

## LinTronic

# TT455-RT-238 Quick guide

Updated 210414 (yymmdd)

## In this guide:

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**Step 2 - CommandList** 

**Step 3 - Memory Map** 

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## Step 1 - Getting started

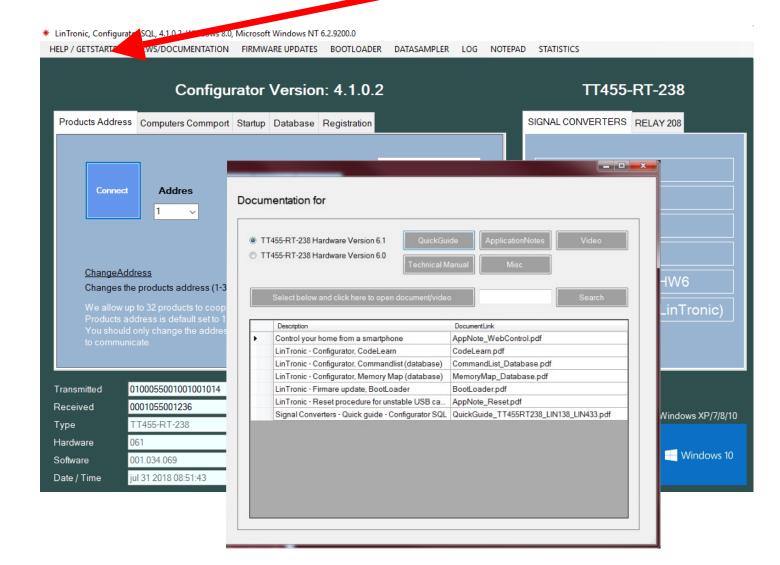
This is a Quick Guide to get you started.

When you have studied this Quick Guide

- we recommend you read it all then use the Configurators

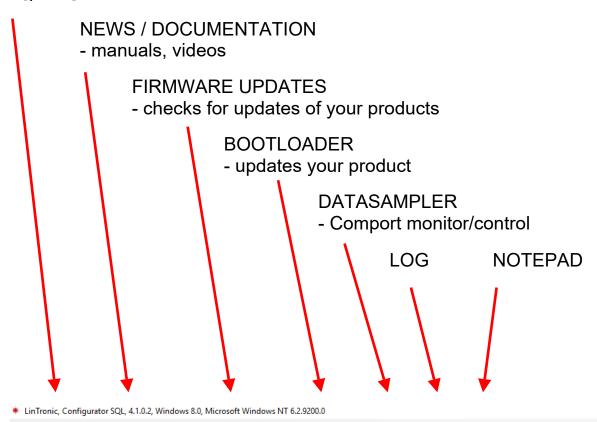
HELP button to find the
manual for the CommandList

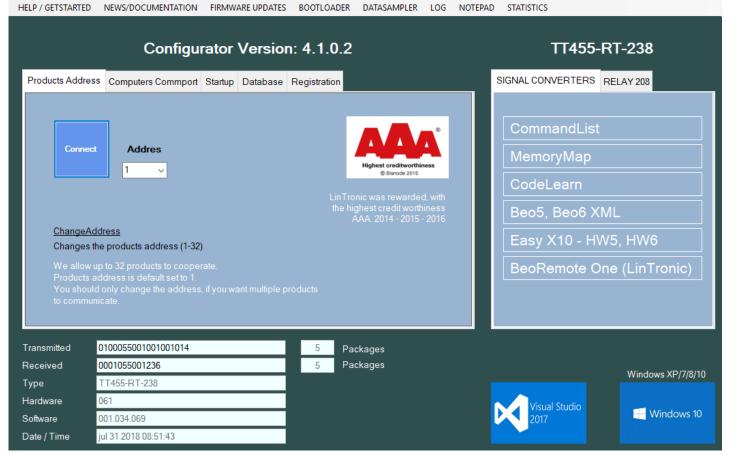
and Memory Map



### HELP / GET STARTED

- QuickGudes





## **IMPORTANT**

## **FIRST**

- 1. **Read this entire document**, so you understand the relation between "CommandList and Memory Map" as well as "Triggers and Actions" We offer separate PDF file for: http://lintronic.dk/TriggersAndActions.pdf
- 2. Download and install latest Configurator: http://lintronic.dk/download.aspx
- 3. You tube: https://www.youtube.com/channel/UCqJ3HTufgmRUfZ6klcGpNgA

Enter your license related email and password from your customer profile. Connect ComCab cables and open comport in Configurator.

- 4. Apply power to your product and check for connection.
- 5. Update firmware if new version is available (always recommended).
- 6. Make sure you understand the difference between the

Step 1, CommandList Step 2, Memory Map

#### USB/RS232

Our products are designed to work as standalone products with the possibility of controlling other products by for example infrared, RS232 or relays.

Therefore a USB connector is not very useful in our products, as USB require that the product is connected to a computer only and we would not be able to control TV's, projectors, light systems, relays, etc. etc.

It is recommended that you also familiarize yourself with our products technical manuals and the dedicated manuals for CommandList and Memory Map.

Best regards, Michael Lindgaard Owner and General Manager

## STEP 1 - COMMANDLIST / ACTIONS

Before you start configuring your TT455-RT-238 to carry out what you want it to do, you need to get hold of the commands (Actions) to be carried out by the TT455-RT-238. These commands (Actions) are collected and tested in the CommandList, so you know that the products you carry on to the memory Map actually work.

In the CommandList you can use commands from the built-in database, which are commands shared by other users uploading their commands to the online database. Therefore, start by updating your database, allowing it download new commands/products from the online database.

If your product is not already covered/supported/shared, then you can copy commands from your own remote control. If commands cannot be decoded, we can build a new decoder.

We kindly ask you to upload these commands to our database later, when you have tested they work.

#### **FAVORITES**

Only products marked as favorite can be controlled in Memory Map.

#### **RS232**

If your product can be controlled by RS232 commands, (more and more screens, projectors, light systems, etc.) then it is recommended to use RS232 instead of InfraRed, as the airborn InfraRed (IR) is much easier disturbed than a hardwired RS232 connection.

RS232 requires a cable from the RS232-connector of the product.

In case you want to control another product by RS232 commands, and we do not have the required commands, then we must embed the commands into the firmware for the product and we provide you with a set of virtual commands which will generate the commands.

