



message

placeholder bits
0000

G
Generator

G
G

CRC
Cyclic
Redundancy
Check

Sending computer
calculates the "remainder"
bits 1011

CRC
Redundancy
bits to
add to the
message

Redundancy bits replace these placeholders

4 redundancy bits
for the 5 bit generator

Generator
11001

Message

redundancy bits

1100110011011011

11001

10011
11001

10100
11001

11011
11001

10101
11001

11001
11001

00000
OK
OK
00000

Receiving computer gets message + redundancy bits - uses same generator

Receiving computer gets Message + Redundancy bits, uses Generator and CRC protocol algorithm - remainder = 0000

What if you are given the Message + Redundancy bits? You are given BOTH

No error during transmit

Had an error during transmit
not all 0s

0000 will be the "remainder"

all 0s when done

"0000" means No errors in data