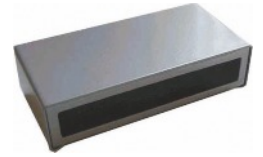


CodeSet 713/716 - NEC



See: Command 039



This document explains the NEC code, which according to specs consist of an ADDRESS and a COMMAND.

The code is send as a preamble - 4 bytes (32 bits) - and a stop pulse.

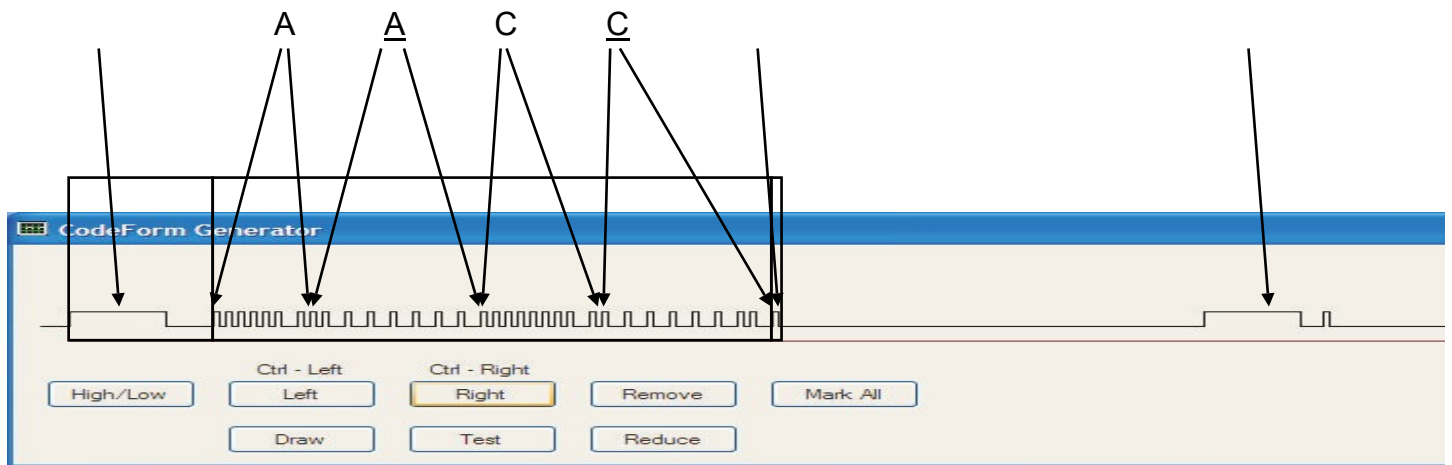
The 4 bytes are: ADDRESS, ADDRESS INVERTED, COMMAND, COMMAND INVERTED.

Preamble

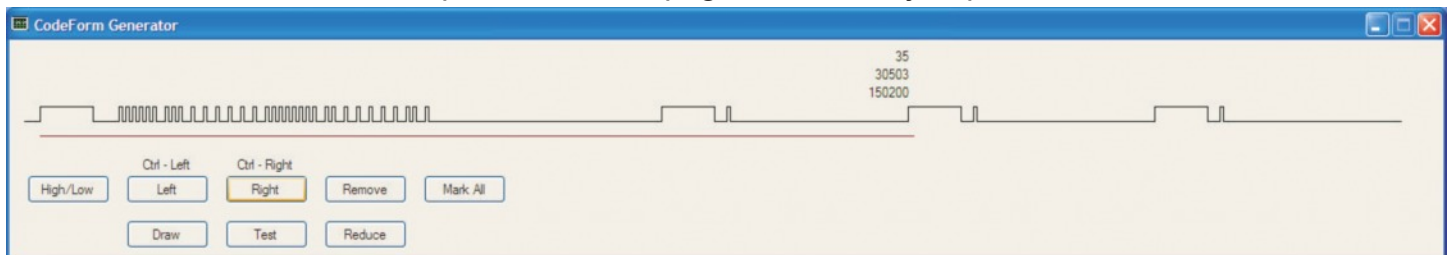
Code

Stop

REPEAT



APPLE, TIVO - must have a repeat block, see page 3 how to adjust parameter 5



CodeSet 713/716 - NEC



See: Command 039



An original NEC code consist of 2 parts:

An Address (AA) and a Command (CC) (here shows as 2-digit HEX)

In order for the receiver to verify correct reception, the Address and the Command are repeated inversed, so the complete instruction to send would be:

