

FCS Example 2

TRANSMITTER			
2	(1) 6	3 -> 4	5
90	ff ff	90 x ff = 6f -> 9b f1	f1 x ff = 0e
84	9b 0e	84 x 0e = 8a -> 2b 52	52 x 9b = c9
72	2b c9	72 x c9 = bb -> 0b 58	58 x 2b = 73
b4	0b 73	b4 x 73 = c7 -> b2 b3	b3 x 0b = b8
b4	b2 b8	b4 x b8 = 0c -> ca 6c	6c x b2 = de
b4	ca de	b4 x de = 6a -> cc 5c	5c x ca = 96
e0	cc 96	e0 x 96 = 76 -> 16 b1	b1 x cc = 7d
90	16 7d	90 x 7d = ed -> 3c eb	eb x 16 = fd
84	3c fd	84 x fd = 79 -> ee 46	46 x 3c = 7a
72	ee 7a	72 x 7a = 08 -> 8c 48	48 x ee = a6
82	8c a6	82 x a6 = 24 -> 67 26	26 x 8c = aa
b0	67 aa	b0 x aa = 1a -> bf db	db x 67 = bc
82	bf bc	82 x bc = 3e -> d8 fd	fd x bf = 42
61	d8 42	61 x 42 = 23 -> 13 99	99 x d8 = 41
5f	13 41	5f x 41 = 1e -> f9 ff	ff x 13 = ec
2a	f9 ec	2a x ec = c6 -> a3 3a	3a x f9 = c3
FCS	a3 c3		

a3c3 x ffff = 5c3c = **FCS**

RECEIVER			
2	(1) 6	3 -> 4	5
90	ff ff	90 x ff = 6f -> 9b f1	f1 x ff = 0e
84	9b 0e	84 x 0e = 8a -> 2b 52	52 x 9b = c9
72	2b c9	72 x c9 = bb -> 0b 58	58 x 2b = 73
b4	0b 73	b4 x 73 = c7 -> b2 b3	b3 x 0b = b8
b4	b2 b8	b4 x b8 = 0c -> ca 6c	6c x b2 = de
b4	ca de	b4 x de = 6a -> cc 5c	5c x ca = 96
e0	cc 96	e0 x 96 = 76 -> 16 b1	b1 x cc = 7d
90	16 7d	90 x 7d = ed -> 3c eb	eb x 16 = fd
84	3c fd	84 x fd = 79 -> ee 46	46 x 3c = 7a
72	ee 7a	72 x 7a = 08 -> 8c 48	48 x ee = a6
82	8c a6	82 x a6 = 24 -> 67 26	26 x 8c = aa
b0	67 aa	b0 x aa = 1a -> bf db	db x 67 = bc
82	bf bc	82 x bc = 3e -> d8 fd	fd x bf = 42
61	d8 42	61 x 42 = 23 -> 13 99	99 x d8 = 41
5f	13 41	5f x 41 = 1e -> f9 ff	ff x 13 = ec
2a	f9 ec	2a x ec = c6 -> a3 3a	3a x f9 = c3
3c	a3 c3	3c x c3 = ff -> 0f 78	78 x a3 = db
5c	0f db	5c x db = 87 -> f0 b7	b7 x 0f = b8
FCS	f0 b8	Transmission Correct!	

Notes:

- Table header according to the Steps in the «Calculation Loop Step by Step».
- «x» means XOR.
- «->» means: from result follows table entry.
- Generatorpolynomon is $x^{16} + x^{12} + x^5 + 1$ (CCITT X.25 & UIT V.24).