



ControlByWeb X-320 Driver

Installation and Usage Guide

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Overview

The X-320™ is a high-end web-based instrumentation module that can be used in a variety of scientific and industrial applications such as energy/power monitoring, meteorology, process control, and much more.

It has a combination of analog and digital inputs that can be used with the appropriate sensors¹ for measuring voltage, current, temperature, humidity, wind speed, solar radiation, fluid level, flow, frequency, count, etc. Two digital inputs can be user-configured as outputs capable of driving solid state relays or triggering the input of another controller.

The Chowmain ControlByWeb X-320 driver for Control4 2 x GPIOs, exposes 6 temperature sensor values, 4 x Analog values and more to Control4.

Features

- 2 x Configurable GPIOs
 - Can be configured in either inputs or outputs
- Exposes values to variables for programming
 - Last Poll Time
 - Serial Number
 - Onboard Timestamp
 - Internal Temperature
 - Internal Voltage
 - Memory Power Up Flag
 - Device Power Up Flag
 - Poss Loss Counter
 - IO1 State
 - IO2 State
 - IO1 Direction
 - IO2 Direction
 - High Time 1
 - High Time 2
 - Raw Count 1
 - Raw Count 2
 - Rate 1
 - Rate 2
 - Raw Frequency
 - Frequency
 - Frequency Alarm
 - Analog 1 State
 - Analog 2 State
 - Analog 3 State
 - Analog 4 State
 - Analog 1 Alarm
 - Analog 2 Alarm
 - Analog 3 Alarm
 - Analog 4 Alarm
 - Units
 - Sensor 1 Temp
 - Sensor 2 Temp
 - Sensor 3 Temp
 - Sensor 4 Temp
 - Sensor 5 Temp
 - Sensor 6 Temp

- Sensor 1 Alarm
- Sensor 2 Alarm
- Sensor 3 Alarm
- Sensor 4 Alarm
- Sensor 5 Alarm
- Sensor 6 Alarm
- Extra Variable 0
- Extra Variable 1
- Extra Variable 2
- Extra Variable 3
- Programming Actions
 - Ability to clear memory flag
 - Ability to clear device flag
 - Ability to clear power loss counter

Important Notice

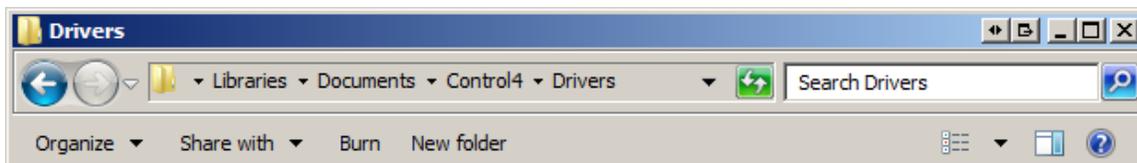
This driver polls the unit once every 5 seconds. As such it may take upto 5 seconds for a response. It is not recommended for time critical applications such as motion sensing.

Driver Installation

1. The driver you have downloaded will be in a zip file. Double click on this file to open it in your preferred zip program (WinZip, WinRar, etc.).



2. Extract the c4i file to the My Documents\Control4\Drivers directory. If you are using Windows 7 or 8 this will be extracted to the Libraries\Documents\Control4\Drivers directory.



3. You are now ready to add and configure the driver via the Composer Pro software.

Adding the driver to your project

IMPORTANT – Before undertaking the installation of the driver please follow the licencing steps outlined at the end of this document.

1. Launch the Composer Pro application and connect to your project
2. In the 'System Design' page select the 'Search' tab on the right hand side.
3. Type in 'X-320' into the search bar



X-320

Local Online Certified Only

-- All Device Types -- -- All Manufacturers --

Results Sort by: Relevance

ControlByWeb X-320

ControlByWeb X-320

others 1/05/2016 12:00 **Local**

4. Double click on the 'ControlByWeb X-320' driver to add it to your project
5. Highlight the 'ControlByWeb X-320' driver on the left hand side.
6. Enter in the IP address, username and password for the device.

Note: The driver will automatically come with the default username and password filled out.

IP Address	192.168.3.221
Username	admin
Password	webrelay

- The driver will auto import the details. Once the details populate the screen then you are ready to add motorised/sensor devices and make the connections.