AAAACCCC (here shown as 2-digit HEX)

Assume the Address is:

00x (HEX number) = 0b00000000 (as binary) = 000 (as 3-digit decimal)

Then the inversed Address is:

FFx (HEX) = 0b11111111 (binary) = (255-0) 255 (3-digit decimal)

Assume the Command is:

2Cx (HEX number) = 0b00101100 (as binary) = 044 (3-digit as decimal)

Then the inversed Command is:

D3x (HEX) = 0b11010011 (binary) = (255-44) 211 (decimal)

NOTE:

A wide range of manufacturers use the NEC code format (see frontpage), but some of them do not follow the specifications which normally require the above, so we have prepared the LinTronic format to accept 4 numbers even if they do not follow the above.

SENDING A NEC USING LINTRONIC FORMAT (3-digit DECIMAL)

716AAAAAACCCC000003

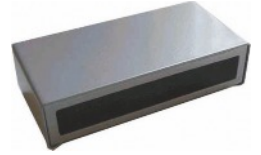
716000255044211000000003 = Address 000 (followed by Address inversed = 255)
Command 044 (followed by Command inversed = 211)

See note for parameter 5 on front page to control repeat pattern.

CodeSet 713/716 - NEC

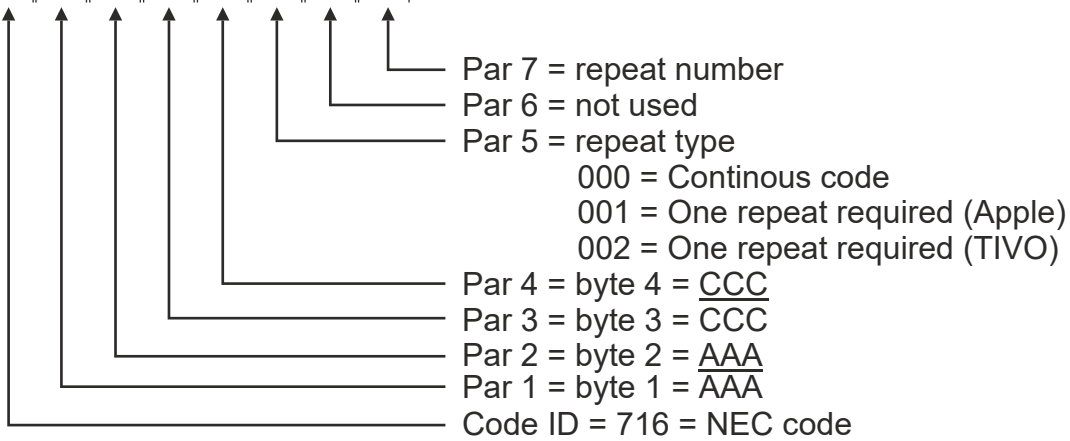


See: Command 039

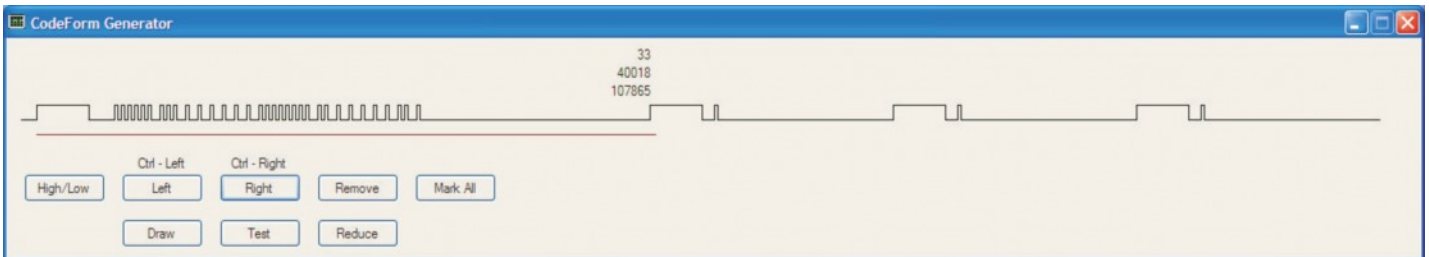


Parameter 5 specifies the type of repeat pattern

7160000000000000000003 = Command



If Parameter 5 = 000 then NO REPEAT block is transmitted (only the read marking is send)



If Parameter 5 = 001 (Apple) or 002 (Tivo), then a repeat block is transmitted (read marking is send)

