PIXMOB

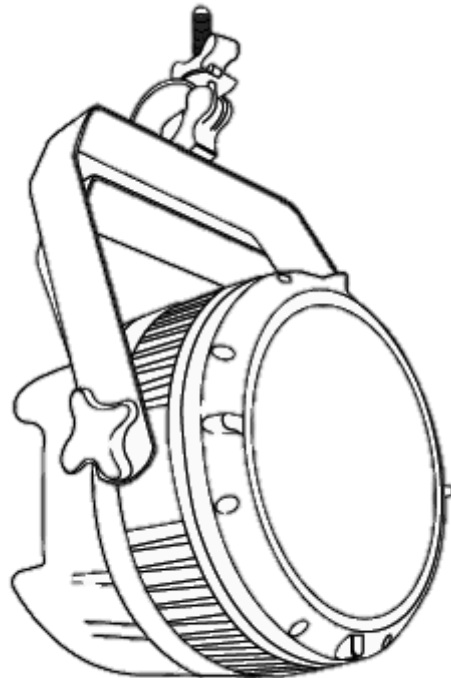# USER GUIDE WASH 3.5

Version 1.0, 14-02-2019

Contents

1. Wash 3.5 presentation and characteristics

1.1 Description use

A WASH is an infrared transmitter that controls PixMob luminous objects wirelessly. Similary to a LED flood light, it is controllable by a lighting through DMX. The operational frequency 20 MHz.

1.2 Electrical charateristics

1.2.1 Description

Our most powerful infrared light fixture built to flood a venue with signal. Output PixMob PRO2 protocol to control wearable devices for mass crowd effects.

1.2.2 Key features

-PixMob PRO2 architechture
-Standard professional lighting rigging yoke
-DMX512

1.2.3 Working temperature

-20 ° to 60 °C
-5 ° to 140 °F

1.2.4 Water protection

IP64

1.2.5 Physical and body

Length	8 in/200 mm
Width	8 in/200 mm
Height	10 in/260 mm
Weight	7.8 kg/17.5 lbs
External I/O	Neutrik PowerCon in/out
	Neutrik 5pol XLR in/out
Casing	Blacm aluminium case

1.2.6 Electrical specs

In/out voltage	AC: 100-240 V nominal, 50/60 Hz
Max power	125 W

1.2.7 Communication protocol

PixMob PRO2 Infrared:

IR Out	940 nm
IR Range	260 m/850 ft at 0° angle
IR Spread	140°

1.2.8 Coverage
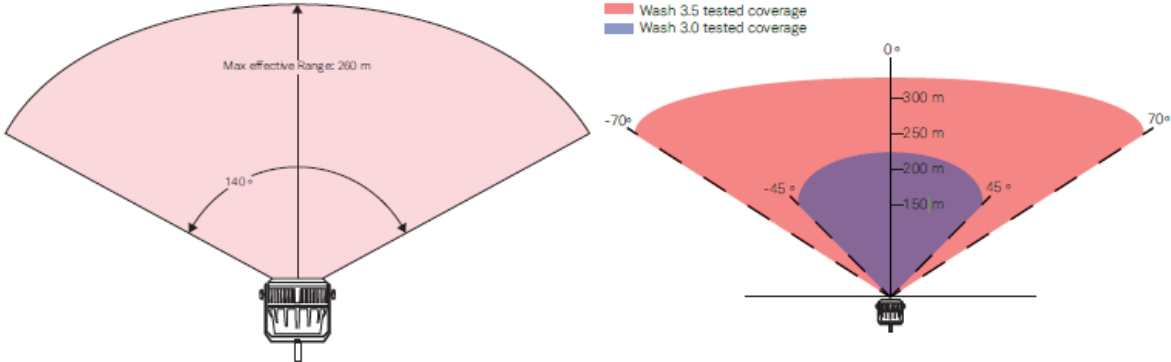
2. Warning

2.1 Security

-Use green glass lenses when you are near a functional WASH during operating and testing. The Maximum distance to be near an operation WASH without glasses is 3 ft/1 m with a direct view.

