

The RC5 code: ----- The RC5 code is an 13-bit code, it used to have a 5-bits group and a 6-bits command, and 2 stop-bits, but it was changed to 5-bits group, 7-bits command and 1 stop-bit. Carrier: 36kHz No header. +----+ 1 is coded: | | ----+ + T T +----+ 0 is coded: | | + +----
T T T = 889us Old RC5: data length: 14bit (2sync bits, 1 control bit, 11 data bits) 24,889ms Example to play video: store 5 in GROUP put 53 on stack press RC5REMOTE

mode: TXT	Video mode: VD	Group 0 (TV1)	1 (TV2)	Commnd:	Video mode: TV1 & TV2	Video Group 2	Video Group 3
				0 0			0
0 1	1		1			1 2	2
2		2 3	3			3	
3 4	4		4			4 5	5
5		5 6	6			6	
6 7	7		7			7 8	8
8		8 9	9			9	
9 10	1/2/3 digts (japan:10)	step page +			=/= =/= 11		
	channel/program(jap:11)	step page -			* 12	standby	
	standby	standby 13					
	mute/demute 14	P.P. (personal pref.)	P.P.			mute/demute	mute/demute
	display	display 16				P.P. 15	display
	volume + 17	volume -	volume -			volume +	volume +
	brightness +	brightness + 19	brightness -			volume - 18	brightness +
	brightness - 20	colour saturation +	colour saturation +			colour saturation + 21	brightness -
saturation -	colour saturation -	colour saturation - 22				colour saturation +	colour
	bass + 23	bass -	bass -			bass +	bass +
	treble +	treble +	treble + 25			treble -	treble -
	treble - 26	balance right	balance right			treble -	treble -
	balance left	balance left	balance left			balance left 28	balance right 27
	enter/validation (Frnc) 29	contrast -	contrast -			balance left 28	contrast +
	sequence out	attribute on/off 31	tint/hue + 32			memory out 30	search +
	exchange 33	channel/program -	index/summary (France)			channel/play +	channel/program +
	alt/channel	row zero (France) 35	1st/2nd language			index 34	index 34
	1st/2nd language 36	spacial stereo on/off	spacial stereo on/off			1st/2nd language	1st/2nd language
	mono/stereo (USA) 38	sleeptimer	hardcopy printer			spacial stereo on/off 37	spacial stereo on/off 37
	tint/hue -	antiope TV mixed (Frnc) 40	RF switch/PIP select			hardcopy printer 39	hardcopy printer 39
	terminal initiation 41	vote	page hold on/off 42			PIP select	PIP select
	timed page (F:magazine) 43	increment (USA)	large top/lrge bot/norm			page hold on/off 42	timed page/channel clk
top/lrge bot/norm	44 decrement (USA)	reveal/conceal/canc pic 45	large			large top/lrge bot/norm	large
	cancel teletext picture 46	2nd controls (USA:menu)	TV/Text mixed/Subtitle			large	large
mixed 47	PIP shift	view data line off 48	pause			TV/Text mixed/Subtitle	TV/Text
	PIP shift	erase	erase			pause	pause
	pause 49	erase	erase			erase 50	erase 50
	rewind	rewind	rewind 51			rewind 51	rewind 51
	go to	go to 52	wind			go to	go to

