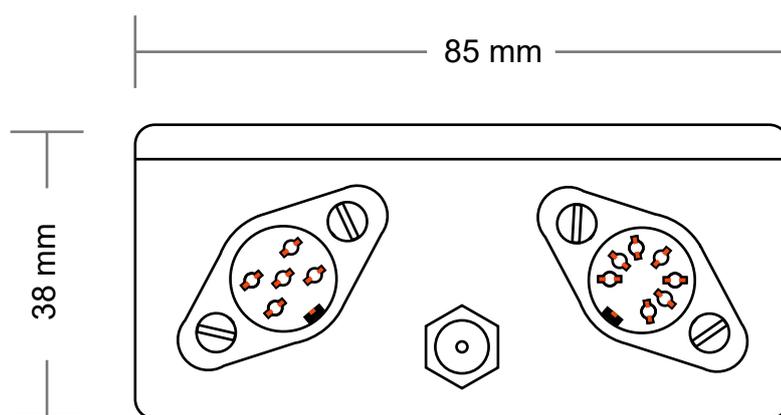# LinTronic

TT455-RT-238
Pulsing Output
Control of TV-stand

85 mm

38 mm
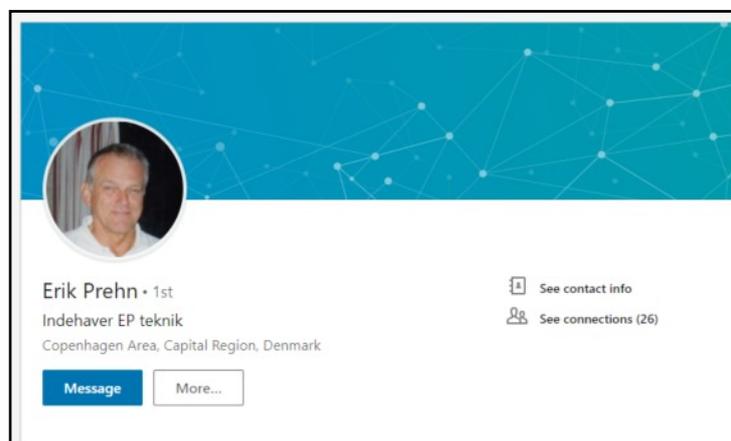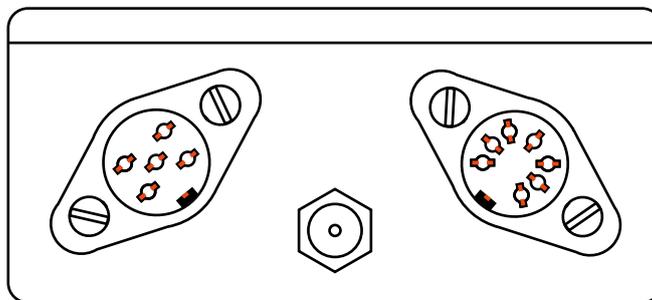
Controlling a rotating TV stand

Erik has designed a small interface box that allows our TT455-RT-238 to rotate a Bang&Olufsen turning tv-stand for 7-32, 7-40 or 7-55.

We added a new function in the TT455-RT-238 that works with Erik's box.

Erik Prehn · 1st
Indehaver EP teknik
Copenhagen Area, Capital Region, Denmark

See contact info
See connections (26)

Message   More...

https://www.linkedin.com/in/erik-prehn-1097b657/

BANGOLUFSEN TV-STAND

We have added a product to our database called
"BANGOLUFSEN" "TV-STAND" "7-32 7-40" that controls Erik's box:
http://lintronic.dk/supportedproducts.aspx?AudioVideoID=2740

This product will also control a 7-55 tv-stand (same as 7-40).

Please observe, that we have added some "security" features in the TT455-RT-238
firmware for this product.

