## 1. Basic format of Data Frame:

No.	1	2	3	4	5	6	7	8
Symbol	SOI	LEN	ADR	CID1	CID2	INFO	CHK	EOI
Length (Bytes)	1	1	3	1	1	N	1	1
Eg. 1	AA	XX	XX.XX.XX	XX	XX	XX XX XX XX XX XX	XX	10

- (1) SOI (Start of Information): Start mark bit, 1 byte, fixed as AAH in this protocol.
- (2) LEN (Length): INFO length, 1 byte, range  $0\sim128$ , if LEN = 128, the actual length of packet 128+9 (SOI+LEN+ADR+CID1+CID2+CHK+EOI) = 137.
- (3) ADR (Address): device logical address, 3 bytes, range 1~127, 255 is the broadcast address.
- (4) CID1 (Command ID 1): Main command code, 1 byte, range 0 ~ 255
- (5) CID2 (Command ID 2): Sub command code, 1 byte, range 0 ~ 255
- (6) INFO (Information): content of data, 0 ~ 128 bytes, variable length
- (7) CHK (Check Summation): Summation check bit, 1 bytes, except SOI, EOI, other CHKSUM bytes of the entire data frame (from the LEN to INFO) should accumulated ASCII code, the remainder of final modulo 256 used for check.
- (8) EOI (End of Information): Ending mark bit, fixed as 10H

### CMD(Command) Data Frame

ADR indicates the address of the devices which receive the commands

CID1, its data range is 1~127

CID2, its data range is 1~127

# ACK(Acknowledgement) Data Frame

ADR indicates the address of the devices which send out the responses.

CID1, its data range is 128~255

### 2. Search device. set(change)device logic address. set device name:

		CMD								ACK							
NO.	. Specification	ADR	CID	CID		IN	FO		ADR	CID1	CID2		I	NFO			
		ADK	1	2	P1	P2	P3	P4	ADR	CIDI	CIDZ	P1	P2	Р3	P4		
1	Get device information	FF.FF.FF	01	01	(0)	(0)	(0)	(0)	vv vv vv	F1	01	Device	Sub ID	MAC			
1	(Search device)	xx.xx.xx	01	01	(0)	(0)	(0)	(0)	XX.XX.XX	11	01	ID(1)	(1)	(6)			

6	Set device logic address	xx.xx.xx	01	06	MAC (6)	ADR (1)	Device ID(1)	Sub ID(1)	xx.xx.xx	F1	06	Device ID(1)	Sub ID (1)	MAC (6)	(0)
7	Set device name	xx.xx.xx	01	07	Name (N)	(0)	(0)	(0)	xx.xx.xx	F1	07	Name (N)	(0)	(0)	(0)

#### 3. Open doors:

1	i Enter dir.	FF.FF.FF xx.xx.xx	0В	0A	Times (1)		xx.xx.xx	FB	0A	(0)	(0)	(0)
2	I FXIT (III).	FF.FF.FF xx.xx.xx	UBI	0B	Times (1)		xx.xx.xx	FB	0B	(0)	(0)	(0)

#### 4. Note:

Don't try to operate others undefined instruction.