Last Poll Time	
Serial Number	n/a
Onboard Timestamp	n/a
Internal Temperature	n/a
Internal Voltage	n/a
Memory Power Up Flag	n/a
Device Power Up Flag	n/a
Power Loss Counter	n/a

- Click on the Actions tab

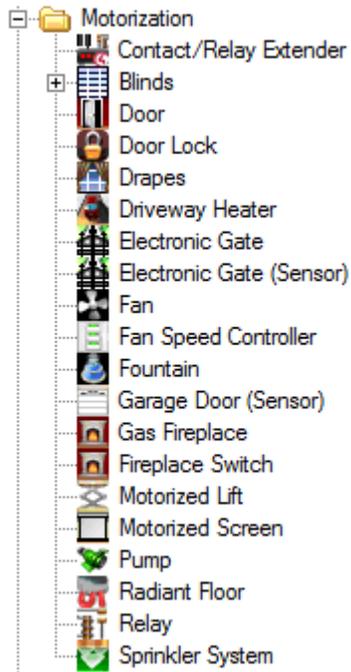


- Click on the Auto Setup Button. This will detect how each of the GPIO's are configured and show the correct connections as such.



- Click on My Drivers on the right hand side.

11. Under Motorisation double click on the device type you want to use (note this will be the icon for your device).



12. Do the same for Sensor based devices.

13. Click on the Connections tab.



14. Highlight driver on the left hand side.

15. The connections will show up as one of the following setups

- a. Two x Relay Outputs

Control Outputs

 GPIO 1	Control	RELAY	Output
 GPIO 2	Control	RELAY	Output

- b. Two x Contact Inputs

Control Outputs

 GPIO 1	Control	CONTACT_SENSOR	Output
 GPIO 2	Control	CONTACT_SENSOR	Output

- c. One of each

Control Outputs

 GPIO 1	Control	CONTACT_SENSOR	Output
 GPIO 2	Control	RELAY	Output

Control Outputs

 GPIO 2	Control	CONTACT_SENSOR	Output
 GPIO 1	Control	RELAY	Output

16. Bind the Relays and Contacts to the binding is it connected to.

17. Click on the File and Refresh Navigators. Congratulations you have set up the Control by Web driver.

Licencing

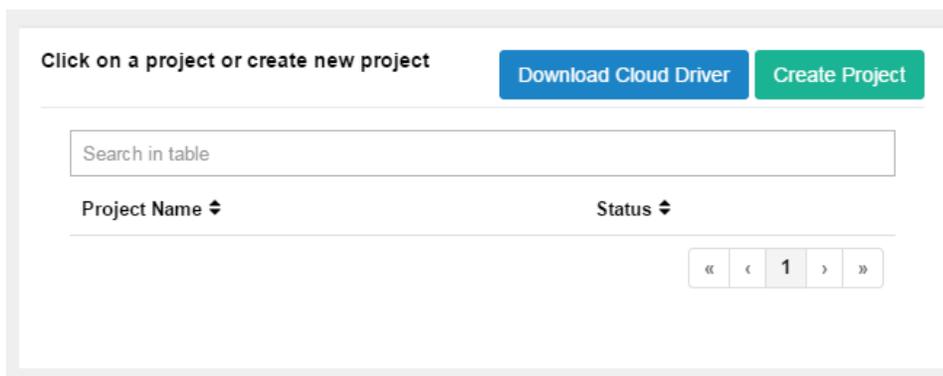
Chowmain drivers require a valid licence to use the driver. Drivers can be purchased from our distributor [driverCentral](#) however all Chowmain drivers come with a 7 day trial. We recommend that prior to purchasing a driver that you test the driver out to ensure that it will work with your hardware and will meet your requirements. The licencing procedure is broken down into 4 steps. A summary of the steps are below along however we have also provided detailed steps if the summary is not sufficient.