-Specifications of the green glass:

-Green Glass lenses (not tinted)
-Standard: ANSI Z87.1-2003
-Marking Z87+
-Color: Shade 3.0 IR

-Recommendation: 3M™ Nassau Rave™ Protective Eyewear 14459-00000-20 Shade 3.0 IR Lens

2.2 Label

3. Material needed

-1 WASH power cable (Powercon)

-1 DMX XLR5 pin cable

-1 PixMob WASH (with cheeseborough clamp or c-clamp and safety cable)

4. Installation

4.1 Installation

Open the cheeseborough clamp or c-clamp and put the Wash on the lighting truss. Secure the Wash with the safety cable first and then fasten the cheeseborough clamp or c-clamp.


4.2 Orientation

For best coverage, it is important to orient the WASH properly. IR signals behave like normal light, so shadows, occlusion and reflections need to be considered. WASH emit IR in a cone shape with a beam angle of 60º. We recommend always thoroughly testing the coverage before any show.

You can adjust the orientation of the Wash along two axes:
1. Use the screw on the cheeseborough clamp or c-clamp to orient the beam of IR.
2. Use the yoke clamps to adjust the head of the Wash.
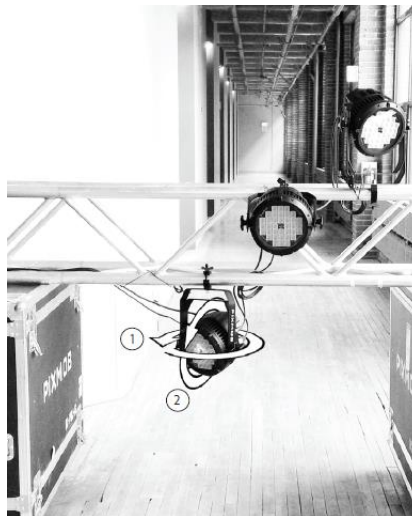
4.3 Connections

This picture shows the process to follow when you have more than one Wash to set up. (Daisy chain)

• For electrical reasons, do not connect more than 4 WASHs in a serie.

• All the WASHs on the same line must be connected to one dedicated DMX line in order to respect our frame rate of 15 fps.

• We recommend putting a 120 ohm DMX terminator on the DMX out on the last WASH in the line.

• We recommend putting a 25MHz ferrite on DMX and Power cable, the closest to the casing.

1. DMX OUT

2. POWERCON OUT

3. DMX IN

4. POWERCON IN

T. 120 ohm DMX TERMINATOR

• Do not connect DMX over ethernet network.

• Do not connect DMX over wireless technology.

5. Wash 3.5 menu

5.1 Home screen

When the WASH 3.5 is power up, these 4 screens show up with an interval of 1-2 seconds.