ON COMMAND
When you activate the ON command, the memory in the TT455-RT-238 stores
the information that the TV-box/stand is now ON and Erik's box and the TV-stand are
now powered up.
You can command the TT455-RT-238 to send the ON command to Eriks' box again
but, the TT455-RT-238 will not be carry it out as long as the tv-box is still ON.
This allows you to send the ON command when you activate the TV mode button on
the B&O remote, goto another mode and return to TV mode without the tv-box receiving
the sam command twice.

OFF COMMAND
When you activate the OFF command, the memory in the TT455-RT-238 stores
the information that the TV-box/stand is now OFF and Erik's box will turn the TV to the
center and power off the TV-box.
You can command the TT455-RT-238 to send the OFF command to Eriks' box again
but the TT455-RT-238 will not be carry it out as long as the tv-box is still OFF.
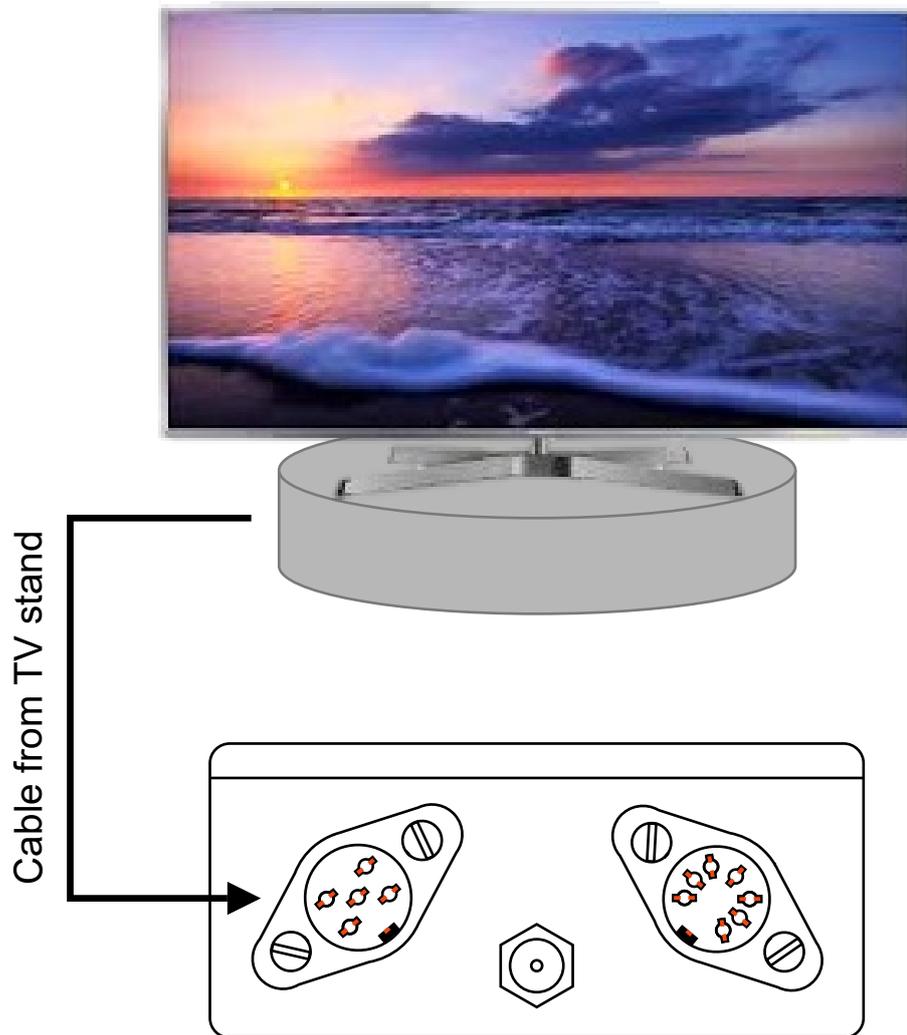
POSITION
To store a position, activate the STORE command and then activate the
POSITION 1/2 or 3.

To turn the TV to 1 of the 3 positions, activate POSITION 1/2 or 3.