Summary

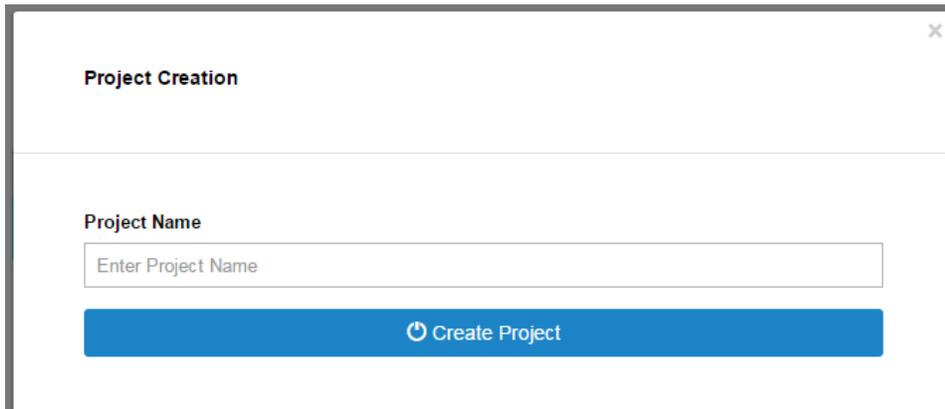
1. Create your project on the driverCentral.io website (This will generate a specific token which you will use in the next step)
2. Download, install and activate the driverCentral cloud driver in your project (Only once per project. Use the token generated in step 1)
3. (Optional) To try a driver, simply download it and install it in your project
4. To purchase a driver:
 - a. On driverCentral, purchase a license and register it to your project
 - b. If the driver is not already installed in your project, download it and install it
 - c. If necessary, use the cloud driver's Action: "Check Drivers" to force licence download to the project.

STEP 1 - Creating your project on driverCentral

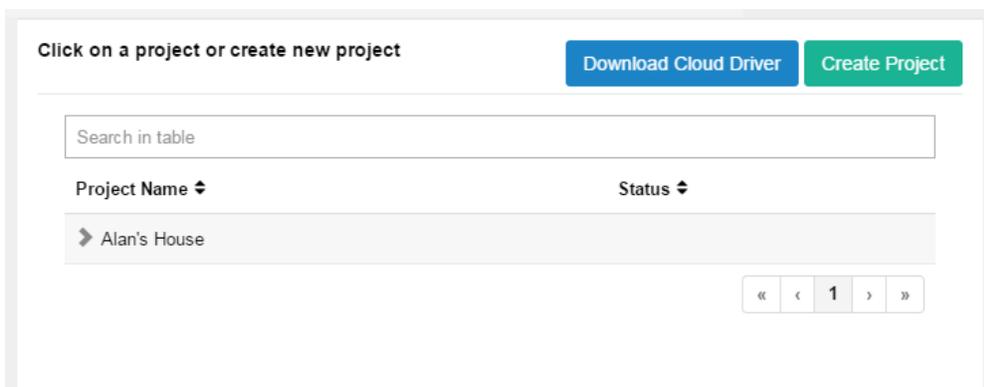
1. Visit <http://www.drivercentral.io>
2. Log into your driver Central dealer account.
3. Visit the Project Portal
4. Click on Create Project



- It will prompt you for a project name. Type in a meaningful name for your customer's project



- Click on Create Project
- Click on the project we just created to expand the project



- Take note of the Project Token as this will be used in STEP 3 when we install the driverCentral cloud driver.

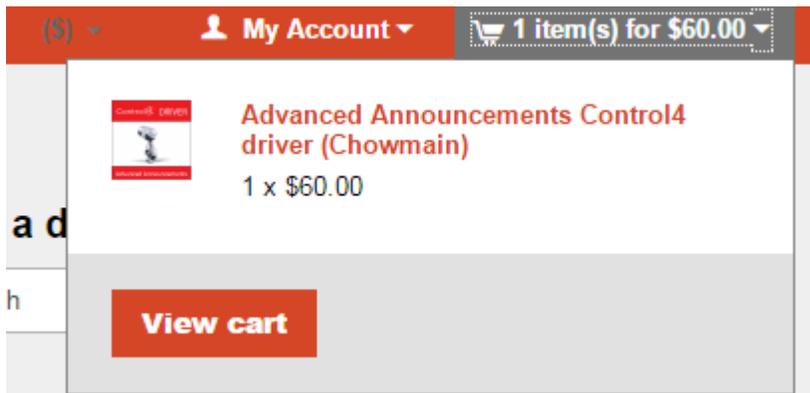
Project Name: <input type="text" value="Alan's House"/>	MAC Address: Not Connected to Project	Action:
Project Token: ABCDEFGHIJ	Last Communication: Not Connected	Connection Status: Not Connected

STEP 2 –Purchase driver licence

1. Visit <https://www.drivercentral.io/chowmain-ltd/> and find the product/driver you want to purchase a licence for.
2. Click on the Add to Cart button



