GAPOSA®

868MHz
range

linkIT-RS232

Connectez vos moteurs radios Gaposa en les intégrant dans les solutions domotiques Control4.
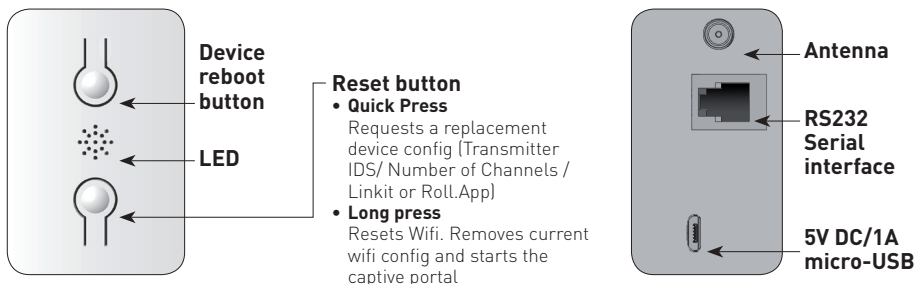
TECHNICAL CHARACTERISTICS

- Individual or group control
- 16 or 24 individual channels
- Tilting mode
- Intermediate position
- LED for feedback
- Reset and programming buttons
- Cables available for easy connection

Voltaje de entrada del Hub	5V
Potencia de entrada del Hub	0.3 A Max.
Frecuencia	868.30 MHz
Conexión	Wi-Fi
Red Wi-Fi	2.4 GHz únicamente
Alcance	30 mt / 98 feet
Grado de protección	IP20
Temperatura de funcionamiento	0°C a 60°C / 32°F a 140°F

Hardware

Comes with 2A, 5V micro-USB power supply.
It is possible to install more than one LinkIT with the IP driver.

Device reboot button

LED

Reset button
- **Quick Press**
  Requests a replacement device config (Transmitter IDS/ Number of Channels / Linkit or Roll.App)
- **Long press**
  Resets Wifi. Removes current wifi config and starts the captive portal

Antenna

RS232 Serial interface

5V DC/1A micro-USB

LED status

Green	Booting up
Flashing Blue	waiting for Wi-Fi network
Blue	Wi-Fi connected
Red	Command sent for UP, DOWN, STOP or PRESET

RJ9 – DB9 RS232 Pin Outs

RJ9 male connector

DB9 female connector rear view

USAGE	RJ9 PIN	DB9 PIN
5 Volt Power	1	NA
TXD	2	2
RXD	3	3
GND	4	5

Note: RS232 connection is made via RJ9 Socket.
Warning: check for crossover of pins 2 & 3 depending on the equipment used.
5V Pin is optional and is provided to allow LinkIT to be powered via the RJ9 socket.
This is for advanced installation only and should not be used alongside the 5V micro USB input.

Cabling distance

15 meters or more if special cables are used.
Cable options:

Reference	Description
	Serial connector with RJ9

RS232 protocol

RS232 Setup: (9K6 8N1)

Baud Rate	9600
Data	8
Check Bit	None
Stop Bit	1

Control Commands:

Command	Byte			
Add Motor (PROG TX)	0xaa	Tilt Up	0xba	
Delete Motor (TX DELETE)	0xab	Tilt Down	0xbb	
Go to Interim Position	0xad	Stop	0xcc	
		Up	0xdd	
		Down	0xee	

Transmission Structure:

Header	Bank	Channel	Command	Verify XOR B0-B3
B0	B1	B2	B3	B4
0x67	0x00	0x01	0xdd	0xbb

Example – Channel 1 – UP (Channel value Min 1 Max 8)

Bank:

Bank ID	Bank Function	Byte
A	Address 1-8	0x00
B	Address 9-16	0x01
C	Address 17-24	0x02

Banks B-C are optional depending on LinkIT SKU – I.E if you have an 8-channel version only bank A will function.
A 24-channel version will have banks A-C.

Reply Structure:

Header	Command	Confirmation
B0	B1	B2
0x6 6	0xdd	0xff

Example – Confirmation Command UP – received

Usage:

The host device must send a 5-byte payload to LinkIT.

B0	Fixed Header Byte – 0x67
B1	B1 Bank Selection from Bank A-C dependent on the target address
B2	Channel – This is always in the range 1-8.
B3	Control Command – see table above
B4	Verify – XOR of Bytes B0-B3 – See Example Table

For example, to close (down) a motor with bank 0 address 1 the command would be:
0x67,0x00,0x01,0xee,0x88 = 0x67^0x00^0x01^0xee - bitwise XOR

Examples of verify Commands:

HEAD	BANK	CHANNEL	COMMAND	VERIFY
0x67	0x00	0x01	0xee	0x88
0x67	0x00	0x02	0xee	0x8B
0x67	0x00	0x03	0xee	0x8A
0x67	0x00	0x04	0xee	0x8D
0x67	0x00	0x05	0xee	0x8C
0x67	0x00	0x06	0xee	0x8F
0x67	0x00	0x07	0xee	0x8E
0x67	0x00	0x08	0xee	0x81