#### **RELAYS**

We support both wired and wireless relays, as well as relays controlled by RS232.

### **CUSTOMIZED SOLUTIONS**

We often participate in development of special firmware which will allow our product to carry out your specific tasks. We work fast and our prices are quite attractive.

## **STEP 2 - MEMORY MAP**

Memory Map, is where you design how you want to control your products.

The Memory Map is where you select your Triggers (typically a remote controls buttons/commands) and associate them with the Actions to be carried out.

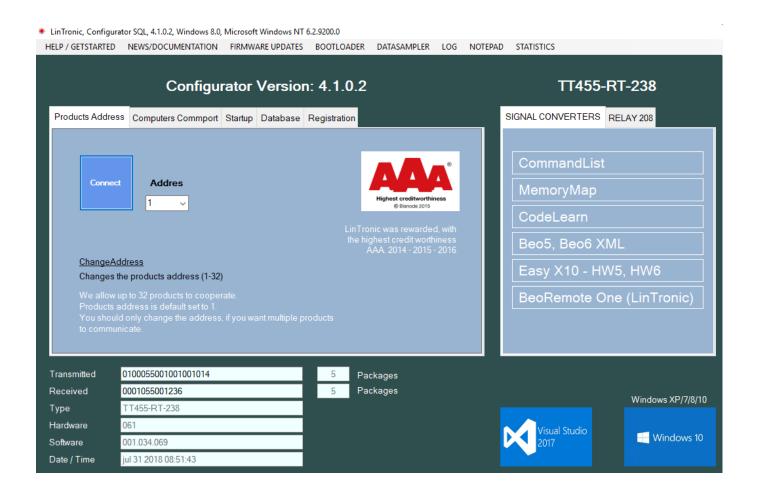


## Download / install the Configurator

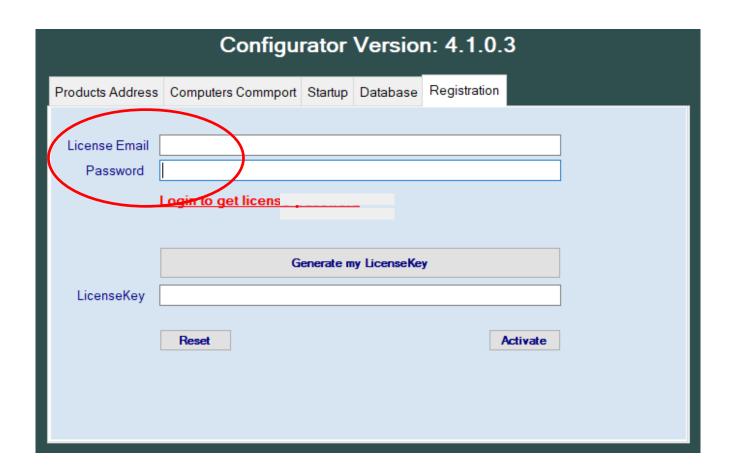
Visit - http://lintronic.dk | Support | Download

or

http://lintronic.dk/download.aspx



## DOWNLOAD/INSTALL



From your online Customer profile: Enter the license related Email and Password. Then generate your LicenseKey.

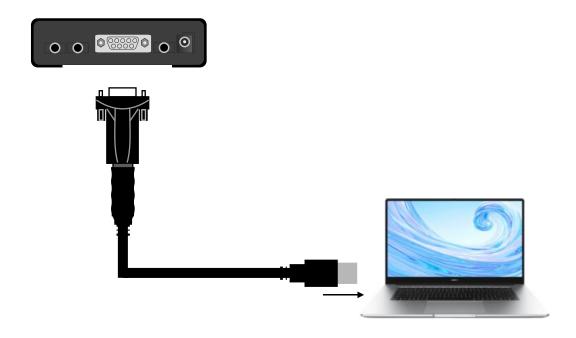
### Please note:

If you later change your email address, then do not forget to edit it in the customer profile.



### ComCab-003

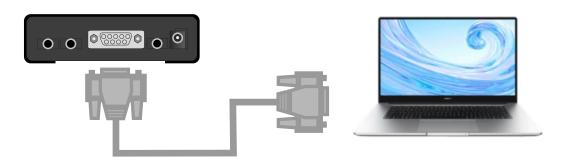
Insert the ComCab-003 into the computer. Windows should automatically detect.





### ComCab-001

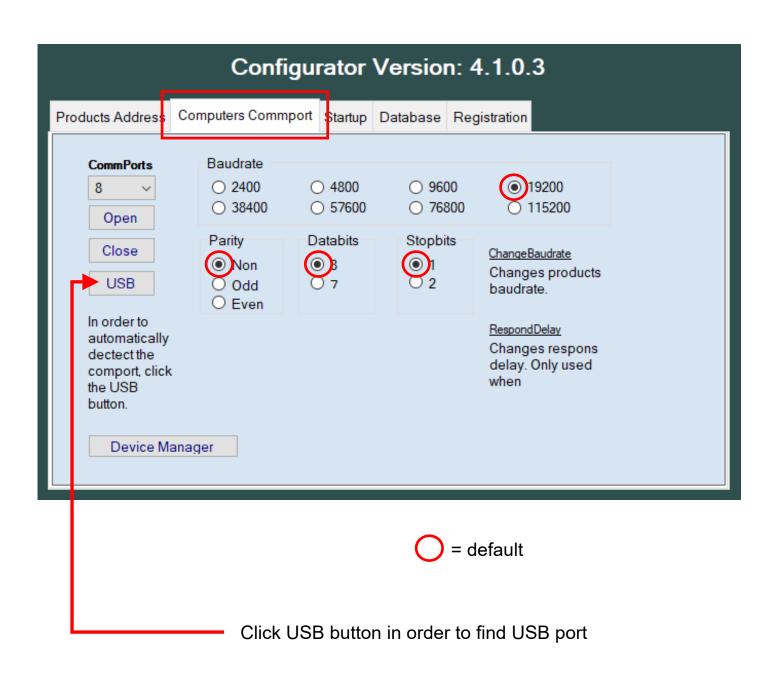
If your computer holds an RS232 comport, then you can connect the TT455-RT-238 to the computers comport using the ComCab-001.

