BlueIR

User Guide

Universal Remote Control for SMARTPHONES, Android

Version 2.0

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Before you do anything else, please read this

Charge the battery

The battery in your BlueIR hasn't been charged yet.

A few important words from our legal team (LIMITATION OF DAMAGES)

To the maximum extent permitted by applicable law, in no event shall PDAwin or its affiliates be liable to you, any user, or third party for any indirect, special, consequential, incidental or punitive damages of any kind, arising in contract, tort, or otherwise, including, but not limited to, injury, loss of revenue, loss of goodwill, loss of business opportunity, loss of data, and/or loss of profits, regardless of the foreseeability thereof or whether PDAwin or its affiliates have been advised of the possibility of such damages. And in no event shall the total liability of PDAwin or its affiliates exceed the amount received from you, regardless of the legal theory under which the cause of action is brought. The foregoing does not affect any statutory rights which may not be disclaimed.

Damage to the device

If the device is defective, do not attempt to repair it yourself. In case of damage, contact PDAwin.
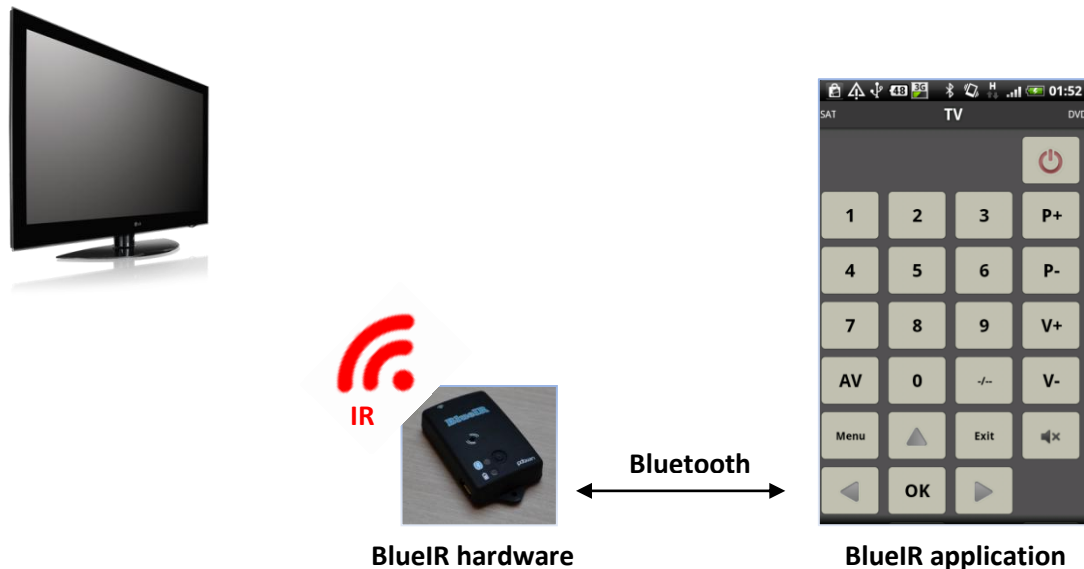
! Attention !

The BlueIR contain an infrared diode. In order to avoid eye injuries do not look at the diode (6).