On the table all codes are listed for motors 1 - 8 for command -0xee (Down)

For Up and Stop

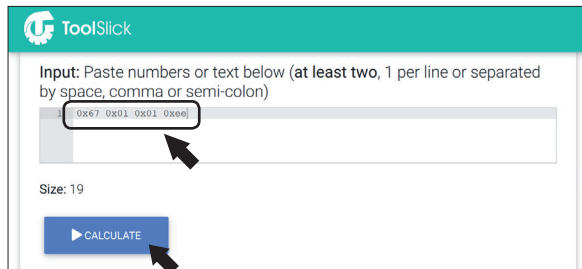Change the Command to **0xdd - UP** and for **0xcc - STOP**

Note: now the bytes must be xored together to get the verification byte

For easy calculation, use XOR Calculator link:

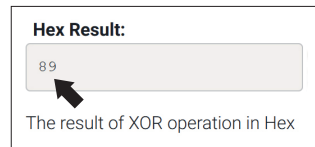https://toolslick.com/math/bitwise/xor-calculator

Enter the bytes for example **0x67 0x01 0x01 0xee** :

Take the HEX result see example:

Using the above you can calculate the XOR for every code that you need:

To ensure this is correct the command and XOR for Bank 1, Channel 1, UP would be:

0x67, 0x01,0x01,0xdd - (XOR = ba)

Command to send: **0x67,0x01,0x01,0xdd,0xba**

Initiating the Hub Set-up

1

Plug the hub into an outlet within range of your Wi-Fi network and Gaposa powered shades.

2

Open your Wi-Fi settings and connect to the network **GAPOSA-xxxx** (ex: GAPOSA-c045)

‹ Settings	Wi-Fi	
Wi-Fi		🟢
✓ FiOS-2073S-5G		🔒 🛜 ⓘ
NETWORKS		
FiOS-2073S		🔒 🛜 ⓘ
GAPOSA-c045		🔒 🛜 ⓘ
Other...		
Ask to Join Networks		Notify ›

3

Enter password to connect (Case sensitive): **GaposaInit**

Enter the password for "GAPOSA-c045"

Cancel　**Enter Password**　Join

Password　Enter Password

You can also access this Wi-Fi network by bringing your iPhone near any iPhone, iPad, or Mac which has connected to this network and has you in their contacts.
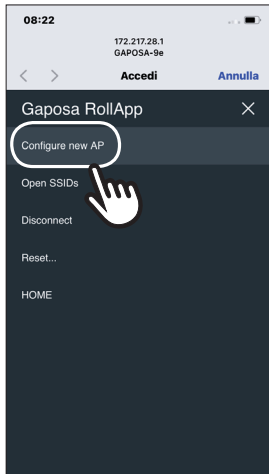
4

You will be taken to the network sign-in page, if not, you must sign into the network from settings. Click the **menu button** at the top right if on a mobile phone.
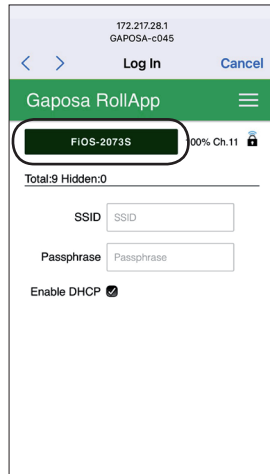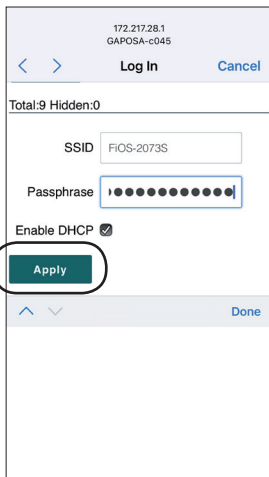
172.217.28.1 GAPOSA-c045	
‹　›　**Log In**　Cancel	
Gaposa RollApp	☰
Established connection	N/A
Mode	AP_STA(6)
IP	0.0.0.0
GW	0.0.0.0
Subnet mask	0.0.0.0
SoftAP IP	172.217.28.1
AP MAC	AC:67:B2:54:45:C1
STA MAC	AC:67:B2:54:45:C0
Channel	1
dBm	0
Chip ID	49221
CPU Freq.	240MHz
Flash size	8388608

5

Click **Configure new AP**

08:22
172.217.28.1
GAPOSA-9e

< > Accedi Annulla

Gaposa RollApp ✕

Configure new AP

Open SSIDs

Disconnect

Reset...
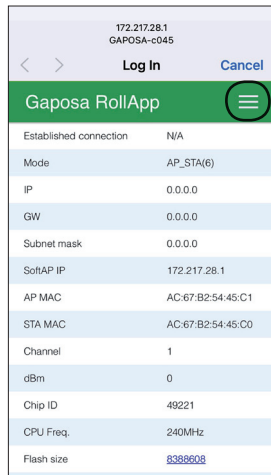
HOME

6

A list of visible WiFi networks appears. Please select your home WiFi network.