3. Click on the Shopping Cart icon in the top right corner and click on View cart



4. Confirm that your order is correct and click on Proceed to checkout



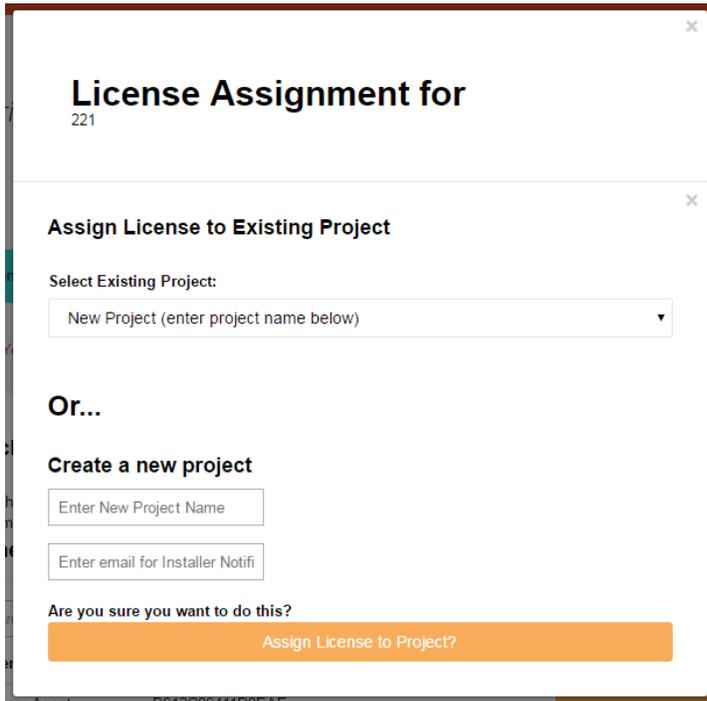
5. Follow the prompts and click on Submit my order



6. This will take you to PayPal for payment.
7. Pay via PayPal. It will automatically return to the marketplace when confirmed.
8. You will now be at a page where you can see your purchased licence.

License Name ↕	License Key ↕	Project Assigned ↕	Action ↕
[REDACTED]			Assign to Project

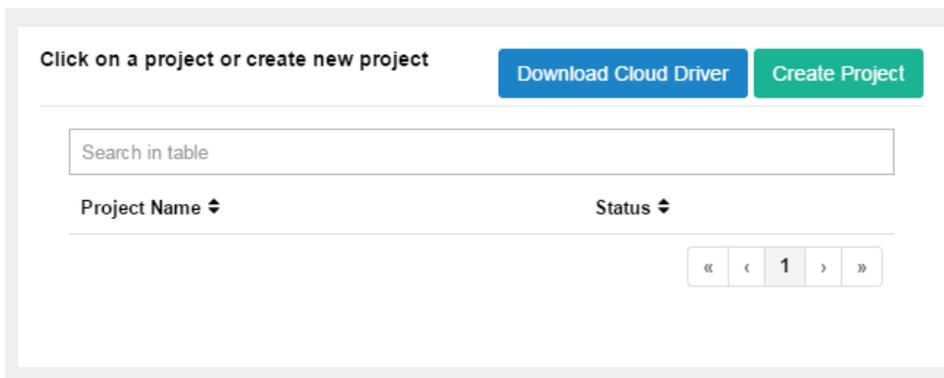
- From here assign the licence to the project we created or if you did not follow that step create a new project



STEP 3 – Install and activate the driverCentral cloud driver

NOTE: Only one instance of the driverCentral cloud driver installed per project. Do not install additional cloud drivers.

- Visit <http://www.drivercentral.io>
- Log into your driver Central dealer account.
- Visit the Project Portal
- Click on Download Cloud Driver



- Copy the C4Z driver to My Documents\Control4\Drivers directory.
- Add the driver to your project.

- Click on the driver to view it's properties

Cloud Status	Please enter cloud project token below...
Project Information	(1) Total, (0) Licensed, (0) Trials, (1) Expired, (0) Updates.
Driver Version	1001
Project Token	<input type="text"/>
	Project token from driverCentral.io project portal
Driver Actions	<input type="button" value="v"/>
Debug Mode	Off <input type="button" value="v"/>

- Type in the project token we took note of in STEP 1.
- Click on the Actions tab
- Click on Check Drivers

STEP 4 - Install Chowmain driver

- Install the Chowmain driver
- You will notice that the Activation Status reflects a Licence Activated state.
- Any driver that does not have a purchased licence will have a trial licence activated via the marketplace. Note that there is no way to reactivate the trial so please use wisely.
- If you do not then press the Check Drivers action in the driverCentral Cloud driver again.

Activation Status	Update Available!!! License Activated
Driver Version	1002
Driver Information	Navigate to connections tab and make serial binding
Automatic Updates	Off <input type="button" value="v"/>