Boot screen

Firmware version

Hardware version

Channel (1 to 512)
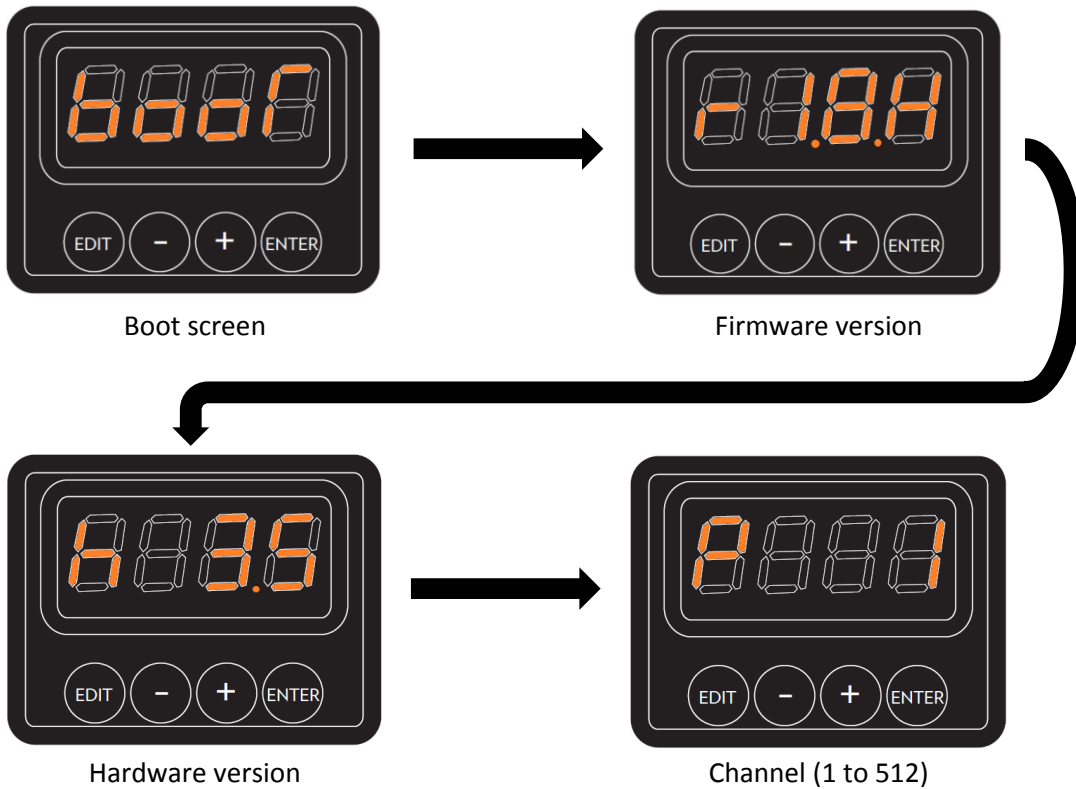
5.2 Change channel

To change the channel you need to:

-Hold the EDIT button for more than 3 seconds

-Press + or – to change the channel

-Press on ENTER to select the channel

If you hold + or -, it will increase or decrease by 10. If you don't press ENTER after you select the channel, it will automatically come back to the previous menu with the previous channel.
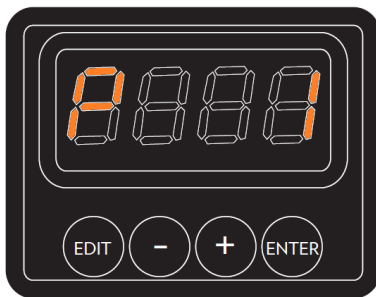
5.3 See temperature

Hold EDIT and – at the same time for 3 seconds and the Temperature should appear.
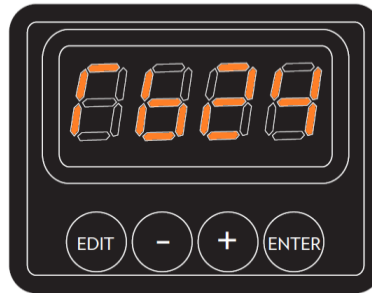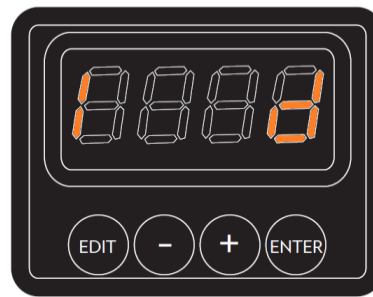

tb24 means temperature 24C

5.4 Flip screen

To flip the screen, hold + and – at the same time for 3 seconds. The screen should flip.
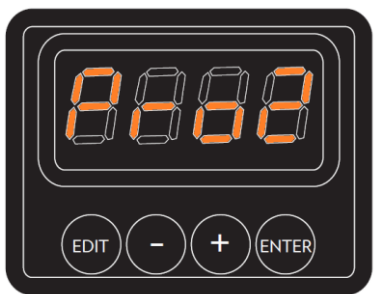

