

LinTronic

Short / Long functionality

TT455-RT-238

Beo1, Beo4 SAT, Beo4 DTV, Beo4 Navi

BeoRemote One Infrared

BeoRemote One Bluetooth

Short/Long functionality

This description is about the setting shown below. All the mentioned remotes can be used, even if they do not repeat commands, as we have made a software timer controlled solution in the TT455-RT-238.

The Short/Long filter allows you to:

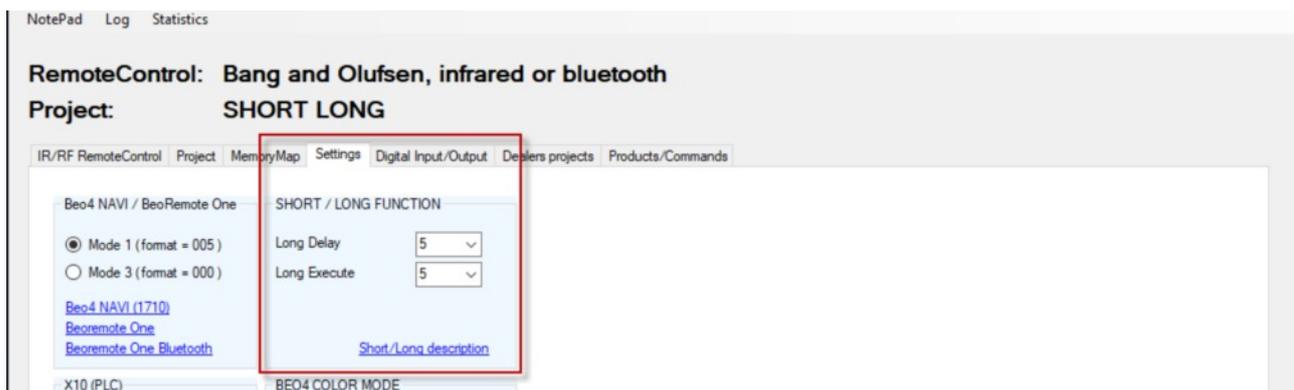
- handle short activations of the remote better
- use different functions for the same button, depending on how long you hold the button activated
- avoid non-intended functionality for short activations

On the next pages, read how the LongDelay and the LongExecute can be used:



When a short activation of a button is detected, the firmware will detect whether a long activation of the same button in the current mode is being used in the project. If NO, then the short command will be executed right away. If YES, then the firmware will ignore the number of long commands specified in the LongDelay value and carry out the the number of long commands specified in the LongExecute value and then ignore the following long commands.

You can use the functionality to ignore short non-intended activations of the remote, or to offer one functionality for a short activation and another functionality for a long activation, or limit how many times a long command can be executed.

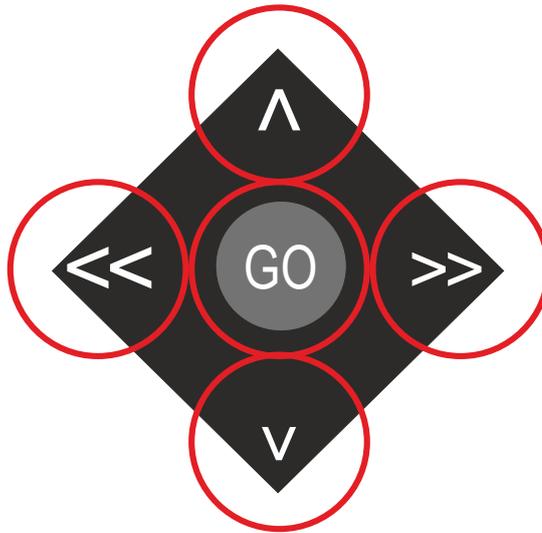


From firmware version 001.034.081

Beo1

These 5 buttons
- Up, Down, Left, Right, Go
all offer a command for a
short activation and a long
activation.

When you activate one of
these 5 buttons
the TT455-RT-238
will detect whether you
produce a short or a long
activation.



Example:

When you activate the Up button - the TT455-RT-238 checks whether you have configured an Action for the Up short command or the Up long command or both.

In case you have configured an Action for the Up short command only, then this Action is carried out immediately.

In case you have configured an Action for the Up long command only, then this Action is carried out upon detection of the long command.

In case you have configured different Actions for the Up short command and the Up long command, then the TT455-RT-238 will carry out the Action for the Up short command if you produced a short activation, or it will carry out the Action for the Up long command if you produced a long activation, but it will not carry out both.



