

# CELADON

## STANDARD CODE 4 – SC45 Low Volume Remote Control

NEC FORMAT: SINGLE REPEAT

Custom Code: 00FF

Custom Code: C0 C1 C2 C3 C4 C5 C6 C7 Custom Code': C0' C1' C2' C3' C4' C5' C6' C7'

BIN CODE: 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1

HEX CODE: 0 0 F F

Key No.	Hex	Function	Data							
			D0	D1	D2	D3	D4	D5	D6	D7
1	00h		0	0	0	0	0	0	0	0
2	01h		1	0	0	0	0	0	0	0
3	02h		0	1	0	0	0	0	0	0
4	03h		1	1	0	0	0	0	0	0
5	04h		0	0	1	0	0	0	0	0
6	05h		1	0	1	0	0	0	0	0
7	06h		0	1	1	0	0	0	0	0
8	07h		1	1	1	0	0	0	0	0
9	08h		0	0	0	1	0	0	0	0
10	09h		1	0	0	1	0	0	0	0
11	0Ah		0	1	0	1	0	0	0	0
12	0Bh		1	1	0	1	0	0	0	0
13	0Ch		0	0	1	1	0	0	0	0
14	0Dh		1	0	1	1	0	0	0	0
15	0Eh		0	1	1	1	0	0	0	0
16	0Fh		1	1	1	1	0	0	0	0
17	10h		0	0	0	0	1	0	0	0
18	11h		1	0	0	0	1	0	0	0
19	12h		0	1	0	0	1	0	0	0
20	13h		1	1	0	0	1	0	0	0
21	14h		0	0	1	0	1	0	0	0
22	15h		1	0	1	0	1	0	0	0
23	16h		0	1	1	0	1	0	0	0
24	17h		1	1	1	0	1	0	0	0
25	18h		0	0	0	1	1	0	0	0
26	19h		1	0	0	1	1	0	0	0
27	1Ah		0	1	0	1	1	0	0	0
28	1Bh		1	1	0	1	1	0	0	0
29	1Ch		0	0	1	1	1	0	0	0
30	1Dh		1	0	1	1	1	0	0	0
31	1Eh		0	1	1	1	1	0	0	0
32	1Fh		1	1	1	1	1	0	0	0

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Custom Code: C0 C1 C2 C3 C4 C5 C6 C7 Custom Code': C0' C1' C2' C3' C4' C5' C6' C7'

BIN CODE: 0 0 0 0 0 0 0 0

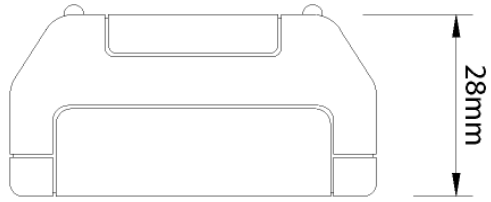
1 1 1 1 1 1 1 1

HEX CODE: 0 0

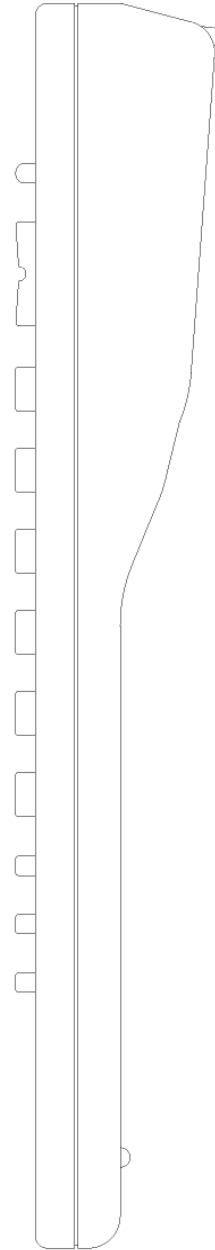
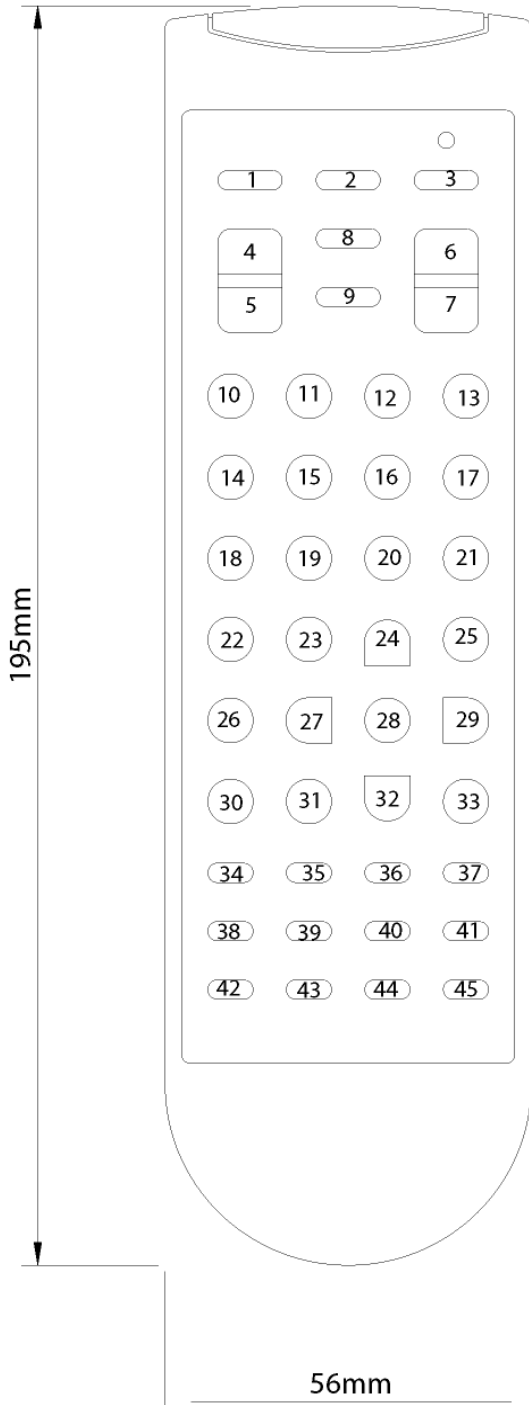
F

