

2a) Sender 1:

1	-1	1	1	-1	-1	1	-1	1	-1	1	1	-1	-1	1	-1
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- First 8 bits need to be multiplied by data bit ($d_1^1 = 1$) as the first step of encoding:

1	-1	1	1	-1	-1	1	-1
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- Second 8 bits also need to be multiplied, but by different data bit ($d_0^1 = -1$):

-1	1	-1	-1	1	1	-1	1
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Sender 2:

1	1	-1	1	1	-1	1	1	1	1	-1	1	1	-1	1	1
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- We do the same with sender 2 ($d_1^2 = -1$, $d_0^2 = -1$):

-1	-1	1	-1	-1	1	-1	-1	-1	-1	1	-1	-1	1	-1	-1
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Result:

1	-1	1	1	-1	-1	1	-1	-1	1	-1	-1	1	1	-1	1
-1	-1	1	-1	-1	1	-1	-1	-1	-1	1	-1	-1	1	-1	-1

- Now we need to summate sender 1 and sender 2 bits to get the encoded output of both senders:

0	-2	2	0	-2	0	0	-2	-2	0	0	-2	0	2	-2	0
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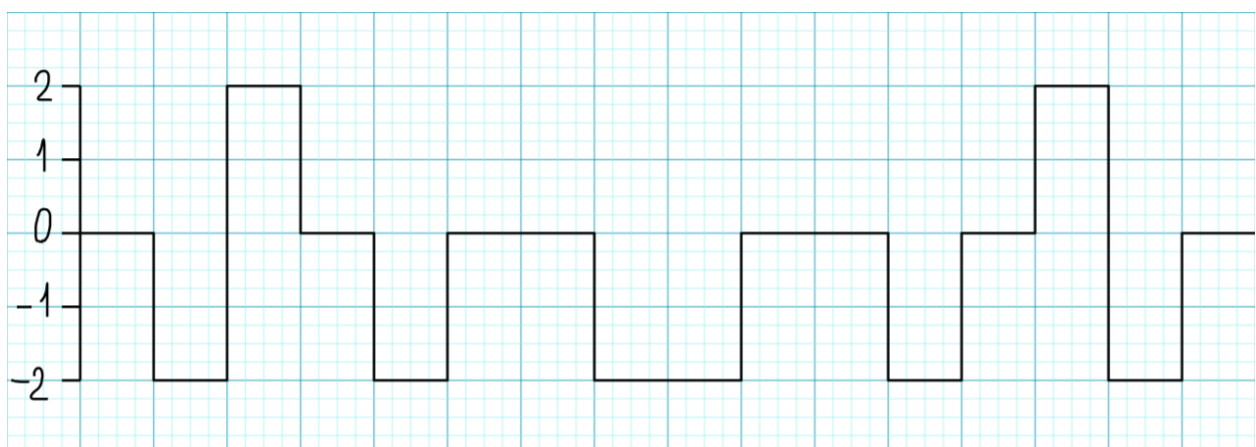


Figure 1. Diagram of the encoded sequence