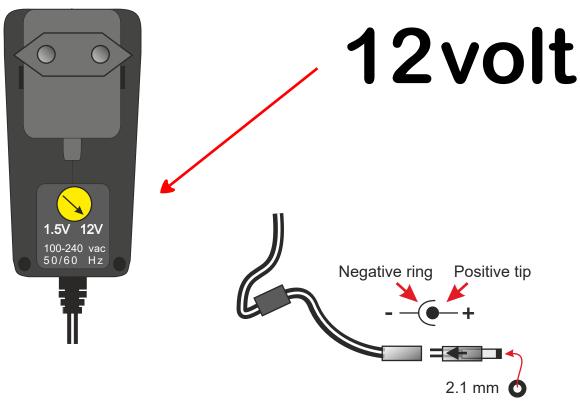




## OPEN THE COMPORT ASSIGNED TO YOUR (USB) CABLE

Do not change default settings.



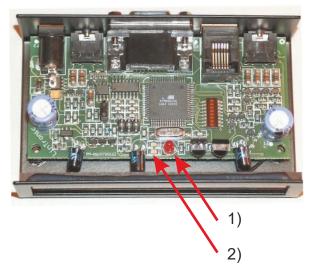




Connect power.

If front LED's do not blink, check power is set for 12 volt. The -238 is protected against wrong polarity.



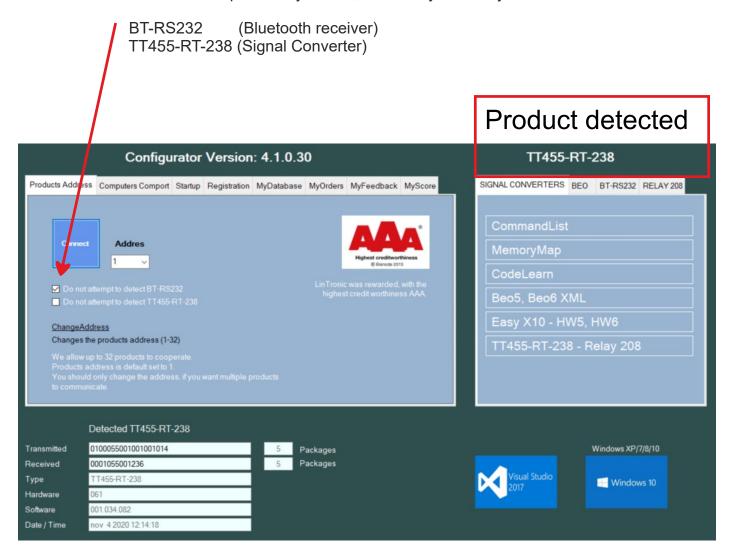


- 1) Front LED should blink for 2 seconds and then turn on for ½ a second.
- 2)Heart beat indicator blinks every second.This indicator is best viewed from the side.



When the right comport is found there is no need to enter the Commport section again. The program will/should remember the settings next time you start up.

Set checkboxes to detect the products you own, or which you want yo check for latest firmware.



If your product is still not detected:

- check power supply
- Products blinks for 2 seconds when power is applied
- If you use our USB-RS232 ComCab-002/003 cable, did you install the driver ? A driver update might be required.

Still no luck? Contact LinTronic for OnlineSupport.

## Step 1 - CommandList

THIS IS WHERE YOU TEST COMMANDS/ACTIONS SO YOU KNOW THEY WORK.

**Update your database** to get the latest commands uploaded by other users.

Select a product closest to one of your products.

If you can find a manufacturer/typenumber close to pour own product, then your product will most likely work on these commands.

- take it easy start by testing a few commands
- start with a TV or a CD player
- test play, stop, power or eject

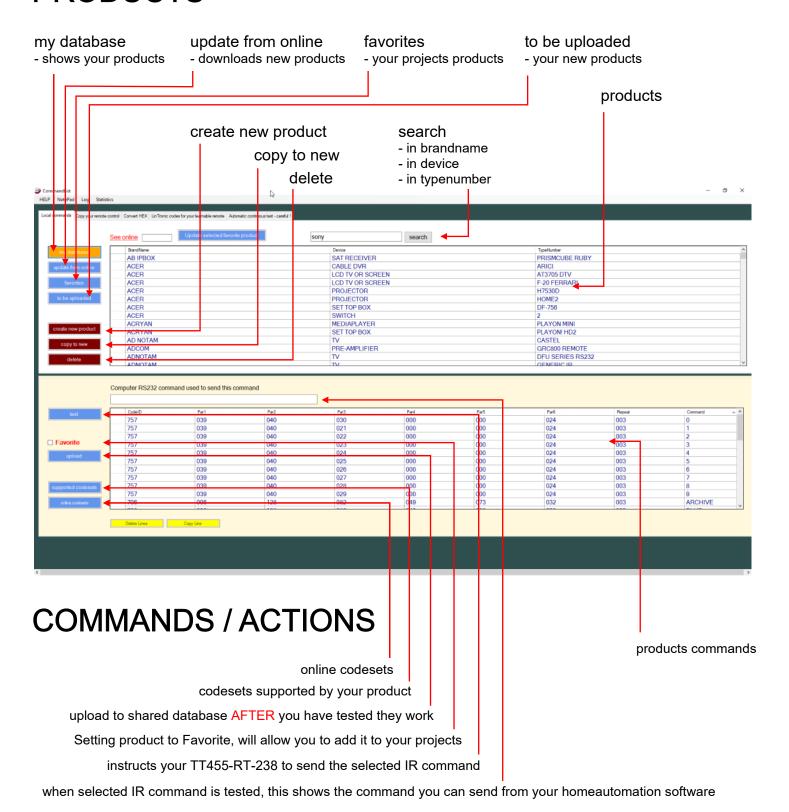
When you know how to handle a few commands you are ready to move on - as everything is done exactly the same way.

Mark a product as Favorite if you want to use it in a configuration project.

NEVER UPLOAD COMMANDS UNLESS YOU HAVE TESTED THEM IN A MEMORY MAP PROJECT AND YOU KNOW THEY THEY WORK. OTHER USERS DEPEND ON YOUR UPLOADS.



## **PRODUCTS**



https//lintronic.