Wiring

Cable from TV stand

Special cable
Order from Erik

12 Volt DC

TT455-RT-238
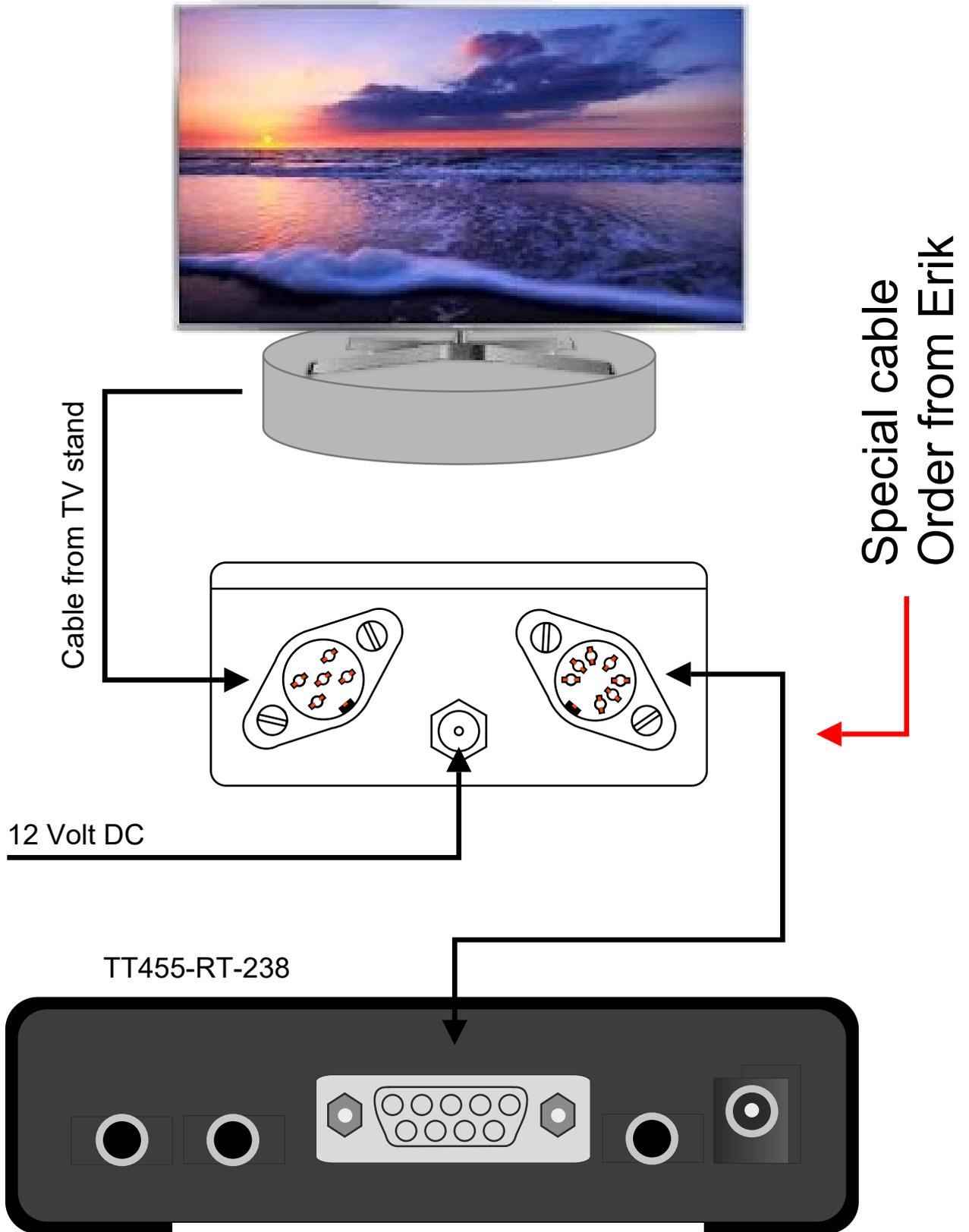
The 5-pin connector
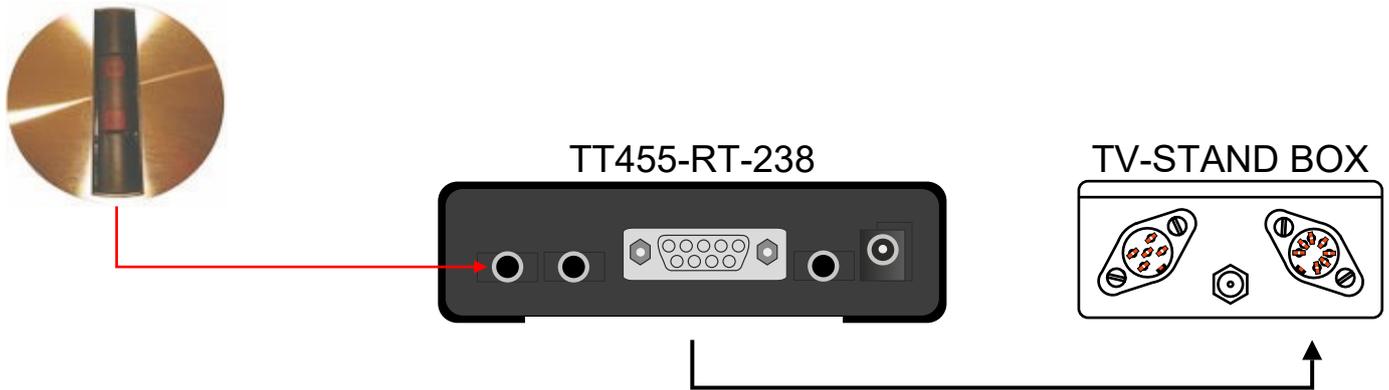