		wind		wind 53	play		play
	play 54	stop		stop		stop 55	
	recording		recording	recording 56		external 1	external 1
	external 1 57		external 2	external 2		external 2 58	PIP display
mode	PIP display mode 59	view data	mode/advance				view data line
on 60	teletext submode (J:12) 61		system standby			system standby	system
standby 62	crispener on/off		news flash (France) 63			system select	system
select	system select 64		surround sound			surround sound	
	surround sound 65	balance front		balance front		balance front	balance front
66	balance rear		balance rear		balance rear 67	balance rear	sound effects
	sound effects		sound effects 68		sound effects	sound effects	sound effects
	sound effects 69	sound effects		sound effects		sound effects 71	sound effects
70	sound effects		sound effects 72		sound or menu func.	sound or menu func.	sound or menu func.
	sound or menu func. 73		sound or menu func.		sound or menu func.	sound or menu func.	sound or menu func. 74
	sound or menu func.	linear function up	linear function up 78		linear function down	linear function down	linear
function down 79	sound or menu func.	sound or menu func.	sound or menu func.		sound or menu func.	sound or menu func.	cursor step up
	cursor step up		cursor step up 81		cursor step down	cursor step down	cursor step down
	cursor step down 82	menu on		menu on		menu on	menu on 83
status	menu off		menu off 84		display A/V status	display A/V	display A/V
	display A/V status 85	cursor step left	cursor step left		cursor step left	cursor step left	cursor step right
	cursor step right	cursor step right 87		menu function		menu function	menu function
	menu function 88	PIP on/off		PIP on/off		PIP on/off 89	PIP shift
	PIP shift	PIP shift 90		PIP main swap		PIP main swap	PIP main swap
	PIP main swap 91	strobe on/off		strobe on/off		strobe on/off	strobe on/off 92
	multi strobe		multi strobe		multi strobe 93	multi strobe	main frozen
	main frozen		main frozen 94		3/9 multi scan	3/9 multi scan	3/9 multi scan
	3/9 multi scan 95	PIP mode select		PIP mode select		PIP mode select	PIP mode select
96	mosaic		mosaic		mosaic 97	mosaic	solarization
	solarization		solarization 98		main stored	main stored	main stored
	main stored 99	PIP strobe	PIP strobe		PIP strobe 100	PIP strobe	recall main
	recall main	recall main 101	PIP freeze		PIP freeze	PIP freeze	PIP freeze 102
	PIP step up		PIP step up		PIP step up 103	PIP step up	PIP step down
	PIP step down		PIP step down 104	105 106 107			red 108
		green 109			yellow 110		
	cyan 111		index 112	113 114 115	116 117 118		sub mode
	sub mode	sub mode 119	sub mode		sub mode		sub mode 120
121 122	cleaning up		cleaning up		cleaning up 123		connect
	connect		connect 124		disconnect	disconnect	disconnect
	disconnect 125	cleaning up	cleaning up		cleaning up		cleaning up 126
	cleaning up		cleaning up		cleaning up 127		cleaning up

cleaning up			cleaning up			-----											
mode: VCR1 & VCR2			Video mode: Satellite			Commnd: Group 4			Video mode: LV1 Group 5			Video (VCR1)					
6 (VCR2) Group 8									0			0					
0			0	1	1				0			0					
1	2	2				2						1					
3			3	4	4							2	3	3			
4	5	5				5						4					
6			6	7	7							5	6	6			
7	8	8				8						7					
9			9	10	picture number/time							8	9	9			
channel number			channel/program		mode				1/2 digits/AM/PM			channel/program		mode	12		
standby			standby						standby			standby			mute/demute		
mute/demute			mute/demute		14	P.P. (personal pref.)			P.P.			display			16		volume
P.P. 15	display		display						display			display			16		volume
+	volume +		volume +		17	volume -			volume -			volume -					
volume -	18	brightness +	brightness +			brightness +			brightness +			brightness +			19		
brightness -			brightness -			brightness -			brightness -			brightness -			20		colour
saturation +	colour saturation +		colour saturation +		21	colour saturation -			colour saturation -			colour saturation -					colour
saturation -	colour saturation -	22	bass +			bass +			bass +			bass +					
bass +	23	treble -	treble -			treble -			treble -			treble -			24		treble +
treble +			treble +		25	treble -			treble -			treble -					treble -
26	balance right		balance right			balance right			balance right			balance right			27		balance left
balance left			balance left		28	repeat once/TSPo			ITR (OTR) delay			ITR (OTR) delay			29		
repeat cont/TSPc	timer programming		timer programming		30	next			next			next					record select
fast run reverse	fast run reverse	32	entry			step -			step -			step -					31
channel/program +	33	auto stop/memory	auto stop/memory			step -			step -			step -					
channel/program -	34	slow run reverse	slow run reverse			slow run reverse			slow run reverse			slow run reverse			35		audio 1
audio output select	language select/mode	1	36			audio 2			audio 2			audio 2					clock/channel
special stereo on/off	37	still picture	still picture			speed -			speed -			speed -					audio
mixed / mode 2	38	speed +	speed +		39	speed -			speed -			speed -					Instant
Time Recording	40	slow run forward	slow run forward		41	still forward			still forward			still forward					still forward
fast run forward		fast run forward	fast run forward		43	search automatic			index scan			index scan			44		scan reverse
scan reverse	45	open/close (eject)	open/close (eject)			eject			scan forward			scan forward					scan forward
subtitle	47	play reverse	play reverse			play reverse			play reverse			play reverse			48		pause
pause			pause		49	erase			erase			erase					erase
erase	50	rewind	rewind			rewind			rewind			rewind			51		go to
go to			go to		52	wind			wind			wind					wind
wind	53	play	play			play			play			play			54		stop
stop			stop		55	recording			recording			recording					stop
recording	56	external 1	external 1			external 1			external 1			external 1			57		external 2
external 2		external 2	external 2		58	clear all memory			short/long			short/long			59		freeze segment
counter memory	60	TXT (pal)/ant.sw (ntsc)	TXT (pal)/ant.sw (ntsc)			scroll local display			scroll local display			scroll local display					TXT submode
system standby		system standby	system standby			system			system			system					61

