

DATA FRAME (default size : 15 byte)

01 - 02 - 03 - 04 - 05 - 06 - 07 - 08 - 09 - 10 - 11 - 12 - 13 - 14 - 15

Serial Communication : 115200 baud, No parity, No FlowControl, 1 Stop Bit, 8 Data Bit

01	SoF : Start of Frame (0x0A)										
02-03	SID : source/destination ID (high byte, low byte)										
04	EID1 - high byte										
05	Command										
06	EID0 - low byte										
07-14	parameters (D0-D7), the data length count (dlc) could be 0 to 8										
15	EoF : End of Frame (0x0D)										

if any byte has a value between 10-13, it must be XORed with 0x0B and must be place the flag byte (0x0B) before the value. This means the whole data frame doesn't have a constant length.

Value	Title	Details	D0	D1	D2	D3	D4	D5	D6	D7	From	To
0	PC_ADDRESS	PC CAN address										
0	BASIC_ADDRESS	BU CAN address										
1FFF	BROADCAST_ADDRESS	CAN broadcast address										

EIDM Hex	Command	Details	D0	D1	D2	D3	D4	D5	D6	D7	From	To
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Microphone / Priority Settings

1	REQUEST_MIC	Request for setting up Mic									DU	BU/PC
	REQUEST_MIC_RELEASE	Request for release Mic	0x00								DU	BU/PC
	REQUEST_MIC_OPEN	Request for open Mic	0x01	Descr	CardH2	CardL2	CardH1	CardL1			DU	BU/PC
		Descriptor(VUDU) bits (true/false): 0: president (1/0); 1: priority on (0/1); 2: priority start from this device (1/0); 3-5: device type; 6-7: mic status device type (5-4-3. bits): 000: DU; 100: VU; 010: IU; 011: BU; mic status (7-6. bits): 10: MIC_OPEN; 01: MIC_WAIT; 00: MIC_IDLE Chipcard ID number (4-3-2-1 bytes): CardH2, CardL2, CardH1, CardL1										
2	COMMAND_MIC_SET	Setting up Microphone									BU/PC	DU
	MIC_SET_OPENAT	Open Mic at Channel 1..63	0x00	Channel							BU/PC	DU
	MIC_SET_WAIT	Set Mic to Wait Status	0x01								BU/PC	DU
	MIC_SET_FORBIDDEN	Forbidden Mic Request	0x02								BU/PC	DU
		If External Input is active, you can open channels 2..63										
3	REQUEST_PRIORITY	Request to Setting up Priority Mode									DU-T	BU/PC
	PRIORITY_START	Request to start Priority Mode	0x00								DU-T	BU/PC
	PRIORITY_RESTORE	Request to restore state before Priority mode	0x01								DU-T	BU/PC
	PRIORITY_CLEAR	Request to clear Priority Mode	0x02								DU-T	BU/PC
4	COMMAND_PRIORITY_SET	Setting up Priority Mode									BU/PC	DU-C
	PRIORITY_START	Start Priority Mode	0x00								BU/PC	DU-C
	PRIORITY_RESTORE	Restore the state before Priority Mode	0x01								BU/PC	DU-C
	PRIORITY_CLEAR	Clear Priority Mode, silence for everybody	0x02								BU/PC	DU-C
5	RESPONSE_PRIORITY_CLEAR	Response for PRIORITY_CLEAR									DU	BU/PC

