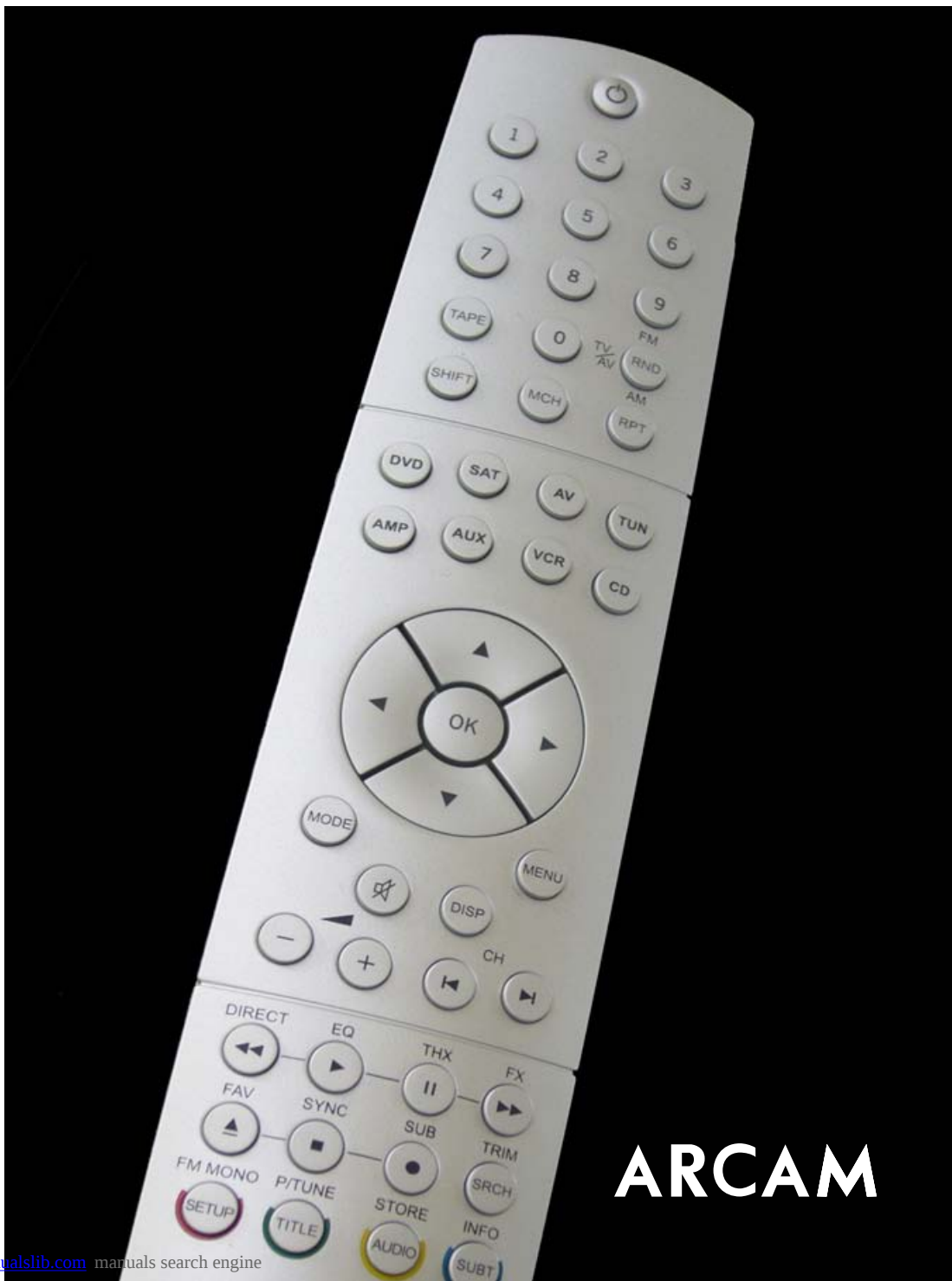


CR100 remote control

English

**ARCAM**

Arcam CR100: one remote for many devices

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The CR100 complies with Part 15 of the FCC rules

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide a reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by

turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet or a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The CR100 is a sophisticated 'universal' remote control that can control up to eight devices.

- The CR100 is preprogrammed for use with Arcam products (Solo Movie, amplifiers, multi-channel sound processors, CD players and DVD players) within range.

SEE PAGES 8–15...

- The CR100 can control your complete home entertainment system. With its extensive built-in library of codes, the CR100 can be used with thousands of third-party TVs, satellite decoders, set-top boxes, VCRs and CD players.

SEE PAGES 6, 21...

- The CR100 can 'learn' almost any function from an old single-device remote.

SEE PAGE 16...

- You can customise the CR100 to suit, and program it to issue a sequence of commands (a 'Macro') at a single key press.

SEE PAGES 16, 19...

The CR100 is supplied with several Arcam products. For specific information on how to use the CR100 to control the product it was supplied with, please refer to that product's manual.

Device Mode keys

The Device Mode keys (shown below) select the source on your amplifier, preamplifier or receiver. These keys also change the functionality of the remote control. It's like having eight different remotes in your hand!



If you press and hold a Device Mode key, you change the Device Mode *without* changing the signal source.

Each Device Mode changes the behaviour of many of the CR100 keys to control the source appropriately (see pages 8–15). For example:

- In **CD** mode the **⏮** key plays the previous CD track
- In **AV** mode the **⏮** key issues the TV 'Channel Down' command.



English

Navigation keys



The Navigation keys steer the cursor in setup menus or on-screen menus. They also replicate the navigation functions of original remotes supplied with other home entertainment devices in your system. **OK** confirms a setting.

Getting started

Here's how to get the most out of your CR100 universal remote:

Insert the batteries

- Follow the instructions on the facing page to insert four AAA alkaline batteries.

Get to know the CR100 by using it with your Arcam equipment

- Familiarise yourself with the CR100 by using it with the Arcam components in your system. Refer to the relevant Arcam Handbook.

Set up the CR100 to control your other audio-visual components

- Use the methods described on pages 6 and 7 to use your CR100 to control the third-party devices in your home entertainment system.

Customise the CR100

- Use the methods described in 'Customising the CR100' (pages 16–19) to make the CR100 work in exactly the way you want: Control volume intelligently, switch multiple devices on and off with a single key press, and much more.

Useful information

When reading this manual keep the following information in mind, as it will help you understand the operation of the CR100.

Backlight

- A blue backlight comes on for five seconds whenever a key is pressed. This helps you use the handset in subdued lighting conditions.

Power LED 'blinks'

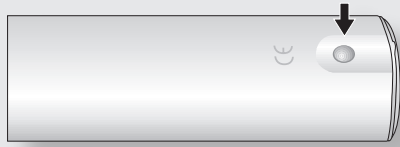


- Short blinks indicate a valid key press.
- Multiple short blinks convey information (such as a device code) or signal the beginning and successful completion of a programming sequence.
- Long blinks indicate an invalid key press or entry.
- The symbol  is used in the manual to indicate a Power LED blink.

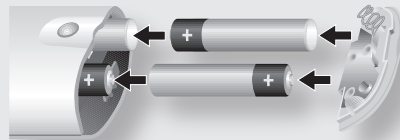
Timeouts and unassigned keys

- Time Out – After 10 seconds the CR100 exits the programming state and returns to normal operation.
- Stuck Key Timeout – After any key is pressed continuously for 30 seconds, the CR100 stops sending IR transmission to conserve battery life. The CR100 remains off until all keys are released.
- Unassigned Keys – The CR100 control ignores any unassigned key presses for a particular mode and does not transmit IR.

Inserting batteries



1. Open the battery compartment by pressing the button on the back of the handset.



2. Insert four AAA batteries into the battery compartment: two with '+' facing the top of the handset, and two with '+' facing the end cap, as in the diagram.
3. Lower the end cap onto the plastic locating plate in the handset. This acts as a hinge, and you can now push the end cap firmly into its locked position with a click.

Low voltage indicator

When the batteries are running down, the IR transmit indicator on the CR100 (the LED surrounding the Power button) flashes five times whenever you press a button.



If this happens, please fit four new AAA alkaline batteries as soon as possible.

Maintaining reliability

Please keep in mind the following when using the CR100:

- Make sure there are no obstacles between the remote control and the remote sensors on any devices you're controlling. The CR100 has a range of about seven meters. (If a unit's remote sensor is obscured, you may be able to use a remote control input jack on the rear panel – contact your dealer for further information.)
- As with any IR remote, operation may become unreliable if strong sunlight or strong fluorescent light is shining on a front panel remote sensor.

Controlling other devices:

Method 1 (Direct code setup)

This section describes the simplest (preferred) way to program the CR100's Device Mode keys to control the non-Arcam devices in your system.



- Some of the modes are locked to Arcam operation but can be unlocked if required (see page 18).
- mode **only** controls Arcam equipment.

DVD mode	Locked
SAT mode	Unlocked
AV mode	Unlocked
TUN mode	Locked
AUX mode	Locked
VCR mode	Unlocked
CD mode	Locked

Example: To set up the CR100 for an Addison TV

Here is a specific example of how to program the key to control an Addison television. The principles for controlling other devices are exactly the same.

1. Make sure your device is switched on (not just on 'stand-by').
2. Find the correct Device Code table (e.g. TV) for the type of device you want to control from the CR100.
3. Find the row containing the codes for the manufacturer of your device (e.g. Addison) (page 21). The most popular code is listed first.
4. Press the appropriate Device Mode key (e.g.) on the CR100.
5. Press and hold until the red Power LED blinks twice: (It actually blinks once when you press the key, then twice after about three seconds).

6. Enter the first four-digit device code using the number keys. The device key (e.g.) blinks twice:



7. Aim the CR100 at the device and press . If the device switches off, the setup is complete.
8. Turn your device back on and test all the CR100's functions to ensure they are working properly.
9. **Important!** Write your device code down on the next page so you can remember it if you ever reset the CR100.

What if I still can't control my device?

- If your device doesn't respond, repeat the above steps until one of the device codes listed for your brand works.
- If none of the codes listed for your brand operates your device, or if your brand is not listed at all, try the Library Search Method described in the next section.

Notes:

- Some codes are quite similar. If your device does not respond or is not functioning properly with one of the codes, try another code listed under your brand.
- If your device's original remote control does not have a (POWER) key, press instead of when setting up your device.
- Remember to press the corresponding device key before operating your device.
- Many TVs do not switch on pressing . Please try pressing a number key ('channel select') to switch your TV back on.
- To search for the code for another device follow the instructions above, but press the appropriate device key instead of during step 2.

Controlling other devices: Method 2 (Library search)

This section describes another way to program the CR100 to control third-party equipment.

Library Search allows you to scan through all the codes contained in the CR100's memory. It can take a lot longer than the previous method, so only use this method if:

- Your device does not respond to the CR100 after you have tried all the codes listed for your brand.
- Your brand is not listed at all in the Device Code tables.

Example: To search for a TV code

1. Switch your TV on (not stand-by) and aim the CR100 at it.
2. Press  on your CR100.
3. Press and hold  until the power LED blinks twice.
3. Press   . The power LED key blinks twice:  
5. Press .
6. Aim the CR100 at your Television and press  repeatedly until your Television turns off.

Every time you press  the CR100 sends out a POWER signal from the next code contained in its memory. In the worst case, you may have to press this key up to 150 times, so patience is required! If you skip past a code, step back by pressing . Remember to keep pointing the CR100 at your Television while pressing this key.

7. As soon as your television turns off, press  to store the code.

Notes:

- Many TVs do not switch on pressing . Please try pressing a number key ('channel select') to switch your TV back on.
- If you cannot control your Television properly, please continue the Search Method, you may be using the wrong code.
- To search for the code for another device follow the instructions above, but press the appropriate

Device Mode key instead of  during step 2.

- If your device's original remote control does not have a  (POWER) key, press  instead during step 5.

Code blink-back

Once you have set up your CR100, you can blink back your device set-up codes for future reference.

Example: To blink back your Television code

1. Press the appropriate Device Mode key (e.g. ) once.
2. Press and hold  until the red Power LED blinks twice   (It actually blinks once when you press the key, then twice after about three seconds).
3. Press   . The  key blinks twice.
4. For the first digit of your four-digit code, press  and count all the red blinks. If there are no blinks, the digit is '0'.
5. For the second, third and fourth digits, repeat the previous step, pressing , , or  as appropriate.

Now you have the four-digit code.

Make a note of the codes

Write down the codes for your devices in the boxes below for future reference.

