

hospitality BLE remote control user guide

Telus

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# revision history

version	creation date	author	comments
V1	2017-05-26	Ralph Leblhuber	initial version
V2	2017-08-04	Ralph Leblhuber	updated references

# product version

type	description	firmware version	comments
2503-539	BLE2IR dongle	0.2.1	sticker on back side: model 2503A FCC ID: XYN503A IC: 8748A-503A
2759-515	Telus hospitality	1.0.0	1.0.0

# list of reference documents

no.	document name	comments
1	RC Specification_2759-515_V1	RCU key mapping
2	Specification_2503-539_V4	BLE2IR key mapping
3	Telus_2503-539_TV_AMP_Code_List_v2	TV and amplifier code list



# scope

the purpose of this document is to describe the BLE2IR dongle and BLE remote control setup



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# list of abbreviations

BLE bluetooth low energy

BLE2IR BLE to IR dongle

IR infrared

RCU remote control unit

STB set top box

# 1 user installation and programming guide

## 1.1 dongle and RCU pairing

- 1. press "play/pause" and "on demand" keys simultaneously for 3 seconds
  - → the LED will start flashing red continuously
- 2. plug in the ble2ir dongle (fig. 2: BLE2IR dongle) to an available USB port of your Optik TV Set Top Box (fig. 3: Optik TV STB)
- 3. once paired, the red LED on the remote control will stop flashing
  - → the remote control is now using the green LED for button presses

in case pairing failed, the remote control is still using the red Optik TV LED for button presses. in this case the above procedure should be repeated



fig. 2: BLE2IR dongle



fig. 3: Optik TV STB

please note if the BLE2IR dongle is not being used / plugged in the remote control cannot be programmed for TV or amplifier.

however the remote control will continue in IR mode to operator the STB.



fig. 1: hospitality BLE RCU



## 1.2 programming your TV

before you start to program your remote control, make sure your TV and set top box are switched on.

to speed up your programming process, the most used TV brands have a 4-digit code that will be used in the programming process.

search for the 4-digit code of your TV brand.

in case your TV brand is not listed please use code **0 0 2 9** to search for all brands.

please note that the search can take up to 15 minutes in that case.

0010	Vizio	0017	Sony
0011	Funai/Emerson	0018	Samsung
0012	Sanyo	0019	Philips
0013	Panasonic	0020	RCA
0014	Sharp	0021	Insignia
0015	LG	0022	Hitachi
0016	Toshiba	0029	All others

tab. 1: TV brand list - top brands

#### process:

- 1. press and hold **options** key for 3 seconds, until the LED flashes green twice
- 2. enter the 4-digit code for the brand of your TV (see brand list above) within 10 seconds
  - → the LED flashes green twice
- 3. press and hold the power button until your TV switches off
- 4. as soon as your TV switches off, remove your finger from the power button and press **OK** button to confirm
  - → the LED flashes red twice
- 5. press the **power** button to switch your TV back on

in case an invalid code has been entered the LED will be on for 2 seconds.

if no key code is being entered within 10 seconds the remote will time out and the programming procedure needs to be started again.



# 1.3 programming your amplifier

before you start to program your remote control, make sure your TV is switched off and Amplifier is switched on.

to speed up your programming process, the most used Amplifier brands have short numbers that will be used in the programming process.

in case your amplifier brand is not listed please use code **0 0 7 9** to search for all brands. please note that the search can take up to 15 minutes in that case.

0060	Sony	0068	Pioneer
0061	Yamaha	0069	Philips
0062	Harman/Kardon	0070	Aiwa
0063	Denon	0071	Hitachi
0064	Samsung	0072	Sharp
0065	LG	0073	Sanyo
0066	Onkyo	0074	Panasonic
0067	Bose	0079	All others

tab. 2: amplifier brand list - top brands

#### process:

- 1. press and hold **options** key for 3 seconds, until the LED flashes twice green
- 2. enter the 4-digit code for the brand of your amplifier (see brand list above) within 10 seconds
  - → the LED flashes green twice
- 3. press and hold the **power** button until your Amplifier switches off
- 4. as soon as your amplifier switches off, remove your finger from the power button and press **OK** button to confirm.
  - → the LED flashes yellow twice
- 5. press the **power** button to switch on your amplifier and TV

in case an invalid code has been entered the LED will be on for 2 seconds.

if no key code is being entered within 10 seconds the remote will time out and the programming procedure needs to be started again.

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## 1.4 direct code programming TV and amplifier

- 1. press and hold **options** key for 3 seconds, until the LED flashes twice green
- 2. enter the 4-digit code from the code list
  - → the LED flashes twice green
- 3. press the tv power/vol+/vol-/mute key to verify the functionality of this code

in case an invalid code has been entered the red LED will be on for 2 seconds.

if no key code is being entered within 10 seconds the remote will time out and the programming procedure needs to be started again.