standby 62	CX on/off	RF switch 63	system select	system select
	system select 64	surround sound	surround sound	surround sound
65	balance front	balance front	balance front 66	balance rear
	balance rear	balance rear 67	sound effects	sound effects
69	sound effects 68	sound effects	sound effects	sound effects
	sound effects	sound effects 71	sound effects 70	sound effects
	sound effects 72	sound or menu func.	sound or menu func.	sound or menu func. 73
menu func.	sound or menu func.	sound or menu func. 74	sound or menu func.	sound or
menu func.	sound or menu func. 75	data stream end 77	data stream start 76	data stream start 76
up 78	linear function down	linear function down	linear function up	linear function
	catalogue	sound or menu func. 80	linear function down 79	sound or menu func.
	cursor step up 81	cursor step down	cursor step up	cursor step up
		menu on	cursor step down 82	menu on
	menu off	menu off 84	menu on 83	menu off
status 85	cursor step left	cursor step left	display A/V status	display A/V status
	cursor step right 87	cursor step left	cursor step left 86	cursor step right
88	PIP on/off	menu function	acknowledge	menu function
	PIP shift 90	PIP on/off	PIP on/off 89	PIP shift
91	strobe on/off	PIP main swap	PIP main swap	PIP main swap
	multi strobe	strobe on/off	strobe on/off 92	multi strobe
	main freezed 94	multi strobe 93	main freezed	main freezed
95	PIP mode select	3/9 multi scan	3/9 multi scan	3/9 multi scan
	mosaic	PIP mode select	PIP mode select 96	mosaic
	solarization 98	mosaic 97	solarization	solarization
	PIP strobe	main stored	main stored	main stored 99
	recall main 101	PIP strobe	PIP strobe 100	recall main
	PIP step up	PIP freeze	PIP freeze 102	PIP step up
	PIP step down 104	PIP step up 103	PIP step down	PIP step down
	write skip ID 106		automatic start ID 105	
	write end ID 108		skip on/off 107	
	write TOC 110 111 112		write FTS 109	
	viss index previous 114		viss index next 113	
	erase 116		mark 115	
	blank search 118	sub mode	renumber 117	sub mode
	sub mode	sub mode 120	TV1 119	sub mode
		insert temp 122	auto repeat 121	scr loc disp 123
	connect		connect 124	disconnect 125 126 127