Device	Code
1	
2	
3	
4	
5	
6	
7	
8	

Device Mode key functions

DVD mode



	Toggles power between stand-by and on		Starts the playback of a DVD. SHIFT followed by ► cycles Angle options on Arcam DVD player
	Searches for and plays the track corresponding to the key pressed		Pauses DVD play-back. Press ► to restart playback
	Selects Tape input on amplifier		Fast forward SHIFT + ►► cycles through slow forward play modes
	Toggles random ('shuffle') play on and off		Ejects disc
	Modifies many keys (see individual key descriptions, below)		Stop playback of a DVD
	Selects multichannel (MCH) input on amplifier		Start recording (on products that have this feature)
	Cycles through repeat options (track, disc, etc.) SHIFT + RPT gives RPT A-B functionality.		Displays Search menu with Title, Track and Time options. SHIFT + TRIM displays Trim menu on Arcam DVD players
	Navigate setup and DVD programme selection menus. OK confirms a selection. SHIFT to Power on SHIFT to Power off		Displays Setup menu. SHIFT + SETUP displays programming screen on Arcam DVD players
	Confirms a setting ('Enter' or 'Select' on some remotes)		Displays Title menu. SHIFT + TITLE clears bookmark, search and program display entries on Arcam DVD players
	Cycles through available surround sound modes. SHIFT + MODE changes the HDMI setting.		Changes Audio decode format (Dolby digital, DTS, etc.) SHIFT + AUDIO displays the 'Mem' function (Bookmarks).
	Activates DVD menu if available		Cycles through DVD subtitle language options, if available SHIFT + INFO displays STATUS on Arcam DVD players
	Cycles through the front panel display's brightness options (dim to bright, off)		
	Toggles the mute function, if available. By default this key always operates the AMP Mute		
	Press and release to skip back to the beginning of the current/previous track.		
	Press and release to skip forwards to the beginning of the next track.		
	Decrease (-) and increase (+) amplifier volume		
	Fast rewind SHIFT + ◀◀ cycles through slow playback speeds		

SAT mode



	Toggles power between stand-by and on
	Functions as original remote number key.
	Selects Tape input on amplifier
	Toggles between the available inputs
	Modifies many keys (see individual key descriptions, below)
	Selects multichannel (MCH) input on amplifier
	(not used)
	Navigate setup menus. OK confirms a selection
	Confirms a setting (equivalent to 'Enter' or 'Select' on some remotes)
	Controls BACKUP function, if available.
	Performs same function as on original remote, if available.
	On some Satellite and Cable set top boxes this key functions as the Guide key to open the EPG (Electronic Program Guide).
	Toggles the mute function, if available. By default this key always operates the AMP Mute
	Channel down
	Channel up.
	Decrease (-) and increase (+) amplifier volume
	Fast rewind
	Starts the playback
	Toggles pause of playback

	Fast forward
	(not used)
	Stop playback
	Start recording
	(not used)
	Duplicates function of RED key for some Satellite and Cable set-top boxes
	Duplicates function of GREEN key for some Satellite and Cable set-top boxes
	Duplicates function of YELLOW key for some Satellite and Cable set-top boxes
	Duplicates function of BLUE key for some Satellite and Cable set-top boxes

English

AV (i.e. TV) mode



	Toggles power between stand-by and on. (Some TVs require you to use a number key to turn them on.)
	Functions as original remote number key – usually for channel selection.
	Selects Tape input on amplifier
	Toggles between the available inputs (e.g. TV/AV)
	Modifies many keys (see individual key descriptions, below)
	Selects multichannel (MCH) input on amplifier
	(not used)
	Navigate setup and programme selection menus. OK confirms a selection.
	Confirms a setting (equivalent to 'Enter' or 'Select' on some remotes)
	EXIT function on some models.
	Functions as original remote key, if available.
	INFO or OSD function, if available.
	Toggles the mute function, if available. By default this key always operates the AMP Mute
	Channel down
	Channel up
	Decrease (-) and increase (+) amplifier volume
	Toggles TEXT page on/off
	TEXT page off
	Turns Programme-In-Programme (PIP) on, if available
	Activates PIP move, if available

	Activates PIP swap, if available
	Activates PIP freeze, if available
	Activates PIP channel up, if available
	Activates PIP channel down, if available
	Duplicates function of RED key for Text TV
	Duplicates function of GREEN key for Text TV
	Duplicates function of YELLOW key for Text TV
	Duplicates function of BLUE key for Text TV

TUN mode



	Toggles power between stand-by and on.
	Functions as original remote number key.
	Selects Tape input on amplifier
	Selects FM band
	Modifies many keys (see individual key descriptions, below)
	Selects multichannel (MCH) input on amplifier
	Selects AM band
	Navigate setup and programme selection menus. OK confirms a selection. SHIFT to Power on SHIFT to Power off
	Confirms a setting (equivalent to 'Enter' or 'Select' on some remotes)
	Cycles through different frequency bands.
	Functions as original remote key, if available
	Cycles through the front panel display's brightness options (dim to bright, off)
	Toggles the mute function, if available. By default this key always operates the AMP Mute.
	Sends Preset Down command
	Sends Preset Up command
	Decrease (-) and increase (+) amplifier volume
	Fast rewind (DAB rewind radio)
	Play (DAB rewind radio)
	Toggles pause of playback (DAB rewind radio)
	Fast forward (DAB rewind radio)

	Selects FM band on the DAB tuner
	Stops playback (DAB rewind radio)
	Start recording (DAB rewind radio)
	Selects DAB band on the DAB tuner
	Toggles FM tuner mode between FM Mute mode and Mono mode on Arcam Receivers and Tuners.
	Toggles between Preset and Tune mode on Arcam Receivers and Tuners.
	Stores tuner preset on Arcam Receivers and Tuners.
	Cycles through RDS radio display modes for Arcam Receiver and Tuners.

English

AMP mode



	Toggles power between stand-by and on.		Sends Preset Down command
to	1 DVD input 2 CD player input 3 AV (television sound input) 4 AUX Auxiliary line input 5 VCR Video Cassette Recorder input 6 SAT Satellite decoder input 7 TUN DAB/FM/AM tuner input 8 Phono input, if available		Sends Preset Up command
	Selects Tape input on amplifier		Decrease (-) and increase (+) amplifier volume
	Selects FM band on Tuner		Toggles Direct mode
	Modifies many keys (see individual key descriptions, below)		Toggles EQ on/off on Arcam surround amplifiers with room EQ function
	Selects multichannel (MCH) input on amplifier		Cycles through available THX modes on Arcam surround amplifiers with THX function
	Selects AM band		Cycles through stereo effects on Arcam surround amplifiers
	Navigate the menus on Arcam surround amplifiers. OK confirms a selection. SHIFT to Power on SHIFT to Power off SHIFT to switch Zone 2 on, if available. SHIFT to switch Zone 2 off, if available.		Restores current Favourite Preset on Arcam surround amplifiers, if available
	Confirms a setting (equivalent to 'Enter' or 'Select' on some remotes)		Displays lip sync adjustment menu on Arcam surround amplifiers
	Changes Audio mode		Displays subwoofer adjustment menu on Arcam surround amplifiers
	Activates the main menu on Arcam amplifier.		Displays trim levels menu on Arcam surround amplifiers
	Cycles through Display panel brightness options (dim to bright, off)		Toggles between FM/Mono-Stereo/Mute on AVR
	Toggles the mute function, if available. By default this key always operates the AMP Mute		Toggles between Tune and Preset mode on AVR
			Stores tuner preset on AVR
			Cycles through RDS Info options on AVR

AUX mode



	Toggles power between stand-by and on.
to	Functions as original remote number key.
	Selects Tape input on amplifier
	(not used)
	Modifies many keys (see individual key descriptions, below)
	Selects multichannel (MCH) input on amplifier
	(not used)
	Navigate setup and programme selection menus. OK confirms a selection.
	Confirms a setting (equivalent to 'Enter' or 'Select' on some remotes)
Behaviour of all other CR100 keys in AUX mode depends on the type of auxiliary device. Refer to the appropriate table for the device.	

By default, AUX mode has been set up for future ARCAM products.

The AUX control page can be assigned for use with a DVD or VCR player using the following method:

1. Unlock the code page (this is described on page 18 – 'Locking/Unlocking a specific device mode').
2. The functions of AUX mode can now be replaced by those of a DVD or VCR by changing the four-figure device code (this is also explained on page 18 – 'Mode Mover').
3. Now lock the mode so the new settings are not changed inadvertently.

English

VCR mode



	Toggles power between stand-by and on.
	Functions as original remote number key.
	Selects Tape input on amplifier
	Toggles between available inputs (e.g. AV1, AV2)
	Modifies many keys (see individual key descriptions, below)
	Selects multichannel (MCH) input on amplifier
	(not used)
	Navigate setup and programme selection menus. OK confirms a selection.
	Confirms a setting (equivalent to 'Enter' or 'Select' on some remotes)
	Operates the Exit function if the VCR uses this feature
	Turns on the Menu function if the VCR uses this feature
	Toggles display between TV and VCR
	Toggles the mute function, if available. By default this key always operates the AMP Mute
	Channel down
	Channel up.
	Decrease (-) and increase (+) amplifier volume
	Fast rewind
	Play
	Toggles pause of playback
	Fast forward

	Ejects tape
	Stop playback
	Starts recording
	Displays Search menu, if available
	Red selection button (if used)
	Green selection button (if used)
	Yellow selection button (if used)
	Blue selection button (if used)

CD mode



	Toggles power between stand-by and on.
	Functions as original remote number key.
	Selects Tape input on amplifier
	Toggles random ('shuffle') play on and off
	Modifies many keys (see individual key descriptions, below)
	Selects multichannel (MCH) input on amplifier
	Cycles through repeat options (track, disc, etc.)
	Navigate the menus on Arcam surround amplifiers. OK confirms a selection. SHIFT to Power on SHIFT to Power off.
	Confirms a setting (equivalent to 'Enter' or 'Select' on some remotes)
	Changes the time display modes on Arcam CD player
	(not used)
	Cycles through the front panel display's brightness options (dim to bright, off).
	Toggles the mute function, if available. By default this key always operates the AMP Mute
	Press and release to skip back to the beginning of the current/previous track.
	Press and release to skip forwards to the beginning of the next track.
	Decrease (-) and increase (+) amplifier volume
	Fast rewind
	Play
	Toggles pause of playback

	Fast forward
	Open/close disc tray
	Stop playback
	Start recording (on products that have this feature)
	Scans first 10 seconds of each track on CD (Audio search)
	Starts Program mode
	Clears programmed item
	Starts and stops A-B repeat function
	(not used)

English

Customising the CR100

Code Learning

The CR100 comes with a complete library of preprogrammed codes. After you have set up the CR100 for your device, you may find that there are one or more functions on your original remote which do not have a place on the CR100 keypad. For convenience, the CR100 offers a Code Learning feature that allows you to copy up to 16 functions from an original remote control onto the CR100 keypad.

Before you start, make sure that:

- The original remote control is working correctly.
- The remotes are not pointing at your device.
- The remotes have new batteries.
- The remotes are not in direct sunlight or under strong fluorescent lights.

Learned functions are mode-dependent: You could theoretically assign up to eight different functions to a single key (the CR100 can handle a total of 16 learned functions).

Example: To copy the 'text hold' function from a TV remote onto the key of your CR100.

1. Place both remotes on a flat surface, 2 to 5cm apart, with the IR ports facing each other.
2. On the CR100, press and hold  until the power LED blinks twice: .
3. Press   . The power LED blinks twice: .
4. On the CR100, press the device key that matches the 'source' device (e.g. if you're learning a TV function, press .
5. On the CR100, press the key to which you want to assign the learned function (e.g. ). The device key blinks rapidly.

6. On the original remote, press and hold the function key that you want to learn (e.g. **TEXT HOLD**) until the CR100 device key blinks twice: .

7. If you want to learn other functions from the same source device, simply repeat steps 5 and 6 pressing the next key you want to learn.
8. To exit Code Learning mode, press and hold  until the device key blinks twice: .
9. To use the learned function on the CR100, press the Device Mode key, followed by the function key.

In this example, you'd press  followed by .

Shifted Learning

You can assign a learned function to a CR100 key without sacrificing its original function.

You can assign Shifted Learning functions to any key **except** for: Device Mode keys (e.g. , , or number keys ( to ).

1. To assign a Shifted Learning function, simply follow Code Learning steps in the previous section. During step 5, press  once before you press the key to which you want to assign the learned function.
2. To access the shifted function, press  and then the target key.

Important notes

- Once you start a Code Learning session, you have approximately 10 seconds to conduct each step. Any longer, and a timeout means that you'll have to start the process again.
- The Learning feature is mode-specific – you can copy one feature *per mode* onto a key.
- The CR100 can learn approximately 16 functions in total.

- To replace a learned function, simply assign a new one to the same key.
- Learned functions *are* retained when you change batteries.
- If Code Learning fails, try altering the distance between the two remotes; make sure that the light in the area is not too bright.

To delete a learned function:

1. Press and hold  until the power LED blinks twice: .
3. Press   . The power LED blinks twice: .
3. Press a Device Mode key once. For example, if you want to delete one of your learned TV functions, press .
4. Press twice on the key you want to deassign. The handset blinks twice:  to confirm.

The original function of the CR100 is restored.

To delete a Shifted Learned function:

To delete a Shifted Learned function, press  before you press the key to be deassigned (during step 4 above).

To delete ALL learned functions within a given Device Mode:

1. Press and hold  until the power LED blinks twice: .
2. Press    – the power LED blinks twice: .
3. Press the appropriate Device Mode key twice.

Creating Macros

You can program your CR100 to issue a sequence of commands when you press a single key. Any sequence of commands you regularly use can be reduced to a single key press for your convenience.

For example, you might want to turn off your TV, VCR and Satellite at the same time.

- A key programmed with a Macro is available in all modes; it will replace that key's different functions for all modes.
- A Macro can consist of up to eight key presses.

Example: To assign a Macro to the key

1. Press and hold  until the power LED blinks twice: .
2. Press   .
3. Press  (the Macro will be assigned to this key).
4. Press , , , . (These are the Macro steps you wish to record.)
5. To store the Macro, press and hold  until the power LED blinks twice: .

Now, whenever you press , the CR100 will toggle the power to your TV, VCR and Satellite.

- The important word here is 'toggle'. For example, if the TV and Satellite devices are currently on, but the VCR is off, pressing  will switch off the TV and Satellite and switch on the VCR (rather than switching all three devices on or off).
- When using Macros, remember that you may need to change mode or use , and that each key press (including changing modes and pressing ) counts as one of the Macro steps. You cannot use a Macro key within another Macro.
- If the amount of memory storage for a particular Macro is exceeded, the power LED comes

on for five seconds. You can, however, save the macro steps up to that point by pressing , or you can cancel the Macro recording by pressing any other key.

- The delay between key presses is recorded as part of the Macro. A delay of up to 30 seconds is permitted.

Example: To deassign the Macro associated with the key

1. Press and hold  until the power LED blinks twice:  .
2. Press   .
3. Press .
4. Press and hold  until the power LED blinks twice:  .

Key Mover

Sometimes you might find that a key you use a lot for your system is in the 'wrong' place on the CR100 keypad. It's quite easy to reassign a favourite function to a more accessible key.

Remember that key functions are Mode-specific.

Example: To assign the DISP function to the MENU key in SAT mode:

1. Press .
2. Press and hold  until the power LED blinks twice:  .
3. Press   .
4. Press the key you want to move (e.g. .
5. Press the key you want to move the key to (e.g. .