WARNING

To avoid injury, read all operating instructions and safety information in this guide before using BlueIR. Keep this safety information for future reference. BlueIR contains sensitive components. Do not drop, crush, bend, deform, puncture, shred, microwave, incinerate, or insert foreign objects into BlueIR. Avoid water and wet locations.
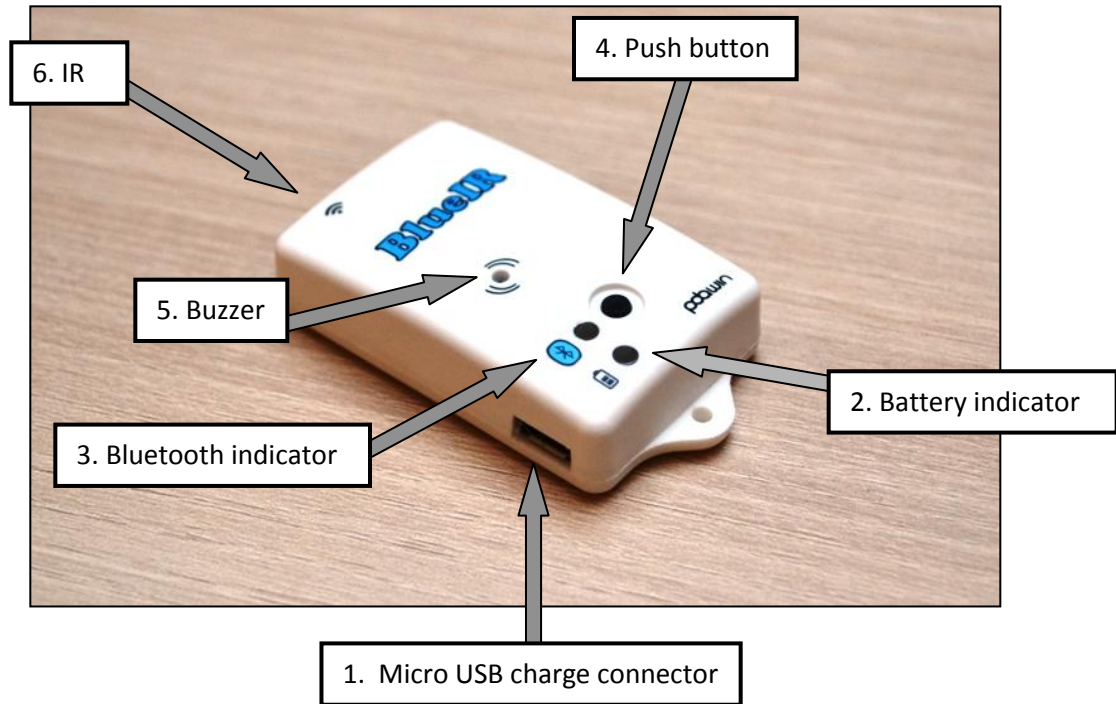
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Introduction

The BlueIR is a universal remote control. It can be used for most devices that understand infrared (IR) remote control signals. The BlueIR consists of two parts, hardware part and software part. BlueIR operation schema:

IR

Bluetooth

BlueIR hardware   **BlueIR application**

Basic information:

- About 1000 predefined most used remotes (TV, DVD, SAT, Cable, Audio….)
- Create own remotes (Learn functions)
- Take photo of your remotes with phone and use it
- Very low power consumption
    - for about one month in waiting mode - user can connect and operate BlueIR without turning it ON/OFF
    - for about two years when user turns ON/OFF BlueIR manually
- Charging with phone charger (micro USB)
- BlueIR can be carried on keys and used at many places (home, weekend house, etc...)
- If BlueIR is lost (for example with keys), it can be found by mobile phone -> BlueIR has built-in buzzer and start beeping on request
- Block other remotes in room on request. (for example if this function is activated children's cannot change channels or volume on TV with other remotes, only BlueIR remote can do it)
- Weight 21 g (0.74 oz)
- Dimension 32mm x 50mm x 13 mm (WxLxH)
- Voice control feature, say commands to control your TV, DVD, etc…
- MACRO
- And more…

1. BlueIR hardware

1. Micro USB charging connector.
2. Battery state indicator.
3. Bluetooth state indicator.
4. Push button.
5. Buzzer.
6. IR. Infrared diodes.

1.2 Charging battery:

Use your phone battery charger or PC to charge BlueIR. Plug micro USB cable to charge (1) connector. Red diode (2) starts to light up. When the red diode stops shining, battery is fully charged and you can remove micro USB charge cable.

1.3 Basic battery LED states indication (red):

Off	->	Normal operation.
Solid red light	->	Charging…
Short blink every 3 second	->	LOW Battery, please charge BlueIR

Short blink every 3 second + short beeps ->   Battery is very low. BlueIR is automatically
                                                turned off. BlueIR will automatically turn on
                                                when the battery charger is plugged.