## Read this

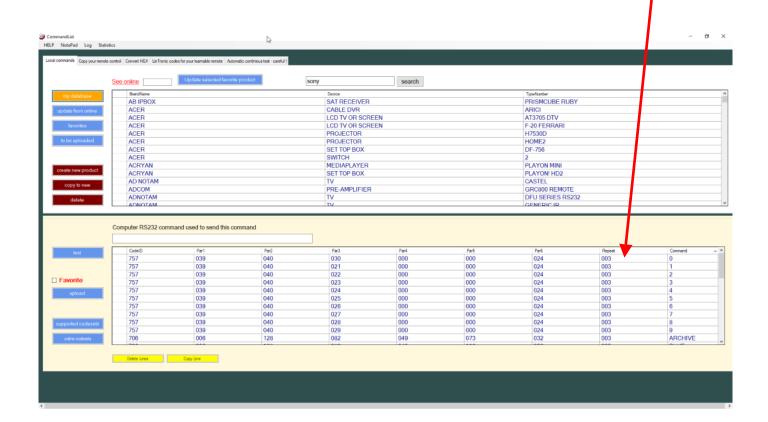
#### REPEATNUMBER

If the product performs the same command three times when tested, then adjust repeatnumber down to 1 (001 - the range is 000 to 255).

### **TYPENUMBER**

If you can use the commands from this product, but your product holds a different typenumber, then please copy the product into a new product and change the typenumber.

See the complete CommandList manual for more details - and how to copy commands from your own remote control.



## Step 3 - MEMORY MAP

THIS IS WHERE YOU CREATE A PROJECT HOLDING YOUR CONFIGURATION.

SPECIFY MODE/TRIGGER - SELECT RELATED ACTION. THAT'S IT.

### START SIMPLE!

Start by controlling a CD player (play, stop, eject) or a TV (power on/off, channels, volume).

When you know how this works - you can virtually do all.

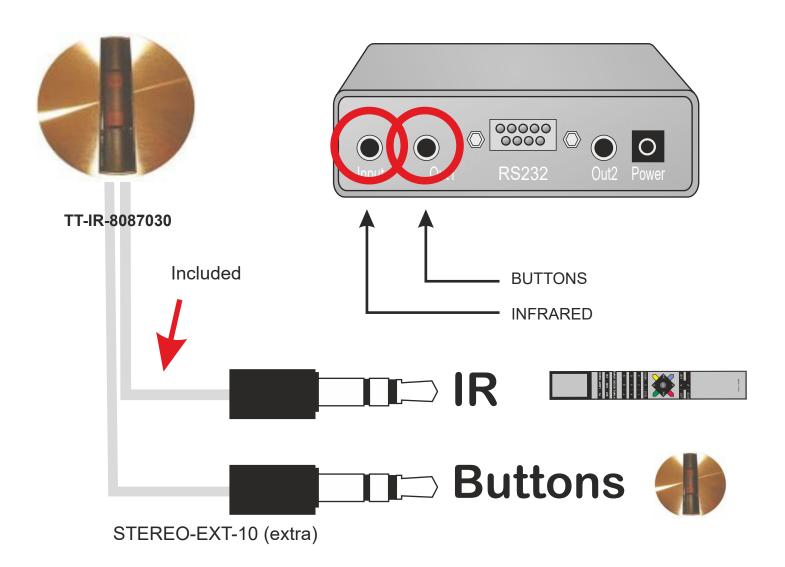
## TT455-RT-238

# If you want to use a B&O infrared remote control as trigger:

You can insert the IR receiver and use the remote to set MODE and TRIGGER.

See manual for the TT-IR-8087030 IR receiver:

http://lintronic.dk/AppNote TTIR8087030.pdf



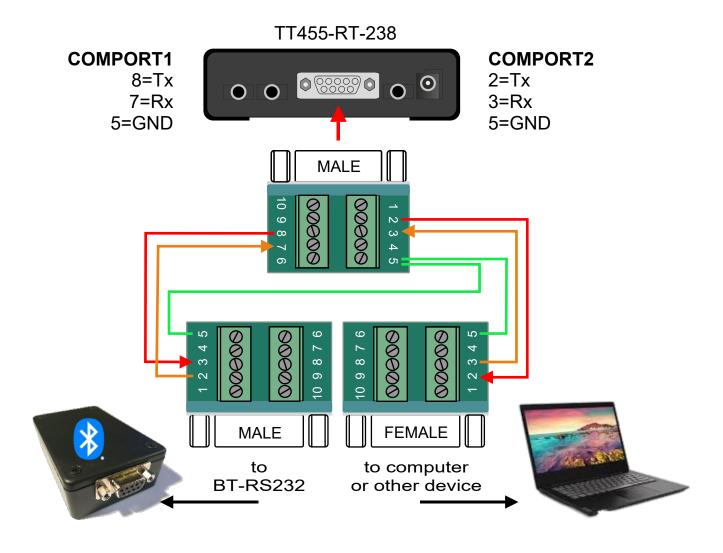
## TT455-RT-238

# If you want to use a B&O bluetooth remote control as trigger:

You can connect the BT-RS232 with the TT455-RT-238 and use the remote to set MODE and TRIGGER.

See manual for the BT-RS232 bluetooth receiver:

<a href="http://lintronic.dk/AppNote">http://lintronic.dk/AppNote</a> BeoRemoteOneBluetooth.pdf



## TRIGGER: LINTRONIC

# If you want to use a remote control sending out LinTronic codes:

For easy configuration, choose LinTronic (codeset 745) as trigger and operate the remote.

Point the remote at the front of the TT455-RT-238 and operate the keys to set Mode and Trigger.

LogiTech Smart can be recommended allowing control from your smartphone.

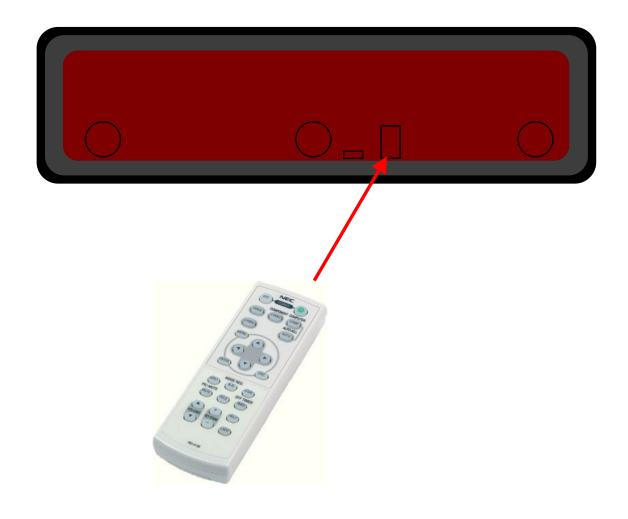
See: http://lintronic.dk/AppNote LogiTech.pdf



# If you want to use a NEC code based remote as trigger:

For easy configuration, choose NEC (codeset 713/716) as trigger and operate the remote.