Cable from TV stand

Insert the 5-pin connector
from the TV-stand, into the
5-pin socket on the left.

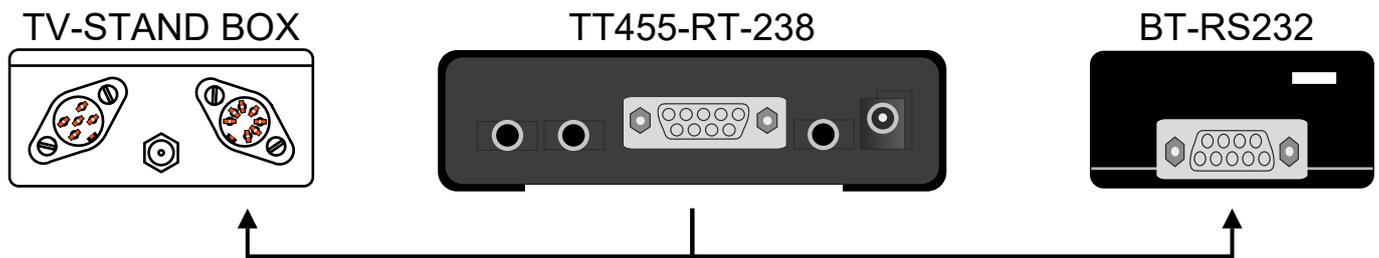See next page about
how to wire the 7-pin
connector.

Erik can supply cables
and connectors if you
do not have or cannot
find.

Cables

If you order cable from Erik, you must advise which TV-stand you have:
7-32 or 7-40 (7-55 is same as 7-40).