From firmware version 001.034.081

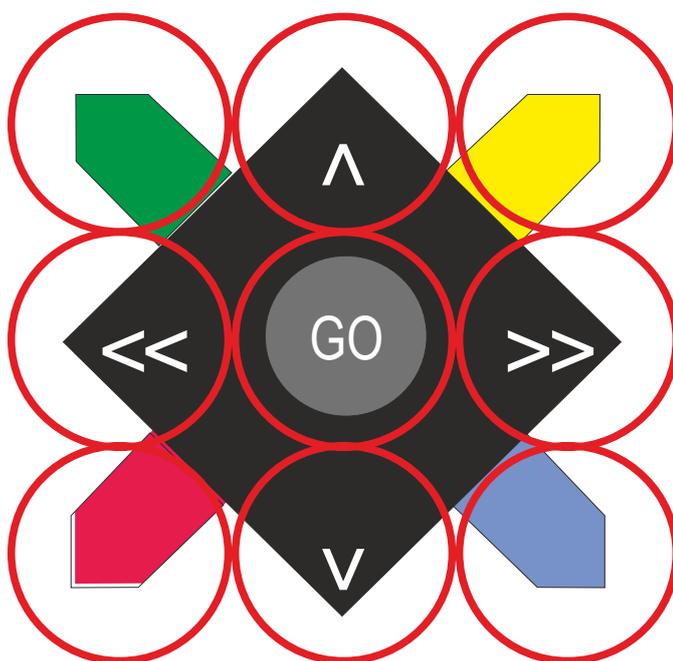
Beo4 SAT/DTV

These 9 buttons

- Red, Green, Yellow, Blue
- Up, Down, Left, Right
- center

all offer a command for a short activation and a long activation.

When you activate one of these 9 buttons the TT455-RT-238 will detect whether you produce a short or a long activation.



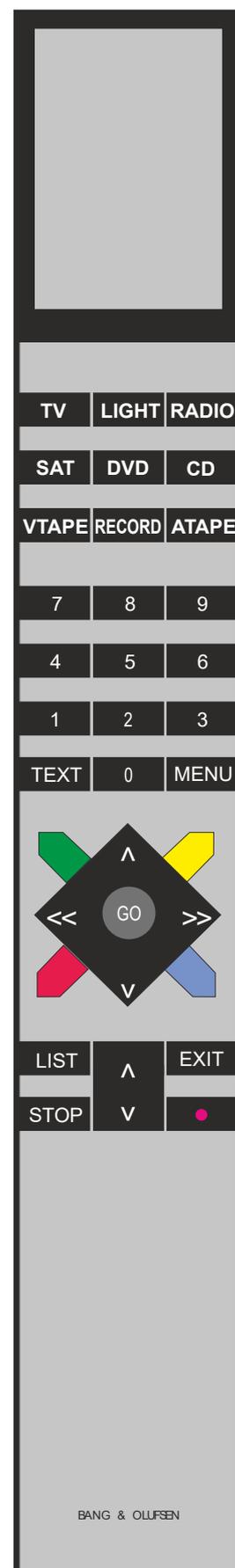
Example:

When you activate the Red button - the TT455-RT-238 checks whether you have configured an Action for the Red short command or the Red long command or both.

In case you have configured an Action for the Red short command only, then this Action is carried out immediately.

In case you have configured an Action for the Red long command only, then this Action is carried out upon detection of the long command.

In case you have configured different Actions for the Red short command and the Red long command, then the TT455-RT-238 will carry out the Action for the Red short command if you produced a short activation, or it will carry out the Action for the Red long command if you produced a long activation, but it will not carry out both.



From firmware version 001.034.081

Beo4 NAVI (1710)

These 13 buttons

- Red, Green, Yellow, Blue
 - Up, Down, Left, Right
 - center
 - center up, center down
 - center left, center right
- all offer a command for a short activation and a long activation.

When you activate one of these 13 buttons the TT455-RT-238 will detect whether you produce a short or a long activation.

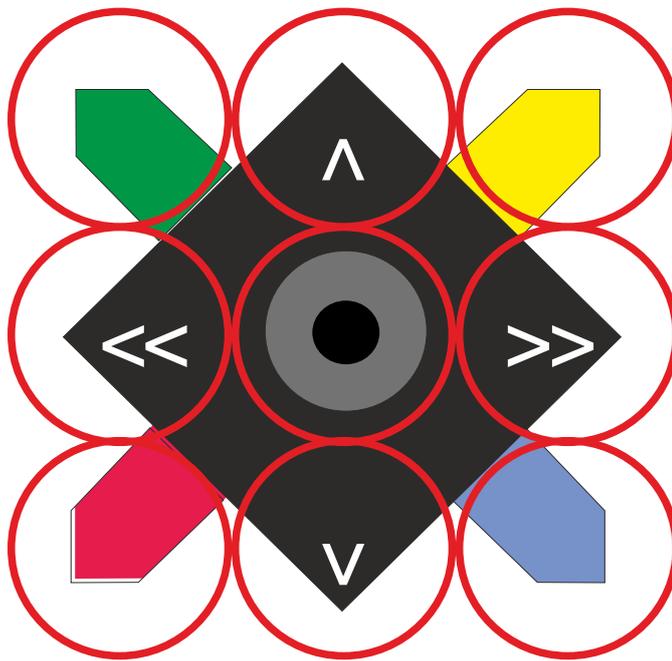
Example:

When you activate the Red button - the TT455-RT-238 checks whether you have configured an Action for the Red short command or the Red long command or both.

