DRIVER SET FOR DOOYA BRIDGES AND BLIND/SHADE MOTORS

This driver set enables you to control Dooya Motors connected to Dooya Bridges.

The driver may be connected via a Serial connection to one or more Dooya Bridges arranged in an RS485 network.
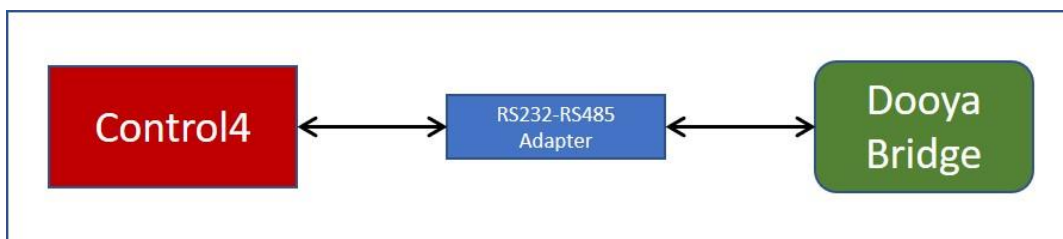
PLEASE NOTE THAT IP COMMUNICATIONS WITH THE DOOYA BRIDGE ARE NOT SUPPORTED AT THIS TIME.
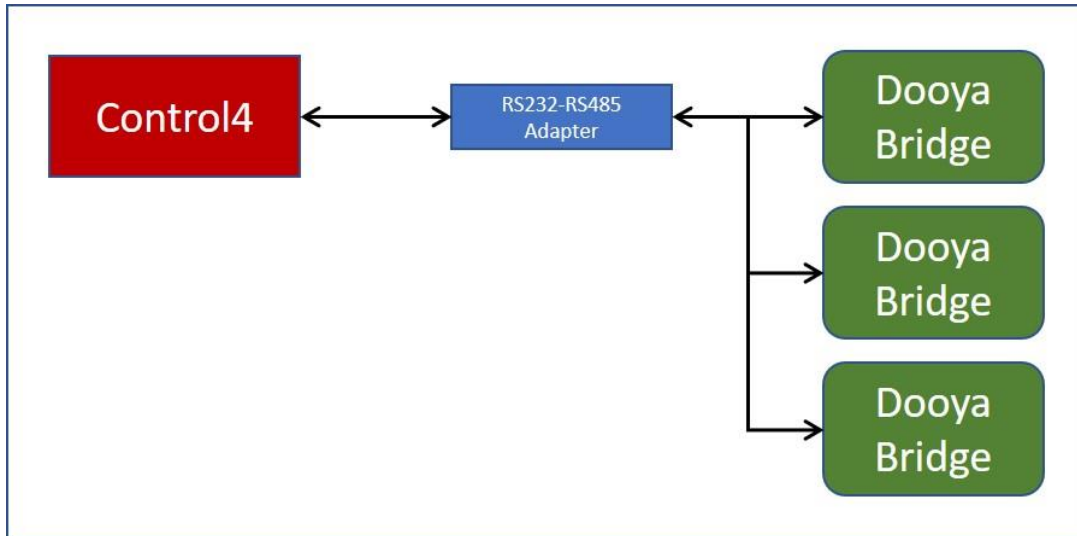
ITEMS TO COMPLETE:
- **IP communications with Dooya Bridge**
- **Low battery logic and events**
- **Support information in documentation**

INSTALLATION STEPS

- Before installing this driver set, fully configure and verify your Dooya setup using Dooya's Connector App. If using more than one Bridge, the Bridges do not need to be interconnected at this point. Once you are satisfied, proceed to the next steps which involve connecting your setup to Control4. At this point the Bridge(s) should all have their LED **solid Blue**.

- If you are using only one Dooya Bridge, simply connect its RS485 connection to a Control4 serial port, using an RS232 to RS485 adapter (this is essential). In this case, you will need only **one** Interface Driver in your Project.