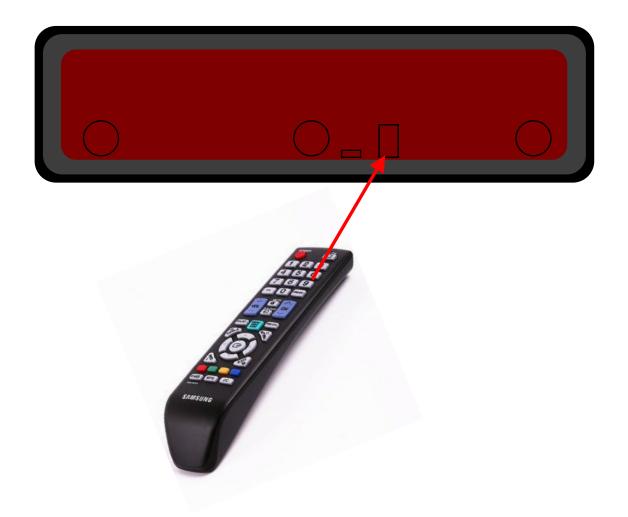
Point the remote at the front of the TT455-RT-238 and operate the keys to set Mode and Trigger.



# If you want to use a SAMSUNG code based remote as trigger:

For easy configuration, choose SAMSUNG (codeset 753) as trigger and operate the remote.

Point the remote at the front of the TT455-RT-238 and operate the keys to set Mode and Trigger.





### MEMORY MAP

This is where you specify how your Triggers activate the Actions.

### TRIGGER (Incoming signals)

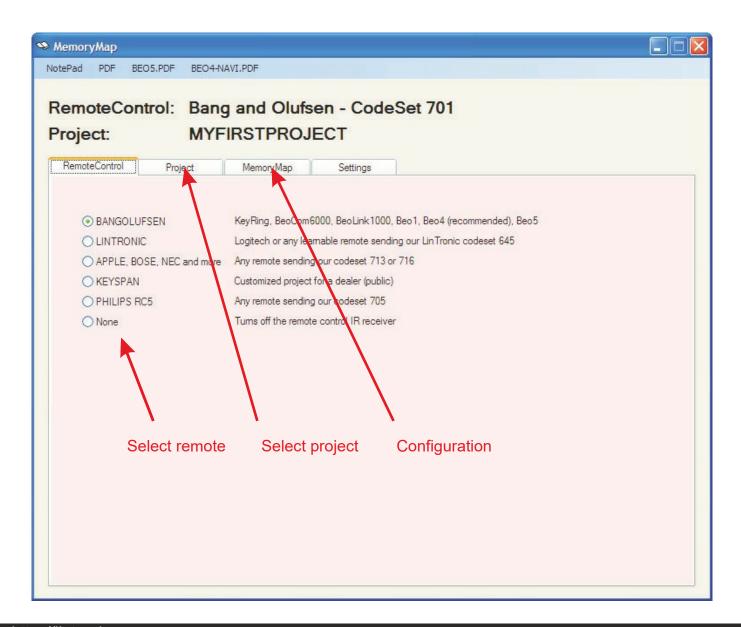
A Trigger can for example be:

- an InfraRed (IR) signal from your remote control (Apple, Bang&Olufsen, Bose, NEC etc.)
- the activation/release of a switch or sensor connected to one of the two digital inputs
- an RS232 command from a computer or another type of controller

### **ACTION (Outgoing signals)**

An Action is for example:

- one or more InfraRed (IR) signals for your products (audio/video, light, curtains, aircon etc.)
- an RS232/RS485 command for your computer, projector, lcd/plasma screen,light, etc.



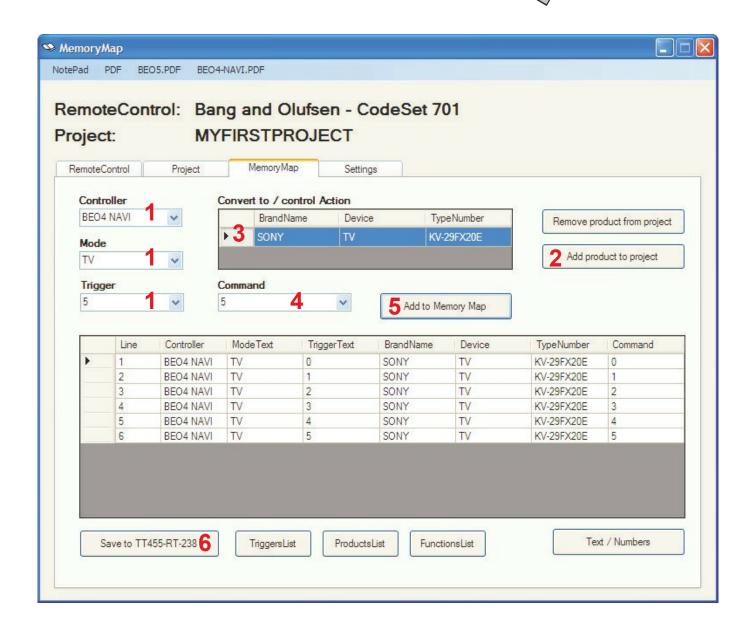


### **MEMORY MAP**

In this example we assume you use a Beo4 NAVI (recommended) to set the Mode/Trigger.

- 1. Point the BEO4 at the TT455-RT-238's external receiver or use the mouse to select: Mode TV Trigger 0
- 2. Add Sony TV KV-F29FX20E to the project.
- 3. Select the product.
- 4. Select the command you want related to TV 0
- 5. Add to Memory Map
  - Continue step 4 and 5 with more commands
- 6. Save to TT455-RT-238

You may now remove the TT455-RT-238 from the computer





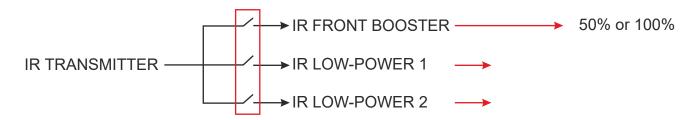
## Ports (InfraRed)

For transmission of infrared signals, the TT455-RT-238 includes a:

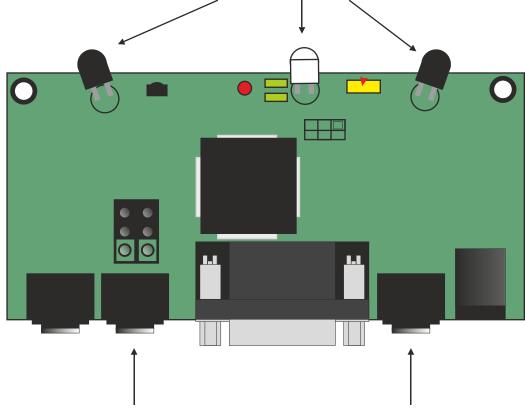
#### PROGRAMMABLE 3-CHANNEL IR DISTRIBUTOR

This means you can specify where you want the infrared signal to be transmitted: On the low-power output 1 and/or on the low-power output 2 and/or on the high-power front booster.