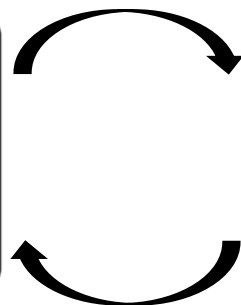Normal screen   Flip screen

5.5 Change Pro2 to Auto

To change the protocol from Auto to Pro2, hold EDIT and ENTER at the same time for 3 seconds. The screen should switch from Pro2 to Auto continually. Press ENTER when you want to select.
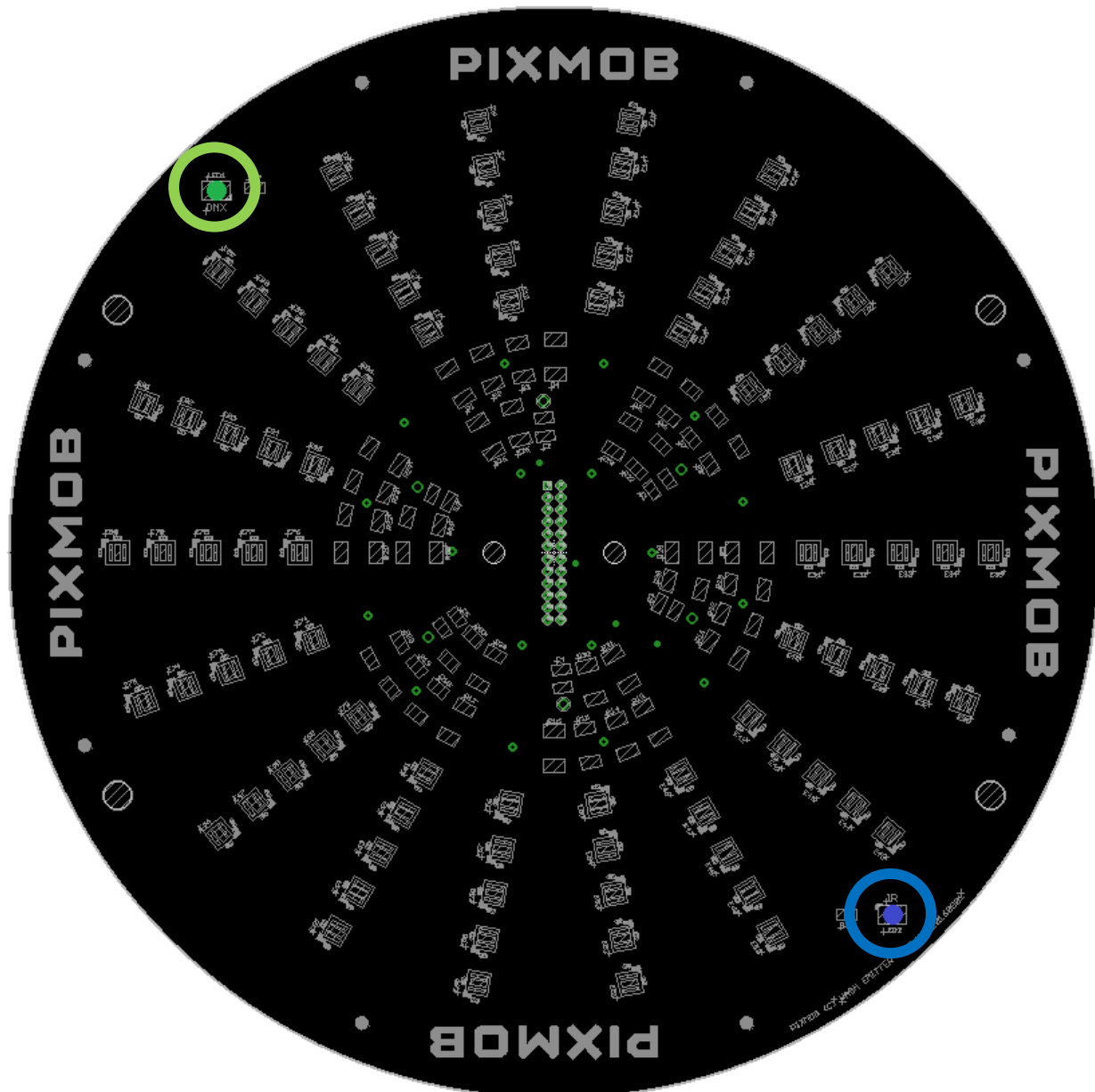

Pro2 screen   Auto screen

6. Troubleshooting

6.1 Front LED status indicator

Once the Wash is properly connected, you should see the two (green and blue) LED status indicator illuminate at the front of the Wash.

1. Blinking green (DMX); Receiving DMX
2. Fast blue blinking (IR); Output PixMob IR signal

6.2 Visualizing infrared

Before checking the IR LED, use the protective glasses against IR. After that, to see if all IR LED are ok you can use:

1- The WASH power meter to detect if one or more IR LED are burned or damaged.
2- Your telephone, open the camera and check it some IR LED are not power.