

# Data Format

Unless otherwise indicated, numbers in the following tables are hexadecimal. Values in double quotation marks, such as "00," are ASCII.

## Command Frame

STX	Node No.	Sub-address	SID	Command text			ETX	BCC
(02)	( $\times 10^1$ )   ( $\times 10^0$ )	"00"	"0"	MRC	SRC	Data	(03)	
1 byte	2 bytes	2 bytes	1 byte				1 byte	1 byte

## Response Frame

STX	Node No.	Sub-address	End code	Response text			ETX	BCC
(02)	( $\times 10^1$ )   ( $\times 10^0$ )	"00"	"00"	MRC	SRC	MRES   SRES   Data*	(03)	
1 byte	2 bytes	2 bytes	2 bytes				1 byte	1 byte

**Note** There will be no data if there was an error in the command frame. (In this case, there will be an end code other than "00" or "0F.")

STX	This code (02) indicates the beginning of the transmission frame. Always set this character in the first byte.
Node number	This number specifies the transmission's destination. Specify the K3N□'s unit number to transmit to the K3N□. Specify "XX" for a broadcast transmission. No responses will be returned for broadcast transmissions.
Sub-address	Not used for the K3N□. Always set the sub-address to "00."
SID (Service ID)	Not used for the K3N□. Always set the SID to "0."
End code	Indicates the execution result for the corresponding command frame.
Command text	This is the main component of the command. Refer to 1–4–2 <i>Command Text Composition</i> for details.
MRC, SRC (Command code)	Indicate the service being used. Refer to 1–4–2 <i>Command Text Composition</i> for details.
MRES, SRES (Response code)	Indicate the transmission results.
ETX	This code (03) indicates the end of the text.
BCC	Block Check Character • This is the BCC result for the data from just after STX until ETX. • Horizontal parity (1 character display)

The BCC result is found by calculating the exclusive OR of the bytes from just after STX until ETX.

### End Code Summary

End code	Name	Meaning
"00"	Normal completion	The command was completed normally, without any of the following errors.
"0F"	Command error	The specified command couldn't be executed. The response code should indicate why the command couldn't be executed.
"10"	Parity error	A parity error occurred in one of the characters during reception.
"11"	Framing error	A framing error occurred in one of the characters during reception.
"12"	Overrun error	An overrun error occurred in one of the characters during reception.
"13"	BCC error	The received frame's BCC was incorrect.
"14"	Format error	The command text was incorrect. This error will occur when a character other than "0" to "9" or "A" to "F" is included in the command text.
"16"	Sub-address error	The received frame's header or address is incorrect.
"18"	Frame length error	The received frame exceeded the prescribed number of bytes.