

## Footsie1

## Footsie 2

## Table of contents

1. Safety instructions ..... 3
2. Operating determination ..... 4
3. Fixture exterior view ..... 6
4. Installation ..... 8
4.1 Connection to the mains ..... 8
4.2 Connecting Footsies ..... 9
4.3 Diffusion filter installation ..... 11
5. DMX operation ..... 12
6. Control menu map ..... 13
7. Control menu ..... 15
7.1 DMXA (Addressing) ..... 16
7.2 Info (Fixture information) ..... 16
7.3 Pers (Personality) ..... 17
7.4 Manual (Manual Control) ..... 18
7.5 Test Prg (Test program) ..... 18
7.6 St Alone (Stand-alone) ..... 18
7.7 Reset ..... 19
7.8 Special (Special functions) ..... 19
8. RDM ..... 21
9. NFC ..... 22
10. Error and information messages ..... 23
11. Technical Specifications ..... 24

# FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOU INITIAL START - UP 

This device has left our premises in absolutely perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warnings in this manual.

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

Please consider that damages caused by manual modifications to the device are not subject to warranty.
The Robin Footsie was designed for outdoor use and it is intended for professional application only. It is not for household use.

## 1. Safety instructions

## CAUTION!

Disconnect the fixture from mains before removing any cover of the fixture. With a high voltage you can suffer a dangerous electric shock when touching alive wires and electrical parts under covers!

Make sure that the available voltage is not higher than stated on the rear panel of the fixture.
This fixture should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied, consult your authorized distributor or local power company.

Always disconnect the fixture from AC power before cleaning or servicing any part of the fixture.
The power plug has to be accessible after installing the fixture. Do not overload wall outlets and extension cords as this can result in fire or electric shock.

Make sure that the power cord is never crimped or damaged by sharp edges. Check the fixture and the power cord from time to time.

Refer servicing to qualified service personnel.
This fixture falls under protection class l. Therefore this fixture has to be connected to a mains socket outlet with a protective earthing connection.

Do not connect this fixture to a dimmer pack.

During the initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective.

> LED light emission. Risk of eye injury. Do not look into the beam at short distance of the of the product. Do not view the light output with optical instruments or any device that may concentrate the beam.

> The light source contains blue LEDs.

Handle the fixture only in a folded state without diffuser (11) by means of handles (5) or by bottom side of the base (12).

Never handle the fixture holding it by the display cover (3), rear cover (2), diffusion filter cover (10) or diffusion filter (11)!
Never handle the fixture in unfolded state!
Danger of injury of your fingers at incorrect handling with the fixture.


## 2. Operating determination

WARNING! This unit does not contain an ON/OFF switch. Always disconnect the power input cable from mains to completely remove power from unit when not in use or before cleaning or servicing the unit.

Avoid brute force when installing or operating the device.
When choosing the installation spot, please make sure that the device is not exposed to extreme heat or dust.
Only operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.
Do not block the lens array with any object when the fixture is under operation.
Operate the device only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the device.

The fixture housing never must be covered with cloth or other materials during its operation.
Please consider that unauthorized modifications on the device are forbidden due to safety reasons!
Potential foggy front lens array does not influence function of the fixture and does not subject to complaint.

# Please use only an original ROBE packaging (paper box, loader case or foam shell) for transporting the device, otherwise potential damage of the device during its transport will not subject to warranty. 

## The fixture must not come into contact with sea water (salt water). Damages or corrosion issues resulting from salt water will void the manufacture warranty and will not be subject to any warranty claims or repairs.

The product (covers and cables) must not be exposed to a high frequency electromagnetic field higher than $3 \mathrm{~V} / \mathrm{m}$.
Immunity of the equipment is designed according to the standard EN 55035 Electromagnetic compatibility of multimedia equipment - Immunity requirements

Emission of the equipment complies with the standard EN55032 Electromagnetic compatibility of multimedia equipment - Emission Requirements according to class B.

Contains FCC ID: 2A6PL-DMXRDMRW001
Contains IC: 29573-DMXRDMRW001

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The [Device] wireless operation is safe and complies to RF Exposure requirements
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.


## 3. Fixture exterior view



Top side - covers in closed position

1. Glass cover
2. Rear cover
3. Display cover
4. Connecting pin

Bottom side - covers in closed position
5. Handles

Top side - covers in open position

1. Glass cover
2. Control panel with display and control buttons


Top side - covers in closed position
7. Connecting aperture
8. DMX connection
9. Power

Top side - covers in open position
2. Rear cover
3. Display cover
10. Diffusion filter support cover


Top side - diffuser in open position
2. Rear cover
3. Display cover
10. Diffusion filter support cover
11. Diffusion filter

Footsie 1

Footsie 2



Fixtures must be installed by a qualified electrician in accordance with all national and local electrical and construction codes and regulations.