### 1.5 power control STB, TV and amplifier

#### 1.5.1 no devices programmed

→ power button only power toggles STB

#### 1.5.2 TV programmed

- → power button power toggles STB (BLE) and TV (IR)
- → Volume + / mute are controlled via TV

#### 1.5.3 AMP programmed

- → power button power toggles STB (BLE) and AMP (IR)
- → Volume + / mute are controlled via AMP

#### 1.5.4 AMP + TV programmed

- → power button power toggles STB (BLE), TV (IR) and AMP (IR)
- → Volume + / mute are controlled via AMP

### 1.6 factory reset

- 1. press and hold **options** key for 3 seconds, until the LED flashes twice green
- 2. enter code 9 9 9 9 LED flashes twice green
  - → reset has been completed; remote is set back to original factory settings

#### factory default setting

→ no TV or Amplifier programmed



## 1.7 notes

- in case of low battery (<2.2V) the red LED flashes three times after sending a command
- TV programming will remain if batteries are being removed / changed
- if STB commands are transmitted via bluetooth, the LED will flash green
- if STB commands are transmitted via infrared, the LED will flash red
- for TV commands the LED will flash red (only if TV has been programmed)
- for AMP commands the LED will flash yellow (only if AMP has been programmed)
- dongle can be paired with only one remote control at the time
- if dongle is out of power it cannot be powered on with remote control
- in case remote control has been programmed for tv and dongle is out of power, the tv and amplifier still can be operated (power on/off, volume +/-, mute)
- sections 1.2, 1.3, 1.4 and 1.5 do not apply if BLE remote control is being used without BLE2IR dongle.
- in that case TV / AMP programming online TV database tool (pf app, etc.)
  needs to be used



# 2 technician installation guide

### 2.1 querying the stored 4-digit TV code

- 1. press options button for a minimum of 3 seconds, LED flashes twice green
- 2. enter the code 1 0 0 2 LED flashes twice red
- 3. to query the currently saved code, press **1** for first digit, **2** for second digit, **3** for third digit and **4** for fourth digit

## 2.2 querying the stored 4-digit amplifier code

- 1. press **options** button for a minimum of 3 seconds, green LED flashes twice
- 2. enter the code **7 0 0 2** LED flashes twice yellow
- 3. to query the currently saved code, press **1** for first digit, **2** for second digit, **3** for third digit and **4** for fourth digit

#### 2.3 reset

- 1. press **options** button for a minimum of 3 seconds, LED flashes twice green
- 2. enter the code **9 9 9 9** LED flashes twice green
  - → factory reset has been completed; remote is set back to original factory settings
- 3. enter the code 1099 LED flashes twice red
  - → TV programming will be deleted; AMP (if programmed) will remain
- 4. enter the code 7 0 9 9 yellow LED flashes twice
  - → AMP programming will be deleted; TV (if programmed) will remain

### 2.4 switching between layers RCU

- 1. press options button for a minimum of 3 seconds, LED flashes twice green
- 2. enter the code **0 0 0 1** LED flashes twice green
  - → remote use the BLE mode(rcmm for pairing) DEFAULT
- 3. enter the code **0 0 0 4** LED flashes twice green
  - → remote use the STB/RCMM protocol (fallback if BLE not working)
- 4. enter the code **0 0 0 5** LED flashes twice green

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→ remote use the STB/RSTEP protocol

### 2.5 switching between layers BLE2IR dongle

- 1. press **options** button for a minimum of 3 seconds, LED flashes twice green
- 2. enter the code **0 9 0 5** LED flashes twice green
  - → BLE2IR dongle will use RCMM DEFAULT
- 3. enter the code **0 9 0 4** LED flashes twice green
  - → BLE2IR dongle will use RSTEP

## 2.6 querying the stored 2-digit DB version

- 1. press options button for a minimum of 3 seconds, LED flashes twice green
- 2. enter the code **9 0 0 1** LED flashes twice green
- 3. to query the currently saved code, press **1** for first digit(year) and **2** for second digit(month)

if no key is pressed for 10 seconds, while in "Programming mode", the remote will return automatically to its previous state after signalising error (LED 2 sec. lighting).

#### 2.7 code search- 5 steps back

if code search [0029 / 0079 – Others] has been started and the correct code has been missed e-g. power button has not been released and confirmed with OK button - it is possible to go up to 5 steps back in the code list.

- 1. press **rewind** button for one step back; up to 5 times to go back up to 5 codes
- 2. if rewind button is pressed 6 times it will go back to the 1st code of the "last 5 list"
- 3. now you can test all device functions within a timeout of 10s.
- 4. if no button is pressed, code search will be exited after time out (10s).
- 5. note that the code will not be stored
- 6. to continue with code search press **forward** button once; then press the power button to continue with normal code search as described above
- 7. to confirm a working code press **OK** button otherwise code will not be stored after timeout
- 8. pressing **back/exit** button will exit programming mode without storing programming



# 3 declaration

User Information FCC 15.2:

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Part 15 Statement. FCC 15.19/RSS Gen Issue 3 Sect. 7.1.3

This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Statement Class B Digital Device FCC 15.105:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a ciRCUit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

