

# AstroComms UAL

## Software User Manual v1.0 - 10/2020

### Welcome to this manual

This manual will show you how to use your UAL board.

First connect a USB cable to your UAL and open Arduino IDE (or any other app that supports a serial terminal using USB), but Arduino IDE it's highly recommended.

You will see the following welcome message on the app

```
Welcome to Utility Arms Logic - UAL
Developed in 2020 by Walex and designed by Nitewing based on Tarla76's
concept
```

```
You can enter commands directly on the terminal or type '/help' for more
information.
```

```
Do not forget to send CR after the command.
```

```
Do you need assistance?
```

```
Please visit www.astrocomms.net for more info
```

```
Much to learn you still have my old Padawan. This is just the beginning
```

UAL uses AstroComms Droid Protocol (ACDP) for receiving orders.

This is an example of a valid command: `/AC/UAL/S01C01B020F050W1000`

Please note that you need to add a carriage return after each command.

Every ACDP must start with `/AC` to specify an AstroComms device it's being addressed and after that `/UAL` must be written to tell the protocol you are talking to an UAL unit.

Addressing its completing by adding `/` to the command.

Following parameters are accepted

Sxx: Sequence number (from 0 to 6) both included

Cxx: Color number (from 0 to 9) both included

Bxxx: Brightness value (from 0 to 255)

Fxxx: Frame speed (from 0 to 999) indicating milliseconds between each led update

Wxxx: Wait time (from 0 to 9999) indicating milliseconds pause after command issued

#### Sequences

S00: Turn off all leds. Params used: None

S01: Finn data upload. Params used: BFW

S02: Customizable Finn data upload. Params used: CBFW

S03: Theater Chase. Params used: CBF

S04: Color Wipe. Params used: CBF

S05: Rainbow. Params used: BF

S06: Theater Chase Rainbow. Params used: BF

#### Colors

0 Black, 1 Red, 2 Yellow, 3 Green, 4 Cyan, 5 Blue, 6 Magenta, 7 Orange, 8 Purple, 9 White

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