In case you have configured an Action for the Red short command only, then this Action is carried out immediately.

In case you have configured an Action for the Red long command only, then this Action is carried out upon detection of the long command.

In case you have configured different Actions for the Red short command and the Red long command, then the TT455-RT-238 will carry out the Action for the Red short command if you produced a short activation, or it will carry out the Action for the Red long command if you produced a long activation, but it will not carry out both.



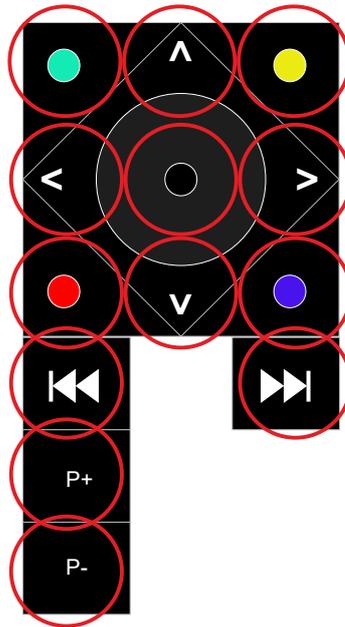
From firmware version 001.034.081

Beoremote One (IR)

These 13 buttons

- Red, Green, Yellow, Blue
 - Up, Down, Left, Right
 - center
 - Skip BW/FW
 - Program Up/Down
- all offer a command for a short activation and a long activation.

When you activate one of these 13 buttons the TT455-RT-238 will detect whether you produce a short or a long activation.



Example:

When you activate the Red button - the TT455-RT-238 checks whether you have configured an Action for the Red short command or the Red long command or both.

In case you have configured an Action for the Red short command only, then this Action is carried out immediately.

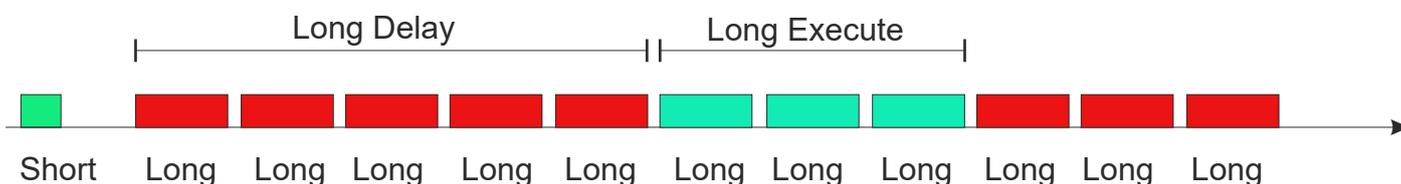
In case you have configured an Action for the Red long command only, then this Action is carried out upon detection of the long command.

In case you have configured different Actions for the Red short command and the Red long command, then the TT455-RT-238 will carry out the Action for the Red short command if you produced a short activation, or it will carry out the Action for the Red long command if you produced a long activation, but it will not carry out both.



How we do it ... for IR remotes

(Beo1, Beo4 SAT/DTV, Beo4 Navi, Beoremote One IR)



The original behaviour of the BEO remote

When you activate any of the shown buttons, the related "short code" is transmitted immediately. Then there is a short delay where the remote detects whether you have released the button. If you still hold the button activated after this delay, then the remote starts sending "long code" continuously.

In case you do not want the "long code" to be transmitted, then it can be a little difficult to release the button quick enough.

LinTronic make the control easier

"Long Delay" specifies how many "long codes" should be received by the TT455-RT-238, before the TT455-RT-238 should consider the received code as a "long code". With a setting of 1, the first long code is accepted. Default is 5 giving a delay of approximately 0.6 second (Maximum is 50).

If you release the button before the "Long Delay" is reached, then the short code will be executed, when you release, even if long codes were already received by the TT455-RT-238.

Note: The shorter the "Long Delay" is, the harder it becomes to activate the "short code" and release again - and avoid that the "long code" Action is executed.

"Long Execute" specifies how many "long codes" Actions should be executed. Default is 1 which fires the Action only once. (Maximum is 250. If set to 250, then the Action is executed until the button is released).

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This feature is a very nice way to filter the short and the long codes, or to ensure that the long code is only activated if you hold the button activated long enough.

You do not need to assign any Actions to the neither the short or the long code.

The Short/Long functionality currently works in these 8 modes:

TV, LIGHT, RADIO, DTV/SAT, DVD, CD, VTAPE/VMEM, ATAPE/AMEM,

Testing you Beo remote (IR)

Use a TT-IR-8087030 as IR receiver receiver and connect it to the TT455-RT-238. Se manual for the TT455-RT-238.