mode: Pre-Amp Audio mode: Tuner Group 12 Commnd: Audio mode: LV2/CDLV Audio

0 0 0 Group 16 (#1) 19 (#2) Group 17

0

	0	1	1				1			1	2	2
	2				2	3	3			3		
	3	4	4				4			4	5	5
	5				5	6	6			6		
	6	7	7				7			7	8	8
	8				8	9	9			9		
	9	10	picture number/time		graphic equalizer left	1/2 digits	11			chapter number		
	graphic equalizer right	12			standby		standby			standby		
13	mute/demute				mute/demute		mute/demute	14	P.P. (personal			
pref.)	P.P.				P.P.	15	display		display			
	display	16	volume +		volume +		volume +	17	volume -			
	volume -		volume -	18	brightness +		brightness +		brightness +			
	brightness +	19	brightness -		brightness -		brightness -	20	brightness -	20		
	colour saturation +		colour saturation +		colour saturation +	21	colour saturation +	21	colour saturation -			
	colour saturation -		colour saturation -	22	bass +		bass +		bass +			
	bass +	23	bass -		bass -		bass -	24	treble +			
	treble +		treble +	25	treble -		treble -		treble -			
26	balance right		balance right		balance right	27	balance right	27	balance left			
	balance left		balance left	28	repeat once/TSPo		repeat once/TSPo		graph equal left&right			
29	repeat cont/TSPc		loudness	30	next		next		high tone filter	search		
+ 31	programming		low tone filter		search -	32	search -					
	step +		preset +	33	auto stop/memory		step -					
	preset -	34	slow run reverse		signal path scroll	35	stereo left/right	36	previous			
37	still reverse		surround mode		mono/stereo	38	speed +					
	sleeptimer	39	speed -		balance rear	40	slow run forward					
	balance front		RF switch	41	still forward		TPS					
	store execute	42	digital multi screen	timer set	43	strobe			timer up			
	scan forward	44	scan reverse		timer down	45	open/close					
(eject)	timer memo		FM	46	scan forward		acoustic memory					
	MW (USA: MW/FM)	47	pause		acoustic memory select	LW	48					
	pause		erase	50	rewind		erase					
	erase		rewind	51	go to		rewind					
	rewind	51	go to		go to	52	wind					
	wind		wind	53	play		play					
	play	54	stop		stop	55	stop					
	recording		recording	56	external 1		external 1					
	external 1	57	external 2		external 2	58	clear all					
memory	clear all memory		clear all memory	59	repeat A/B program	60	TXT (pal)/ant.sw (ntsc)					
	dyn range expand/compr	61	system standby		system standby		system standby					
standby	62	CX on/off	63	system select		system select						
select	64	surround sound		surround sound		surround sound	65	balance				
front		balance front		balance front	66	balance rear		balance				
rear		balance rear	67	sound effects		sound effects		sound				
effects	68	sound effects		sound effects		sound effects	69	sound effects				
	sound effects		sound effects	70	sound effects		sound					

effects sound effects 71 sound effects sound effects sound
 effects 72 sound or menu func. sound or menu func. sound or menu func. 73 sound or menu func.
 sound or menu func. sound or menu func. 74 sound or menu func. sound or menu func.
 sound or menu func. 75 76 77 linear function up linear function up linear function up 78
 linear function down linear function down linear function down 79 sound or menu func.
 catalogue sound or menu func. 80 cursor step up cursor step up
 cursor step up 81 cursor step down cursor step down cursor step down 82 menu on
 menu on menu on 83 menu off
 menu off menu off 84 display A/V status display A/V status display A/V
 status 85 cursor step left cursor step left cursor step left 86 cursor step right cursor step right
 cursor step right 87 menu function menu function menu function
 88 PIP on/off PIP on/off PIP on/off 89 PIP shift PIP shift PIP shift
 PIP shift 90 PIP main swap PIP main swap PIP main swap
 91 strobe on/off strobe on/off strobe on/off 92 multi strobe multi strobe
 multi strobe multi strobe 93 main freezed main freezed main freezed
 main freezed 94 3/9 multi scan 3/9 multi scan 3/9 multi scan
 95 PIP mode select PIP mode select PIP mode select 96 mosaic mosaic
 mosaic 97 solarization solarization solarization
 solarization 98 main stored main stored main stored 99 recall main recall main
 PIP strobe PIP strobe PIP strobe 100 recall main recall main
 recall main 101 PIP freeze PIP freeze PIP freeze 102 PIP step up PIP step up
 PIP step up PIP step up 103 PIP step down PIP step down PIP step down
 PIP step down 104 105 106
 107
 108 FTS
 109
 110
 111
 112 index next
 113 index previous
 114
 115
 116
 117
 118 sub mode
 119 sub mode
 120
 121
 122
 123 connect connect connect
 124 disconnect disconnect disconnect
 125
 126
 127

 mode: Phono Audio mode: Recorder Commnd: Group 20 Audio mode: CD Audio
 23 (#2) Group 21 Group 18 (#1)