EIDM Hex	Command	Details	D0	D1	D2	D3	D4	D5	D6	D7	From	To
Voting												
40	REQUEST_VOTE	Request to start Voting									DU-T	BU/PC
	VOTE_3	3 button type vote	0x00								DU-T	BU/PC
	VOTE_5	5 button type vote	0x01								DU-T	BU/PC
	VOTE_DU	1 button type vote (DU)	0x02								DU-T	BU/PC
41	COMMAND_VOTE	Start Voting									BU/PC	DU-C
	VOTE_3	3 button type vote	0x00	Typ							BU/PC	DU-C
	VOTE_5	5 button type vote	0x01	Typ							BU/PC	DU-C
	VOTE_DU	1 button type vote (DU)	0x02								BU/PC	DU-C
		Type of voting (1-0. bits) : 00 : unit based; 01 : required chipcard; 10 : unit based + secret; 11 : required chipcard + secret										
42	REQUEST_VOTE_INTERRUPT	Request to interrupt voting									DU-T	BU/PC
43	COMMAND_VOTE_INTERRUPT	Interrupt voting									BU/PC	DU-C
44	COMMAND_VOTE_PERMISSION	Permission Denied for Voting (Code) : 0: no; 1: yes	Code								PC	DU
45	COMMAND_VOTE_RESULT	Get voting result and exit from voting									BU/PC	DU-C
46	RESPONSE_VOTE_RESULT	Response for voting result request	BtnN	CardH2	CardL2	CardH1	CardL1				DU	BU/PC
47	RESPONSE_VOTE_ONLINE	Online voting result	BtnN	CardH2	CardL2	CardH1	CardL1				DU	BU/PC
		Button type (BtnN) : 1 : strong no; 2 : no; 3 : abstain; 4 : yes; 5 : strong yes										
48	COMMAND_VOTE3_DISPLAY	Show voting result (3 button - B2/B3/B4)	0	NoL	AbstL	YesL	0	NoH	AbstH	YesH	BU/PC	DU-C
49	COMMAND_VOTE5_DISPLAY	Show voting result (5 button - B1-B5) (+ EID0 : 0V2R5)	RL	NoL	AbstL	YesL	VL	NoH	AbstH	V3Y5	BU/PC	DU-C
4A	COMMAND_VOTE_DU_DISPLAY	Show voting result (1 button - DU - B3)	0	NVL	0	YesL	0	NVH	0	YesH	BU/PC	DU-C
		NoL : No low byte, NoH : No high byte; NVL : Not Voted low byte, NVH : Not Voted high Byte; VL : Strong Yes low byte; V3Y5 : Strong Yes high (7-6-5. bits) , Yes high (4-3-2-1-0. bits); 0V2R5 : Strong Yes high (6-5. bits) , Strong No high (4-3-2-1-0. bits)										
4E	COMMAND_VOTE_TIME	Estimated Voting Time (seconds - max. 4m : 15s)	Time								BU/PC	DU-C
4F	COMMAND_VOTE_END	Close Voting									BU/PC	DU-C

Chipcard Settings												
C6	COMMAND_CARD_READ	Kártya olvasása (8 byte) Addr : kártyacím	Addr								BU/PC	DU
C7	RESPONSE_CARD_READ	Kártya olvasás eredmény (Rb : olvasott byte (0-7))	Rb1	Rb1	Rb3	Rb4	Rb5	Rb6	Rb7	Rb8	DU	BU/PC
C8	COMMAND_CARD_OPEN	A következő írási cím küldése Addr: kártyacím	Addr								BU/PC	DU
C5	COMMAND_CARD_WRITE	A kártya írás (adatok hossza a dlc-ben) Wb: adatok	Wb1	Wb2	Wb3	Wb4	Wb5	Wb6	Wb7	Wb8	BU/PC	DU
C9	RESPONSE_CARD_WRITE	Aktuális kártyacímet küldi, Addr : kártyacím	Addr								DU	BU/PC
CA	COMMAND_CARD_CHANGES	Sent by devices if their card status is changed	State	CardH2	CardL2	CardH1	CardL1				VU	BU/PC
		State : 0 : card is out; 1 : card not allowed; 3 : card is inserted										

