

Dooya Installation and Usage Guide

DOOYA[®]
TUBULAR MOTOR



Version: 1.0
Date: Friday, June 17, 2022
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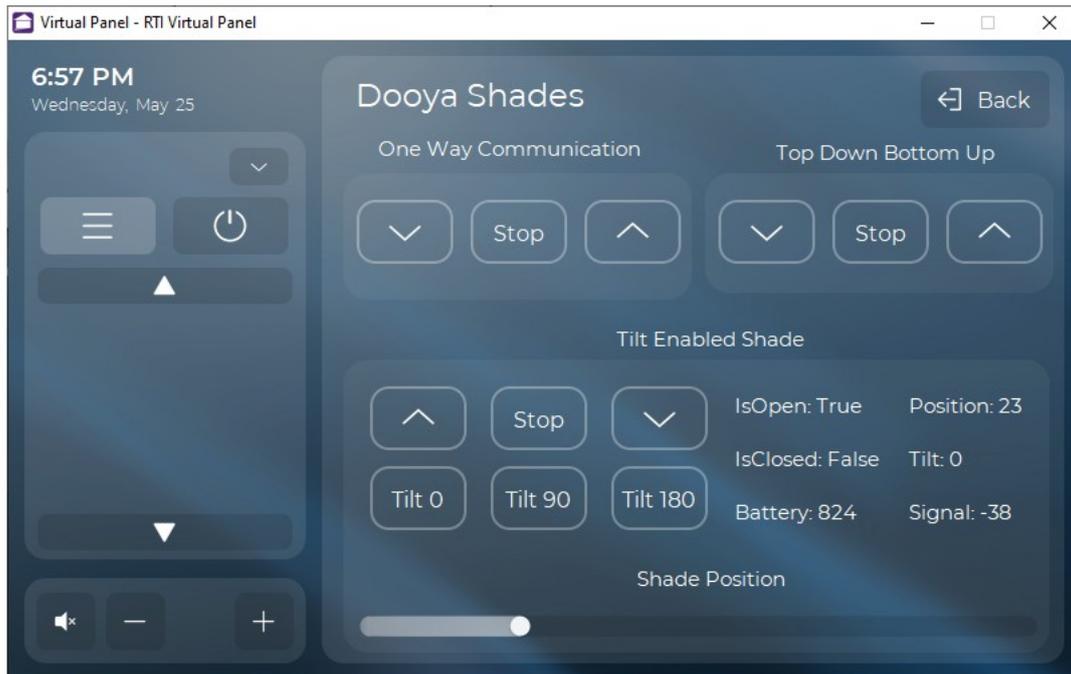
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Overview

Operating in the Home & Building and Access Activities, Dooya is the leading Chinese brand in tubular motors, particularly at the entry-level. Dooya specializes in the design of control systems for rolling shutters, rolling doors, curtains and interior blinds.

Dooya is part of the Somfy Group's portfolio of complimentary brands. Together, they cover most automation needs for openings and closures of homes and buildings around the world. They also allow the Group to service its distribution channels—manufacturers, installers, DIY superstores, e-commerce, architects—with suitable solutions.



Features

- Manufacturer Sponsored FREE Driver
 - Uni Directional Shade Driver
 - One Way Driver
 - Commands
 - Up
 - Down
 - Stop
 - Bi Directional Shade Driver
 - Two Way Driver
 - Commands
 - Up
 - Down
 - Stop
 - Position
 - Feedback
 - Position
 - Battery mAh
 - Signal Strength
 - Bi Directional Tilt Shade Driver
 - Two Way Driver
 - Commands
 - Up
 - Down
 - Stop
 - Position
 - Tilt
 - Feedback
 - Position
 - Tilt
 - Battery mAh
 - Signal Strength
 - Bi Directional TDBU (Top Down, Bottom Up) Shade Driver
 - Two Way Driver
 - Commands
 - Up
 - Down
 - Stop
 - Position for Top and Bottom
 - Feedback
 - Top Motor Position

- Bottom Motor Position
- Battery mAh
- Signal Strength
- Position feedback for bi-directional motors
 - Event fire on Open
 - Event Fire on Close
- Battery mAh feedback for bi-directional motors with batteries installed.
 - Event fire on low battery