To restore a moved key and return it to its previous function, repeat the process above, pressing the key to be restored twice.

Mode Mover

If your home entertainment setup contains devices of the same type (e.g. two TVs, perhaps from different manufacturers) you can still control both those devices with the CR100. You simply need to reassign an *unused* Device Mode key.

Example: To use the key to control a second TV

1. Press and hold  until the power LED blinks twice:  .
3. Press   .
3. Press the Device Mode key for the type of device you want to control (e.g. for a TV, press .
4. Press the Device Mode key you want to use (e.g. .
5. Don't forget to set up the CR100 to control the second device, using one of the methods on pages 6 or 7.

Note that Volume lock features are not applied to a Device Mode that has been altered using Mode Mover.

To restore a moved Device Mode key to its original state

1. Press and hold  until the power LED blinks twice:  .
2. Press   .
3. Press the Device Mode key you want to restore *twice*.

Locking/Unlocking a specific device mode

When you first unpack your CR100 and insert the batteries, for your convenience it is able to control certain Arcam components automatically (e.g. DVD players, Amplifiers, Tuners and CD Players). We achieve this by preprogramming specific Arcam device codes onto the relevant Device Mode keys, then locking the Device Modes so you don't reprogram them inadvertently.

If you want to override these locked default settings – to control a third-party DVD player, for example – you will first need to unlock DVD Mode before setting up the CR100 using one of the methods described at the start of this guide.

Here are the factory default settings:

Mode	Default Status	Default Arcam codes
DVD mode	Locked	0762
SAT mode	Unlocked	0877
AV mode	Unlocked	0586
TUN mode	Locked	2009
AMP mode	Locked	1956
AUX mode	Locked	2004
VCR mode	Unlocked	0111
CD mode	Locked	0680

Alternative codes are available for multi-room solutions, or in the case of code clashes with other manufacturer's products.

For example:

DVD (system code 12) 1655

AMP (system code 19) 1371

You will need to change the system code on the product you wish to control, as well as the CR100.

Note: AMP mode is permanently locked; it will only control Arcam Amplifiers.

To toggle a Device Mode lock setting:

1. Press the Device Mode key you want to unlock (e.g. )
2. Press and hold  until the power LED blinks twice:  .
3. Press   .

- The power LED blinks twice when being locked, and blinks four times when being unlocked.
- If you enter an invalid key sequence, the power LED gives one long blink and returns to normal operation.

While the Device Mode key is locked, the Direct Code Setup and Move Mode functions are not available.

Volume punch-through

Volume punch-through means that, no matter which Device Mode is selected, the CR100 controls the Amplifier volume. You don't need to press  on your CR100. This feature is switched on by default.

There are times, however, when you might want to control a device's volume directly when in a specific Device Mode.

Example: To cancel volume punch-through for a TV (AV mode)

1. Press  once.
2. Press and hold  until the power LED blinks twice:  .
3. Press   .
4. Press . The power LED blinks four times.

Now, while in TV (AV) mode, you will be able to control the volume or mute functions of your TV directly.

To completely cancel all volume punch-through settings

1. Press and hold  until the power LED blinks twice:  .
2. Press   .
3. Press . The power LED blinks four times    .

Now, whichever mode you're in, you will have direct access to that device's volume or mute functions, assuming they are available. You would need to switch to **AMP** mode to alter the Amplifier volume.

Example: To restore default volume punch-through settings in VCR, DVD, AMP and SAT mode

1. Press and hold  until the power LED blinks twice:  .
2. Press   .
3. Press . The power key LED blinks twice:  .

Mode key IR punch-through

The Mode key IR punch-through default is 'on'.

Example: To set the Mode key IR punch-through to AMP

1. Press and hold  until the power LED blinks twice:  .
2. Press   . The power LED blinks twice:  .
3. Press  to punch through IR from it.

Now, whenever you press and release a Mode key, the IR data assigned to **AMP** is transmitted, no matter what the current mode is (i.e. it 'punches through' any other device).

To cancel Mode key IR punch-through:

1. Press and hold  until the power LED blinks twice:  .
2. Press   . The power LED blinks twice:  .
3. Press  until the power LED blinks twice:  .

Resetting the CR100

Resetting the CR100 will erase all learned functions across all modes, as well as some other programmed functions like Macros. It will not reset the Device Mode keys; these will remain programmed to your choice of component.

1. Press and hold  until the power LED blinks twice:  .
2. Press   . The power LED blinks four times:    .

Command summary

Direct code setup

(e.g. AV mode, *NNNN*=code number)



Library search

(e.g. AV mode)



until unit turns off

SHIFT to save

Code blink back



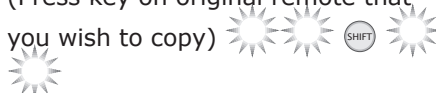
- 1 count blinks for first *N*
- 2 count blinks for second *N*
- 3 count blinks for third *N*
- 4 count blinks for fourth *N*

Code learning

(e.g. AV mode fast forward key)



(Press key on original remote that you wish to copy)



Delete a learned function

(e.g. AV mode fast forward key)



Delete all learned functions with a device

(e.g. AV mode)



Creating macros

(e.g. **SRCH** key)



Deassign macro



Key mover

(e.g. SAT mode, **DISP** key to **MENU** key)



Mode mover

(e.g. change SAT to TV(AV))



Restore device mode

(e.g. restore SAT)



Locking/unlocking a mode

(e.g. DVD mode)



(i.e. two blinks for lock)



(i.e. four blinks for unlock)

Cancel volume punch through



Restore volume punch through



Mode key IR punch through



Cancel mode key IR punch through



Reset the CR100



As elsewhere in this Handbook, a single 'blink' of the red LED behind the power button is indicated by the symbol .

Device code tables

The tables that begin on the opposite page list the four-figure codes for different manufacturers' devices.

Use these when setting your CR100 up to control your devices, as described in Method 1 (see page 6).

If more than one code number is listed, try the first number. If the results are unsatisfactory, continue trying the numbers for that manufacturer to get the best 'fit' with the functionality required.

If the manufacturer of your equipment is not listed, you can try Method 2, the Library Search (see page 7). This allows you to scan through every set of codes contained in the CR100's memory.

TV		
888	0294	
A.R. Systems	0067 0382 0586 0404 0485	
Accent	0039 0067 0586	
Acoustic Research	1299	
Acura	0039	
Adcom	0655	
Addison	0683 0138	
ADL	1247	
Admiral	0123 0193 0448 0294	
Advent	0906	
Adyson	0247 0246	
AEA	0067 0586	
AEG	0636 1193	
Agashi	0246 0294 0247	
Aiko	0039 0067 0586 0246 0065 0463 0294 0247	
Aim	0067 0586 0783 0238 0736	
Aiwa	1535	
Akai	0039 0632 0238 0586 0067 0463 0065 0783 0193 0759 0744 0745 0578 0510 0247 0661 0246 0294 0208 0407 0636 1067 0503 1289 1278	
Akashi	0890 0039	
Akiba	0485 0067 0586	
Akira	0448	
Akito	0067 0586	
Akura	0067 0294 0586 0698 0039 0744	
Alaron	0246	
Alba	0039 0067 1067 0586 0744 0448 0400 0698 0246 0193 0517 0473	
Alkos	0065	
All-Tel	0895	
Allorgan	0247	
Allstar	0067 0586	
Amplivision	0247 0400	
Amstrad	0039 0067 0294 0463 0586 1067	
Anam	0067 0586 0039 0680	
Anam National	0067 0586 0680	
Andersson	1193 1179	
Anglo	0039 0294	
Anitech	0039 0294 0067 0586	
Ansonic	0400 0067 0586 0039 0698 0404 0193	
AOC	0039 0090 0123 0138 0208	
Aolingpike	0294	
Apex Digital	1247	

Apollo	0503	
Arc en Ciel	0139	
Arcam	0246 0247	
Ardem	0516 0744 0067 0663 0586	
Aristona	0586 0067	
Arthur Martin	0193	
ASA	0135 0376 0100	
Asberg	0067 0586	
Asora	0039	
Astra	0067 0586	
Asuka	0247 0246 0294	
ATD	0728	
Atlantic	0067 0586 0246	
Atori	0039	
Auchan	0193	
Audiosonic	0039 0067 0404 0850 0139 0586 0744 0745 0247 0400 0294 0516	
Audioton	0247 0516 0400 0294	
Audioworld	0728	
Aumark	0090	
Autovox	0247	
AWA	0039 0404 0067 0586 0246 0636 0247 0138 0294 1406	
Axxent	0039	
Axxon	0744	
B&D	1247	
Baier	0906	
Baihe	0039 0294	
Baile	0039 0404 0691	
Baird	0139 0373 0247 0238 1226	
Bang & Olufsen	0595	
BaoHuaShi	0294	
Baosheng	0039	
Barco	0193	
Basic Line	0039 0404 0067 0193 0698 0586 0247 0485 1067	
Bastide	0247	
Bauer	0039	
Baur	0039 0067 0542 0225 0586 1535	
Bazin	0247	
Beaumark	0208	
Beijing	0039 0238 0256 0294 0404 0512 0691	
Beko	0400 0744 0065 0516 0745 0067 0448 1067 0586 0636 0838	
Belson	1221	
Bennett	0586 0067	
Beon	0067 0586 0448	
Berthen	0698	
Best	0400	
Bestar	0067 0586 0400 0404	
Bestar-Daewoo	0404	
Binatone	0247	

Black Diamond	0850 1067 0586 0783 1193	
Black Strip	0065	
Blaupunkt	0225 0230 0357 0485 0200	
Blue Sky	0067 0586 0698 0744 1067 0517 0745 1939 0485 1221 0838 1393	
Boots	0247 0039	
Bosch	0357	
BPL	0067 0586 0926	
Brandt	0139 0655 0365 0373 0590	
Brandt Electronique	0365	
Brinkmann	0067 0586 0698 0448 0516	
Brionvega	0067 0586	
Britannia	0246 0247	
Brother	0294	
Bruns	0516	
BSR	0193	
Bush	0039 1067 0067 0744 0698 0193 0404 0728 0294 0517 0238 0247 0586 0808 1289 1278	
C-Tech	0926 0921	
Caihong	0039	
Caishi	0921	
Capsonic	0294	
Carad	0640 0067 0586 0698 1067	
Carena	0485 0067 0586	
Carrefour	0100 0067 0586	
Carver	0200	
Cascade	0039 0067 0586	
Casio	0067 0586 0193	
Cathay	0067 0586	
CCE	0067 0247 0586	
Celestial	0850	
Centrex	0810 0921	
Centrum	1067	
Centurion	0067 0586	
CGE	0104 0448 0400 0193	
Changcheng	0039 0294 0404 0691	
Changfei	0039 0404	
Changfeng	0294 0783	
Changhai	0039	
Changhong	0850 0039 0294 0538	
Chengdu	0039	
Ching Tai	0039	
Chun Yun	0039	
Chunfeng	0039 0294	
Chung Hsin	0138	
Chunsun	0039	
Cimline	0039	
Citizen	0090	
City	0039	
Clarivox	0067 0448 0586 0100	

TVs (continued)

Clatronic	0067 0400 0744 0294 0586 0247 0039 0636 1193	Digihome	1179	Evesham	1278 1289
Clayton	1067	Digiline	0067 0586 0135 0698	Excel	0067 0586
CMS	0246	DigiLogic	0067 0586	Expert	0193
CMS hightec	0247	Digitex	0850	Exquisit	0067 0586
Cobolt	0921	Digitor	0067 0586	Fagor	0067 0586
Concorde	0039	DigiX	0910	FairTec	1221
Condor	0067 0400 0586 0246 0039 0448 0193 0294	DiK	0067 0586	Family Life	0067 0586
Conia	0784 0850	Dixi	0039 0067 0586 0247	Feilang	0039
Conrac	0838	DL	0921 0810 0067 0617 0895	Feilu	0039
Conrad	0067 0586	Domeos	0698	Feiyan	0294
Conrowa	0039 0294 0728 0783 1200	Domland	0424	Feiyue	0039
Contec	0039 0246 0294 0067 0586	Dongda	0039	Fenner	0404 0039
Continental	0139 0517	Donghai	0039	Ferguson	0067 0139 0655 0365 0373 0590 0586 0065 0683 0138 0578 0473 1067
Edison	0039 0067 0586	Dream Vision	1734	Fidelity	0193 0246 0542 0067 0586 0294
Cosmel	0039 0067 0586	Drean	0067	Filsai	0247
Crosley	0104 0193	DSE	0850	Finlandia	0238 0376 0578 0193 0373
Crown	0039 0742 0067 0400 0516 0586 0448 0517 0744 0636 0745 0238 0683 1067	DTS	0039	Finlux	0067 0135 0100 0586 0744 0376 0247 0193 0745 0661 0522 0510 0503 0448 0636 0838
CS Electronics	0246	Dual	0247 0373 0067 0586 0382 0424 0193 1167 0661 1179 1067	Firstar	0039
Curtis Mathes	0090 0123	Dual Tec	0247	Firstline	0039 0067 0246 0586 0247 0404 0698 0744 0193 1939 0238 1067 1221 0838 1393 1193 1401
Cytronix	1328	Dumont	0100 0247	Fisher	0247 0238 0400 0193
D-Vision	0067 0586	Dunai	0193	Flint	0067 0485 0586 0640 0294
Daewoo	0664 0691 0404 1939 0529 0067 0586 0039 0246 0247 1167 0208 0200 0910 0138 0906 0895	Durabrand	0067 0586 0208	Force	1179
Dainichi	0246	Dux	0067 0586	Formenti	0067 0193 0586 0516 0246
Dansai	0067 0586 0294 0065 0246 0039 0247 0238	DVX	0921	Formenti-Phoenix	0246
Dantax	0400 0516 0744 0636 0745	Dynatech	0247	Fortress	0123
Datsura	0238	Dynatron	0067 0586	Fraba	0067 0586 0400
Dawa	0039 0067 0586	e:max	0636	Friac	0039 0067 0586 0400 0529 0640
Daytek	0728 0736 1406	Easy Living	1278 1289	Frontech	0193 0294 0247 0039
Dayton	0039	Ecco	0803 0736	Fujimaro	0895
Daytron	0039 0404 0067 0586	ECE	0067 0586	Fujitsu	0713 0883 0247 0193 0039 0382 0067 0586
Dayu	0404 0691	Edison-Minerva	0517	Fujitsu General	0039 0247 0193
de Graaf	0238 0578 0193	Elbe	0400 0193 0067 0586 0640 0247	Fujitsu Siemens	1328 1289 1278 1193
DEC	0890 0921	Elcit	0193	Funai	0698 0294
Decca	0067 0586 0247 1167	Electrograph	1785	Furi	0294
Deitron	0067 0586 0404	Elekta	0039 0067 0586 0294	Furichi	0890
Denko	0294	Elfunk	1238 1067	Futronic	0294 0890
Denver	0067 0586 0636 1219 0617	ELG	0067 0586	Future	0067 0586
Desmet	0067 0586 0039	Elin	0067 0246 0578 0586 0135 0193 0039	Galaxi	0067 0586 0193
Diamant	0067 0586	Elite	0067 0586	Galaxis	0400 0448 0067 0586
Diamond	0294 0728 0039 0855 0246 0890 0850	Elta	0039 0294 0246	Galeria	0039
Digatron	0067 0586	Emerson	0208 0744 0067 0586 0100 1939 0516 0400 0193 0698	Gateway	1785
		Enzer	0783		
		Erae	1401		
		Erres	0067 0586		
		ESC	0067 0586 0247		
		Estèle	0193		
		Ether	0039		
		Etron	0039 0067 0586 0193 0850		
		Eurofeel	0294 0247		
		EuroLine	0067		
		Euroman	0246 0294 0067 0586 0247 0400		
		Europa	0067 0586		
		Europhon	0067 0193 0247 0586 0246		