Goto the BEO tab in the Configurator main window.

Activate the remote to see the command/number for each button.
The counter will increase rapidly if the button is repeating the command.



| id | received | mode | mode_text | mode_number | trigger_text | trigger_number |
|-----|-----------------------------|------|-----------|-------------|--------------------|----------------|
| 29 | <0001801000031000000001047> | TV | TV | 000 | PROGRAM DOWN | 031 |
| 135 | <0001801000115000000001050> | TV | TV | 000 | PROGRAM DOWN LONG | 115 |
| 28 | <0001801000030000000001046> | TV | TV | 000 | PROGRAM UP | 030 |
| 134 | <0001801000114000000001049> | TV | TV | 000 | PROGRAM UP LONG | 114 |
| 7 | <0001801000217000000001053> | TV | TV | 000 | RED | 217 |
| 11 | <0001801000121000000001047> | TV | TV | 000 | RED LONG | 121 |
| 16 | <0001801000205000000001055> | TV | TV | 000 | RIGHT | 205 |
| 18 | <0001801000019000000001058> | TV | TV | 000 | SELECT | 019 |
| 24 | <0001801000050000000001048> | TV | TV | 000 | SKIP BACKWARD | 050 |
| 132 | <0001801000112000000001047> | TV | TV | 000 | SKIP BACKWARD LONG | 112 |
| 25 | <0001801000052000000001050> | TV | TV | 000 | SKIP FORWARD | 052 |
| 133 | <0001801000113000000001048> | TV | TV | 000 | SKIP FORWARD LONG | 113 |
| 19 | <0001801000136000000001053> | TV | TV | 000 | TEXT | 136 |
| 2 | <0001801000128000000001054> | TV | TV | 000 | TV | 128 |
| 13 | <0001801000202000000001052> | TV | TV | 000 | UP | 202 |
| 4 | <0001801000133000000001050> | TV | TV | 000 | VMEM/APPLE | 133 |
| 31 | <0001801000100000000001044> | TV | TV | 000 | VOLUME DOWN | 100 |
| 30 | <0001801000096000000001058> | TV | TV | 000 | VOLUME UP | 096 |
| 126 | <0001801000140000000001048> | TV | TV | 000 | WEBMEDIA | 140 |
| 6 | <0001801000212000000001048> | TV | TV | 000 | YELLOW | 212 |
| 10 | <0001801000119000000001054> | TV | TV | 000 | YELLOW LONG | 119 |
| 127 | <0001801000075000000001055> | TV | TV | 000 | YOUTUBE | 075 |

From firmware version 001.034.081

Beoremote One (BT)

For these 15 buttons
- Red, Green, Yellow, Blue
- Up, Down, Left, Right
- Center (Select/OK)
- Skip Forward/Backward
- Program Up/Down
- Volume Up/Down
we have added a
command for a short
activation and a long
activation.

When you activate one of
these 15 buttons
the TT455-RT-238
will detect whether you
produce a short or a long
activation.

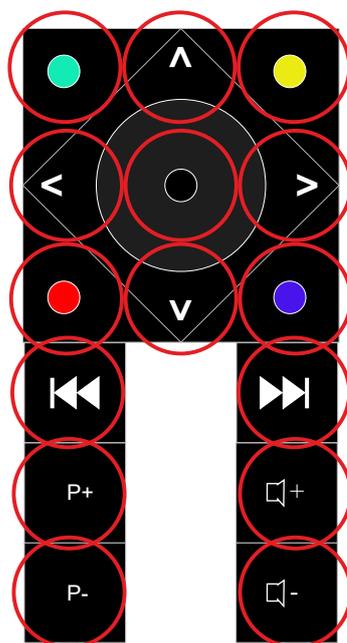
Example:

When you activate the Red button - the TT455-RT-238 checks whether you have configured an Action for the Red short command or the Red long command or both.

In case you have configured an Action for the Red short command only, then this Action is carried out immediately.

In case you have configured an Action for the Red long command only, then this Action is carried out if you hold the Red button activated.

In case you have configured different Actions for the Red short command and the Red long command, then the TT455-RT-238 will carry out the Action for the Red short command if you produced a short activation, or it will carry out the Action for the Red long command if you produced a long activation, but it will not carry out both.



How we do it ... for BT remotes

(Beoremote One Bluetooth)



The original behaviour of the BEO remote

Some Beoremote One BT remotes, are repeating some of the buttons and some Beoremote One BT remotes are not repeating some of the buttons. You can test your remote in the Configurator.

Regardless of which type of remote you have, the new Short/Long functionality will expand the functionality of the Beoremote One BT quite a bit. Up to 90 new actions.

LinTronic make the control easier

When you activate any of the shown buttons, the "short" command is transmitted. The TT455-RT-238 will start a timer and detect whether you have released the button when the timer runs out. If you have released the button, then the "short" command is executed. If you still hold the button activated after this delay, then the TT455-RT-238 firmware will automatically assign a "long code" function even if your remote does not repeat the button.

