

# LinTronic

<http://www.lintronic.dk>



RS232 control of the Loewe TV is based on IR commands being send out as RS232, according to Loewe's specifications in this document: `ir [system] [subsystem] [command] [status]`

Baudrate 9600, no parity, 8 databits, 1 stopbit

Example:

“TV on”

`ir 0 0 22 3`

## Appendix 1: IR codes

The following table contains relevant control codes for control system 0 (=F

subsystem	control code	description
0	0	Key 0
0	1	Key 1
0	2	Key 2
0	3	Key 3
0	4	Key 4
0	5	Key 5
0	6	Key 6
0	7	Key 7
0	8	Key 8
0	9	Key 9
0	10	PIP on/off
0	11	menu
0	12	TV on/off
0	13	mute
0	14	normal (S)
0	15	EPG (H/S)
0	16	cursor right
0	17	cursor left
0	20	Volume -
0	21	Volume +
0	22	TV on
0	23	Program -

## LOEWE, IR COMMANDS SEND ON RS232

The TT455-RT-238 sends out RS232 commands:

ir [system] [subsystem] [command] [status] <CR> (<CR> = carriage return)

In our firmware we have fixed SYSTEM to 0 and we have fixed STATUS to 3:

ir 0 [subsystem] [command] 3 <CR>

The command-structure controlling the TT455-RT-238's RS232 commands to the Loewe:

732 aaa bbb ccc ddd eee fff rrr = command

732 = RS232 command

aaa bbb = Manufacturer (000 024 Loewe)

ccc ddd = Device to control (000 000 = TV, controlled by IR commands. 9600,n,8,1)

eee = SubSystem

fff = Command

rrr = Repeat (fixed 001)

NOTE:

aaabbbccddd are not be changed.

eee and fff can be changed to produce the wanted commands.

Firmware will force rrr to 001 regardless of your settings.

Leading zeros are ignored: 000 represents the value 0, 010 represents the value 10.

Example of commands:

7320000240000000000001001=Key 1

Will send out: ir 0 0 1 3 <CR>

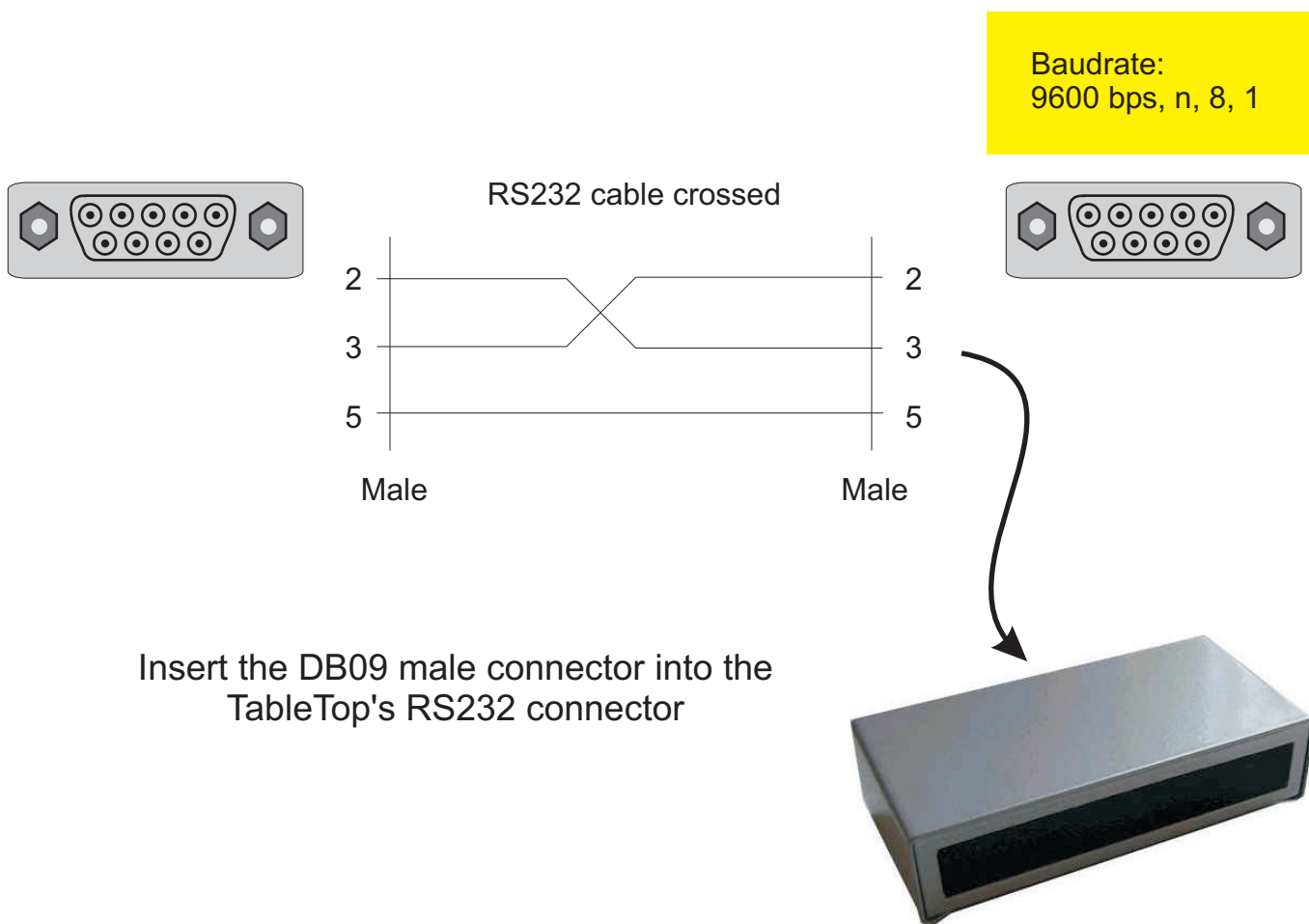
7320000240000000006053001=HDR play

Will send out: ir 0 6 53 3 <CR>

7320000240000000027019001=Key Radio

Will send out: ir 0 27 19 3 <CR>

# PLEASE OBSERVE LOEWE PIN LAYOUT NOT CONFIRMED



In TT455-RT-238's Memory Map, use commands:  
Loewe, TV, RS232 (IR)