GBC	0193	0039
	0404	
GE	0373	0208
	0123	0590
	0139	0365
	0655	
Geant Casino	0193	
GEC	0067	0193
	0247	0586
Geloso	0039	0193
	0404	
General	0139	
General Electric	0373	
General Technic	0039	
Genesis	0039	0067
	0586	
Genexxa	0193	0067
	0586	0039
Gericom	0895	1328
	1247	0910
Gevalt	1401	
Giant	0247	
Go Video	0090	
Goldfunk	0698	
Goldhand	0246	
GoldStar	0039	0067
	0208	0400
	0407	0247
	0586	0246
	0193	0139
	0636	0744
	0745	0485
Gooding	0517	
Goodmans	0664	1289
	1278	0067
	1067	0529
	0247	0586
	0744	0373
	0698	1939
	0404	0294
	0039	0517
	0065	0510
	0590	0365
	0691	0910
	0617	1406
Gorenje	0400	
Gradiente	0067	0683
	0200	0586
Graetz	0193	0744
	0067	0586
	1193	
Granada	0067	0586
	0238	0256
	0247	0138
	0503	0365
	0590	0193
	0373	0578
Grandin	0067	0586
	0039	0193
	0640	0744
	0745	0698
	0404	0485
	1067	0895
	1221	0910
Gronic	0247	0193
Grundig	0225	0538
	1401	0067
	0100	0517
	0586	0617
	0473	0736
	0039	0400
	0208	1406
	0373	
Grunkel	1193	
H&B	0838	
Haaz	0736	
Haier	0728	0921
	0294	
Haihong	0039	
Haiyan	0294	
Halifax	0294	0246
	0247	
Hallmark	0208	

Hammerstein	0294	0090
Hampton	0246	0247
Hankook	0208	
Hanseatic	0067	0586
	0529	0193
	0691	0424
	0664	0400
	0039	0247
	0407	0744
	0838	0516
Hantarex	0039	0067
	0586	
Hantor	0067	0586
Harsper	0895	
Harwa	0803	1226
	1299	
Harwood	0039	0067
	0586	0517
Hauppauge	0067	0586
Havermy	0123	
HCM	0039	0067
	0586	0247
	0448	0294
Hedzon	0586	0067
helios	0895	
Hema	0247	0039
Hifivox	0139	
Higashi	0246	
Highline	0294	0067
	0586	
Hinari	0039	0238
	0067	0586
	0193	0473
	0517	0294
Hisawa	0485	0640
	0744	
HISense	1393	0238
	0039	0538
	0783	1200
	1238	0810
	0586	
Hitachi	0193	0208
	1255	0039
	0608	0135
	0138	0503
	0373	0247
	0139	0511
	0529	0067
	0538	0586
	0578	0664
	0774	1067
	1167	1200
	0522	1511
	0542	0510
	1606	1179
Hitachi Fujian	0138	
Hitsu	0039	0640
	0485	
Höher	0744	0895
Home Electronics	0636	
Hongmei	0039	0123
	0294	
Hongyan	0294	
Hornnyphon	0067	0586
Hoshai	0485	
Hua Tun	0039	
Huafa	0039	
Huanghaimei	0039	
Huanghe	0039	
Huanglong	0039	
Huangshan	0039	0294
Huanyu	0246	0404
	0294	
Huaqiang	0294	
Huari	0294	
Hugoson	0920	1247
Hygashi	0247	0246
Hyper	0039	0246
	0247	

Hypson	0067	0294
	0586	0744
	0745	0247
	0485	1067
	0698	0516
Hyundai	0067	0895
	0586	0736
	0890	0783
	0906	
Iberia	0067	0586
ICE	0247	0294
	0067	0039
	0586	0246
Ices	0246	
Ict	0067	1167
	0586	
IISonic	1406	
Iiyama	1247	0920
Imperial	0067	0104
	0193	0400
	0448	0586
Imperial Crown	0039	0294
	0404	0691
Indiana	0067	0586
InFocus	0782	1194
Ingelen	0193	0517
	0640	0744
Ingersoll	0039	
Inno Hit	0039	0067
	0586	0247
	1193	
Innova	0067	
Innovation	0067	0586
Innowert	0895	1328
inotech	0803	0850
Interactive	0067	0586
	0542	0357
	0193	0400
	0139	
Interbuy	0039	0067
	0294	0542
	0586	
Interfunk	0067	0193
	0586	0542
	0357	0400
	0139	0230
Internal	0067	0586
	0529	0404
	1939	
International	0246	
Intervision	0067	0247
	0485	0294
	0407	0516
	0400	0424
	0517	0193
	0039	0586
Irradio	0039	0067
	0586	
IRT	0728	
Isukai	0067	0586
	0485	
ITC	0247	
ITS	0067	0294
	0246	0039
	0586	
ITT	0193	0510
	0578	0503
	0376	0238
	0640	
ITT Nokia	0578	0193
	0503	0510
	0376	0238
	0636	0640
	0661	
ITV	0294	0067
	0586	0404
IX	0907	
Jean	0039	
JEC	0065	
Jialicai	0039	0294
Jinfeng	0238	0256
Jinque	0039	0294
Jinta	0039	0294

TVs (continued)

Jinjing	0039	0586	Lecson	0067	0586	Masuda	0039	0294
	0067	0294	Legend	0039			0067	0247
JMB	0067	0529	Lenco	0067	0039	Matsui	0039	0067
	0664	0404		0193	0404		0586	0065
	0586	0473		0586	0617		0517	0238
Jocel	0742			1067			0247	0473
Jubilee	0586		Lenoir	0039			0463	0485
Juhua	0294		Levis Austria	0067	0586		0193	0225
JVC	0683	0761	Lexsor	1226			0365	0744
	0538	0636	Leyco	0067	0294		1067	
	0713	0448		0586		Matsushita	0680	
	0123	0680	LG	0067	0208	Matsuviana	0617	
Kaige	0039	0294		0400	0039	Maxam	0294	
Kaisui	0039	0246		0407	1295	Maxdorf	0803	
	0067	0247		0586	0247	Maxent	1785	
	0586	0485		0744	0246	MCE	0039	
Kambrook	0407			0674	0193	Meck	0921	0728
Kamp	0246			0090	0138	Mediator	0067	0586
Kanghua	0926			0636	0139	Medion	0067	0698
Kangli	0039	0294		0728	0745		0744	1067
	0404	0691		1667	1221		0838	0586
Kangyi	0039	0294	Liesen & Tter	0067	0357		0542	1167
Kapsch	0193			0586			0728	1278
Karcher	0067	0586	Liesenkotter	0067	0357		1289	0910
	0400	0640		0586			1319	
	0193	0294	Lifetec	0067	0039	Megas	0640	
	0808	0744		0404	0698	Megatron	0208	
	0636			0542	1067	MEI	1067	0067
Kathrein	0586	0067		1167	0586		0586	
Kawasho	0246			0294	0713	Meile	0294	
KB Aristocrat	0193			1278	1289	Meletronic	0039	0376
Kendo	0067	0640	Lloyd's	0744			0067	0542
	0586	0193	Local Malaysia	0039			0139	0373
	0542	0400	TV	0728			0193	0135
	0407	1067	Lodos	1067	1179		0247	0404
	0516		Loewe	0542	0663		0510	0522
Kennedy	0193			0820	0067		0246	0586
Kennex	1067			0586	0400		0664	0225
Kenwood	0135		Logik	0090	0728		0691	0744
Khind	0926	0736		0803	0039	Memorex	0039	1067
KIC	0247			0294	0910		0208	0680
Kingsley	0246			1247	1067		0090	
Kioto	0736	0586	Logix	0698		Memphis	0039	
Kiton	0586	0067	Longjiang	0294		Mercury	0067	0039
	0698		Luma	0067	0193		0586	
KLL	0067			0586	0404	Mermaid	0067	
Kneissel	0067	0400	Lumatron	0039		Merritt	0578	0193
	0640	0404		0067	0586	Metronic	0655	
	0529	0586		0193	0247	Metz	0418	0477
Kolin	0138			0294			0776	1193
Kolster	0067	0586	Lux May	0067	0039		0225	0067
Kongque	0039	0294		0586			0586	0617
Konichi	0039		Luxor	1193	0510		0698	1067
Konka	0067	0586		0522	0238		1563	
	0744	0448		0578	0193	MGA	0208	0067
	0617	0784		0376	0503		0586	
Kontakt	0517			1067	0247	Micromaxx	0067	0586
Korpel	0067	0586	LXI	0661			0698	1067
Korting	0400			0208			0838	
Kosmos	0067	0586	Madison	0067	0586	Microstar	0838	
Kotron	0294		Magnadyne	0193		MicroTEK	0850	
Koyoda	0039		Magnafon	0246		Mikomi	1179	
Kreisen	0906		Magnavox	0067	0586	Minato	0067	0586
KTV	0247			0736	0810	Minerva	0100	0517
Kuaile	0039	0294	Magnum	0744	0067		0225	0138
Kuba	0193			0586	0745	Minoka	0067	0586
Kuba Electronic	0193			1319		Mitsubishi	0138	0123
Kulun	0039		Mandor	0294			0542	0067
Kunlun	0238	0256	Manesth	0067	0247		0208	0586
	0294	0404		0586	0294		0238	1067
	0691			0065	0193	Mitsuri General	0193	
Kyoshu	0448	0294	Manhattan	0067	0906	Mivar	0246	0400
Kyoto	0193	0246		0586	0698		0639	0247
	0247			1067	0193	Monaco	0039	
L&S Electronic	0895	0744		0808		Morgan's	0067	0586
LaSAT	0516	0400	Marantz	0067	0586	Motorola	0123	
Lavis	1067	0067	Mark	0067	0586	MTC	0090	0400
	0193			0247	0246		0542	0193
Leader	0039			0404	0039		0246	
				0744	0745	MTlogic	0744	
			Master's	0529	0067	Mudan	0039	0238
			Mastro	0810	0728		0256	0294

Multitec	0067 0516 1067	0586 0698	Odeon	0294	Phoenix	0067 0400 0193	0586 0516 0246
Multitech	0039 0516 0247 0586	0246 0067 0400 0294	Okano	0400 0586 0039	Phonola	0067 0246	0586
Murphy	0246	0193	Olidata	1406	Pilot	0586 0742	0067 0736
Musikland	0067	0586	Omega	0294	Pioneer	0790 0139 0193 1290 0373 0542	0067 0200 0586 0400 0516
MyCom	1406	0208	Omni	0810 0728	Pionier	0400	0516
Myryad	0586	0067	Onwa	0632	Plantron	0067 0294	0586 0039
NAD	0208	0193	Opera	0067	Playsonic	0744 0247	0067 0745
Naiko	0067 0586	0636	Optimus	0680	Polaroid	0895	
Nakimura	0404 0586	0067	Optonica	0123	Policom	0139 0100	0193 0104
Nanbao	0039	0294	Orbit	0067 0586	Poppy	0039	
Nansheng	0294		Orion	0067 0586 0039 0910	Portland	0404	1939
Naonis	0193		Online	0067	Powerpoint	0517 0586	0067 0728
NAT	0256		Ormond	0698 0067	Precision	0247	
National	0256 0538	0238	Osaki	0247 0067 0586	Premier	0039	0294
NEC	0200 1200 0039 0404 0067 0294 1734 0683	0617 0208 0485 0247 0586 0538 0529 0691	Osio	0067	President	0890	
Neckermann	0067 0586 0230 0357 0247	0400 1535 0193 0448 0542	Osume	0067	Prima	0039 1299	0294
NEI	0067 0193	0586	Otto Versand	1535 0247 0123 0586 0139 0039	Princess	0728	
Neovia	0895 0906	1401 1406	Pacific	0067 1167 1067	Prinston	1067	
Netsat	0067	0586	Pael	0246	Profex	0039	0193
Neufunk	0067 0586 0744	0039 0640	Palladium	0400 0448 1167 0230 0357 0247	Profi	0039	
New Tech	0067 0586 0247	0039 0373	Palsonic	0294 0067 0407 0586 0808	Profitronic	0067	0586
Newave	0039 0123	0208	Panama	0039 0294 0067	Proline	0067 0655 1406	0586 0664
Nicamagic	0246		Panasonic	0680 0138 0067 0193 0538 0578 0208	Prosonic	0067 0400 0698 0246	0586 0404 0744 0247
Nikkai	0065 0586 0247 0039	0067 0246 0294	Panavision	0067	Protech	0039 0586 0294 0698 0516	0067 0247 0448 0193 1067
Nikkei	0744		Panda	0039 0238 0294 0921 0728	Proton	0208 0674	0039
Nikko	0208		Papouw	0067	Provision	0529 0586 0744	0067 1067
Nishi	0512		Pathe Cinema	0193 0400	PVision	1221	0906
Noblex	0067 0512	0294	Pathe Marconi	0139	Pye	0067 0404	0586
Nobliko	0100	0246	Pausa	0039	Pymi	0039	
Nogamatic	0139		Peng Sheng	0921	Qingdao	0238 0294	0256
Nokia	0193 0510 0636 0661 0404 0640	0503 0578 0522 0238 0376 0139	Penney	0208	Quasar	0680 0039	0895
Nordic	0247		Perdio	0193 0246	Quelle	0067 0100 0139 0247 0135 0586 0230 1067 0039	1535 0104 0542 0357 0698 0225 0294 0376
Nordmende	0139 0921 0590 0067 0365 1289	0744 0373 0225 0586 0193 1278	Perfekt	0067	R-Line	0067 0193	0586
Norfolk	0193		Philco	0067 0448 0193 0511	Radialva	0139 0067	0193 0586
Normerel	0067	0586	Philex	0193	Radiola	0067 0247	0586
Novak	0067	0586	Philharmonic	0247	Radiomarelli	0067	0586
Novatronic	0067 0404	0135 0586	Philips	0067 0373 0138 0802 0230	RadioShack	0067 0208	0586
NU-TEC	0485	0728	Phocus	1319	Radiotone	0039 0586 0448 0294	0067 0400 0698 1067
Nurnberg	0193				Rank	0100	
Oceanic	0193 0503 0510	0238 0578					