The "Long Delay" number specifies how many "long codes" should be "detected" by the TT455-RT-238, before the TT455-RT-238 should execute "long codes". With a setting of 1, the first long code is accepted. Default is 5 giving a delay of approximately 0.6 second (Maximum is 50).

If you release the button before the "Long Delay" is reached, then the short code will be executed, when you release.

"Long Execute" specifies how many "long codes" Actions should be executed. Default is 1 which fires the Action only once. (Maximum is 250. If set to 250, then the Action is repeatedly executed until the button is released.

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This feature is a very nice way to filter the short and the long codes, or to ensure that the long code is only activated if you hold the button activated long enough.

You do not need to assign any Actions to the neither the short or the long code.

The Short/Long functionality currently works in these 6 modes:

TV, MUSIC, USER1, USER2, USER3, USER4

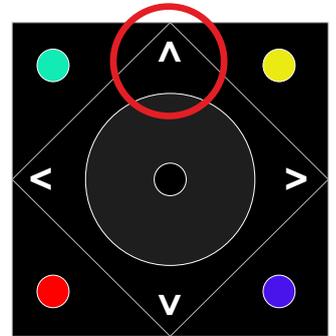
Testing you Beoremote One (BT)

Use a BT-RS232 as bluetooth receiver and connect it to the TT455-RT-238. Se manual for the BT-RS232.

Goto the BT-RS232 tab in the Configurator main window.

Activate and hold the UP button. The Beoremote One BT comes in different versions (repeating or not repeating). If the counter increases rapidly, then your remote is repeating.

Regardless of whether the remote is repeating or not, see the Release, Short and Long indication to learn the timing between a short code and a long code.



MANUAL LOG

Not paired Pairing Paired, not connected Paired and connected

Received at: 19:24:47.7827690

Count: 34

On/Off duration (ms): 763

Received: <9932037000002D0000151>

Bootloader: 050

Firmware: 101 Hardware: 01

Serial number: 200101

Pairing name: BT-RS232

New pairing name:

| trigger_code | trigger_text | trigger_number |
|--------------|--------------|----------------|
| 00.2D.9D.00 | PROGRAM DOWN | 157 |
| 00.2D.9C.00 | PROGRAM UP | 156 |
| 00.31.01.00 | RED | 1 |
| 00.31.00.00 | RELEASE | 0 |
| 00.2D.00.00 | RELEASE | 0 |
| 00.2D.24.02 | RETURN | 36 |
| 00.2D.45.00 | RIGHT | 69 |
| 00.2D.30.00 | STANDBY | 48 |
| 00.31.13.00 | TV | 19 |
| 00.2D.42.00 | UP | 66 |
| 00.31.12.00 | USER1 | 18 |
| 00.31.14.00 | USER2 | 20 |
| 00.31.0F.00 | USER3 | 15 |
| 00.31.11.00 | USER4 | 17 |
| 00.2D.EA.00 | VOLUME DOWN | 234 |
| 00.2D.E9.00 | VOLUME UP | 233 |
| 00.31.03.00 | YELLOW | 3 |

Release Short Long

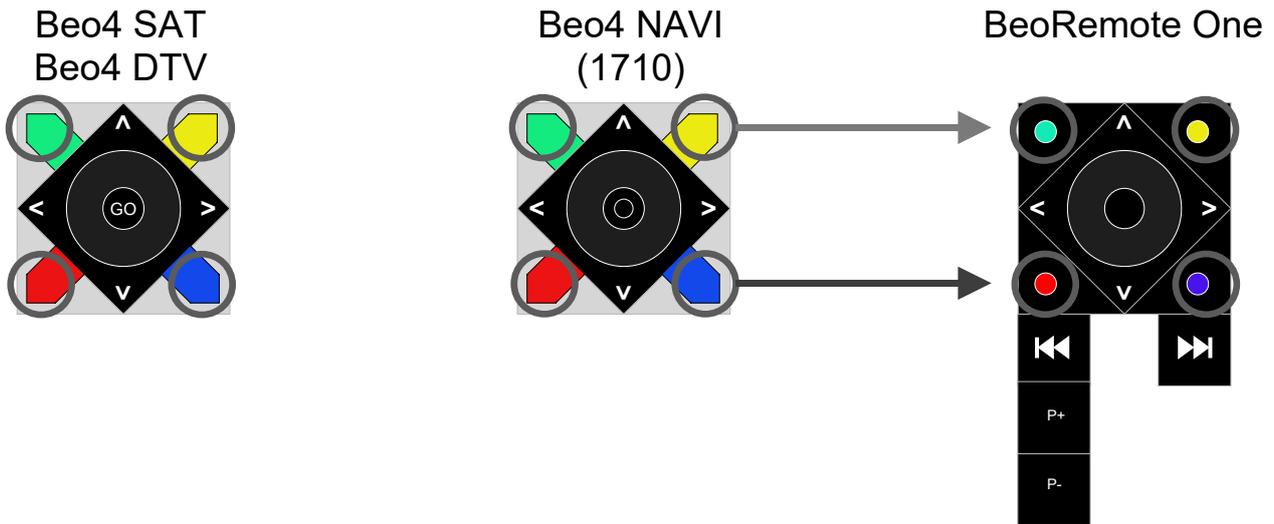
Bluetooth code:

Save to local database

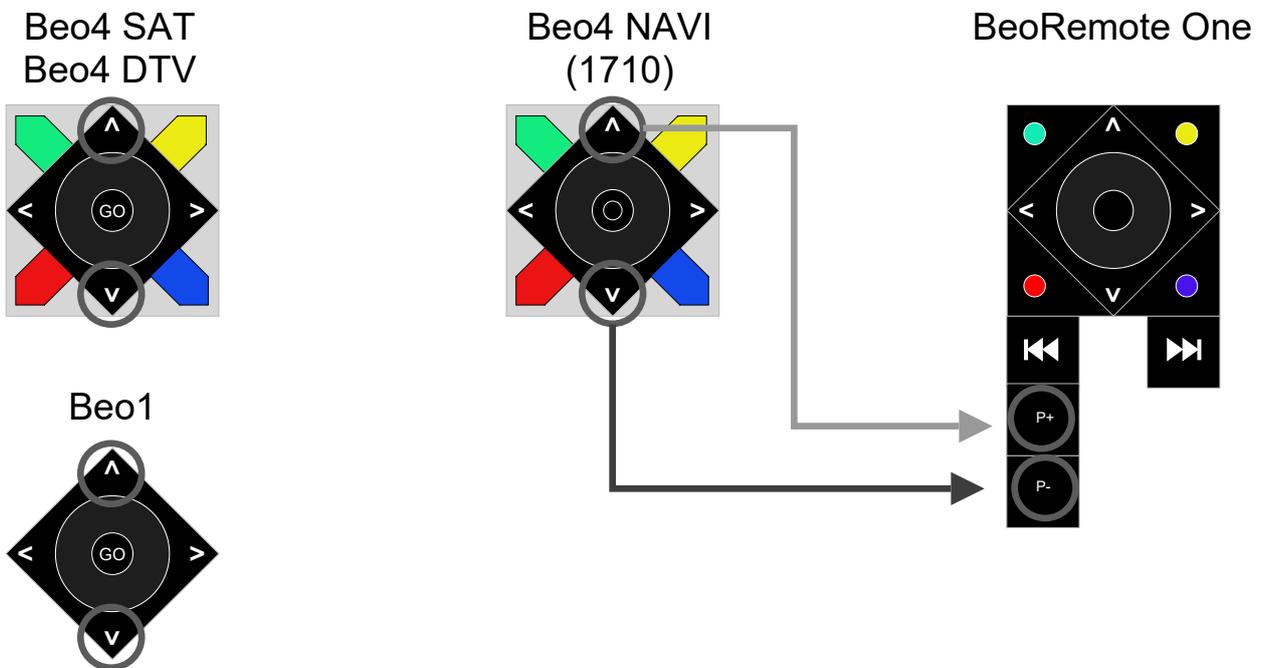
From Beo4 to Beo4Navi to BeoreMOTE One.

Let me show you how LinTronic handled the evolution of the B&O remotes.

All colors (Green, Yellow, Red and Blue and their long-push commands) are the same for all remotes.