172.217.28.1
GAPOSA-c045

< > Log In Cancel

Gaposa RollApp ☰

FiOS-2073S 100% Ch.11 🔒

Total:9 Hidden:0

SSID   SSID

Passphrase   Passphrase

Enable DHCP ☑

7

Enter your WiFi network password and click **Apply**

172.217.28.1
GAPOSA-c045

< > Log In Cancel

Total:9 Hidden:0

SSID   FiOS-2073S

Passphrase   •••••••••••

Enable DHCP ☑

Apply

⋀ ⋁   Done

8

Exit out of the hub sign in page and reconnect to your home WiFi if it doesn't connect automatically.

172.217.28.1
GAPOSA-c045

< > Log In Cancel

Gaposa RollApp ☰

Established connection	FiOS-2073S
Mode	AP_STA(3)
IP	192.168.1.209
GW	192.168.1.1
Subnet mask	255.255.255.0
Channel	11
dBm	-34
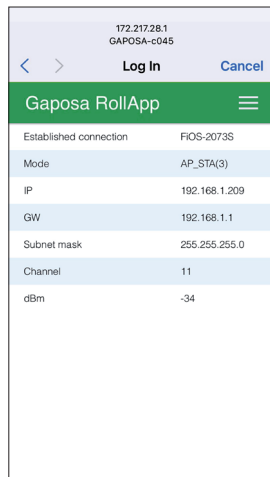
9

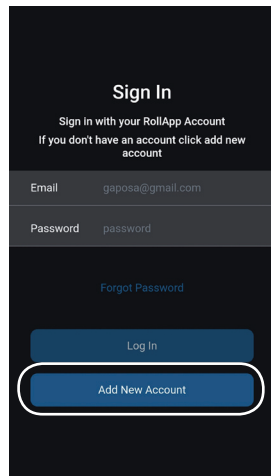Download the app from the app store. Search **RollApp**
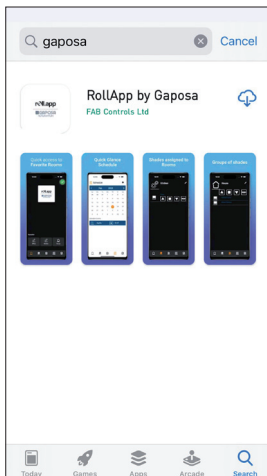
10

Open the app and create an account by clicking
`Add New Account`
The app will ask for location permissions. Please allow location use for sunset / sunrise control.

Sign In

Sign in with your RollApp Account
If you don't have an account click add new account

| Email | gaposa@gmail.com |
| Password | password |

Forgot Password

Log In

Add New Account

11

Fill out the form with your desired account information.

roll.app

Sign Up
Sign up for a RollApp Account.

Name	Mr Gaposa
Email	gaposa@gmail.com
Password	password
Telephone	12345678910

Click to view - Privacy Policy

Register

Login

12

Read the privacy policy and press `Submit` to continue.

It could take us longer than a month if your request is particularly complex or you have made a number of requests. In this case, we will notify you and keep you updated.

10. **Keeping your personal information secure**

We have put in place appropriate security measures to prevent personal information from being accidentally lost, used or accessed unlawfully, altered or disclosed. We limit access to your personal information to those who have a genuine business need to access it. Those processing your information will do so only in an authorised manner and are subject to a duty of confidentiality.

We also have procedures in place to deal with any suspected data security breach. We will notify you and any applicable regulator of a suspected data security breach where we are legally required to do so.

Submit

13

The app will find your location and auto fill your details. Please confirm this is all correct.

Location

Site Name	GAPOSA USA
Address	3920 Providence Rd
Town	Newtown Square
County	Delaware County
State	Pennsylvania
Zip	19073
Country	US

Add Location

14

Once you have created your account, please sign in using the credentials you just created.

Sign In

Sign in with your RollApp Account
If you don't have an account click add new account

Email	gaposa@gmail.com
Password	password

Forgot Password

Log In

Add New Account

15

Scan the QR code or enter the serial number. Click Register Now
-The app will ask to use the camera to take a picture of the QR code

Register Hub

Scan the QR Code on the base of your LinkIT to register your device.

XXXXX

Serial Number: AC67B25445C0

Device Name: Gaposa USA

Register Now

16

The app is now setup and you can begin to add rooms and shades.

roll.app
GAPOSA
AUTOMATION

Favorite Rooms

No Favorite Added

PAIRING MOTOR

Before a screen can be controlled from LinkIt, the screen must be synched into RollApp.

1. Create a room
2. Into the room create the device
3. From the handheld remote already paired with the screen, move the screen to the middle. Press and hold in the sync button on the back of the remote until the screen starts moving. As it moves, let the sync button go and press the corresponding Up or DOWN button into Rollapp. Press submit and go to the next one.
4. Once you paired all the devices into Rollapp go to the SETUP page of Rollapp and open the"integration" section
5. You will see the channel and ID here.

Id	Location	Name	Stat
0,1	Office	Shade 1	▲
0,2	Office	Shade 2	▲
0,3	Office	Shade3	▲
0,4	Office	Shade 4	▲

⌂ Integration