-----				0	0		0
0	1	1		1		1	2 2
2			2 3	3		3	
3	4	4		4		4	5 5
5			5 6	6		6	
6	7	7		7		7	8 8
8			8 9	9		9	
9	10	cursor scroll 11	display scroll 12	standby		standby	
		standby 13	mute/demute			mute/demute	
		mute/demute 14	P.P. (personal pref.)	P.P.		P.P. 15	display
		display	display 16	volume +		volume +	
		volume + 17	volume -	volume -		volume - 18	brightness +
		brightness +	brightness + 19	brightness -		brightness -	brightness -
		brightness - 20	colour saturation +	colour saturation +		colour saturation + 21	colour
saturation -		colour saturation -	colour saturation - 22	bass +		bass +	bass +
		bass + 23	bass -	bass -		bass - 24	
		treble +	treble +	treble + 25		treble -	treble -
		treble - 26	balance right	balance right		balance right 27	
		balance left	balance left	balance left 28		rept	
once/TSPo/shuffle		repeat once	repeat once 29	repeat cont/TSPc		repeat	
continuously		repeat continuously 30	select +	select +		select + 31	
		select -	select - 32	next		next	
		next 33	previous	previous 34		index next	
		index next 35	index previous	index previous		last record	
cancel 36		play/program	stereo/mono	sequential 37		speed nominal	
			blank search 38	speed + 39		speed - 40	
			recording pause 41	store execute		store	
execute		store execute 42					
		recording blank 43	scan forward	scan forward		scan forward 44	
		open/close	eject 46	mechanism A 45		open/close	
		mechanism B 47		wave scroll		play reverse 48	
		pause	pause	pause 49		erase	
		erase	erase 50	rewind		rewind	
		rewind 51	go to	go to 52		wind	
		wind	wind 53	play		play	
		play 54	stop	stop 55			
		recording	recording	recording 56		external 1	
		external 1 57	external 2	external 2		external 2 58	external 1
memory		clear all memory	clear all memory 59	repeat A/B program 60		dynamic range expand	
61		system standby	system standby	system standby 62		dynamic	
range compress			counter memory 63	system select		system	
select		system select 64	surround sound	surround sound			
		surround sound 65	balance front	balance front		balance front	
66		balance					

rear	balance rear	balance rear 67	sound effects	sound effects
effects	sound effects 68	sound effects	sound effects	sound effects
effects 69	sound effects	sound effects	sound effects 70	sound effects
	sound effects	sound effects 71	sound effects	sound effects
	sound effects 72	sound or menu func.	sound or menu func.	sound or menu func. 73
menu func.	sound or menu func.	sound or menu func.	sound or menu func.	sound or menu func. 74
menu func.	sound or menu func.	75 76 77 linear function up	linear function up	linear function up
up 78	linear function down	linear function down	linear function down 79	sound or menu func.
	sound or menu func.	sound or menu func.	80 cursor step up	cursor step up
	cursor step up 81	cursor step down	cursor step down	cursor step down 82
		menu on	menu on 83	menu off
	menu off	menu off 84	display A/V status	display A/V status
status 85	cursor step left	cursor step left	cursor step left 86	cursor step right
	cursor step right 87	menu function	menu function	cursor step right
88	PIP on/off	PIP on/off	PIP on/off 89	PIP shift
	PIP shift 90	PIP main swap	PIP main swap	PIP main swap
91	strobe on/off	strobe on/off	strobe on/off 92	multi strobe
	multi strobe	multi strobe 93	main freed	main freed
	main freed 94	3/9 multi scan	3/9 multi scan	3/9 multi scan
95	PIP mode select	PIP mode select	PIP mode select 96	mosaic
	mosaic	mosaic 97	solarization	solarization
	solarization 98	main stored	main stored	main stored 99
	PIP strobe	PIP strobe	PIP strobe 100	recall main
	recall main 101	PIP freeze	PIP freeze	PIP freeze 102
	PIP step up	PIP step up 103	PIP step down	PIP step up
	PIP step down 104			PIP step down
ID 105				automatic start
				write skip ID 106
		skip on/off 107		
	write end ID 108	FTS		write FTS 109
			write TOC 110 111 112 113 114	
			write start ID 115	
	Ca/Er/SK ID 116			reformat
117				blank search 118
	sub mode	sub mode 119	sub mode	sub mode
121 122 123	connect	connect	connect	sub mode 120
	disconnect	disconnect	disconnect 125 126 127	connect 124

The codes and parts of the RC5REMOTE program are copied from the article "Remote Control for HP28S" written by Michiel Niemeijer & Eric Toonen.