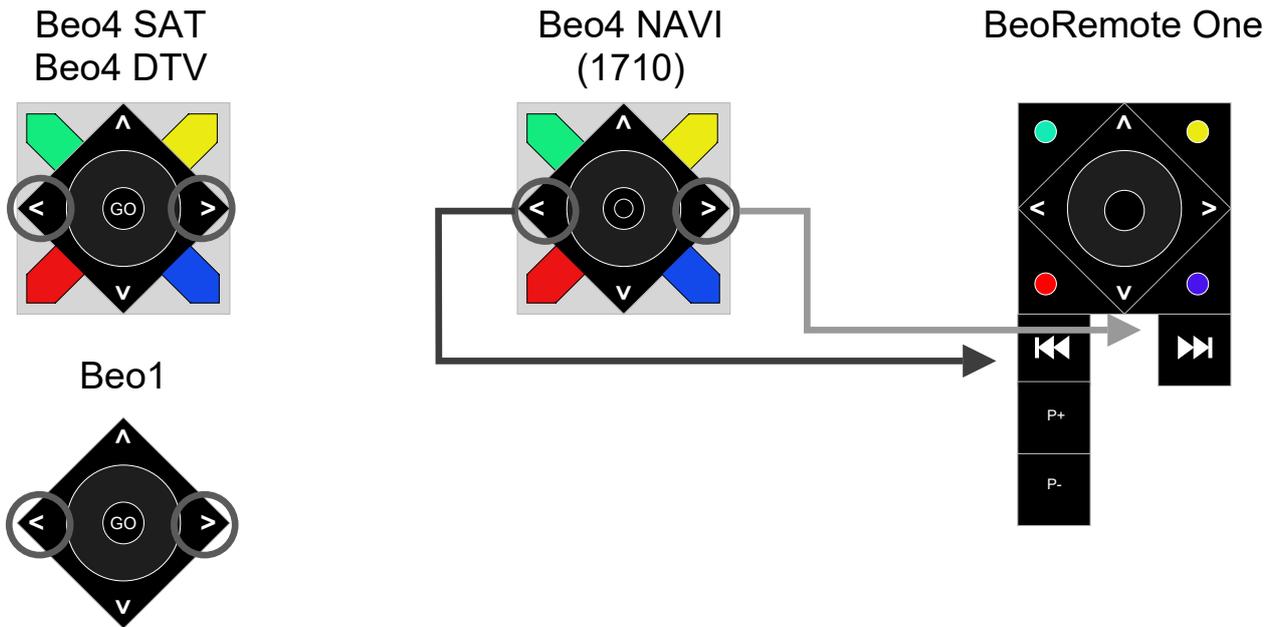


Originally the Up/Down were Program Up and Program Down so we have moved the the Beo4 Up/Down to the Program Up/Down for the BeoreMOTE One.

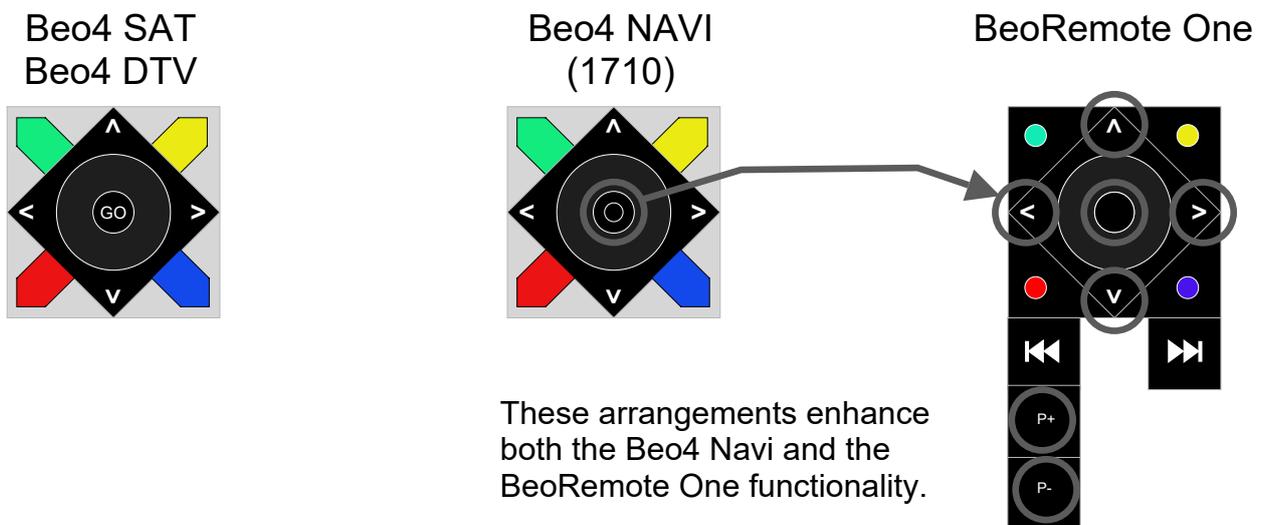


From Beo4 to Beo4Navi to BeoreMOTE One.

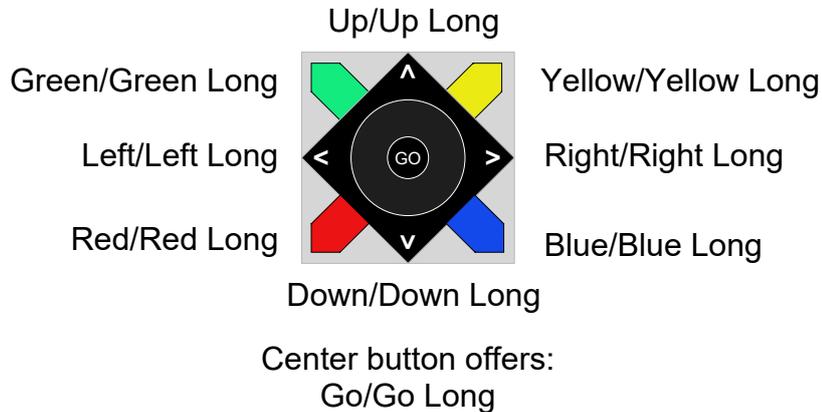
Originally the Left and Right were Skip Backward and Skip Forward so we have moved the the Beo4 Left/Right to the Skip functions for the BeoreMOTE One.