TT455-RT-238

TV-STAND BOX

If you control the TT455-RT-238 by InfraRed and connect the TT455-RT-238 directly to the TV-STAND BOX, then see next pages how to make your own cable,
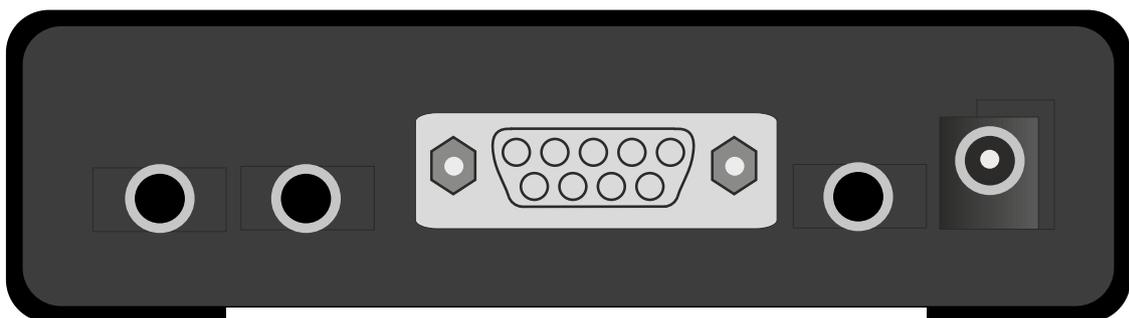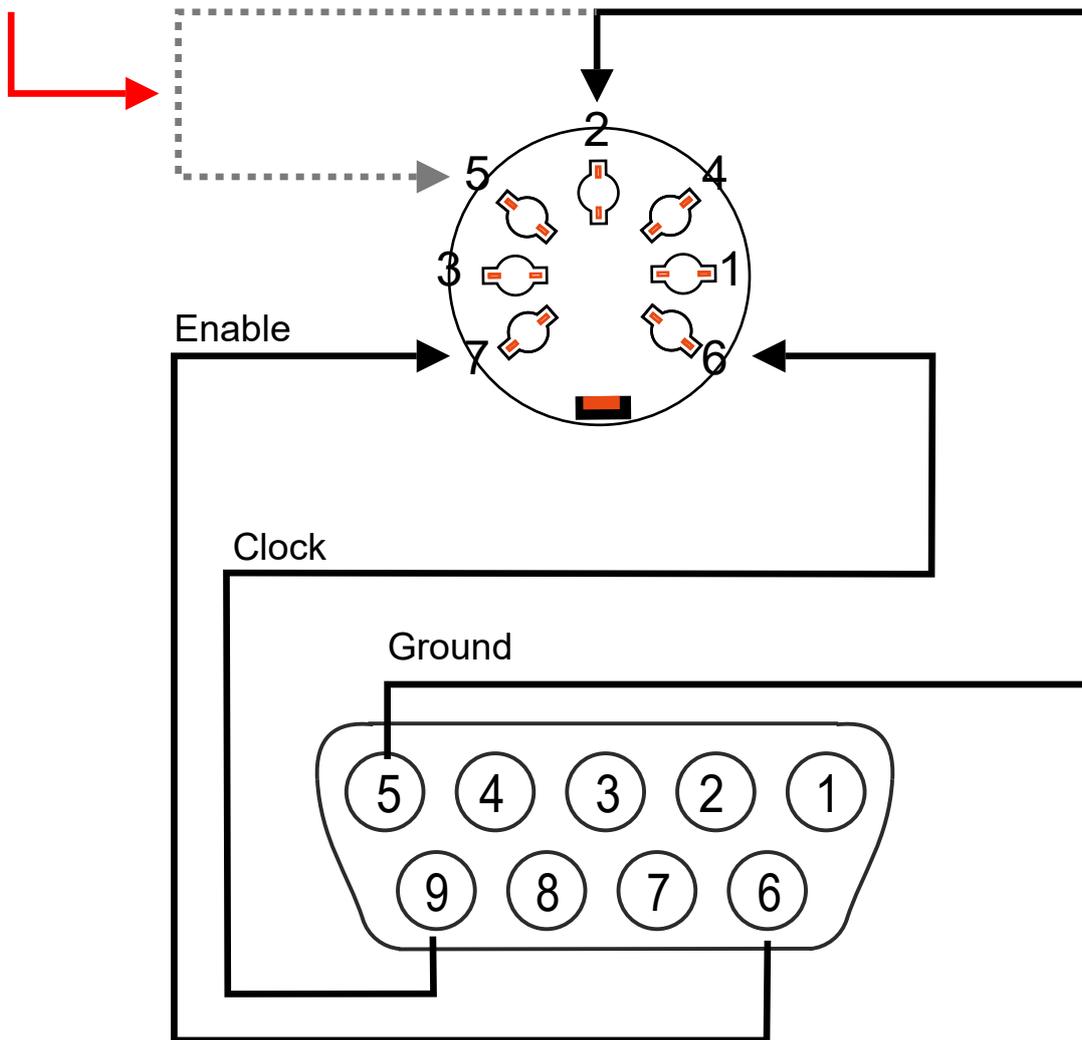or order cable: **TV-32** or **TV-40**