EIDM Hex	Command	Details	D0	D1	D2	D3	D4	D5	D6	D7	From	To
Interpreting												
B3	COMMAND_IU_OPEN	Signes that it started speaking. Descr : see command 29	Descr								IU Twin	IU
B4	COMMAND_IU_RELEASE	Signes that it stopped speaking. Descr : see command 29	Descr								IU Twin	IU
B5	COMMAND_IU_CALL	Help call signal. typ : 1 : alarm on , 0 : alarm off	Typ								IU	BU/PC
B6	RESPONSE_IU_CALL	CALL ack, typ : 1 : alarm on , 0 : alarm off	Typ								BU/PC	IU
B7	COMMAND_TWING_PARKING	To its actually selected/deselected twin. Sel : 1:select, 0:deselect	Sel								IU	IU
B8	COMMAND_TWING_SETUP_DNL	Sending the settings	outA7A	mA	outB7B	mB	Descr	selfAdr			IU	IU
		outA : 6-0. bits : output channel A , 7. bit : mA 7th bit; mA : mnemoic for A channel (lower byte), outB7B, mB : like A; also used to divorce (dlc=0)										
B9	COMMAND_IU_SLOWLY	SLOWLY signal, sid=self a. typ : 1=begin, 0=end	Typ								IU	BU/PC
BA	RESPONSE_IU_SLOWLY	SLOWLY signal ack, sid=self a, typ : 1=begin, 0= end	Typ								BU/PC	IU
E1	REQUEST_ABBREVIATION	Request language abbreviations of the channels. sid=BROADCAST_ADDRESS , Response from lus where that one is the A or B output channel. That is sended by IU/DU at the beginning with sid=BASIC_ADDRESS	Channel								All	All-C
E3	COMMAND_ABBREVIATION_DNL	Setting up Language Abbreviations to a channel. sid=BROADCAST_ADDRESS , Channel : target channel, Ascii1-3 : Language code	Channel	Ascii1	Ascii2	Ascii3					IU/BU	DU-C
E2	COMMAND_CHANNELINFO_CLEAR	Clear the Channelinfo List									BU	IU-C
20	COMMAND_LOGIN_REQUEST	Login request									BU/PC	IU
29	RESPONSE_LOGIN_REQUEST_IU	Response to login request – mic_ch : mic channel	Descr	outA	outB						IU	BU/PC
		Descriptor(IU) bits (true/false): 0: twin mode (1/0); 1 : inter-relay (1/0); 2: mic active (1/0); 3-5: device type; 6: input is connected to the freely selectable channel (when mic not active) (1/0) 7 : inactive mode (1/0) device type (5-4-3. bits) : 000: DU; 100: VU; 010: IU; 011: BU ; mic status (7-6. bits) : 10: MIC_OPEN; 01: MIC_WAIT; 00: MIC_IDLE										
28	RESPONSE_LOGIN_PC_IU	Answer to the Login Request (only PC)	outA7A	mA	outB7B	mB	TwinL	TwinH			IU	PC
		outA : 6-0. bits : output channel A , 7. bit : mA 7th bit; mA : mnemoic for A channel (lower byte), outB7B, mB : like A ; Twin: twin address										
B1	COMMAND_PC_SETUP_DNL	Sending the settings to an IU (only PC)	outA7A	mA	outB7B	mB	TwinL	TwinH			PC	IU
		outA : 6-0. bits : output channel A , 7. bit : mA 7th bit; mA : mnemoic for A channel (lower byte), outB7B, mB : like A ; Twin: twin address										
BB	COMMAND_IU_REMOTE	Remote controll for interpreters. Dlc 1: on, 0: off	State								BU/PC	IU
BC	RESPONSE_IU_REMOTE	Answer to COMMAND_IU_REMOTE. Descr : Descriptor (IU)	Descr								IU	BU/PC
BD	COMMAND_IU_RELAY_SLOWLY	If the source interpreter is gabbing. State : on, 0: off; inpC : input chl.	State	inpC							IUir	IU
BE	RESPONSE_IU_RELAY_SLOWLY	Answer to COMMAND_IU_ITERRELAY_SLOWLY; State : on, 0: off;	State	inpC							IU	IUir