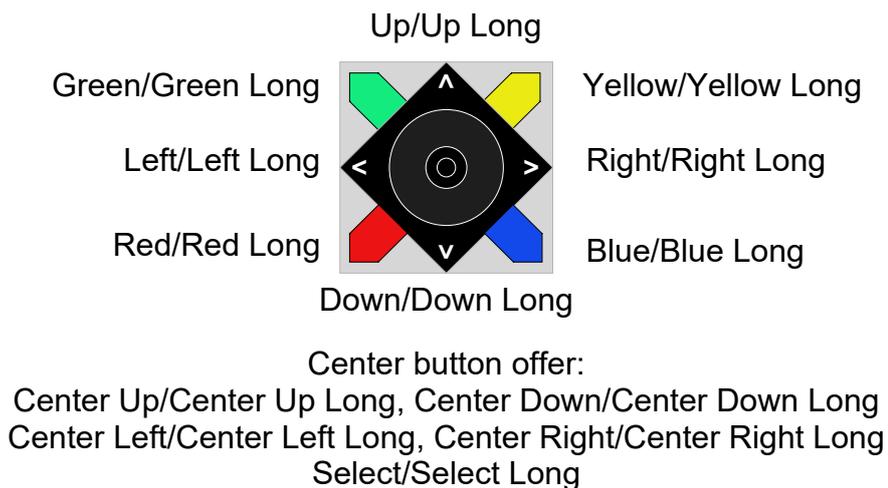
The center functions from the Beo4 NAVI (Up, Down, Left, Right, Select) are moved to the Up, Down, Left, Right, Select functions of the BeoreMOTE One.



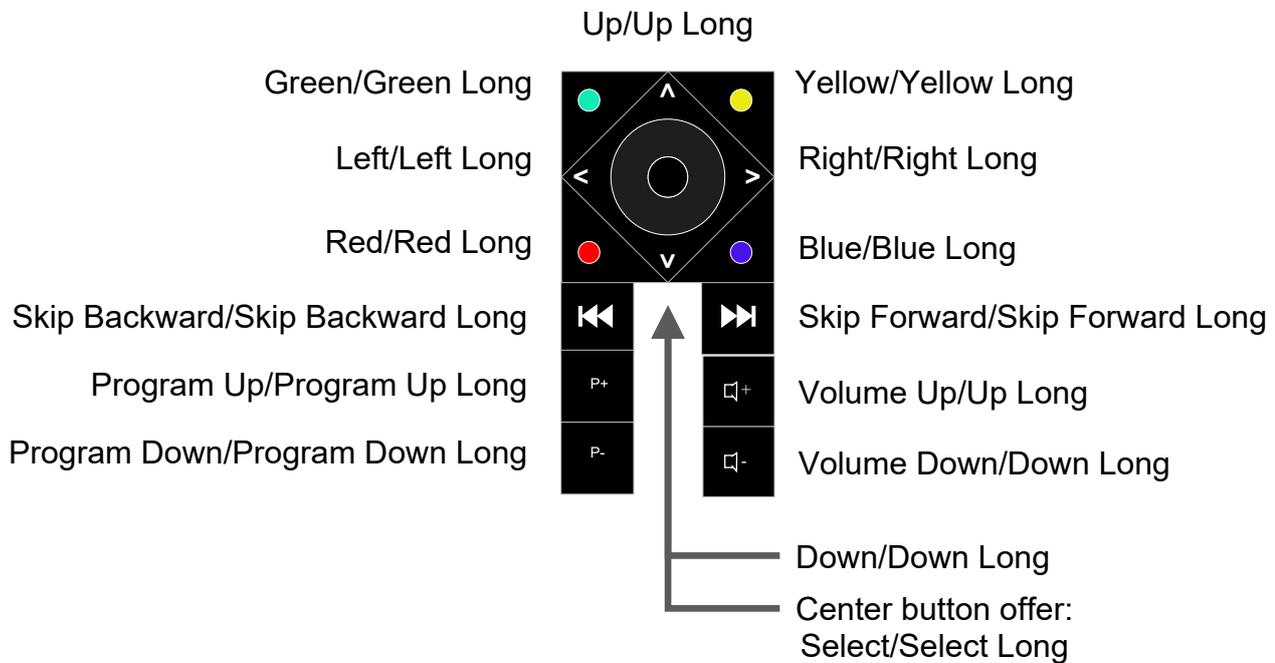
The Beo4 SAT/DTV will offer the following short/long functions:



The Beo4 NAVI will offer the following short/long functions:



The BeoRemote One will offer the following short/long functions:



We do not mention Beo5/Beo6 on purpose, as not many customers use them for our products.

Beo5/Beo6 require special programming from a computer.