                                                To stop short beeps press push button.

1.4 Basic Bluetooth LED states indications (blue):

Off   ->   not connected
Short blink every 3 second   ->   BlueIR is connected with phone.

Note:

- *To reset BlueIR press and hold push button for approximately 11 second until you hear a short beep.*
- *During operation BlueIR, take care that IR diode (6.) has direct view to controlled equipment (TV, DVD, etc.).*
- *Bluetooth state indicator can be turned on and off by application (see software part).*

2. BlueIR application software

BlueIR application software minimal requirements:

- Android device (Smartphone, Tablet) with Bluetooth, OS version minimum 2.1
- BlueIR device

2.1 Installation:

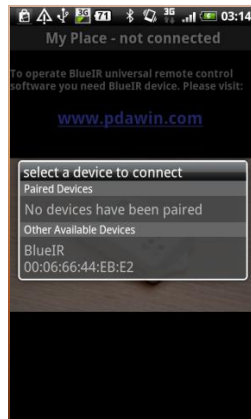Open webpage in phone http://www.pdawin.com/blir/BlueIR.apk and run it.

First screen (*Note:* if phone's Bluetooth is turned OFF, application will ask to turn it ON)
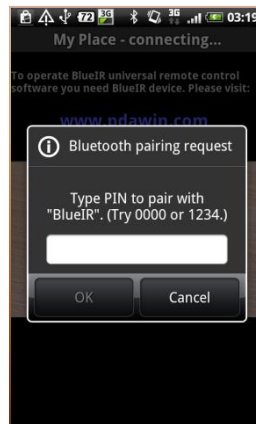
2.2 Pairing BlueIR with phone:

On BlueIR device press and hold push button (4) for approximately 6 seconds until blue led starts shining. On android phone press menu button, from menu select ***More -> Connect a BlueIR***. Following window is displayed:

Press **Scan for device** button. New device should display in "Other Available Devices". If no device is displayed press back button on the phone and repeat this step (*menu -> More -> Connect BlueIR...*).

Select BlueIR device from the list, pairing process begins.

Enter pin code: **1234** and OK. In a few seconds "BlueIR is connected" message is displayed.
Note: Paired BlueIR is saved to phone automatically, so you do not need to pair BlueIR every time.

When you start BlueIR application next time it will try to connect with paired BlueIR device. This connection can take from 1 to 5 seconds if your last connection was within 2 hours or 1 to 30 seconds (occasionally 60s) if you are disconnected for more than 2 hours. If BlueIR is not in use for 30 minutes it automatically disconnects to saving power. This automatic disconnect time can be set in Settings (see Setting part of this guide).
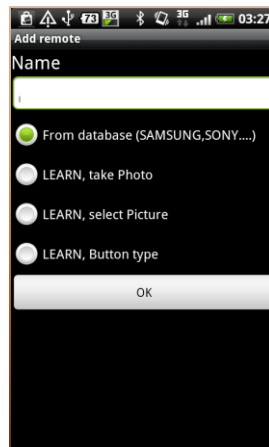*Note: To quickly connect with BlueIR press push button(4) for 1 seconds until red LED starts shining.*
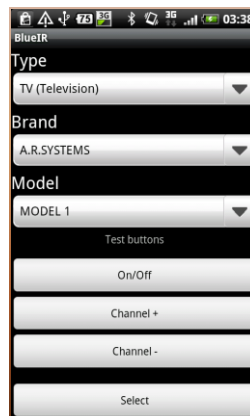
2.3 Add remotes

You can add several types of remotes:
- From database - select type (TV,DVD,Cable…), brand(SAMSUNG,SONY…)
- User learned, Photo skin style
- User learned, Picture skin style
- User learned, Button skin style (matrix of buttons)