The high-power wide-angle dual-band front IR booster, will reach most if not all products in the same room. If you place the TT455-RT-238 on top of a cabinet, then the low-power outputs can reach products inside the cabinet, by means of the low-power emitters TT-IT-ET02.



## HIGH-POWER WIDE-ANGLE DUAL-BAND IR FRONT BOOSTER



**IR LOW-POWER OUTPUT 2** 

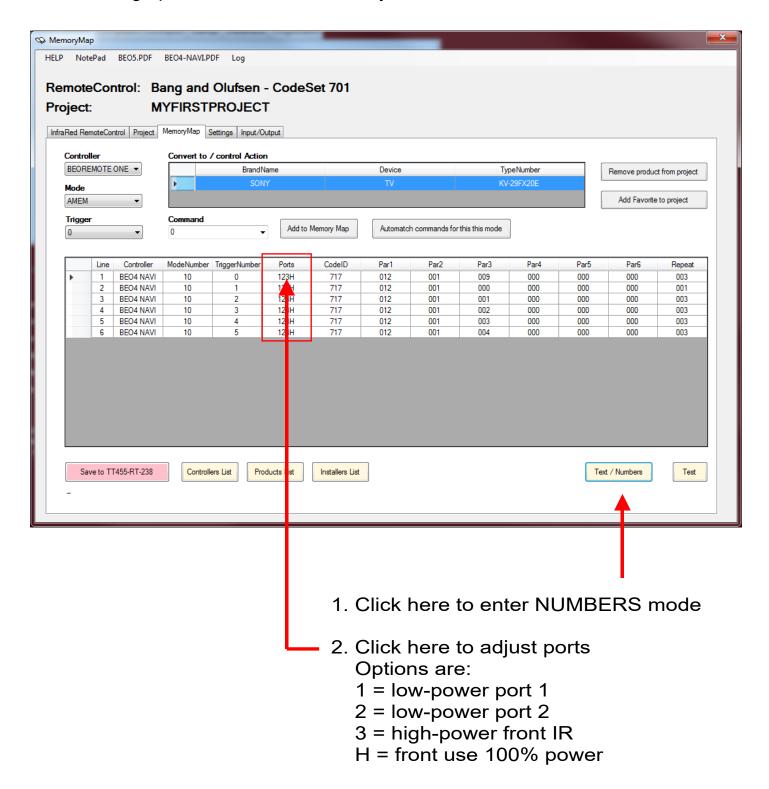
**IR LOW-POWER OUTPUT 1** 



## Ports (InfraRed)

You can specify on which ports you want the IR signal to be transmitted.

You can instruct the signal to be transmitted on any of the two low-power outputs, or on the high-power front booster - or any combination of the three.





## Ports (RS232)

For transmission of RS232 signals, the TT455-RT-238 includes a:

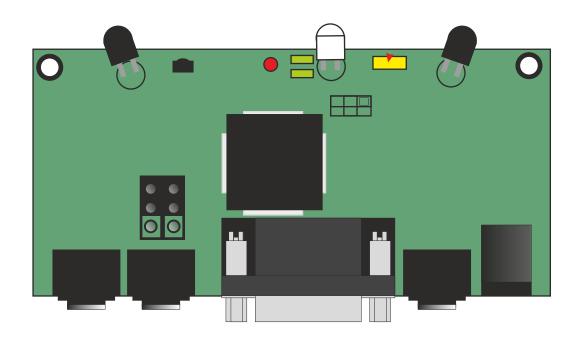
#### PROGRAMMABLE 2-CHANNEL RS232 DISTRIBUTOR

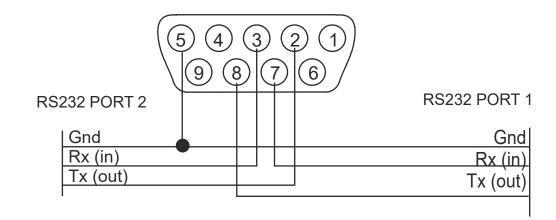
This means you can specify where you want the RS232 signal to be transmitted: On comport 1 (pin 7-8) or on comport 2 (pin 2-3).

You can use both RS232 ports to control your products.

The TT455-RT-238 can be placed on top of a cabinet and you can connect RS232 kables to for example a TV, a projector, an amplifier, etc.

Comport 2 is used by the TT455-RT-238 when communicating with the computer, while being configured. After being configured, you disconnect power to the TT455-RT-238. When repowered the TT455-RT-238 is ready to control/monitor your RS232 product on this comport.



