerex          | 20032                      |
| Emerson         | 20037, 20240               |
| ESA             | 21137                      |
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| Fidelity        | 20240                      |
| Finlux          | 20081                      |
| Firstline       | 20037, 21137               |
| Fujitsu General | 20037                      |
| GE              | 20048, 20240               |
| GEC             | 20081                      |
| Go Video        | 20240, 21137               |
| Goldstar        | 20037, 21137               |
| Goodmans        | 20037, 20081, 20240, 20742 |
| GPX             | 20037                      |
| Gradiente       | 21137                      |
| Graetz          | 20240                      |
| Granada         | 20037, 20048, 20081, 20240 |
| Grandin         | 20037, 20742               |
| Grundig         | 20081, 20742               |
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| Harman/Kardon | 20081               |
| Hinari        | 20240               |
| Hitachi       | 20037, 20081, 20240 |
| Hornophon     | 20081               |
| Humax         | 20739               |
| Hypson        | 20037               |
| Ingersoll     | 20240               |
| Interbuy      | 20037               |
| Interfunk     | 20081               |
| Intervision   | 20037               |
| Irradio       | 20037, 20081, 21137 |
| ITT           | 20240               |
| ITV           | 20037               |
| JMB           | 20742               |
| JVC           | 20081, 20037        |
| Kambrook      | 20037               |
| Karcher       | 20081               |
| KEC           | 20037               |
| Kenwood       | 20067               |
| Kneissel      | 20037               |
| Kodak         | 20037               |
| LG            | 20037, 21137        |
| Loewe         | 20037, 20081, 21562 |
| Logik         | 20240               |
| Lumatron      | 21137               |
| Luxor         | 20048               |
| LXI           | 20037               |