Driver Installation and Configuration

Information Collection

1. Install and configure your Dooya phone app (or the appropriate rebranded version of the app) adding the available blinds to the rooms
2. Tap the hamburger menu button (three horizontal bars)



3. Tap your profile icon



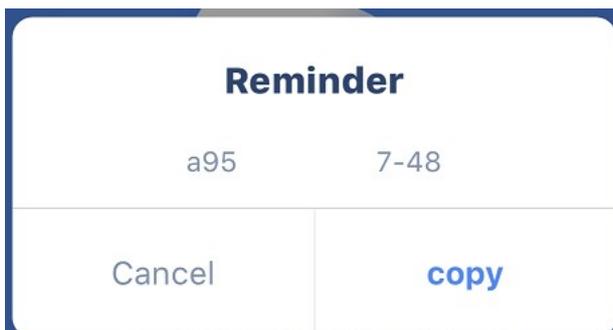
4. Tap **About**



5. Tap the logo 5 times



6. This will display a random string that you need to enter into the driver. We recommend that you copy/paste this key into an email from your phone so you can paste it in to the driver



Installation

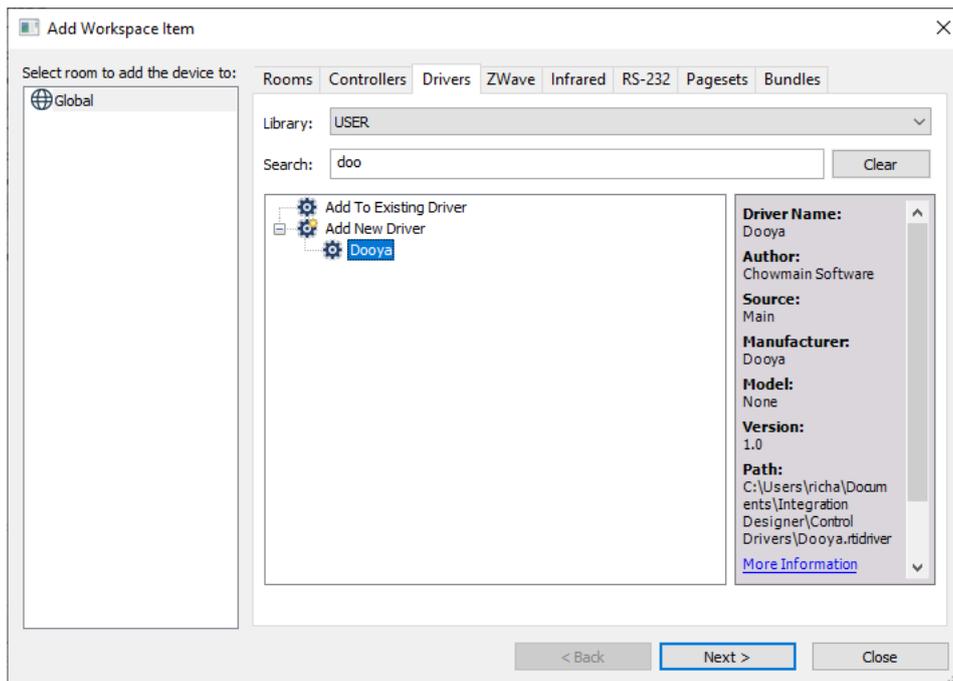
The zip file that included this documentation has the rtidriver file you will need to add. The first step is to download and extract the driver from the zip file. The default location is Documents\Integration Designer\Control Drivers

This driver is designed to work with a remote processor, so to make effective use of it you will need two copies of the driver, one for each processor. Each driver will need its own licence, so make sure you have ordered at least two licences before you start.