F

Key No.	Hex	Function	Data							
			D0	D1	D2	D3	D4	D5	D6	D7
33	40h		0	0	0	0	0	0	1	0
34	41h		1	0	0	0	0	0	1	0
35	42h		0	1	0	0	0	0	1	0
36	43h		1	1	0	0	0	0	1	0
37	44h		0	0	1	0	0	0	1	0
38	45h		1	0	1	0	0	0	1	0
39	46h		0	1	1	0	0	0	1	0
40	47h		1	1	1	0	0	0	1	0
41	48h		0	0	0	1	0	0	1	0
42	49h		1	0	0	1	0	0	1	0
43	4Ah		0	1	0	1	0	0	1	0
44	4Bh		1	1	0	1	0	0	1	0
45	4Ch		0	0	1	1	0	0	1	0



CASE: **SC-45**



**Celadon Blank Keypad Layout**

MODEL NAME			
CASE NO.	SC-45	SCALE	
DATE	2000.07.13	DRAWING	

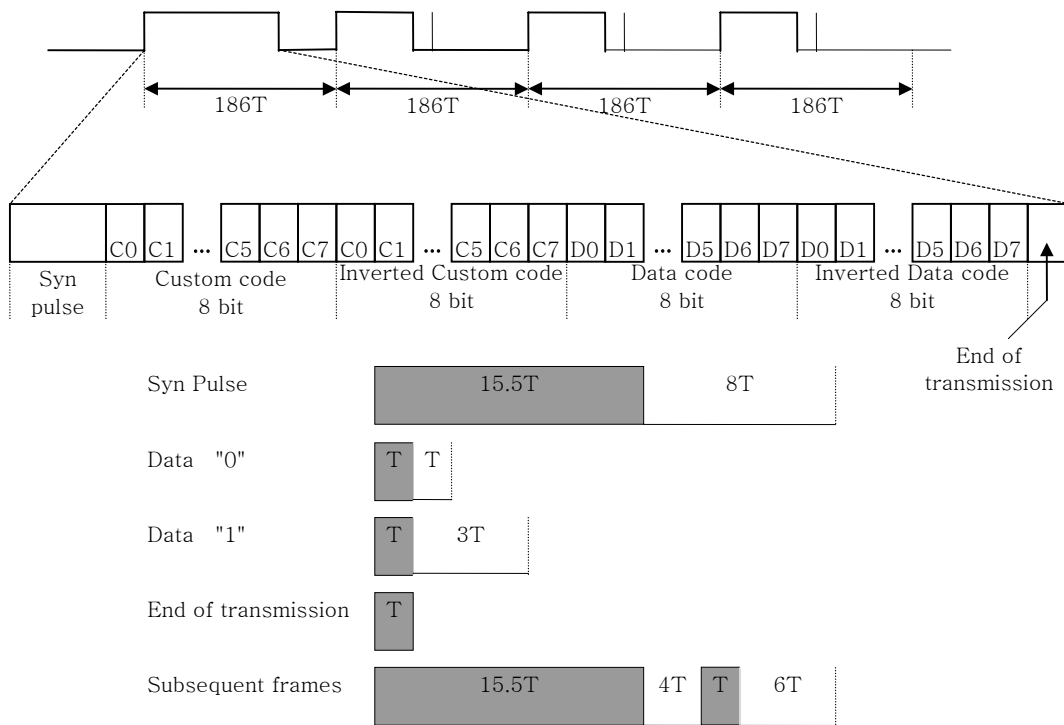
## NEC Protocol

The modulated carrier is usually derived from 455kHz and is 1/12 of the frequency with 1/3 duty cycle.

When data are transmitted repeatedly, the frame cycle is 107.9ms or 186 period.

A frame consists of a syn pulse, an eight-bit custom code, an eight-bit inverted custom code, an eight-bit data code and an eight-bit inverted data code.

The timing definitions of the output code waveform are shown below.



Data Item	Time (sec.)	Time (no. of period)
Syn pulse on time	8.993ms	15.5T
Syn pulse off time	4.642ms	8T
Syn pulse off time (subsequent frame)	2.321ms	4T
Data on time (0)	0.561ms	T
Data off time (0)	0.598ms	T
Data on time (1)	0.561ms	T
Data off time (1)	1.7582.63ms	3T
Data period (0)	1.160ms	2T
Data period (1)	2.321ms	4T
Frame output cycle	107.9ms	186T

Where T=0.58ms