# BLASTBOT SMART CONTROL INTEGRATION WITH FIBARO HOME CENTER 2



Blastbot Smart Control is an IR code transmitter for universal control. You can copy and emit IR codes for air conditioners, TV, sound systems, etc.

Blastbot Smart Control connects directly to the user's WiFi network and allows the emission of infrared signals to the device to be controlled using a simple http API.

In order to control the infrared devices, these must be in line of sight with the Blastbot Smart Control, or the optional infrared extension that can be connected to the jack on the back of the product.

## **TECHNICAL SPECIFICATIONS**

#### **POWER INPUT**

• 5V DC, 500mA (USB cable y wall adapter included)

#### Configuration

- · Integrated web server for device configuration and testing.
- Web interface for IR code capture.

#### Network

- WiFi standard 802.11b, 2.4Ghz
- Access point mode supported (for configuration) and infrastructure mode.

### **LED** indicators

- LED indicators red and green to indicate the device status:
  - Green blinking: Attempting to connect to the WiFi network.
  - Green steady: Configuration mode.
  - Green fast blinking for a couple of seconds: Configuration restored to factory default.
  - Green flashes slowly with 5 seconds between each other: Trying to connect to Blastbot Cloud.
  - Red steady: IR learning mode.
  - **Red flash:** Sending IR code.
  - Green and red steady: Searching or installing firmware updates.
  - Red blinking: Connection rejected by server (wrong udid or token).

#### **Configuration Button**

- Enter configuration mode: Press and hold the configuration button for more than 5 seconds until the green LED remains on.
- **Restore configuration settings:** Once in set up mode, press and hold the button for another 5 seconds until the green led flashes quickly.

#### **Infrared emitters**

- Integrated 6 infrared emitters to achieve a range of 300° and up to 20 meters distance (depends on the installation environment).
- Conector Jack 3.5mm optional for infrared emitter extension.

### **Box Contents**



- Blastbot Smart Control
- Wall adapter AC/DC de 5V 1A
- USB to micro USB cable (for power supply)
- Installation Manual and warranty

## **Initial Setup**

1. Install the Blastbot Smart Control in a position where the IR emitters point towards the devices to control.



- 2. Power the Blastbot with the AC/DC adapter.
- 3. Set the SSID and password to connect to the WiFi network, for this, press the configuration button for at least 5 seconds until the green LED stays lit.



4. Blastbot will create a WiFi network with the name "BlastbotXXXX", where XXXX is the device id, connect this network from a pc o Smartphone.



5. Open a web browser and go to <u>http://192.168.4.1:555</u> to access to the configuration interface where you must enter the SSID (name) and your WiFi password.

WiFi Configuration			
SSID: MyNetwork BSSID (optional): FF:FF:FF:FF:FF Password: MyNetworkPassword			
IP Configuration			
🕗 HTTP API			
Use DHCP (automatic configuration)			
IP Addres: 192 . 168 . 1 . 30 Gateway: 192 . 168 . 1 . 1 Subnet: 255 . 255 . 255 . 0			
MQTT Configuration			
UDID:			
Token:			
Save			

- 6. Make sure to enable the "HTTP API" option.
- 7. It's highly recommended to unselect the "**DHCP**" option and assign the **IP address manually** to make easier the configuration with Fibaro's Home Center 2.
- 8. Leave all fields blank in the "MQTT Configuration" section.
- 9. Press the "Save" bottom. The device will restart and connect to the network automatically.
- 10. Once configured, reconnect your PC or Smartphone to your WiFi network.

## Infrared code capture

The test interface allows you to capture IR codes and test it.

To access to the test interface, navigate with the web browser to : http://<blastbot ip address assigned during initial setup>

Blast	bot
Send cod	de
Insert code a	nd press "Send".
	Send
Code cap	oture
After clicking for pressing t	"Capture" you will have 10 seconds he remote control button to copy.
Capture	

Press the Capture button. You will have 10 seconds to send the code with any remote control to the receiver on the back side of the Blastbot Smart Control. Once this is done, you will receive the code in plain text.



