

Hi All,

At SiliconCode, we are continually updating and innovating. In our latest implementation of remote switching, we are making use of a public broker available on the internet to connect between publisher and the subscriber. In our case, publisher is anyone who is subscribed to the broker (Host is : broker.hivemq.com) and publishes to a topic (Light). The host connects to the client (publisher) through a specific port (8000). The subscriber is our microcontroller, which subscribes to the topic "Light" at the same broker. Whenever there is anything published (either a 1 or 0 to the topic Light) the broker broadcasts to all the subscribers to that topic. We as a subscriber will execute a callback function when that happens and switch the light on or off accordingly.

Here are the steps :

Open the websocket link to the broker "hivemq" by clicking (Ctrl + click) on the link below :

[MQTT Websocket Client \(hivemq.com\)](https://www.hivemq.com/demos/websocket-client/)


For host enter : broker.hivemq.com

For port enter : 8000

(Don't have to change anything else)

ESP32 | New t... | SwA - | (170) < | HiveM | Web C | (170) | New t... | MQTT | M x | + | -

Not secure | www.hivemq.com/demos/websocket-client/ | A | ☆ | ☆ | 📦 | 🔔 | Not syncing

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Connection

Host: Port: ClientID: [Connect](#)

Username: Password: Keep Alive: SSL: ☐ Clean Session: ☒

Last-Will Topic: Last-Will QoS: Last-Will Retain: ☐

Last-Will Message:

Publish ⌵ **Subscriptions** ⌵ **Messages** ⌵

Click on Connect button on the top right.

It takes you to a Subscriber/Publisher window.

To switch on the light at the SiliconCode office, enter the topic as Pan_Tilt.

In the message box type 4 sets of PAN,TILT values each 3 digit and press publish.

000,000

060,060

120,120

180,180

The broker send this to all the subscribers to the topic "Pan Tilt".

The screenshot shows the Hivemq web interface in a browser. The address bar indicates the URL is www.hivemq.com/demos/websocket-client/. A banner at the top promotes a fully managed MQTT broker. The main interface is divided into two main sections: 'Publish' and 'Subscriptions'. The 'Publish' section has a 'Topic' field containing 'Pan_Tilt', a 'QoS' dropdown set to '0', and an unchecked 'Retain' checkbox. Below these is a 'Message' text area containing four lines of comma-separated values: '000,000', '060,060', '120,120', and '180,180'. A 'Publish' button is to the right of the message area. The 'Subscriptions' section is currently empty, showing only an 'Add New Topic Subscription' button. At the top right, a status indicator shows a green dot and the text 'connected'. A 'Messages' section is partially visible at the bottom.

The esp32 board, which is signed up as a subscriber at hivemq to the topic Pan Tilt will read the values and apply the same to the servo motors responsible for the Pan and Tilt.