TV-STAND BOX

TT455-RT-238

BT-RS232

If you control the TT455-RT-238 by Bluetooth (BT-RS232) and connect the TT455-RT-238 to the TV-STAND, then see next pages on how to make own cable, or order cable: **TV-32-BT** or **TV-40-BT**.
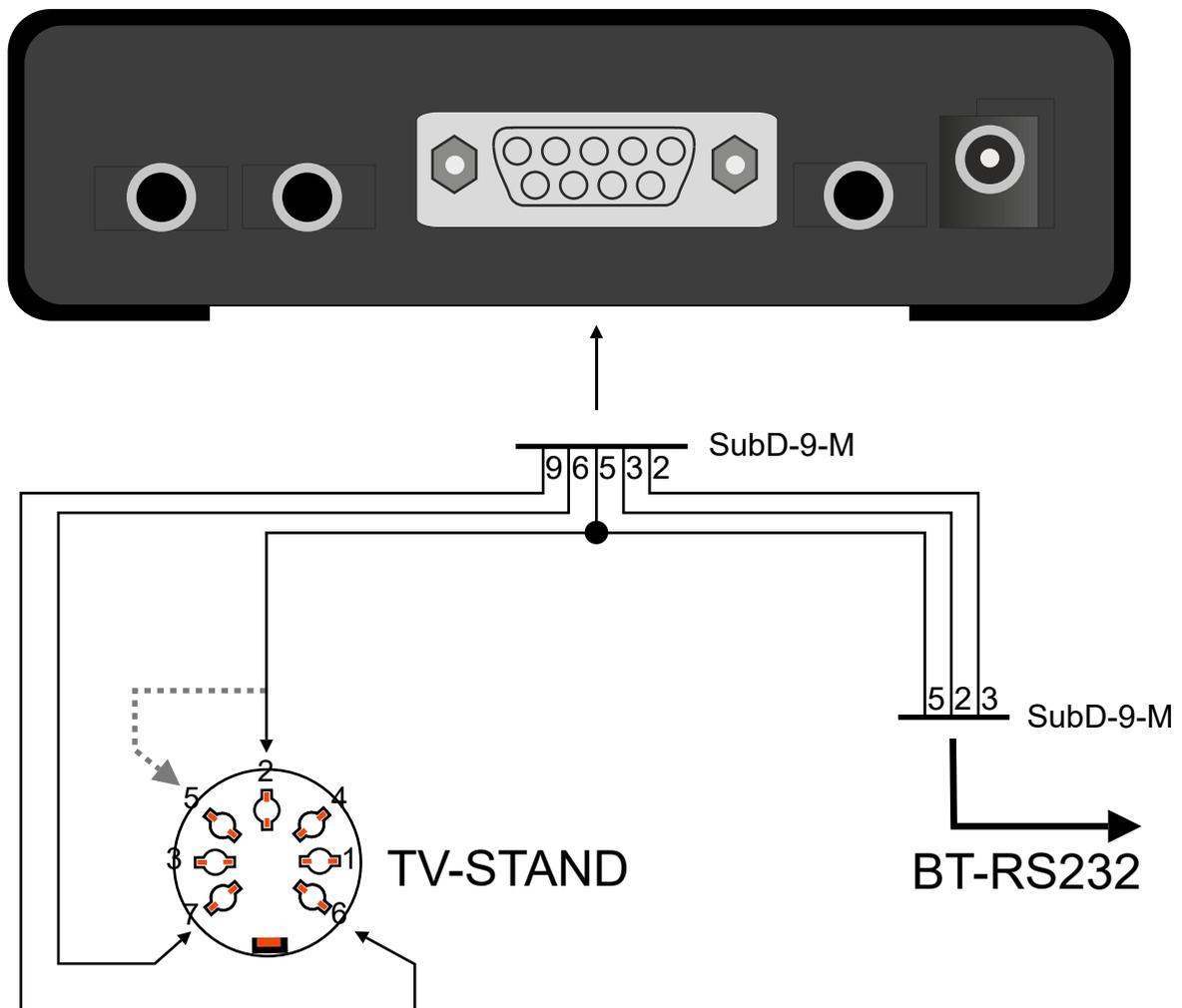
Cable for
TT455-RT-238 and TV-STAND
TV-32 or TV-40