You can test the code by returning to the test interface and pasting it into the corresponding gap and pressing "Send".

Note: Garbage codes may sometimes be obtained due to environmental noise, this is easy to recognize for the codes are shorter than 5 numbers. If this happens simply try again until a valid code is read.

## Integration with Fibaro Home Center 2

Once the Blastbot Smart Control has been configured according to the "Initial Configuration" section of this document, access the Fibaro Home Center 2 interface and do the following.

1. Create a new "Virtual Device"



2. Assign te device a name, enter the IP address assigned to Blastbot Smart Control and enter in te TCP Port "9999"

New Device				
General	Advanced	Advanced		
	Name: Blastbot			
	Room: Unassigned			
	IP Address: 192 168 1 30			
	9999			
	Type: Virtual device			

3. Add the buttons you want to set up (In te section "Advanced").

Label	Label - max 15 characters
	One button per line - max 35 characters / button
	Two buttons per line - max 15 characters / button
	Three buttons per line - max 10 characters / button
	Four buttons per line - max 6 characters / button
	Five buttons per line - max 3 characters / button
<b>_</b>	One slider per line - max 15 characters

4. In this image we create two buttons, one to turn on and the other one to turn off the air conditioner.

<b>Blastbot</b> Virtual device	
On	Off

- 5. For each button it's necessary to capture the corresponding code from the original control following the steps mentioned in the section "Infrared Code Capture" in this document.
- 6. In te button's configuration, enter the name and select the option "String". Enable the option "Wait for device response" and enter the following text (**replacing** the values between sings <> (greater y less than) by the corresponding value):

<captured code>0x0D0x0A

○ 1 ○ 1 button					х
On	Label:	On	2/35 characters	Empty	Main
	ID:	Button11			
Change Icon	38000,1,1,5,381 20,24,63,23,20 4,20,24,19,25,1 24,64,23,19,25, 0,24,20,24,20,2	2,345,168,25,63,24,20,24, ,24,20,24,20,24,20,24,20,2 9,25,63,23,19,25,62,24,20, 20,24,20,24,20,24,20,24,20,24, 24,19,25,20,23,20,24,20,24	20,24,62,24,20,24,20,24 4,20,24,20,24,20,24,20, 24,21,23,63,23,20,24,76 0,24,20,24,19,25,63,23, ,20,24,20,24,20,240x0D	4,63,23,20,24,3 ,23,64,23,62,2 ;0,24,62,25,20 20,24,20,24,20 0x0A	20,24,20,24, 5,20,24,20,2 ,24,20,24,20, 0,24,20,24,2
	String	🔍 Lua code	Wait for device respo	inse	

**Note:** Make sure to add "**0x0D0x0A**" at the end of the captured code. If you don't include this code, the Blastbot Smart Control may take longer than necessary to send the code.

7. Press the "Save" button. After doing this, you will have a new "Virtual Device" with buttons that will emit the corresponding infrared code through Blastbot Smart Control.

## Solving common problems

1. When accessing http://<Blastbot ip address assigned during the initial configuration> the test and the code capture interface does no appear .

**Solution:** Make sure you've checked "**HTTP API**" box in the Blastbot Smart Control initial configuration. Follow the instructions in the "**Initial configuration**" section in this document to correct it.

2. Doesn't send the code when pressing the "Virtual Device" button configured in the Fibaro Home Center.

#### Solutions:

- Make sure you've entered the IP address and the port correctly according to the instructions in the section "**Fibaro Home Center 2 integration**" in this document.
- The code sending function "String" is available in the Blastbot Smart Control with firmware version "C-20170822" or recent. In case your device has an older version, contact info@makerlab.mx and indicate your serial number and requesting a firmware update. You can verify the device version by accessing to http://<dirección ip del Blastbot>/info. If you do not receive a reply it means that your version is older.