- If you are using more than one Dooya Bridge, connect them in parallel to form an RS485 network and then connect that network to a Control4 serial port, using an RS232 to RS485 adapter. In this case, you will also need only **one** Interface Driver in your Project.

- You may also connect several Bridges individually, each to its own Control4 serial port using its own RS232 to RS485 adapter. If you do this, you will need to install one Interface Driver per Bridge. This setup would typically not be required as it is more efficient to interconnect the Bridges as an RS485 network and use only one Control4 serial port.

- Install one (or more) Interface Driver(s) as per the instructions above and make the connection to the appropriate serial port.

- Before you install the Blind drivers, it is best that you configure the Interface Driver itself. Repeat this for each Interface Driver installed in your Project:

  - If your Interface Driver has only one Dooya Bridge connected to it, simply run the Action 'Discover and Configure Bridges' using the default options, especially 'Number of Bridges' set to 1. All the steps should complete automatically. If not, verify your connections.

  - If your Interface Driver has more than one Dooya Bridge connected to it, run the Action 'Discover and Configure Bridges' being careful to specify the exact number of Bridges connected. Then, follow the instructions carefully:

    1) The driver will query the Bridges on the RS485 network and determine whether or not the Bridge addresses are unique. If they are, all the steps will complete automatically.

    2) As the Dooya Bridges typically have the default address of '123', the driver will then go through a process of renaming the Bridges so they have unique addresses. You will be required to disconnect all Bridges from the RS485 network and then reconnecting them one by one. Follow these steps **carefully**. At the end, you will be requested to reconnect all the Bridges. Do so in a **timely fashion** as the whole process might have to be repeated. There is an Action to abort this process, if you run into difficulties or need to postpone.

    3) If some renaming was required and done, the driver will then complete the final steps and retrieve all motor information automatically.

- The next step involves specifying an Alias for each motor defined in Bridge(s). The ID used by the driver for each motor is '**bbbtmmm**', where **bbb** is the Bridge address (123, 124, etc.), **t** is the Motor Type (defined later) and **mmm** is the Motor sequence number in each Bridge (001, 002, etc.). Examples: '**123U001**' (the first motor defined on Bridge 123) and '**124A002**' (the second motor defined on Bridge 124). Since it is not obvious to know which physical blind has which sequence number, use the Action 'Assign Alias to Motor' to sort this out. This Action allows you to operate a specific motor, in order to identify it visually, and then, based on its location, assign it an Alias which will be meaningful when you identify Blind drivers in the next steps.

  The Motor Types are defined as follows:
  A: AC tubular motor
  C: Curtain motor
  D: DC tubular motor
  U: Undefined
  Z: One-way motor

- Within two to three minutes, the Interface Driver will retrieve all information from the Dooya Bridge(s). You may verify this by running the Action 'Print Status Report' which contains the Blind Report at the end.

• There are two Blind drivers: the normal driver is a single-control driver for blinds which have only one movement (either up/down or left/right or tilt, etc.). If you have a Venetian Blind/Louver, with two movements (up/down AND tilt), then use the Combo driver which has two controls.

• Install one appropriate Blind Driver for each physical Dooya blind you have in your Project. Using the 'Available Dooya Bridges' property, select the Interface Driver to which the Dooya Bridge controlling this blind is connected. Then, run the Action 'Refresh All Devices List' which should populate the property 'Available Dooya Blinds' with all the available motors, including those which have already be assigned to a blind driver. Select the motor you wish to assign to this specific blind. If the list is not right, then some of the previous steps may need to be redone. Repeat the current step until all the Blind drivers are installed.

• **IMPORTANT**: if you later add or remove Bridges, re-run the Action 'Discover and Configure Bridges'. If you simply add/remove motors to/from existing Bridges, run the Action 'Refresh Motors and Validate' instead.

• After adding all the Blind drivers, Refresh Navigators.

SUPPORT

For support on this driver set, please go to *[Dooya Support Website]* …

CHANGELOG

1.0.0 May 21, 2019   Initial release