TVs (continued)

Rank Arena	0632	0783	Sanyo	0238	1238	Singer	0039	0067
RBM	0100			0400	0246		0586	0365
RCA	0090	0648		0247	0039		0193	
	0123	0655		0538	0193	Sinotec	0803	
	0208	0590		0067	0138	Sinudyne	0193	1535
	0365	0373		0586	0516		0067	0586
	0783			0200		Sky	0067	0910
Realistic	0208		Sanyuan	0039	0123		0208	0586
Recor	0067	0448	Save	0067	0586	SKY Brasil	0910	
	0586		SBR	0067	0586	Skymaster	0135	
Rectiligne	0067	0586	Schaub Lorenz	0578	0744	Skysonic	0783	
Rediffusion	0578	0376		0636	0516	Skyworth	0067	0586
Redstar	0067	0586		0404	1221		0039	0294
Reflex	0067	0586	Schneider	0067	1167		0728	0783
	1067	0698		0586	0698	Sliding	0895	0910
Relisys	0895	0906		0424	0382	SLX	0698	
	0907	1328		0373	0247	Smaragd	0517	
Reoc	0744	0664		1067	0193	Soemtron	0895	1328
	1939			0744	1939	Solavox	0193	0578
Revox	0067	0586	Scotch	0100			0067	0586
	0400		Scotland	0208		Songba	0039	
Rex	0193	0294		0193		Soniko	0067	0586
RFT	0400	0294	Scott	1219	0208	Sonitron	0238	0400
	0067	0586	Sears	0208			0247	
	0516		Seaway	0664		Sonneclair	0067	0586
Rhapsody	0246		Seelver	0586	1067	Sonoko	0039	0067
Ricoh	0067	0586		0067			0586	0294
Rinex	0803	0448	SEG	0067	0247		0247	
Roadstar	0039	1067		0586	0294	Sonolor	0193	0238
	0294	0448		1067	0698		1535	0578
	0067	0586		0517	0039	Sontec	0067	0586
	0744	0698		0193	0664		0400	0039
	1219			0246	1193	Sony	1535	0104
Rodex	0067	0586	SEI	1939	0744		1681	0680
Rover	0907			1535	0193		0683	1781
Rowa	0067	0294	Sei-Sinudyne	0067	0586		0383	0067
	0728	0039		0586			0586	0123
	0247	0742	Seitech	1247			0200	
	0246	0617	Seleco	0193	0294	Sound & Vision	0404	0067
	0586			0376			0586	
Royal Lux	0400	0365	Sencora	0039		Soundesign	0208	
Rukopir	0586	0067	Sentra	0065	0039	Soundwave	0067	0448
Saba	0139	0655	Serie Dorada	0208			0586	0745
	0193	0590	Serino	0640	0485	Sowa	0090	0256
	0365	0373		0246	0123		0208	
	0578	0680	Shancha	0294		Soyea	0803	
	0744		Shanghai	0039	0238	Spectra	0039	
Sagem	0640	0485		0256	0294	Ssangyong	0039	
	0860	1343	Sharp	0123	0039	Staksonic	0039	
	0648			1223	1423	Standard	0039	0067
Saige	0039			0683	0680		0247	0586
Saisho	0039	0294		0230	0790		1067	0404
	0247	0193		1193		Starlite	0039	0193
Saivod	0067	0586	Shen Ying	0039			0067	0586
	1193	0698	Shencai	0039	0294		0294	
	0742	1067	Sheng Chai	0039		Stern	0193	0294
Sakai	0193		Sheng Chia	0039	0123	Strato	0067	0586
Sakyno	0485		Shenyang	0039	0294		0294	0039
Salora	0193	0578		0783		Strong	1193	1179
	0238	0510		0039			1067	0067
Salsa	0365		Sherwood	0039			0586	
Sampo	1785	0039	Shintoshi	0067	0586	Stylandia	0247	
	0123	0208	Shivaki	0067	0586	Sunic Line	0067	0586
	0680			0473	0404	Sunkai	0485	0640
				0208			0067	0586
Samsung	0090	0648	Show	0448	0039		0517	0895
	0674	0512	Siam	0067	0586	Sunstar	0067	0586
	0617	0796	Siarem	0193			0039	0294
	0067	0208	Siemens	0067	0225	Sunwatt	0485	
	0586	1279		0230	0357	Sunwood	0067	0586
	0039	0123		0586			0039	
	1265	0247	Siera	0067	0586	Superla	0246	0247
	0400	0294		0617		SuperScan	0123	
	0246	0238	Siesta	0400		Supersonic	0238	0586
	0193	0256	Silva	0067	0586		0728	0294
	0655			0246			0485	
Sandra	0246	0247	Silver	0067	0485	SuperTech	0039	0246
Sanjian	0294			0586	0745		0067	0586
Sansui	0067	0759	SilverCrest	0193		Supra	0208	0404
	0586	0736		1067	0067		0039	
	0632	0485		0586		Susumu	0365	
	0783	1401				Sutron	0039	
Santon	0039							

SVA	0617	0895
Swisstec	0910	
Sydney	0246	0247
Synco	0090	0123
	0208	
Sysline	0067	0586
Sytong	0246	
T+A	0477	
Tacico	0208	0039
Tai Yi	0039	
Taishan	0039	0404
Tandberg	0139	0193
Tandy	0123	0247
	0193	
Targa	1401	
Tashiko	0247	0680
	0200	0246
	0193	
Tatung	0039	0067
	0586	0090
	0247	1401
	1289	1278
	1221	
TCL	0736	0728
TCM	0744	1319
	0838	
Teac	0039	0728
	0067	0542
	0294	1067
	0448	0586
	0485	0742
	0698	0247
	0736	1939
	0208	0200
	0744	1179
	1785	
TEC	0247	0039
	0365	0067
	0586	0193
Tech Line	0067	0586
	0698	1193
Tech Lux	1219	
Technics	0680	
TechniSat	0067	0586
	0193	
Technisson	0744	1319
Technosonic	0067	0586
Techwood	1193	
Tecnimagen	0586	
Teco	0039	0123
	0208	0294
	0683	
Tedexlex	0247	0448
	0636	0039
	0736	0238
	0728	0617
	0921	0067
	0586	
Teiron	0039	
Teknika	0090	
Tele System	0906	
Teleavia	0139	0373
Telecor	0067	0586
	0193	0247
	0424	
Telefunken	0655	0104
	0590	0139
	0617	0365
	0728	0373
	0742	0850
	0926	0784
	0067	0586
	0516	0744
	0376	
Telefusion	0067	0586
Telegazi	0067	0193
	0294	0586
Telemeister	0067	0586
Telesonic	0067	0586
Telestar	0039	0067
	0586	

Teletech	0039	0067
	0586	0698
	1067	
Teleton	0247	0193
Televideon	0193	0246
Television	0067	0586
Tempest	0039	0067
	0586	0294
Tennessee	0067	0586
Tensai	0067	0586
	0247	0039
	0135	0404
	0407	0745
	0193	1067
Tenson	0039	
Tesla	0067	
Tevion	1278	1328
	0067	1289
	0586	0838
	0698	1167
	0744	1067
	1319	
Texet	0246	0247
	0404	0039
Thomson	0139	0655
	0590	0373
	0365	0067
	0586	0246
Thorn	0065	0138
	0067	0139
	0104	0373
	1535	0529
	0542	0586
	0365	0404
	0100	
Thorn-Ferguson	0138	0373
	0139	0365
	0529	0065
Tiane	0123	
Tiny	1226	1299
TMK	0208	
Tobo	0039	0294
Tokai	0067	0586
	0698	0193
	0247	0404
	0039	1067
Tokaido	1067	
Tokyo	0246	0065
Tongguang	0294	
Tongtel	0810	0617
Topline	1067	0698
Toshiba	0538	0090
	0680	1538
	0039	0065
	0123	1734
	1194	1319
	0100	1295
	0744	0294
	0247	0139
	0225	0648
	0674	0728
	0067	1193
Towada	0247	
Toyoda	0039	0294
Trakton	0039	0294
	0247	
Trans	0698	0247
Continens	1067	0067
	0586	0516
TRANS-	0895	
continents		
Transonic	0067	0728
	0586	0742
	0485	0617
	0542	0294
	0448	0039
Transtec	0246	
Triad	0067	0586
Trident	0247	
Tristar	0294	
Triumph	0376	0586
	0067	
Tuntex	0039	
TVTEXT 95	0586	

Uher	0067	0586
	0404	0448
	0516	0400
	0510	
Ultravox	0404	0246
	0193	0067
	0586	
Unic Line	0067	0586
	0503	0485
United	0744	0067
	0745	0586
	1067	0617
Universal	0744	0067
	0586	
Universum	0067	0376
	0104	0135
	0225	0294
	0503	0400
	0522	0510
	0230	0448
	0542	0100
	0193	0586
	0357	1535
	0698	0247
	0139	0661
	0039	1067
	0200	1193
	1179	0648
Univox	0067	0586
	0193	
Utax	0193	
V7 Videoseven	1785	0208
	0910	1406
	1247	
Vestel	0067	0193
	0247	0586
	0698	1067
	1193	
Vexa	0039	0067
	0586	
Victor	0683	0680
Videocon	0538	
Videologic	0246	
Videologique	0246	0247
VideoSystem	0067	0586
Videotechnic	0246	0247
	0404	
Videoton	0193	
Vidtech	0208	
Viewpia	0906	
ViewSonic	1785	
Visiola	0246	
Vision	0067	0294
	0586	0247
Vortec	0067	0586
Voxson	0193	0208
	0067	0586
	0448	
Waltham	0247	0448
	0067	0586
	0698	0139
	1067	0193
	0473	
Wards	0208	
Warumaia	0404	0691
Watson	0067	1067
	1278	1289
	0586	0193
	0039	0698
	0424	1406
	0357	
Watt Radio	0193	0246
Wega	0067	0586
Wegavox	0039	0067
	0586	
Weipai	0039	
Welltech	0744	
Weltblick	0067	0586
	0247	
Westinghouse	0920	
Weston	0067	0586
Wharfedale	0067	0926
	0586	

TVs (continued)

White	0067	0246
Westinghouse	0586	1939
Windsor	0698	1067
Windy Sam	0586	
Wintel	0744	
World-of-Vision	0910	0920
	0895	1319
	1328	0907
	1247	
Worldview	0485	
X-View	1221	
Xenius	0664	0691
Xiahua	0039	0294
	0728	0803
Xianghai	0039	
Xiangyang	0294	
Xihu	0294	
Xingfu	0039	
Xinghai	0294	
Xingyu	0039	
XLogic	0728	0890
Xoro	1226	1247
Xrypton	0067	0586
Yamaha	0680	1606
Yamishi	0485	0067
	0586	0247
Yingge	0039	
Yokan	0067	0586
Yoko	0067	0247
	0294	0586
	0039	0400
	0246	
Yonggu	0039	
Yousida	0039	
Yuhang	0039	
Zanussi	0247	
Zenith	1939	0208
	1295	
Zhuhai	0039	0404
Zonda	0728	

VCR

Accent	0102
Admiral	0078
Adventura	0030
Adyson	0102
Aiko	0308
Aim	0308 0672
	0378
Aiwa	0030 0378
	0382 0067
	0772 1167
	0062
Akai	0067 0136
	0345 0672
	0382 0270
	0378
Akashi	0102
Akiba	0102
Akura	0102
Alba	0308 0102
	0382 0030
	0345 0378
	0111
Allorgan	0270
Allstar	0111
America Action	0308
Amstrad	0030 0308
	0102
Anam	0067 0256
	0270 0308
Anitech	0102
Ansonic	0030
Aristona	0111
ASA	0067 0111
Asha	0270
Asuka	0102 0067
	0111 0030
Audiosonic	0308
Audiovox	0067 0308
AVP	0382 0030
AWA	0067 0308
	0672 0073
Baird	0136 0308
	0134 0030
Basic Line	0308 0102
	0134
Beaumark	0270
Beko	0134
Bell & Howell	0134
Bestar	0308
Black	0672 0308
Diamond	
Black Panther	0308
Blaupunkt	0256 1592
	0111
Blue Sky	0067 0378
	0102 0382
	0308 0030
	0510 0672
	1167
Bondstec	0102
Brandt	0350
Brinkmann	0378
Broksonic	0378
Bush	0102 0308
	0345 0382
	0030 0378
	0111 0672
	0772
Calix	0067
Carena	0111
Carrefour	0075
Carver	0111
Casio	0030
Cathay	0308
CCE	0102 0308
CGE	0030
Cimline	0102