EIDM Hex	Command	Details	D0	D1	D2	D3	D4	D5	D6	D7	From	To
Control Settings												
6	COMMAND_RESET	BU sends at the beginning									BU	DU/PC-C
7	COMMAND_FLOOR_MIX	Mix to the FLOOR ChG1(1-8)..ChG8(57-64) chnl. : 0=not 1=mix	ChG1	ChG2	ChG3	ChG4	ChG5	ChG6	ChG7	ChG8	BU	
8	COMMAND_FLOOR_VOLUME	BU sends the volume of the FLOOR (Vol : 0..255)	Vol									
9	RESPONSE_FLOOR_VOLUME	Answer to the given speech										
20	COMMAND_LOGIN_REQUEST	Login request									BU/PC	VUDU
21	RESPONSE_LOGIN_REQUEST	Response to login request – mic_ch : mic channel	mic_ch	Descr	CardH2	CardL2	CardH1	CardL1			DU	BU/PC
		Descriptor(VUDU) bits (true/false): 0: president (1/0); 1: priority on (0/1); 2: priority start from this device (1/0); 3-5: device type; 6-7: mic status device type (5-4-3. bits) : 000: DU; 100: VU; 010: IU; 011: BU ; mic status (7-6. bits) : 10: MIC_OPEN; 01: MIC_WAIT; 00: MIC_IDLE Chipcard ID number (4-3-2-1 bytes) : CardH2, CardL2, CardH1, CardL1										
23	REQUEST_LEARN_ADDRESS	Initiating the learning phase									PC/VUp	VUDUIU
24	COMMAND_LEARN_ADDRESS	After stabilising the ring , VUDUs stores the config in the EEPROM									BU	BROAD
25	RESPONSE_LEARN_ADDRESS	Result of the learning phase initiated by president VU	State	VUDUH	VUDUL	IUH	IUL				DU	BU/PC
		State : 0 : ok, 1 : failed; VUDU H+L : last counted VUDU + 1; IU H+L : last counted IU + 1										
D0	COMMAND_GRAB_CONTROL	Grab controlling from BU									PC	BU
D1	COMMAND_GIVEUP_CONTROL	Give back the controlling to BU									PC	BU
D2	REQUEST_NOM	Request nominal-limit number (Num : 0: back, 0+ : setting , NULL : get)	Num								PC	BU
D3	RESPONSE_NOM	Send nominal limit number	NomLim								BU	PC
D4	REQUEST_CONTROL_STATUS	Request the control rights status from the Basic Unit									PC	BU
D5	RESPONSE_CONTROL_STATUS	Response the control rights status. State : 6.bit(extLang) 0: off 1:on	Valid	Status							BU	PC
2C	REQUEST_RING_STATUS	Request Network Status									PC	BU
2D	RESPONSE_RING_STATUS	Send Network Status	RICS_R	RDAH_0	RDAL_0	RDAH_1	RDAL_1	FPGA	AVR	Desc	BU/DU	PC
		Descriptor(BU) bits : 0-2 bits : 0; 3-5 : device type; 6-7 : EXTERNAL LANGUAGE mic status (details : see command 21)										
26	COMMAND_LOGIN_PC	Asking the installed devices for login device (only PC)									PC	VUDUIU
27	RESPONSE_LOGIN_PC	Answer for Login Request (see command 21) (only PC)	mic_ch	Descr	CardH2	CardL2	CardH1	CardL1			VUDU	PC
2E	REQUEST_SAVED_STATUS	Asks the saved ring status from the BU's EEPROM									PC	BU
2F	RESPONSE_SAVED_STATUS	Answers the saved ring status from the BU's EEPROM	RICS_R	RDAH_0	RDAL_0	RDAH_1	RDAL_1	FPGA	AVR	Desc	BU	PC
22	COMMAND_VERSION	Asking only DU devices for blink down the software version										
2A	COMMAND_LED_ALERT	Blinks the leds on the receiver device. Blink: 0: off; 1 : on	Blink									
B0	COMMAND_MAX_IU_ADDRESS	Asking the BU, what is the last IU address	Adr								IU/PC	BU
BF	COMMAND_RELAY_RESERVE	pressed the "OUT B" button: outC: used output channel, Adr: self_address, M : mnemonic of the "A" channel.	outC	AdrH	AdrL	M1	M2	M3			IU	BROAD
B2	COMMAND_RELAY_RELEASE	pressed the "OUT A" or the "RELAY" button : outC : used output channel, Adr :self_address	outC	AdrH	AdrL						IU	BROAD

EIDM Hex	Command	Details	D0	D1	D2	D3	D4	D5	D6	D7	From	To
LCD Settings												
F4	RESPONSE_LCD_WRITE	Response after every LCD command									DU	PC
F5	COMMAND_LCD_OPEN	Open LCD buffer for write									PC	DU
F6	COMMAND_LCD_WRITE	Write byte to the LCD buffer									PC	DU
F7	COMMAND_LCD_CLOSE	Finish LCD buffer writing									PC	DU
C4	COMMAND_CONTRAST	Setting the contrast of the LCD panel. Cont : 0-255	Cont								PC	DU
Flash Settings												
F0	RESPONSE_FLASH_WRITE	Response after every flash command	Adr								DU	PC
F1	COMMAND_FLASH_OPEN	Open Card for Write. sid=self address, AdrHML-3 : destination address	AdrH	AdrM	AdrL						PC	DU
F2	COMMAND_FLASH_WRITE	Write to the Card, sid=self_address Dat1-8 : data bytes	Dat1	Dat2	Dat3	Dat4	Dat5	Dat6	Dat7	Dat8	PC	DU
F3	COMMAND_FLASH_CLOSE	Finish Card writing									PC	DU
12	COMMAND_PRGFLASH_OPEN	Initiating a programflash update									PC	VUDU
16	COMMAND_PRGFLASH_OPEN_IU	Initiating a programflash update for IUs									PC	IU
17	COMMAND_FPGA_UPDATE	Initiating or finishing an FPGA update procedure, dlc: 1 -> begin, 0 -> end									PC	VUDUIU