

## Communicating with Intellibus via the RS232 interface 08/2006

### NOTE:

To reduce document size, and remove information  
Not required by our TT455-RT-238 Signal Converter  
this document has been edited by: [www.lintronic.dk](http://www.lintronic.dk)

The RS232 interface requires 3 wires (TX, RX, GND) - no handshake.

Baud Rate     19200  
Stop Bits     1  
Parity         None

The data packet format (hex) :  
0x80,0x00,0x00,0x00,ADR,COM,0x55

0x80	Start Byte
0x00,0x00,0x00	Sync Byte
ADR	Address
COM	Command
0x55	Termination Byte

### LinTronic Command set

732000019000000ADRCOM001 = INTELLIBUS RS232 command

732 identifies "RS232 command"

000019 identifies "IntelliBus"

000000 identifies "Version 1"

ADR identifies Address (see Addressing below)

COM identifies Command (See Command below)

001 identifies repeat number

### Examples:

7320000190000000255006001 = Address 255 (All), Command 005 (Off)

732000019000000002016001 = Address 002 (2), Command 016 (Goto Scene 1)

732000019000000002005001 = Address 002 (2), Command 005 (On)

732000019000000002003005 = Address 002 (2), Command 003 (Raise), repeat 5 times

**Addressing:**

Intellibus devices can be communicated with by their individual device addresses, their group addresses, or the broadcast address.

Commands can be sent to device, group or broadcast addresses, but Query's must only be sent to device addresses only.

Device addresses:

	C ADR	D ADR
	Hex	Hex
ZONE 1	0x03	0x02
ZONE 2	0x05	0x04
ZONE 3	0x07	0x06
ZONE 4	0x09	0x08
ZONE 5	0x0B	0x0A
ZONE 6	0x0D	0x0C
ZONE 7	0x0F	0x0E
ZONE 8	0x11	0x10
ZONE 9	0x13	0x12
ZONE 10	0x15	0x14
ZONE 11	0x17	0x16
ZONE 12	0x19	0x18
ZONE 13	0x1B	0x1A
ZONE 14	0x1D	0x1C
ZONE 15	0x1F	0x1E
ZONE 16	0x21	0x20
ZONE 17	0x23	0x22
ZONE 18	0x25	0x24
ZONE 19	0x27	0x26
ZONE 20	0x29	0x28
ZONE 21	0x2B	0x2A
ZONE 22	0x2D	0x2C
ZONE 23	0x2F	0x2E
ZONE 24	0x31	0x30
ZONE 25	0x33	0x32
ZONE 26	0x35	0x34
ZONE 27	0x37	0x36
ZONE 28	0x39	0x38
ZONE 29	0x3B	0x3A
ZONE 30	0x3D	0x3C
ZONE 31	0x3F	0x3E
ZONE 32	0x41	0x40
ZONE 33	0x43	0x42
ZONE 34	0x45	0x44
ZONE 35	0x47	0x46
ZONE 36	0x49	0x48

ZONE 37	0x4B	0x4A
ZONE 38	0x4D	0x4C
ZONE 39	0x4F	0x4E
ZONE 40	0x51	0x50
ZONE 41	0x53	0x52
ZONE 42	0x55	0x54
ZONE 43	0x57	0x56
ZONE 44	0x59	0x58
ZONE 45	0x5B	0x5A
ZONE 46	0x5D	0x5C
ZONE 47	0x5F	0x5E
ZONE 48	0x61	0x60
ZONE 49	0x63	0x62
ZONE 50	0x65	0x64
ZONE 51	0x67	0x66
ZONE 52	0x69	0x68
ZONE 53	0x6B	0x6A
ZONE 54	0x6D	0x6C
ZONE 55	0x6F	0x6E
ZONE 56	0x71	0x70
ZONE 57	0x73	0x72
ZONE 58	0x75	0x74
ZONE 59	0x77	0x76
ZONE 60	0x79	0x78
ZONE 61	0x7B	0x7A
ZONE 62	0x7D	0x7C
ZONE 63	0x7F	0x7E
ZONE 64	0x01	0x00

Most commands can be sent to a group of devices :

		C ADR	D ADR
		Hex	Hex
GROUP	1	0x81	0x80
GROUP	2	0x83	0x82
GROUP	3	0x85	0x84
GROUP	4	0x87	0x86
GROUP	5	0x89	0x88
GROUP	6	0x8B	0x8A
GROUP	7	0x8D	0x8C
GROUP	8	0x8F	0x8E
GROUP	9	0x91	0x90
GROUP	10	0x93	0x92
GROUP	11	0x95	0x94
GROUP	12	0x97	0x96
GROUP	13	0x99	0x98
GROUP	14	0x9B	0x9A

GROUP	15	0x9D	0x9C
GROUP	16	0x9F	0x9E

To communicate with all devices use the broadcast address 0xFF or 0xFE for direct levels.

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### **Standard Commands:**

Command	hex	dec	
On	0x05	5	-Goto Maximum level (No Fade )
Fade Off	0x06	6	-Fades to off (adjust rate from intellidim) (Mute Audio)
Off	0x00	0	-Turns off without fading
Raise	0x03	3	-Increase output by 0.5 % (Volume up for Audio)
Lower	0x04	4	-Decrease output by 0.5% (Volume down for Audio)

### Goto Scene :

Scene#	hex	dec	
1	0x10	16	-Also used to select source 1 for Audio
2	0x11	17	-Also used to select source 2 for Audio
3	0x12	18	-
4	0x13	19	
5	0x14	20	
6	0x15	21	
7	0x16	22	
8	0x17	23	
9	0x18	24	
10	0x19	25	
11	0x1A	26	
12	0x1B	27	
13	0x1C	28	
14	0x1D	29	
15	0x1E	30	
16	0x1F	31	

### Direct Level Values:

	Hex	dec
0%	0x00	0
10%	0x31	51
20%	0x47	71
30%	0x5B	91
40%	0x6F	111
50%	0x83	131
60%	0x97	151
70%	0xAB	171
80%	0xBF	191
90%	0xDD	211
100%	0xFE	241