2.3.1 Add remote from predefined database:

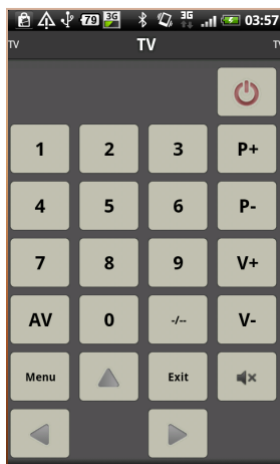Press **_menu -> Remotes -> Add_**, following screen is displayed:

Tap on Name window and type name for remote (for example "TV"). Make sure "From database…" is selected. Tap on OK (Note: you can scroll window down to see OK button). Select remote type TV (Television)

Choose Brand name (for example SAMSUNG). The majority of manufacturers use several different models of the remote control. You must now ascertain which of the available models is best suited to
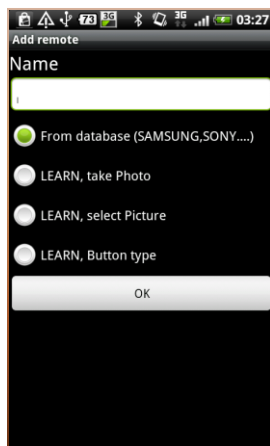
your TV. For example select MODEL 1 and try buttons (Channel +, Channel -). If you cannot operate your TV select another model etc. If you find a suitable model tap on "Select" button.

Now you have successfully add remote. To operate selected TV press button on display. If some buttons not works correctly go to step 2.3.1. and try to select different Model number.

2.3.2 Add remote by taking photo of real remote:
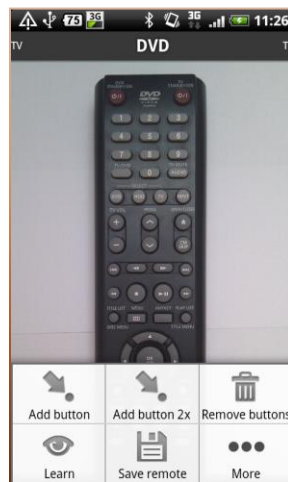
Press **_menu -> Remotes -> Add_**, following screen will be displayed:

Tap on Name window and type name for remote (for example "DVD"). Make sure "LEARN, take Photo" is selected. Tap on OK (Note: you can scroll window down to see OK button). Camera application will start.
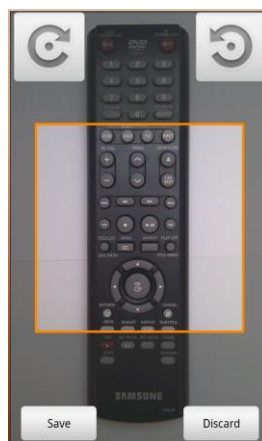
Tips:
- *Clean camera lens*
- *Take photo in good light conditions*
- *Do not use flash*
- *Use high resolution (5M is recommended)*

After you take and accept picture, following screen with photo will be displayed:
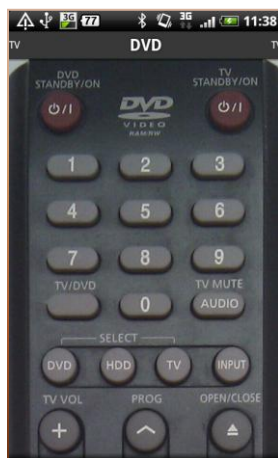

As the photo is too small on display we need to crop it. Select More -> Edit Image

Now select crop rectangle to highlight only remote:

Finally tap on Save.

Hints:

- *You can use rotate buttons to rotate photo if needed*
- *Change crop rectangle dimension only with one finger*
- *If "Out of memory" is displayed, take picture with lower resolution*

2.3.2.1 Add buttons:

Select **_menu -> Add button_**, now tap on every button on screen (red dot is displayed on button place):

Hints:
- *You can scroll remote by swiping it UP or DOWN with finger*

- *If you are not satisfied with position of button you can remove it (**menu -> Remove button**) and add it again (menu -> Add button)*

2.3.2.2 Learn buttons:

Before starting learning take care to:

- In learning process keep away from other IR light sources (TV, Plasma TV, Monitors…). Best place is room without these sources. The light sources could disrupt the infrared transmission
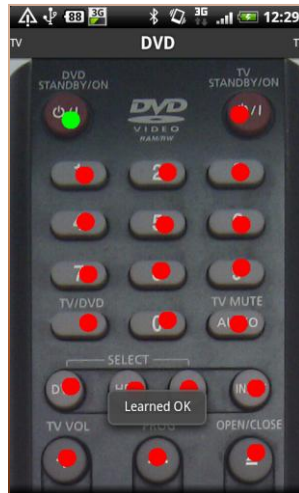- Point the infrared sensors (6) of both BlueIR and remote control towards each other. Best distance is from 0.5 to 2 meters.

Placing BlueIR towards remote control

1. Select **menu -> Learn**
2. Now tap on the button you want to learn (red dot is changed to blue). Status LED on BlueIR starts shining. You have 20 seconds to press corresponding button on the remote control.

3. Now SHORTLY press the same button on your remote control

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4. If learning process is done OK you will receive "Learned OK" message and blue dot will change to green, otherwise go to step 2 to learn the button again.
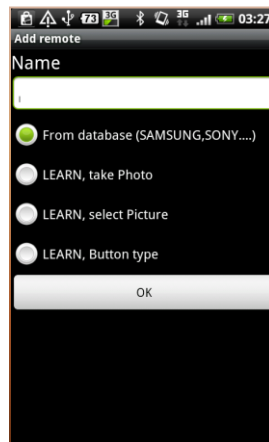
5. Repeat steps 2.-4. To learn all buttons.

6. Finally press **_menu -> Save remote_**

Hints:
- Some remote controls use same button for 2 different operations (for example air conditions ON/OFF button, one code for ON and different code for OFF). To learn 2 different operations to the same button you need to add 2x button (**_menu -> Add button 2x_**) instead of 1x button. In learning process press button once and after you receive message "Learned OK, press the button again!" press button for the second time, you will receive "Learned OK" message.
- Some buttons on remote controls do not send any code (especially switching mode buttons DVD, TV, etc.). In this case you will receive "Time OUT!" message. You can skip these buttons.

2.3.3 Add remote by browsing picture of remote:

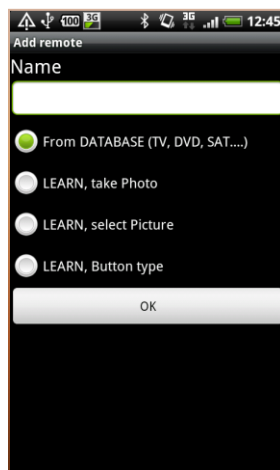Press **_menu -> Remotes -> Add_**, following screen will be displayed:

Tap on Name window and type name for remote (for example "SAT"). Make sure "LEARN, select Picture" is selected. Tap on OK (Note: you can scroll window down to see OK button). Now you can choose a picture that you want to use as skin for remote (photo from PC, your own design, etc...). Next steps are the same as for **Add remote by taking photo of real remote 2.3.2** (section after taking photo).
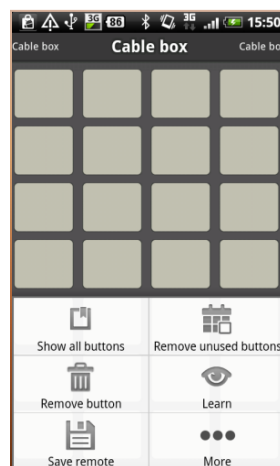
Tips:
- *It is recommended to optimize picture resolution to resolution of your Android device screen.*

2.3.4 Add remote using buttons matrix style:

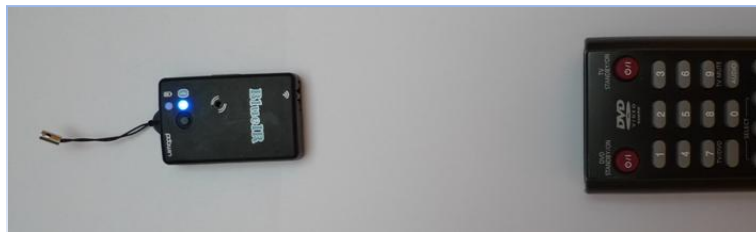Press ***menu -> Remotes -> Add***, following screen will be displayed:

Tap on Name window and type name for remote (for example "Cable box"). Make sure "LEARN, Button type" is selected. Tap on OK (Note: you can scroll window down to see OK button). Following screen will be displayed:

2.3.4.1 Learn buttons:

Before starting learning pay attention to:

- In learning process keep away from other IR light sources (TV, Plasma TV, Monitors…). Best place is a room without these sources. The light sources could disrupt the infrared transmission
- Point the infrared sensors (6) of both BlueIR and remote control towards each other. Best distance is from 0.5 to 2 meters.

Placing BlueIR towards remote control

1. Select **menu -> Learn**
2. Now tap on button you want to learn (button color is changed to blue). Status LED on BlueIR starts shining. You have 20 seconds to press the corresponding button on remote control.
3. Now SHORTLY press the button on your remote control
4. If learn process is done OK you will receive "Learned OK" message. Window for set button name will be displayed:

5. Type name for button or choose an icon.
6. Repeat steps 2.-5. To learn all buttons.
7. Finally to remove not learned buttons press **menu -> Remove unused buttons**
8. To save remote press **menu -> Save remote**

Hints:
- Some remote controls use the same button for 2 different operations (for example air conditions ON/OFF button, one code for ON and different code for OFF). To learn 2 different operations to the same button you need to change button type, press **menu -> More -> Set button type 2x** and tap on button. In learning process press button once and after you receive a message "Learned OK, press button again!" press button for the second time. Finally you will receive "Learned OK" message.

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2.4 Application MENU description

2.4.1 Location

You can use BlueIR on different locations (carried on keys). Locations are used to load sets of remotes for selected location. On first start BlueIR automatically creates location "My Place"

Select	-	Choose location from the list
Add -		Add new location
Rename -		Rename actual location
Remove -		Remove actual location and all its remotes!!!

2.4.2 Remotes

Select	-	Select remote from the list (*Tip:* you can switch between remotes by swiping finger LEFT or RIGHT on the screen)
Add -		Add new remote (*see section 2.3*)
Edit -		Edit actual remote. You can add, delete, learn buttons, crop image etc. in this section.
Rename -		Rename actual remote.
Remove -		Remove actual remote.

2.4.3 Remotes Jammer

To block other remotes in the room you can use remotes Jammer function. To activate function press ***menu -> Jammer***, BlueIR Bluetooth LED status (3) starts shining with low intensity. Now all remotes in room are blocked except BlueIR. It is possible that not all remotes are blocked (this is due to different type of coding or frequency), this only occurs, however, in rare cases and it is not deficiency of BlueIR. To switch jammer function off, press ***menu -> Jammer*** again. You can find if remote Jammer function is on or off in "Info BlueIR" window (menu -> More -> Info BlueIR).

Note:

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- If no button is pressed within 15 minutes Jammer function will automatically turn off
- Jammer function consumes a lot of energy. It can operate for about 1 hour with a full charged battery.

2.4.4 TV Guide

This function opens your favorite web page with TV guide. The link for page can be set in Setting window (*menu -> More -> Settings*).
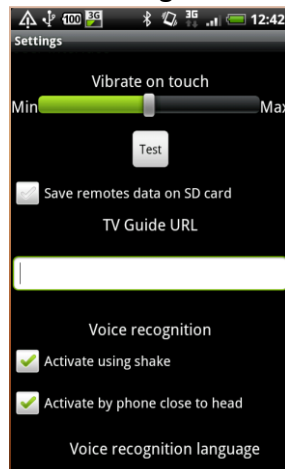
2.4.5 Say command

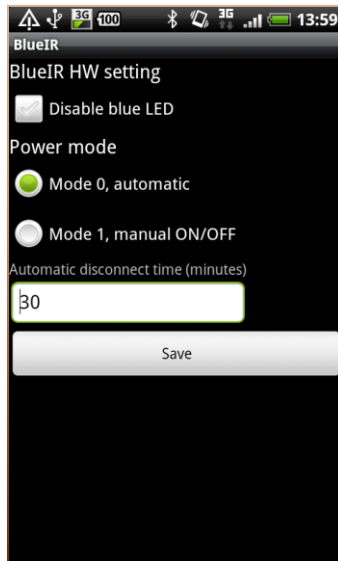Select this to say control command. For more information about voice control feature see chapter 2.5.