Add the driver

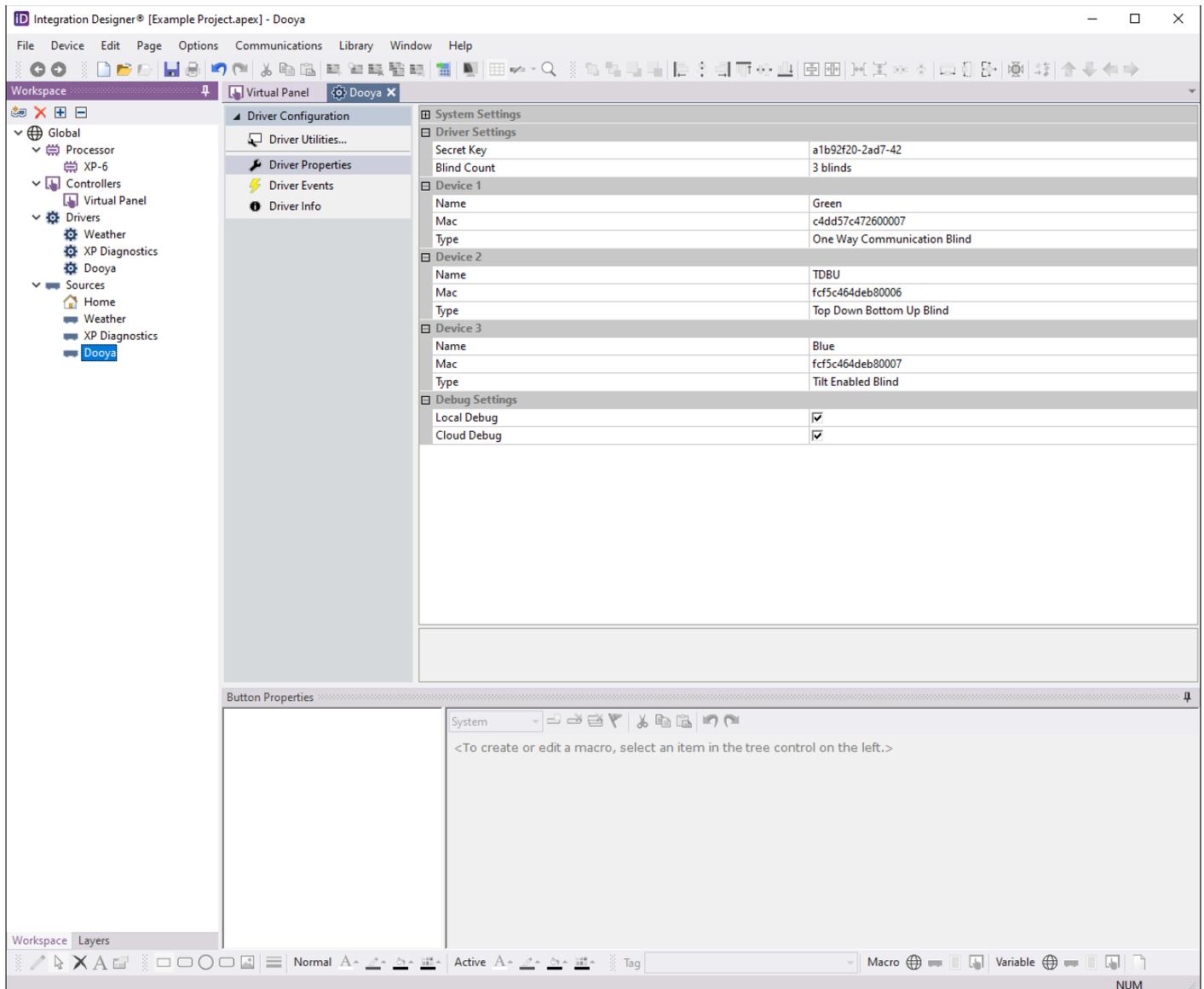
Click on to the Drivers tab at the top of the Add Workspace Item window. For ID11 make sure to choose the USER library,. Select the appropriate room to install the driver into and click Next. If required change the driver name and when your done click Add Device. If you have more than one driver to add repeat the process.

The driver is now ready to configure or use.



Configuration

The driver only requires a few items to be configured before it is ready to use.



Driver Settings

- Secret Key
This is the key from the mobile phone app where you tapped 5 times on the about logo.
- Blind Count
Use the dropdown to select the total number of blinds to be controlled.

Device 1 -50

- Name
Enter the name of the device, this will be used when programming functions, events and variables.

- Mac
Enter the mac address of the device found on the mobile app, click on the cog icon for the device and the mac is displayed in the device settings.
- Type
Use the dropdown to select the type of blind, this will show functions, events and variables applicable for the selected type.