Cineral	0308
CineVision	1167
Citizen	0067 0308
Clatronic	0102 0030
Colt	0102
Combitech	0382
Condor	0308
Craig	0067 0102
	0270
Crown	0067 0308
	0102 0510
Cybernex	0270
Cyrus	0111
Daewoo	0308 0672
	0667 1167
	0075 0378
	0382
Dansai	0102 0308
Dantax	0382
Daytron	0308
de Graaf	0072 0196
	0111 0134
	0078
Decca	0030 0111
	0097 0378
	0382
Deitron	0308
Denko	0102
Denon	0072
Diamant	0067
Diamond	0308
Digiton	0672
DSE	0672
Dual	0111 0308
	0030 0378
Dumont	0030 0111
	0134
Durabrand	0672
Dynatech	0030
Elbe	0308
Elcatech	0102
Electrohome	0067
Electrophonic	0067
Elin	0270
Elsay	0102
Elta	0102 0308
Emerex	0062
Emerson	0030 0102
	0067 0075
	0073 1167
	0308
ESC	0308 0270
EuroLine	0378
Ferguson	0350 0030
	0308
Fidelity	0030 0102
	0270 0462
	0382
Finlandia	0134 0111
	0072 0196
	0030 0078
	0067 0073
	0136 0256
Finlux	0030 0111
	0134 0072
Firstline	0102 0378
	0073 0067
	0075 0072
	0308 1167
Fisher	0134
Flint	0378
Frontech	0102
Fujitsu	0030
Fujitsu General	0067
Funai	0030
Galaxi	0030
Galaxis	0308
Garrard	0030

GE	0350	0078	Kendo	0136	0345	Neckermann	0111
	0270			0378	0102	Nesco	0102 0030
GEC	0111			0067	0308		0382
General Electric	0067		Kenwood	0097		Neufunk	0067
General Technic	0378		KIC	0030		Nikkai	0102 0308
Genexxa	0134		Kioto	0378		Nikko	0067
Go Video	0462	1167	KLH	0102		Noblex	0270
Goldhand	0102		Kneissel	0382	0378	Nokia	0134 0136
GoldStar	0067	0510		0067	0308		0345 0308
	0030	1167	Kodak	0067			0270 0078
Goodmans	0030	0102	Kolster	0378			0072 0111
	0270	0308	Korpel	0102		Nordmende	0350 0097
	0067	0111	Kyoto	0102		NU-TEC	0378
	0378	0667	Lenco	0308		Oceanic	0030 0078
	0382	0672	Leyco	0102			0136 0111
GPX	0067		LG	0067	0510	Okano	0345 0378
Gradiente	0030			0030	0308		0102 0308
Graetz	0134	0270	Lifetec	1167		Olympus	0256
Granada	0134	0078	Lloyd's	0378		Onimax	0672
	0111	0270	Loewe	0030		Optimus	0067 0078
	0067	0256		0111	1592		0134 0462
	0072	0030		0256	0067	Orbit	0102
Grandin	0102	0067	Logik	0270	0102	Orion	0382 0378
	0030	0308		0136			0772
Grundig	0270	0377	Lumatron	0308		Orson	0030
	0111	0256	Lux May	0102		Osaki	0030 0067
	0350	0378	Luxor	0136	0073		0102
	0102	0382		0102	0134	Osume	0102
	0772			0078	0345	Otto Versand	0111
Haaz	0378		LXI	0067		Pace	0382
Hanimex	0382		Magnasonic	0308		Pacific	0030
Hanseatic	0067	0308	Magnavox	0111	0030	Palladium	0102 0345
	0111			0672			0067 0270
Harley Davidson	0030		Magnin	0270			0378 0462
Harman/Kardon	0111		Magnum	0672		Palsonic	0102 0030
Harwood	0102		Manesth	0102	0075		0672
HCM	0102			0111		Panasonic	0256 1592
Hinari	0102	0382	Marantz	0111			0866
	0308	0270	Mark	0308	0030	Pathe Cinema	0073
Hisawa	0382		Marta	0067		Penney	0067 0070
Hischito	0075		Mastec	0672			0072 0270
Hitachi	0072	0196	Master's	0308		Pentax	0072
	0030	0270	Matsui	0378	0067	Perdio	0030
	0111	0134		0270	0382	Philco	0102
Höher	0308	0672		0030	0772	Philips	0111
Hornyphon	0111		Mediator	0111		Phoenix	0308
Hughes Network Systems	0072		Medion	0378	0382	Phonola	0111
Hypson	0102	0308	Meletronic	0030	0067	Pilot	0067
	0382	0030	Memorex	0134	0030	Pioneer	0097 0111
	0067	0510		0067	0078		0072
Imperial	0030	0270		0378	0270	Portland	0308 0667
Ingersoll	0270		Memphis	0102		Prinz	0030
Inno Hit	0270	0308	Metronic	0111		Profitronic	0111 0270
	0102		Metz	1592	0377	Proline	0030 0308
Interbuy	0067	0102		0866	0111		0350 0672
Interfunk	0111	0134	MGA	0256	0067	Prosco	0308
Internal	0308	0667		0073	0270	Prosonic	0308 0030
International	0308	0067	MGN	0270		Protech	0102 0111
Intervision	0030	0308	Technology	0378			0308
	0067	0378	Micormay	0378		Provision	0308
Irradio	0102	0067	Micromaxx	0378		Pye	0111 0030
	0111	1167	Migros	0030		Quasar	0308
ITT	0136	0134	Minolta	0072		Quelle	0111
	0270		Mitsubishi	0073	0097	Radialva	0067 0102
ITT Nokia	0078			0078	0111		0111 0078
ITV	0308	0067		0510	0030	Radiola	0111
JMB	0382	0378		0672		Radionette	1167 0067
Joyce	0030		Motorola	0078		RadioShack	0030
JVC	0097		MTC	0270	0030	Radix	0067
Kaisui	0102		Multitec	0067		Randex	0067
Kambrook	0067		Multitech	0030	0102	RCA	0136 0072
Karcher	0308			0134			0078 0350
KEC	0067	0308	Murphy	0030			0270
			Myryad	0111		Realistic	0030 0067
			NAD	0134			0078 0134
			Naiko	0672	0378	Reoc	0378 0667
			National	0256	1592		0308
			NEC	0097	0070	RFT	0102
				0134	0067		
				0308	1167		

VCRs (continued)

Roadstar	0270 0102 0067 0308 0772 0111	Symphonic	0030 0102	XR-1000	0030 0102
Royal	0102	T+A	0256	Yamishi	0102 0308
Saba	0350 0308	Tandberg	0308	Yokan	0102
Saisho	0378	Tandy	0030 0134	Yoko	0067 0102 0270
Salora	0073 0136 0134	Tashiko	0030 0078 0270 0111 0067	Yoshita	0102
Samsung	0270 0462 0075	Tatung	0030 0111 0078 0073 0378 0382	Zenith	0030 0667 1167
Sanky	0078	Tchibo	0378	ZX	0378 0382
Sansei	0078	TCM	0378		
Sansui	0097 0030 0136 0102 0378	Teac	0102 0030 0308 0672 0067 0111 0667		
Sanyo	0134 0270 0078 0097 0378	TEC	0308 0102		
Saville	0382 0308 0270	Tech Line	0102		
SBR	0111	Technics	0256		
ScanSonic	0270	TechniSat	0378		
Schaub	0134 0030	Tedalex	0067 0378 0672		
Lorenz	0136 0345	Teknika	0030 0067		
Schneider	0102 0030 0067 0111 0308 0270 1167 0072 0382 0672	Telefunken	0672 0350 0308		
Scott	0073 0075	Telestar	0067		
Sears	0030 0067 0072 0134	Teletech	0102 0308 0030		
Seaway	0308	Tenosal	0102		
SEG	0102 0270 0308 0672 0111 0667	Tensai	0030 0067 0102 0308		
SEI	0111	Tevion	0378 0672		
Sei-Sinudyne	0111	Texet	0308		
Seleco	0067	Thomas	0030		
Semivox	0075	Thomson	0350 0097 0308		
Semp	0075	Thorn	0134 0067		
Sentra	0102	Thorn- Ferguson	0350		
Setron	0102	TMK	0270		
Sharp	0078 0067 0599	Tokai	0102 0067 0134		
Shintom	0102 0134	Tokiwa	0102		
Shivaki	0067	Topline	0378		
Shogun	0270	Toshiba	0073 0075 0111 0772 0382		
Siemens	0067 0134 0111 0350 0377	Totevision	0067 0270		
Siera	0111	Towada	0102		
Silva	0067	Tradex	0111		
Silver	0308	Tredex	0308		
SilverCrest	0672	Triad	0308		
Singer	0378 0075 0102	Uher	0067 0270		
Sinudyne	0111 0382	Ultravox	0308		
Smaragd	0378	Unitech	0270		
Sonneclair	0102	United	0378 0772		
Sonoko	0308	United Quick Star	0308		
Sonolor	0078	Universum	0030 0111 0270 0067 0136 0378 0134		
Sontec	0067 0308	Vector	0075		
Sonwa	0672	Vector Research	0070		
Sony	0062 0030 0136	Victor	0097		
Soundwave	0067 0378	Video	0070 0075		
Ssangyong	0102	Concepts			
Standard	0308	Video Technic	0030		
Starlite	0067 0134	Videosonic	0270		
Stern	0308	Wards	0030 0072 0078 0102 0111 0270		
STS	0072	Watson	0111 0382 0308 0672		
Sunkai	0378 0308	Weltblick	0067		
Sunstar	0030	Wharfedale	0672		
Suntronic	0030	White	0102 0308		
Sunwood	0102	Westinghouse			
Supra	0067 0270 0378 0308	World	0378		
Sylvania	0030 0073 0111				

SAT

@sat	1330
@Sky	1364
ABsat	1353 0743
ADB	0672 0917 1289 1397 1503 1521
Adcom	0230
Akai	0230
Alba	0743 1314
Allsat	0230 1047
Allsonic	0399
Alltech	0743
Allvision	1262
Alpha	0230
Amitronica	0743
Ampere	0162
Amstrad	0877 1205 0743 0162 1143
Anglo	0743
Ankaro	0399 0743 1309
AntSat	1047
Arcon	1309 0162 1105
Armstrong	0230
Arnion	1330
ASA	0329
Asat	0230
ASCI	1364
ASLF	0743
AssCom	0883
Aston	1159 1291
Astra	0743
Astratec	1773
Astro	0163 0203 0399 0688 1143 1129 1130 0230
Audioline	1459
Aurora	0909 0672 1463
Austar	1289 0672 0909 1206
Axil	1487
Axis	1141 0399
B@ytronic	1442
Bentley Walker	1047
Best	0399
Big Sat	1487
Black	1314
Diamond	
Blaupunkt	0203
Blue Sky	0743
Blue Star	1309
Boca	0162 1396 0743 1262
Boston	0162
Brainwave	1244 0688 1702
British Sky Broadcasting	0877 1205
Broco	0743
BSkyB	0877 1205
BT	1326
Bubu Sat	0743
Bush	1501 1702 1675 1773
Canal Digital	1883 0883 0197 1076
Canal+	0883 1883
CanalSatellite	0883 1369 1883
Centrex	1577
CGV	1443
Cherokee	1353

Chesley	1577
Chess	1364 0743 1656
CityCom	1206 1262 0329 0848 0534 1105
Clatronic	1443
CNS	1397
Colombia	0162
Columbia	0162
Comag	0162 1396 1443 1262 1442
Condor	0399
Connexions	0399
Conrad	0399 0162
Coship	1487
Crown	1314
Cyrus	0230
D-box	1144 0753
Daewoo	1326 0743 1773 1141
Deltasat	1105
DGTEC	1272 1572
Digatron	1324
Digenius	0329 1191
DigiFusion	1675 1773
Diginet	1577
DigiQuest	1487 1330
DigiSat	1262
Digisky	1487
Digital+	1883
DigitAll World	1257
DiPro	1577 1503 1397
DirecTV	0129 0886
Distratel	1313
Distrisat	0230
DMT	1105
DNT	0230
Dream Multimedia	1267
DStv	0672 0909
Dune	0399
Durabrand	1314
Echostar	1230 0640 0197 0883 0743 1353 1503 1439 1797
Einhell	0162 0743
Elap	0743 1159 1597
Elsat	0743
Elta	0230 0399
Emme Esse	0399
eMTech	1244
Engel	1047 0743 1281
EuroLine	1281
Europa	0230
Europhon	0329 0162
Eurosat	1597
Eurosky	0162 0329 0399
Eurostar	0848
Eutelsat	0743
Eycos	1309
Fenner	0743 0399
Ferguson	1321 0741 1773
Flair Mate	0743
FMD	1281 1487 1443
Force	1224
Fortec Star	1047
Foxtel	1386 0909 0750 1206 1192

