Appendix1 Command set

Magnetic Card/Reader Writer MSRE106

Function	Command	Format of Data Return	Remark
Reset	DEL (7FH)	-----	
Liaison	ESC (1BH)	ACK (06H)	
Read card	----	**Correct**: STX% 1st track data?;2nd track data?+3rd track data?ETX BCC (02H25H 1st track data 3FH3BH 2nd track data 3FH2BH 3rd track data 3F03H BCC) **Error**: NAK (15H)	
Write card	STX% 1st track data ?; 2nd track data? + 3rd track data? ETX BCC (02H25H 1st track data 3FH3BH 2nd track data 3FH2BH 3rd track data 3FH03H BCC)	**Correct**: STX% 1st track data?;2nd track data?+3rd track data?ETX BCC (02H25H 1st track data 3FH3BH 2nd track data 3FH2BH 3rd track data 3F03H BCC) **Error**: NAK (15H)	

Notes:

(1) MSRE106 series magnetic card reader/writer exchanges the Information with the host computer in the way of data package. The format of the data package is the following: STX% 1st track data? ;2nd track data ?+ 3rd track data ? ETX BCC Where STX (02H) is the header flag of the data package; ETX (03H) is the trailer flag; "%(25H)", ";(3B)","+(2B)" is the start character of 1st, 2nd, 3rd track respectively;"?(3FH)" is the end character of each track data; BCC is the check byte of the package (NOR Sum) including ETX(03H) except STX(02H).

(2) In read operation, each track data can be put into the data package only in the correct reading and be transferred up to the host computer (the start and end character of the corresponding track is added to the package), the operation returns "NAK (15H)" when the reading for all three track data fails.

(3) In write operation, the host computer adds the start/end Character on the corresponding track data, puts it into the data package and transfer down to the reader/writer. If the write operation is correct, the written-in data are read out and return to the host computer in the way of data package. If the write of some track is mistaken, then the operation fails and returns "NAK (15H)".