2.4.6 More

Settings
- Basic application settings:

- You can set vibrate intensity when button is pressed.
- Save remotes data on SD card. Application will store all user data including remotes photos and learned buttons on SD card in BlueIR folder.
- Turn off Bluetooth on exit. If checked, phone Bluetooth is automatically turned off on exit (menu->more->Exit) to save phone power. On application start, It automatically turn on (without ask of permission).
- TV Guide URL. Enter your favorite web page for TV guide.
- To activate voice recognition by shaking your phone check "Activate using shake".
- You can activate voice recognition feature also using phone proximity sensor (put phone close to head), check "Activate by phone close to head".
- You can use your phone default language for voice recognition or select language for voice recognition from list of languages.

Settings BlueIR

This setting can be open only when BlueIR is connected.

- Disable blue LED. If selected Bluetooth status LED is turned off
- Power mode
  - o Mode 0 – BlueIR lowest power consumption state is standby and it is still connectable.
  - o Mode 1 – BlueIR lowest power state can be OFF. In OFF state BlueIR is **not** connectable and consumes no power from battery! You need to turn it ON by press and hold push button until red LED light starts shining. ON state is indicated by 2 short beeps. To turn it OFF repeat same steps, OFF state is indicated by 1 short beep. In mode 1 BlueIR will automatically turn OFF if no connection is made for 24 hours.
- Automatic time disconnection. To save power BlueIR will automatically disconnect in this time. Time is counted from last press of remote button. In next 2 hours time reconnection is fast (1-5 seconds) after then it can take 1-60 seconds (mostly 1-15 second).

Connect BlueIR

Connect to a BlueIR device.

Disconnect BlueIR

Disconnect from a BlueIR device. To connect again select
menu -> Connect BlueIR

Info BlueIR

- Information windows. These windows can be open only when BlueIR is connected.

- BlueIR v x.x -> Version of BlueIR application
- BlueIR firmware: x.x -> Version of BlueIR firmware
- Battery: if battery is below 30% BlueIR should be charged.
- Temperature: Temperature of BlueIR HW (in normal condition this is temperature around BlueIR). This temperature can be higher when charging.
- Disconnected: Elapsed time from last charging in disconnected state
- Connected: Elapsed time from last charging in connected state
- Jammer state, ON or OFF

Ring BlueIR   BlueIR starts beeping. This function is very useful when you need to find your keys and you have attached BlueIR on it.

Create Backup

You can create backup of all remotes (macros, learned codes, skins…) with this function. You can use this option also for transfer all your remotes between phones. This function create folder "BlueIRdat" on external storage (SD card, phone external memory…).

Load Backup

Load backup from folder "BlueIRdat" on external storage (SD card, phone external memory…). **This function remove all your actual remotes** and rewrite it with backup data!!

About

Information about application.

Exit

This will disconnect phone from BlueIR and close application.

2.5 Voice recognition feature

You can control TV, DVD, SAT, etc. using voice commands, for example start voice command and say "power" to turn ON TV, or say "25" to select channel 25, etc. You can start voice command from menu (***menu -> Say command***) or by shaking your phone or by putting phone close to head (similar as you have it during call). Start of listening for command is present by vibrate of phone, after then you can say command. To use voice recognition feature you need internet connection! You can select from most used languages (English, Spanish, France, Portuguese, Italian, Russian, Arabic, German, Japanese, etc….), see Settings (chapter 2.4.6).

For each button of remote you can set one voice command, select menu -> Remotes -> Edit -> More -> Set voice command, now tap on screen to select remote button.