Fracarro	0155
Freecom	0203
FTEmaximal	0399 0743
Fuba	1831 0399 0203 1191 0329 1281
Fugionkyo	0155
Galaxis	1141 1206 0883 0399 0909
Gardiner	0848
Garnet	1105
GbSAT	1244
Gecco	1442 1303
General Satellite	1206
Globo	1281 1656 1442 1459 1364
GOD Digital	0230
Gold Box	0883
Gold Vision	1047
Golden	1313
Interstar	
Goodmans	1314
Gradiente	0917
Grundig	0203 0877 1321 0909 0883
H&B	1577
Hanseatic	1129 1130
Hänsel & Gretel	0162
Hauptpauge	1324 1702
HB	1244
HDT	1189
HE@D	1309
Hills	1262
Hirschmann	1141 1143 0203 0329 1262 0399 0155 1442
Hitachi	1314
HNE	1262 0162
Homecast	1244
Humax	1206 1457 1705 1255 1773
Huth	0162 1047 1105
Hyundai	1189 1105
iCan	1397
ID Digital	1206
Imperial	1459 1364 1129 1130 1225 1227 0230 1702
International	0162
Interstar	1047 1244
iotronic	0162
ITT Nokia	0753
Jadeworld	0672
Jaeger	1364
Jepssen	1244
K-SAT	0743
Kamm	0743
Kaon	1330
KaTelco	1141
Kathrein	0534 1597 0510 1591 0688 0203 0230 0743 0848 1353 1446
Kennex	0155
Kenwood	0883
Key West	0162
Kongque	1330
Kreiling	0688
Kreiselmeyer	0203

Satellite decoders (continued)

Kyostar	0162	Optus	0909	0883	Servimat	1641
L&S Electronic	0399 0162	Orbis	1364	1442	ServiSat	1281 0743
Labgear	1326	Orbitech	1129	1130	Sherwood	1641
LaSAT	0399 0162		0230		Siemens	0203 1459
Lenco	0743 0399	P/Sat	1262			1364
Lennox	0399	Pace	0877	0917	Silva	0329
Lenoxx	1641		1205	1386	Skantin	0743
Lexus	0230		1880	0271	SKR	0743
LG	1444 1105		1353	0821	Sky	0129 0877
Lifesat	0162 0399	Pacific	0750	0230		0886 0917
	0329 0743		0883	1453		1205 0741
Lodos	1314	Packard Bell	1314		SKY Brasil	0672 0917
Logik	1314	Palcom	1141		SKY Italia	1878 1880
Logix	1047 1105		0329	1191	Sky XL	1442 1281
Lorenzen	0329 1324	Panasat	1439		SKY+	1205
	1191 0162	Panasonic	0909		Skymaster	0743 1439
Lupus	0399		0877	1334		1230 1105
Macab	0883	Panda	1434			1641 1364
Madritel	0672	Patriot	0203		Skymax	0230
Manata	0743 0162	peekTON	0162		skyplus	1262 1364
Manhattan	1047	Philips	1487			1442
Marantz	0230		0230	1144	SkySat	0743
Maspro	0743 0203		0883	0129	SL	0162 1702
Matsui	0203 1773		0163	0848	SM Electronic	0743 1230
Maximum	1105 1364		1702	0203		1105
MDS	1255	Phoenix	1459		Smart	1303 0162
Mediabox	0883	Phonotrend	1303			0329 1143
Mediacom	1236	Pilotime	1047	1230		1262 0743
MediaSat	0883	Pino	1369		Soniq	1443
Medion	1262 0329	Pioneer	1364		Sony	1597
	0743 0162		0883	1338		0877 1588
	1105 1442	Portland	0382		SR	0312 0883
	1656 1364	Power Sky	1326		Star Sat	0162
	0399	Preisner	1309		Starland	0743
Medison	0743		0162	1143	Stream	1878
Mega	0230	Premiere	1396		Strong	0155 1397
Meletronic	0848		0883	1144		1439 1656
Metronic	0743 1309	Primacom	0753	1141		0399 0909
	1313 0848	QNS	1206	1225		0883 1189
	0162	Quadral	1130	0688		1330 1503
Metz	0203	Quelle	1141		Sunny	1330
Micro	0743 1324	Radiola	1397	1434	Sunny Sound	0399
Micro electronic	0743		0399	1353	Sunsat	0743
Micro Technology	0743	RCA	0329		Sunstar	0399 0162
Micromaxx	0329 0399	Rebox	0230			0672
Microstar	1105	Red Star	1321		Supermax	1313
Microtec	0743	RFT	1244		Systec	0162 1364
Morgan's	0230 0743	Roadstar	1281		Tarbs	1255
	0162 1439	Rover	0230		TBoston	1487
Motorola	0886	Rownsonic	0743	0883	Teac	1257 1255
Multichoice	0672 0909	S-ZWO	0743	0399		1352
	1463	SAB	1597		Tecatel	1230
Myryad	0230	Sagem	1237		TechniSat	1129 1130
Mysat	0743		1281			1225 1227
Neotion	1364	Samsung	1144	1283		0230 1352
Netgem	1352		1720		Technomate	1313
Netsat	0917 0129		1273	1600	Technosat	1236
Neuf TV	1352	Sat Control	1488	1047	Technosonic	1702
Neuhaus	0743	Sat Team	1236	0883	Technotrend	1459
Neuling	1262	SAT+	1330		Technowelt	0162
Neusat	0743 1309	Satec	0743		Techsan	1047
Neveling	1191	Satelco	1439		Techwood	1314 1656
NextWave	1047	Satplus	0743		tekComm	1047
Nikko	0743 0753	Schaub Lorenz	0399		Tele System	1281 1439
	0230	Schneider	1130			1641 1831
Nokia	1144 1253	Schwaiger	1244		Tele System	1641
	1053 0753		1281	1236	Electronic	
	0883 1753		0534	1364	TeleClub	1397
Nordmende	1641		1487	1442	Telecom	0743
Nova	0909		1141	0162	Telestar	1129 1130
OctalTV	1324	SCS	1105			0230 1281
Opentel	1262 1442	Sede	0329			1364 1656
Optex	1313 0743	Electronique	0155	0162	Televes	0162 1244
	1641		1313	1656		1330 1364
		SEG	1309			1439
			1281	0399	Televisa	0917
		Serino	1656	1105	Telewire	1262
			0640			

Tevion	1364	1702
	0743	1439
	1597	
Thomson	0741	0877
	1321	1930
	0743	1205
	0883	1076
Tiny	1702	
Tioko	0162	
Tokai	0230	
Tonna	1641	0743
Topfield	1236	1237
	1575	1813
TPS	1283	
Triax	0230	0743
	0883	1281
	1326	1321
	0162	1129
	1143	1257
	1656	
Trio	1105	
TT-micro	1459	
Turnsat	0743	
Twinner	0162	0743
UEC	0909	1192
	1386	
Unimax	1577	
Unisat	0230	0162
United	1281	
Universum	0203	0329
	1129	
Van Hunen	1191	0329
Variosat	0203	
Vega	0399	
Ventana	0230	
Vestel	1281	
VH-Sat	1191	0329
Viasat	1353	1053
Visionic	0155	1309
Visiosat	0743	1159
	1487	
Vivid	1192	
VTech	0848	
Wavelength	1262	1443
Wharfedale	1314	
Winbox	1831	
Wisi	0203	0329
	0162	
Worldsat	1503	1244
	1281	
XMS	1105	
Xrypton	0399	
XSat	0743	1244
	0877	1353
Xtreme	1330	
YES	0917	
Yess	1577	
Zehnder	1281	1262
	1364	1442
	1105	1443
	0534	0848
	0399	
Zenith	0886	
Zeta	0230	
Technology		
Zinwell	1206	
Zodiac	1831	

CBL		
ADB	1260	1299
Amstrad	1252	
Auna	1299	1260
Austar	0306	
Canal Plus	0473	
Comcrypt	0473	
Comtec	0049	
Contec	0049	
Daeryung	0507	
Fastweb	1660	
Filmnet	0473	
Foxtel	1252	
France Telecom	0847	1764
freebox	1512	
Funai	0049	
General Instrument	0306	
Jerrold	0306	0049
Macab	0847	
Madritel	1260	
MNet	0473	0049
Motorola	0306	1136
	1513	
Multichoice	0049	0473
Nokia	1599	
Noos	0847	1654
NTL	1090	1098
Oak	0049	
Ono	1098	
Optus	0306	1090
Pace	1098	1607
	1090	
Philips	0847	
Sagem	0847	1654
Samsung	1696	
Scientific Atlanta	0507	
Tele+1	0473	
Telepiu	0473	
Telewest	1098	1090
Telsey	1660	
Thomson	1764	1612
Trans PX	0306	
UPC	1612	
US Electronics	0306	
Visiopass	0847	

VIDAC	
Gateway	1302
Hewlett Packard	1302
Microsoft	1302
Pinnacle Systems	1477
Sony	1302

CD		
Advantage	0062	
Aiwa	0187	
Arcam	0187	
Audio Research	0187	
Audiolab	0187	
Audiomeca	0187	
Audioton	0187	
Balanced Audio Technology	0187	
Cairn	0187	
California Audio Labs	0059	0333
Cambridge Audio	0187	
Carver	0187	
CCE	0187	
Copland	0423	
Cyrus	0187	
Denon	0033	0796
	0656	
DKK	0030	
Dual	0033	
Dynaco	0187	
Elektra	0423	
Garrard	0423	
Genexxa	0030	0062
Goldmund	0187	
Grundig	0187	
Harman/Kardon	0187	
Hitachi	0062	
JVC	0102	
Kenwood	0220	0656
	0066	
Krell	0187	
Linn	0187	
Loewe	0187	
Magnavox	0187	
Marantz	0187	0656
	0059	
Matsui	0187	
MCS	0059	
Memorex	0062	
Meridian	0187	
Micromega	0187	
Mission	0187	
Musical Fidelity	0423	
Myryad	0187	
NAD	0751	0030
Naim	0187	
NSM	0187	
Onkyo	0131	
Optimus	0030	0062
Orion	0423	
Panasonic	0333	0059
Philips	0187	0656
Pioneer	0062	
Primare	0187	
Proton	0187	
QED	0187	
Quad	0187	
Quasar	0059	
Radiola	0187	
Restek	0187	
Revox	0187	
Rotel	0187	
SAE	0187	
Sansui	0187	
Siemens	0187	
Simaudio	0187	
Sony	0030	0520
	0187	

Tag McLaren	0187
Tandy	0062
Teac	0423
Technics	0333 0059
Thorens	0187
Thule Audio	0187
Traxdata	0656
Universum	0187
Victor	0102
Wards	0187
Yamaha	0066 0520
	0062
Zonda	0187

TUNER		
AEG	1420	
AFK	1419	
Aiwa	0151	0219
	1088	1188
	1288	1652
Akai	0639	1250
	1420	
All-Tel	1420	
Anam	0639	
Arcam	0219	1119
	1219	1299
	1319	
ASCOMTEC	1419	
Audiolab	1119	1219
	1299	1319
	0219	
Audiosonic	1419	
Audiovox	1420	
Audioworld	1420	
Balanced Audio Technology	1119	1219
	1299	1319
	0219	
Bang & Olufsen	0829	
Basic Line	1584	
Belson	1419	
Blue Sky	1420	
Bose	1259	1385
Bush	1119	1219
	1299	1319
Cairn	0219	
Cambridge Audio	0219	1219
Carver	0219	1119
	1219	
CCE	1382	
Centrum	1250	1584
	1419	
Classic	1382	
Clatronic	1250	
Copland	1119	1219
	1299	1319
Denon	1390	1134
Denver	1419	
Diamond	1420	
DK digital	1450	
DMTECH	1420	
Dual	1250	1420
	1450	
Electrocom-paniet	1219	
Elta	1420	
Fisher	1831	
Genexxa	0216	
Goldmund	0219	1119
	1219	1299
	1319	
Goodmans	0639	1229
	1450	1641
	1419	
Grundig	1119	1219
	1299	1319
	0219	
Hanseatic	1420	
Harman/Kardon	1334	1119
	1219	1299
	1319	0219
HCM	1420	
HE	1419	
Hitachi	1831	1250
	1584	
Hiteker	1419	
Integra	0165	1350
JVC	0104	1404
	1229	1525
Kenwood	1057	1343
	1599	0216
KLH	1420	
KXD	1419	

Lenoxx	1641	
Lenoxx Sound	1641	
LG	1323	
Linn	0219 1119 1219 1299 1319	
Loewe	1119 1219 1299 1319 0219	
Magnavox	0219 1119 1219 1299	
Magnum	1641	
Marantz	0219 1119 1219 1299 1319	
Mark	1119 1219 1299 1319	
MBO	1382	
Medion	1450	
MEI	1420	
Melectronic	0639	
Meridian	1119 1219 1299 1319	
Metz	1584	
Micromaxx	1450	
Micromega	1119 1219 1299 1319 0219	
Mitsubishi	0206	
Mustek	1382	
Myryad	1219 1119 1299 1319 0219	
NAD	0350 0639	
Naim	1119 1219 1299 1319	
Nikkai	1419	
Nikko	0639	
Norcent	1419	
Okano	0639	
Onkyo	0165 1350	
Optimus	0216 1053	
Palladium	1250	
Panasonic	1548 1338 1339 1793 1809 1795	
Philco	1420	
Philips	0219 1219 1299 1119 1319	
Pioneer	1053 0216 1119 1219 1299 1319 1489	
Polk Audio	1319	
Proline	1420	
Proson	0639	
Provision	1419	
QONIX	1450	
Quad	1119 1219 1299 1319	
Radiola	1119 1219 1299 1319 0219	
Radionette	1664 1323	
RCA	1184 1420 1489	
Red Star	1419	
Restek	0219	
Revox	1119 1219 1299 1319 0219 0216	
Revoy	1119 1219 1299 1319	
Roadstar	1641	
Rotel	0823	
Saba	1184	
Samsung	1325 1229	
Sansui	0219 1119 0639	
Sanyo	1831	

Schneider	1420 1229 1250	
SEG	1584	
Sharp	0216 1664 1644	
Sherwood	0683	
Siemens	0639	
Silva Schneider	1323	
Sony	1188 1288 1888 1789 1088 1688 1752 1652 1142	
Soundwave	0639	
Sunfire	1343	
Sunstech	1450	
Tag McLaren	1219	
Teac	1229 0639 1420	
Technics	1338 1339 1793 1548 1795	
Techwood	0639 1584	
Telefunken	1419	
Tevion	1641	
Thomson	1184 1384	
Thorens	1219 1119 1299 1319 0219	
Toshiba	1602	
United	1420	
Universum	1250 0639 1420 1119 1219 1299 1319 0219	
Venturer	1420	
Victor	0104	
Voxson	1450	
Waitec	1382	
Wards	0219	
Wharfedale	0639 1420	
Yamaha	0206 1361 1306 0216 0742	
Yukai	1382	