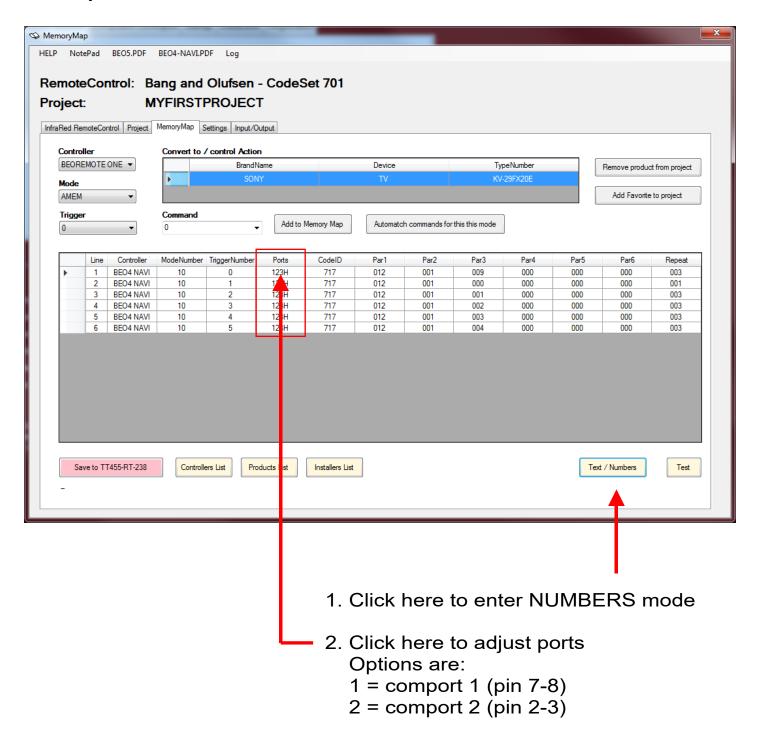




## Ports (RS232)

You can specify on which ports you want the RS232 signal to be transmitted.

You can instruct the signal to be transmitted on any of the two RS232 comports, but only on one of them.



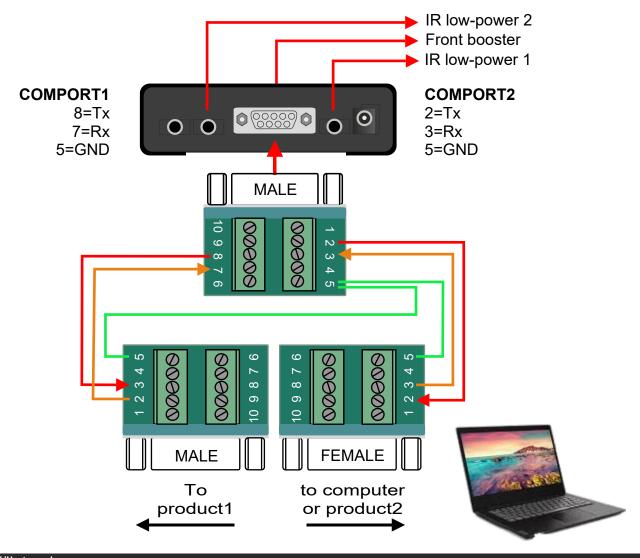
# Testing the Memory Map (infrared and/or RS232)

Infrared signals can be send to the infrared ports as configured. You can send signals to any of the 8 combinations: 1, 2, 1+2, 3, 1+3, 2+3, 1+2+3.

RS232 commands can be send either to comport1 (7/8) or comport2 (2/3). The computer is communicating with the TT455-RT-238 on the TT455-RT-238's comport2.

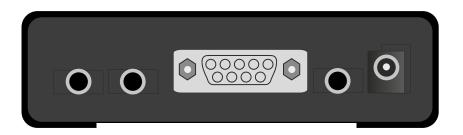
When you ask the TT455-RT-238 to send out RS232 commands on comport 2, then the RS232 command is therefore send back to the computer). The configurator will show you what was received, allowing you to see the commands that will be send to the device connected on comport2, when the TT455-RT-238 is disconnected from the computer.

When you ask the TT455-RT-238 to send out RS232 commands on comport1 then you get nothing returned to the computer, but you can actually control the product on comport1 with this setup.





## Ports (RS232)





The TT455-RT-238 holds 2 comports. You can for example trigger the TT455-RT-238 by bluetooth signals from our BTRS232 on comport1 (pin 7 and 8) and let the TT455-RT-238 communicate with or control another product on comport 2 (pin 2 and 3).

With RS232 breakout boxes like the shown below, you can easily connect 3 products by a few wires and a screwdriver.

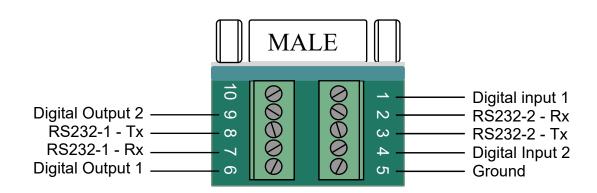
See the TT455-RT-238 technical manual for more instructions about the RS232 ports: http://lintronic.dk/hw6.pdf

Simply explained "get started guide" on RS232:

http://lintronic.dk/rs232.pdf

Example on how to connect our BTRS232 bluetooth receiver, see:

http://lintronic.dk/AppNote\_BeoRemoteOneBluetooth.pdf





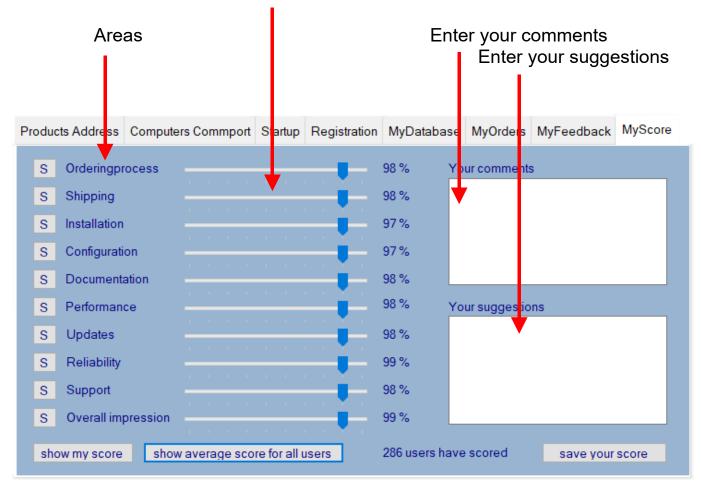
## Step 4 - MyScore

The tab MyScore allows you to let us know what you think of our products and services.

- 1) Set the markers for a value from 10% to 100% for each area.
- 2) Enter your comments and suggestions.
- Save your score.
   You will be asked whether you want to send your feedback to LinTronic.

You can at any time read your score, change it and save again.

Set 10% for worst score and 100% for best score - for each area.





Click the S for each area, to see how other LinTronic users scored the particular area.

For example, click the S left for the Documentation label, which will show you how other users likes the documentation.