You can use keyboard to type command, or use microphone button to dictate command. To describe digits use digit number "1", "2" etc., do not use "one", "two" etc. text.

If you select remote from BlueIR database, following voice commands are assigned to buttons:

TV, Cable, Sat type	
Button	Say
On/Off	power
1	one
2	two
3	three
4	four
5	five
6	six
7	seven
8	eight
9	nine
0	zero
P+	channel up
P-	channel down
V+	volume up
V-	volume down
Menu	menu
Exit	exit
UP arrow	up
DOWN arrow	down
LEFT arrow	left
RIGHT arrow	right
OK	ok
Mute	mute
Txt	text
TxtOff	Text off
AV	input

DVD, Blue Ray, VCR, DVR type	
Button	Say
On/Off	power
P+	next
P-	previous
Menu	menu
Exit	exit
UP arrow	up
DOWN arrow	down
LEFT arrow	left
RIGHT arrow	right
Rewind	rewind

Forward	forward
Play	play
Stop	stop
Pause	pause
Record	record

CD, Audio type	
Button	Say
On/Off	power
P+	next
P-	previous
Menu	menu
V+	volume up
V-	volume down
Mute	mute
Exit	exit
UP arrow	up
DOWN arrow	down
LEFT arrow	left
RIGHT arrow	right
Rewind	rewind
Forward	forward
Play	play
Stop	stop
Pause	pause
Record	record

Air-condition type	
Button	Say
On/Off	power
UP arrow (increase temperature)	up
DOWN arrow (decrease temperature)	down
Mode	mode
Fan	fan

You can modify these commands (translate, etc.), select menu -> Remotes -> Edit -> More -> Set voice command. If you say command that is not assigned to any remote control buttons, message "command xxx is not found!" is displayed.

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2.6 MACRO

With MACRO feature you can assign up to 50 buttons to one button. For example if you want to turn ON TV -> Select TV input -> Turn ON DVD by pressing only one button, use MACRO. To use macro you need to add macro buttons. First select remote you want to place macro buttons.

2.6.1 For skin type remote (photo, etc...):

Add button: press menu -> Remotes -> Edit -> More -> Add macro button. Now place macro button by tap on screen. Magenta circle will appear (if you want more macro buttons just tap on next place to add next macro button).

Learn macro: press menu -> Learn. Select macro button you want to learn (magenta circle). Now select remote button (green circle or button) you want to add to macro (for example ON TV), window with pause time will be displayed. This time mean how long will BlueIR wait to send next IR command. Default time is 800 ms (0,8 s). For example if you want to get more time to TV to turn ON (5 second), change this value to 5000, press OK. Now you can add next remote button to macro, etc... You can also add buttons from another remotes from same location (use left, right swipe or back button to change remotes). To finish macro button learning process press menu -> Stop record macro. Now you can start to learn another macro button. To finish editing remote press menu -> Save remote.

Use macro: Tap on macro button you want to run. BlueIR will send IR command in order you select buttons in learning process.

2.6.2 For button type remote (matrix of buttons):

Add button: press menu -> Remotes -> Edit -> More -> Set macro button. Now select empty button you want to change to macro style. Button will change color to light blue.

Learn macro: press menu -> Learn. Select macro button you want to learn (light blue buttons). Now select remote button (green circle or button) you want to add to macro (for example ON TV), window with pause time will be displayed. This time mean how long will BlueIR wait to send next IR command. Default time is 800 ms (0,8 s). For example if you want to get more time to TV to turn ON (5 second), change this value to 5000, press OK. Now you can add next remote button to macro, etc... You can also add buttons from another remotes from same location (use left, right swipe or back button to change remotes). To finish macro button learning process press menu -> Stop record macro. Now window for button name will be displayed, so type name for macro button (for example "all off", you can use enter to type name

in two lines). Now you can start to learn another macro button. To finish editing remote press menu -> Save remote.

   Use macro: Tap on macro button you want to run. BlueIR will send IR command in order you select buttons in learning process.

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