DVD		
3D LAB	0569	
4Kus	1188	
A-Trend	0744	
Acoustic Solutions	0760 0743 1258	
AEG	0818 0800 0820	
AFK	1258 1182	
Aim	0808 0702	
Airis	1254 1351 0702 1035 1375	
Aiwa	0725 0899 0563	
Akai	0820 0809 0800 0818 0725 1145 0928 0746 0743 0882 0735 1725 1263	
Akashi	0868	
AKI	1035	
Akira	0808 1351	
Akura	1201 0928 1081 1170	
Alba	0747 0743 0753 0725 0760 0569 0702 1170 1081 1560 1725	
Alize	1181	
All-Tel	0820 1481 0865	
Amitech	0800 0880	
Amoi	0882	
Amoisonic	0865	
Amstrad	0743 1145 1181 1601	
AMW	0902	
Ansonic	0789 0861	
Apex Digital	0702 0747 1034	
Arena	0882	
Asono	1254	
ATACOM	1254	
Audiovox	0820 0747	
Audioworld	0820	
Audix	1134 1182	
Autovox	0743	
Auvio	0873	
Aviois	1195	
AWA	0760 0902	
Axion	0760	
Base	1481	
Basic Line	0743	
Baze	1195 0928 0702	
BBK	0892 1254	
Bel Canto Design	1601	
Bellagio	0902	
Best Buy	0887	
Black Diamond	0743 0863	
Blaupunkt	0747	
Blu:sens	1263	
Blue Parade	0601	
Blue Sky	0743 0725 0702 0873 0808 0681 0820	
BNI	1351	
Boghe	1034	
Boman	0818 0928 1035	
Brainwave	0800 1145	

DVD players (continued)

Brandt	0681	0581	DiK	0861	H&B	0848	0743
	0533		Dinamic	0818		0871	0880
Broksonic	0725	1449	DiViDo	0735		1263	1451
Bush	0743	0725	DK digital	0861	Haaz	0798	0781
	0863	1725	DMTECH	0820	Haier	0873	
	0760	0861	Dragon	0861	Hanseatic	0771	0820
	0747	0808	DSE	1760	Harman/ Kardon	0732	
	0546	0848		1182	HCM	0818	
	0753	1195	Dual	0861	HDT	0735	
	1466	1449		0695	HE	0760	
	1513	1170		0760	Henß	0743	
C-Tech	0798	1182		0820	HiMAX	0887	0873
Cambridge Audio	1139	0781	Durabrand	0861	Hitachi	0694	0725
Campomatic Digital	1081		DVX	0798		0809	0695
CAT	0819		E-Boda	0753		0603	0887
Celestial	0702		E-Dem	1254		0743	
cello	1760		e:max	1263	Hiteker	0702	
Centrex	0702	1034	EagleTec	0744	Höher	0861	1034
Centrum	0743	0819	eBench	1182		1254	
	0809	1035	Eclipse	0753	Home Electronics	0760	0800
CGV	0800	0781	Electrohome	0800	Home Tech Industries	1254	
Cinea	0871		Elfunk	0880	Hyundai	0880	1258
Cineral	0760		Elin	0800	Iekee	1137	
Cinetec	0743	0902	Ellion	0880	Ingelen	0818	
CineVision	0899	0863	Elta	0800	Inno Hit	0743	
Classic	0760	1760		0820	Integra	0657	
Clatronic	0818	0809		1181	Irradio	0771	1145
	0848	0702		1081		1254	1263
	1195	0705	Eltax	1351		0899	0800
Clayton	0743		Emerson	0621	ISP	0725	
Coby	0808	1137		0735	Jaton	0695	
	0760	1195	ENG	1601	JBL	0732	
	0882		Enterprise	0621	JDB	0760	
Codex	1263		Enzer	0695	JDV	1258	
Conia	0702	0882	EuroLine	0818	Jeken	0808	
	0546	0865		1145	Jepssen	1213	
	1351			0705	JMB	0725	
Contel	0818		Ferguson	0681	JNC	0702	1301
Continental Edison	0902	0861		1760	JVC	0653	0588
Craig	0861			0928		1194	0569
Crown	0800	0681	Finlux	0771		0533	0897
Crypto	1258			0800	jWIN	1081	
Cybercom	0861			0621	Kansai	1137	
CyberHome	0744	0846	Fintec	0743	Kansas Technologies	1263	1560
Cytron	0746	0681	Firstline	0899	Kendo	0743	0861
	0735	0861		1560		0702	1377
	1377		Fisher	0700	Kennex	0800	0743
D-Vision	1145		Funai	0725		0928	
Daenyx	0902		Gateway	1188	Kenwood	0564	0520
Daewoo	0800	0863	GE	0747	KeyPlug	0800	
	0899	1513	General Electric	0747	Kihiro	0800	
	0735	0744	Germatic	1081	Kingavon	0848	
	1466	0902	Global Link	1254	Kiss	0871	0695
	0808		Global Solutions	0798	KLH	0820	
Dalton	1066		Global Sphère	0798	KLH Digital	0747	
Dansai	0800	1145	Go Video	0774	Kodak	0848	
	1725			1188	Koss	0681	
Dantax	0753	0725		0899	Kreisen	1451	
Daytek	0902	1035	GoldStar	0621	KXD	0887	1137
Dayton	0902		Goodmans	0743		1351	
DCE	0861			1034	Lawson	0735	0746
DEC	0808	0848		0753		0798	
Decca	0800			0781	Leiker	0902	
Denon	0520	0664		0760	Lenco	0681	0800
	1664			0820		0808	0848
Denver	0808	0818		0848		0743	0861
	0928	0848		1170		1195	
	1137	1351	GP Audio	1170	Lenoir	1258	
	0702		GPX	0681	Lenox	0868	
Denzel	0695		Gradiente	0681	LG	0771	0601
Diamond	0681	0798	Graetz	0695		0621	1936
	0781	0808	Gran Prix	0861		0899	
	0753	0820	Grandin	0746	Lifetec	0681	0861
Digihome	0743		Greenhill	0747		1377	
DigiLogic	0743		Grundig	0725	Limit	0746	0798
digiRED	0747			0805	LiteOn	1188	
Digitor	1035			0569			
Digitrex	0702	1034		0681			
				0820			
				0743			
				0753			
				1034			
				1466			
				1513			
				0800			
				0861			

Lodos	0743	
Loewe	0569	0771
LogicLab	0798	
Logik	0743	
Logix	0735	
Lumatron	0735	1145
	0771	0863
	1351	0743
	0760	0928
Luxman	0603	
Luxor	1034	0743
	1760	0760
Magnasonic	0681	
Magnavox	0533	0705
	0848	1170
	0569	0743
Magnex	0753	1195
Magnum	1466	
Majestic	1137	1375
Manhattan	0735	0743
Marantz	0569	
Mark	0743	0725
	1725	
Marquant	0800	1481
Mastec	1036	
Matsui	0681	0743
	0702	0725
	1760	
Maxdorf	0818	
Maxent	1377	
Maxim	0743	
Maya	1375	
MBO	0760	
MDS	0808	
Mecotek	0800	
Medion	0861	1377
	0681	0746
	1375	0660
	1195	1036
MEI	0820	
Memorex	0861	
Memory	0760	1081
Metz	0601	0555
	0743	
MiCO	0753	0781
	1253	
Micromaxx	1725	0725
	1377	
Micromedia	0533	0569
Micromega	0569	
Microsoft	0552	
Microstar	0861	
Minax	0743	
Minerva	0735	
Minoka	0800	1145
Minowa	1195	
Mintek	0747	
Mitsubishi	0743	
Mizuda	0848	0887
	1481	
Monyka	0695	
MPX	0873	
Mustek	0760	1760
Mx Onda	0681	0781
	0753	1253
Mystral	0861	
NAD	0771	
Naiko	0800	1034
NEC	0899	0621
	0771	
Neovia	1301	
Nesa	0747	
Neufunk	0695	
Nevir	0861	0800
Nintaus	1081	
Nordmende	0861	
Nowa	0873	
NU-TEC	0546	1258

Omni	0808	0863
	1134	1258
Onix	0868	
Onkyo	0657	0533
Oopla	1188	
Oppo	1254	
Optim	0873	
Optimus	0601	0555
Orava	0848	
Orbit	0902	
Orion	0725	1725
	1036	1263
	1449	0928
Oritron	0681	
P&B	0848	1481
Pacific	0798	0820
	0789	0743
	0861	
Packard Bell	0861	
Palladium	0725	0809
Palsonic	0865	0702
	0882	
Panasonic	0520	1864
	1938	
Panda	0747	1137
Papouw	0563	
peeKTON	1254	0928
Philco	0753	0892
	0818	0820
Philips	0569	0676
	1370	0705
	0533	1188
Philo	1375	
Phonotrend	1195	
Pioneer	0601	0661
	1995	0555
	1601	
Plu2	0880	
Pointer	0800	
Polk Audio	0569	
Portland	0800	
Powerpoint	0902	1035
Presidian	0705	
Prima	1258	
Prinz	0861	
Prism	1036	0861
Pro2	1375	
ProCaster	1034	
Proline	0681	0702
	0820	1034
	1513	0863
Proscan	0552	
Proson	0743	
Prosonic	1137	
Provision	0848	1351
	1137	0760
Pye	0676	0569
QONIX	0808	1081
Qwestar	0681	
Radionette	0771	0899
	1936	
Raite	0695	
RCA	0552	0681
	0820	1995
REC	0520	
Red Star	0789	0793
	0800	0818
	0928	1137
	1375	
Relisys	1377	
Reoc	0798	
Revoy	0871	
Rex	0868	
Richmond	1263	
Rimax	1181	
Rio Audio	0899	

Roadstar	0743	0848
	0760	1081
	0928	0863
	1257	
Rocksonic	0819	
Ronin	0902	
Rotel	0653	0588
Rowa	0789	1034
	0546	0555
	0747	
Rownsonic	0819	0753
Saba	0681	0581
Sabaki	0798	
Saivod	0789	0861
	0800	
Salora	0771	
Sampo	1377	
Samsung	0603	0774
	1962	0520
Sansui	0725	0746
	0798	0753
	0800	0781
	1258	1725
Sanyo	0700	0903
	0725	0820
	0743	
Scan	0735	0865
	0880	
ScanMagic	0760	1760
ScanSonic	0887	
SCE	0819	
Schaub Lorenz	0818	1195
	0800	
Schneider	0861	0809
	0569	0735
	0818	0743
	0681	0899
	0820	0676
Scientific Labs	0798	1182
Scott	0681	0702
	1066	1263
Seeltech	1254	1481
SEG	0743	0695
	0798	0902
	0793	1560
Semp	0533	
Shanghai	0702	
Sharp	0660	1286
	0743	0725
	1449	
Sherwood	0747	0771
Shinco	0747	
Siemssen	1412	
Sigmathek	0887	1254
Silva	0818	0928
	0861	
Silva	0861	1936
Schneider		
SilverCrest	1182	
Singer	0746	0753
	0781	0798
Sinudyne	1170	
Sistemas	0702	
Skymaster	0760	0798
Skyworth	0928	
Sliding	1145	
Slim Art	0800	
Slim Devices	0563	
SM Electronic	0760	0798
Smart	0735	0743
Sonashi	0746	0861
Sonic Blue	0899	
Soniko	0818	
Sony	0563	0894
	1663	0802
	1100	2011
	1463	0603
Sound Color	1263	
Soundmaster	0798	
Soundmax	0798	
Spectra	0902	

DVD players (continued)

Standard	0681 0798 0818 0861 0928	upXus	1375
Star Clusters	0798 1257 1182	Urban Concepts	0533
StarLogic	1035	Venturer	0820
Starmedia	0848 1254 1035	Vestel	0743 1560
Strong	0743	Vieta	0735
Sunfly	0887	Viewmaster	0892 1254
Sunkai	0800 0880	Voxson	0760 0861
Sunstech	0861	VTrek	1258
Sunwood	0818	Waitec	1254
SuperDigital	1217	Walkvision	0747
Supervision	0760 0798	Waltham	1560
SVA	0702 0747	Welkin	0861
Sylvania	0705 0660	Wellington	0743
Symphonic	0705	Weltstar	0743
Synn	0798	Wharfedale	0798 0753 0781
Tandberg	0743 1725	Wilson	0861 1263
Tangent	1351	Windy Sam	0603
Targa	0771 1188 1257	Wintech	1217
Tatung	0800	Woxter	1181 1254
Tchibo	0771	XBox	0552
TCM	0771	XLogic	0800 0798 1258
Teac	0747 0771 0546 0601 0798 0621 0789 1036 0820 1227 0863 1257 1195 0705	XMS	0818 0800
TEC	0928	Xoro	1213
Technics	0520 1938	Yakumo	1034
Technika	0800 1145 0861 1195	Yamada	1034 0902 1181 1188
Technosonic	1081 1145	Yamaha	0569 0520 0676
Techwood	0743 1560 0569	Yamakawa	0695 0902 1134
Tedelex	1258	Yukai	0760
Telefunken	0820 0819 0818 1258	Zenith	0533 0899 0621 0771
Teletech	0743		
Tensai	0681 0800		
Tevion	0681 1066 1412 0798 1257 0863 1377 1760		
Theta Digital	0601		
Thomson	0581 0552		
Tokai	0695 0928 0818		
Tokiwa	0735 0746		
Tom-Tec	0819		
Top Suxess	1254		
Toshiba	0533 0725 1075 1540		
TRANS-continents	0902 0861 1195		
Transonic	0702 1195		
Tredex	0873		
Trio	0800		
TruVision	0887 1481		
TSM	1254		
TYT	0735		
Umax	1181		
United	0818 0760 0820 1258 0702 1195 0725 1145 0798 1263 0743 1182 0705		
Universal Multimedia	0798		
Universum	0771 0743 0621 0809 1257 0820 1560		
Uptek	0793		

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