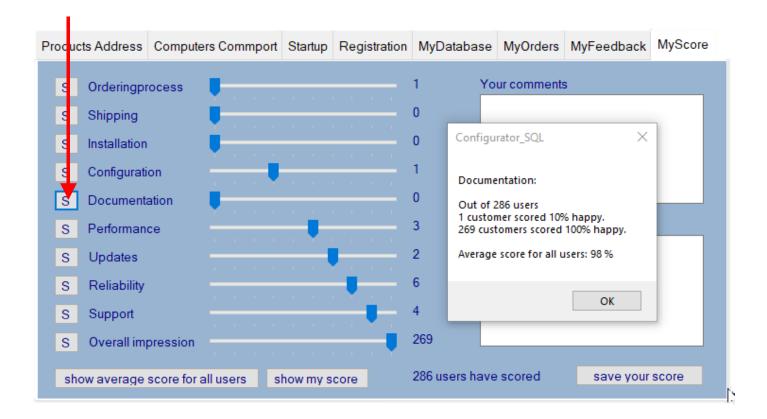
We evaluate the scorings to determine how we can improve in all areas.

#### In this case:

- 1 user scored 10%
- 1 user scored 40%
- 3 users scored 60%
- 2 users scored 70%
- 6 users scored 80%
- 4 users scored 90%
- 269 users scored 100%.

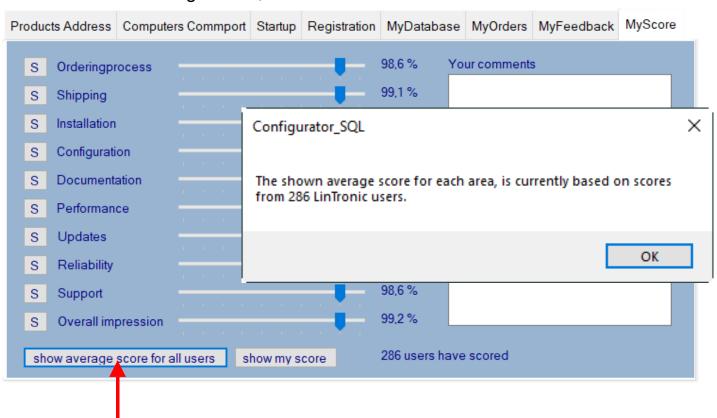
The aveage score for the documentation, for 269 users out of 286 is 98%.

In other words: 94% of the users find the documentation 100% satisfactory.





### Click to see the average score, for all users for all areas:



### See more at: http://lintronic.dk/rating.aspx

Customer satisfaction / Rating / Score	
Overall	98,5 %
In the Configurator program, customers/users can expres We feel confident that you will a	
Ordering process	98,6 %
Shipping	99,0 %
Installation	97,8 %
Configuration	97,4 %
Documentation	98,2 %
Performance	98,8 %
Updates	99,0 %
Reliability	99,3 %
	98,7 %



## Step 5 - MyFeedback

If you have contributed to our online fedback page, then you get a simplified copy in this folder.

In order to help us with your feedback goto: http://lintronic.dk/feedback.aspx

### **Excellent Product, superb support**

Feedback by bomanden1, 16-01-2020 10:14:09

I wanted to upgrade my Beovision 4 with a better monitor, and wished for my Beosystem to control a non Bang & Olufsen sceen
I found Lintronic, and the TT455-RT238 could do the job
Michael help me to configurate the system, very professionel and his support was outstanding and superb.
This produkt is very high quality





## Step 6 - Dealers projects

This new section, allows dealers to share Memory Map projects in the cloud.

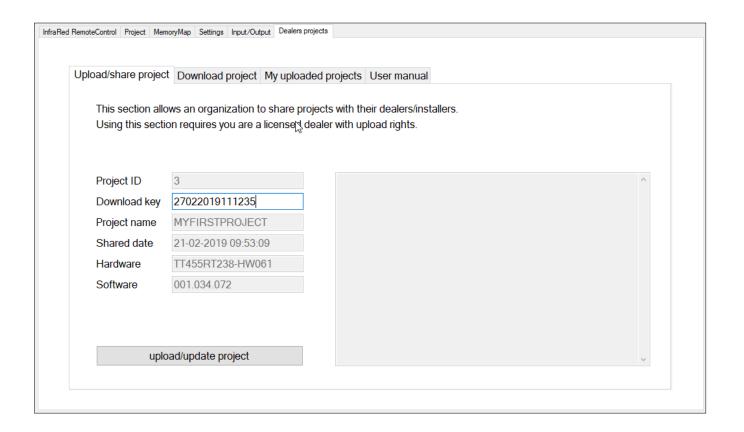
Projects can be uploaded (by administrator) or downloaded (by dealers).

Administrator can change each project and upload new/revised version.

In order to download a project as a dealer, you need to know the Project ID and the Download key.

To ensure everything works as expected at customer/dealer site, downloaded projects cannot be edited.

If this could be intersting for your organisation, please contact LinTronic.

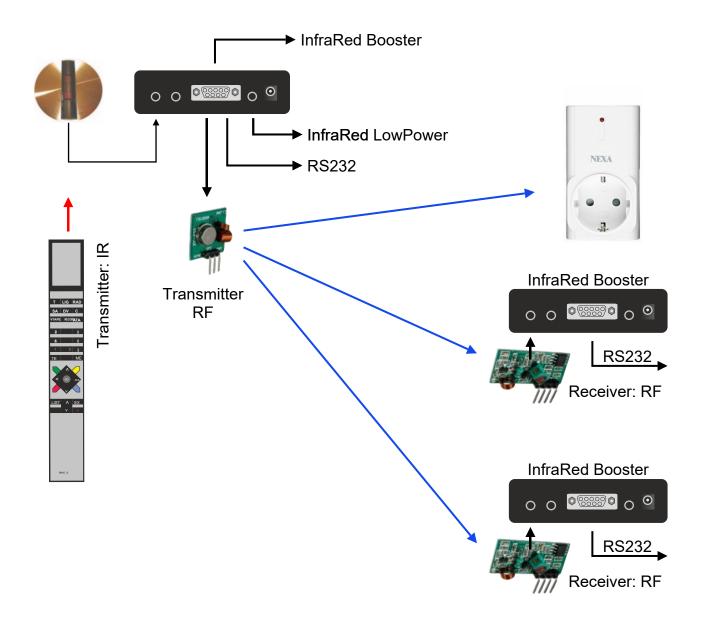




## Step 7 - RadioFrequency

See special Application Note:

http://lintronic.dk/appnote\_RF.pdf



Do not forget to study the technical manual in order to get the most out of your TT455-RT-238:

http://lintronic.dk/hw6.pdf

It can do so much more.

[end of document]