TV-32: Do not connect pin-5 wire for a 7-32 stand
TV-40: Connect pin-5 wire for a 7-40/7-55 stand

Cable for combined
TT455-RT-238, BT-RS232 and TV-STAND
TV-32-BT or TV-40-BT

SubD-9-M

9 6 5 3 2

5 2 3 SubD-9-M

TV-STAND

BT-RS232

TV-32-BT: Do not connect pin-5 wire for a 7-32 stand
TV-40-BT: Connect pin-5 wire for a 7-40/7-55 stand

Memory Map output settings

In the Memory Map, Digital Input/Output, setting:
Make sure the Output 1 and Output 2 are both set to Active Ground.

Pulsing output timing

Enable

Clock

Ground

ON OFF ON OFF ON OFF ON OFF

Clock

Pulse

1 Pulse = 1 x ON + 1 x OFF

ON   timing range: 50 to 65.535 microseconds
OFF   timing range: 50 to 65.535 microseconds

ON timing   = pu1 * 256 + pu2
OFF timing = pa1 * 256 + pa2

See next page.

Pulsing output timing

If you want to create customized pulses, then parameters can be adjusted in Configurators CommandList:
http://lintronic.dk/supportedproducts.aspx?AudioVideoID=2613

id   pa1 pa2 pa3 pa4 pa5 pa6 rpt
769 020 vvv   pu1   pu2   pa1   pa2   001

769 programmable function
020 product id (pulsed output for Bang&Olufsen turning tv stand)
vvv   version, range: 001 - 255
pu1 On time1, range: 000 - 255
pu2 On time2, range: 000 - 255
pa1 Off time1, range: 000 - 255
pa2 Off time2, range: 000 - 255
rpt   Number of pulses, range: 000 - 255

For version 001:
ON time   pu1 * 256 + pu2 (range: 50 to 65.535 microseconds)
Off time   pa1 * 256 + pa2 (range: 50 to 65.535 microseconds)

Example: 50 pulses at 200 Hz
200 Hz = 1 ON/OFF periode of 0,005 sec (5.000 microseconds)
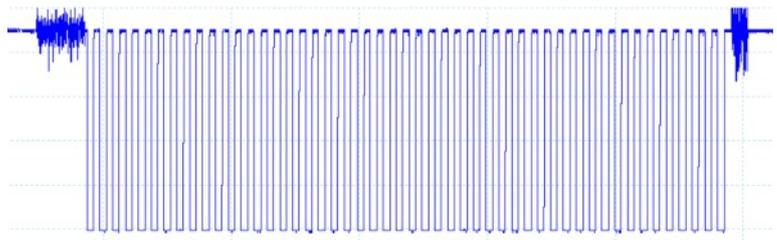At 50% duty-cycle On and Off are both 2.500 microseconds
px1 = 2500 / 256 = 9
px2 = 2500 - (9 * 256) = 196

pu1 = 009 and pa1 = 009
pu2 = 196 and pa2 = 196
rpt   = 050

Pull-up resistor

The TV stand box requires that the pull-up resistors are NOT activated (as default in TT455-RT-238 HW6.1).

Please see the technical manual for the
TT455-RT-238 HARDWARE 6.1 - http://lintronic.dk/HW6.pdf
if you want to activate the pull-up resistors for the digital outputs.

Active ground