System Functions

System Commands

Get Devices

This command is run at startup and attaches the input mac addresses entered in the config. This can be run later to discover mac addresses if required.

Device 1-50 Name Commands

Send Close [TAG: Shade Down: 1-50]

The Send Close command allows you to close the blind from a fully or partially opened state.

Send Open [TAG: Shade Up: 1-50]

The Send Open command allows you to open the blind from either a closed state or further open from a partially opened state.

Send Stop [TAG: Shade Stop: 1-50]

The Send Stop command allows you to stop the current open or close action before it has completed its action.

Set Position [TAG: Shade Level: 1-50]

Only available from two-way devices, the Set Position command allows you to open or close the blind from its current position to the specified position. This also allows adjustment from a slider control.

Set Tilt [TAG: Angle: 1-50]

Only available from tilt enabled devices, the Set Tilt command allows you to adjust the position of the tilt from 0 degrees to 180 degrees. This command becomes available once the blind is in the closed position which can be around 90% to which the angle will use the last 10% of the position for the angle. Closing the blind to 100% will also fully tilt the blind to 180 degrees.

System Variables

Variables are only available on two-way controlled devices

Device 1-50 Name

Blind Position **[integer]** [TAG: Level]

The Blind Position variable displays the current position of the blind, this is a percentage amount where 0 is fully open and 100 is fully closed.

Blind Open **[boolean]** [TAG: Open]

The Blind Open variable displays as true when the blind is partially or fully open.

Blind Closed **[boolean]** [TAG: Closed]

The Blind Closed variable displays as true when the blind is fully closed.

Blind Top Position **[integer]** [TAG: Top Level]

The Blind Top Position variable displays the current position of the top portion of the blind, this is a percentage amount where 100 is fully closed and 0 is fully open. Note that the top position cannot be greater than the bottom blind position.

Blind Top Open **[boolean]** [TAG: Top Open]

The Blind Top Open variable displays as true when the top portion of the blind is partially or fully open, this is a position greater than 0.

Blind Top Closed **[boolean]** [TAG: Top Closed]

The Blind Top Closed variable displays as true when the top portion of the blind is fully closed, this is when the position is equal to 0.

Blind Bottom Position **[integer]** [TAG: Bottom Level]

The Blind Bottom Position variable displays the current position of the bottom portion of the blind, this is a percentage amount where 0 is fully closed and 100 is fully open. Note that the bottom position cannot be lesser than the top blind position.

Blind Bottom Open **[boolean]** [TAG: Bottom Open]

The Blind Bottom Open variable displays as true when the bottom portion of the blind is partially or fully open, this is when the position is less than 100.

Blind Bottom Closed [boolean] [TAG: Bottom Closed]

The Blind Bottom Closed variable displays as true when the bottom portion of the blind is fully closed, this is when the position is equal to 100.

Tilt Position [integer] [TAG: Tilt]

The Tilt Position variable displays the position of the current tilt as a value between 0 and 180, where 180 is closed and less than is open.

For the Tilt to be at 180 the position of the blind must be 100%

Battery Level [integer] [TAG: Battery]

The Battery Level variable displays the amount of charge remaining in a two-way blind fitted with battery. This value is shown in mAh and can vary from device to device.

If there are multiple batteries / reported levels on a device the lowest is displayed.

Signal Strength [integer] [TAG: Signal]

The Signal Strength variable displays the received signal strength indicator by the bridge to the blind device. The higher the number the better the signal, For example the value of -30 being a good connection and the value of -60 being a poor connection.

System Events

Events are only available on two-way controlled devices

Device 1-50 Name

Blind Open

- The Blind Open event is sent when the blind transitions from a closed state to an open one. If the blind is stopped and further opened this will not send again.
- For top down bottom up devices the blind is open if either the top or the bottom blind is not fully closed.

Blind Closed

- The Blind Closed event is sent when the blind transitions from an open state to closed.
- For top down bottom up devices the blind is closed only when the top and the bottom blind are both fully closed.

Battery Low

- The Battery Low event is sent when the device reports less than 100 mAh
- For devices with multiple batteries this event is sent when the lowest device reports less than 100 mAh