The Footsie's power connectors and DMX connectors are dust and water protected according to IP 65 by mating with related cable connectors.

They cannot stay disconnected outdoor.
All unused power connectors and DMX connectors have to be sealed by the rubber caps.
Visually check connectors on accidental water leaks before connecting related cable connectors.
If some water will appear in connectors, do not connect cable connectors, especially power!


Rubber caps have to be placed on unused connectors.

### 4.1 Connection to the mains

For protection from electric shock, the fixture must be earthed! The fixture has to be connected to an electric outlet which is equipped with a residual-current device (residual-current circuit breaker)!

The Footsie is equipped with auto-switching power supply that automatically adjusts to any $50-60 \mathrm{~Hz}$ AC power source from 100-240 Volts.
The IP65 rated power cable is an optional accessories. If you need to install a power plug on the power cable to allow connection to power outlets, install a grounding-type (earthed) plug, following the plug manufacturer's instructions. If you have any doubts about proper installation, consult a qualified electrician.
The cores in the power cable are coloured according to the following table.

| Core (EU) | Core (US) | Connection | Plug Terminal Marking |
| :--- | :---: | :--- | :---: |
| Brown | Black | Live | L |
| Light blue | White | Neutral | N |
| Yellow/Green | Green | Earth | $\square$ |

This device falls under class one and must be earthed (grounded)!
Ensure all connections and the power plug on the cable are properly sealed.
Design of the Footsie allows you to connect several fixtures to AC mains power in one interconnected daisy chain using power input and throughput connectors.


The max. number of connected fixtures depends on the AC mains power voltage:
Footsie 1

CE:
60 fixtures at power supply $=230 \mathrm{~V}$
54 fixtures at power supply $=208 \mathrm{~V}$
31 fixtures at power supply= 120 V

US:
44 fixtures at power supply $=230 \mathrm{~V}$
40 fixtures at power supply $=208 \mathrm{~V}$
23 fixtures at power supply= 120 V

US:
23 fixtures at power supply= 230 V
21 fixtures at power supply= 208 V
11 fixtures at power supply= 120 V

Real numbers of fixtures may differ from values stated above as you have to take into account the length of supply cables, circuit breaker etc. at projecting the fixtures installation Do not overload the supply line and connecting leads.

Wiring and connection work must be carried out by qualified staff!

### 4.2 Connecting Footsies

Fixtures on stage can be seamlessly aligned by the locking mechanism which creates connecting pin (4) and connecting aperture (7) on sides of the Footsies.



The space under rear cover of the Footsie can be used for placement of cables.


### 4.3 Diffusion filter installation

1. Disconnect Footsie from mains.
2. Open all covers (2), (3) and (10).
3. Place the diffusion filter (11) on the Footsie.
4. Close the diffusion filter support cover (10).
5. Close the rest of covers (2) and (3).


## 5. DMX operation

The fixture is equipped with 5-pin XLR connectors for DMX input and output.
Use a shielded twisted-pair cable designed for RS-485 and 5-pin XLR connectors in order to connect the controller with the fixture.
To keep declared IP rating the fixture, all used XLR connectors and cables have to meet IP 65 rating.

## DMX - output <br> XLR sockets (rear view):

1 - Shield
2 - Signal (-)
3 - Signal (+)
4 - Not connected
5 - Not connected


DMX - input
XLR plugs (rear view):

- Shield

2 - Signal (-)
3-Signal (+)
4 - Not connected
5 - Not connected

## Building a serial DMX daisy chain:

Connect the DMX output of the first fixture in the DMX daisy chain with the DMX input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected. Up to 32 fixtures can be connected in one DMX daisy chain.
Caution: At the last fixture, the DMX cable has to be terminated with a terminator. Solder a $120 \Omega$ resistor between Signal (-) and Signal (+) into 5-pin XLR plug and plug it into DMX output of the last fixture.


DMX controller

## 6. Control menu map

## Default settings=Bold print

| Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | Level 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DMXA | Set DMXA | 001-512 |  |  |  |  |
| Info | Times | PO Time | Total |  |  |  |
|  |  |  | Reset |  |  |  |
|  |  | LOTi | R LOT. |  |  |  |
|  |  |  | G LOT. |  |  |  |
|  |  |  | B LOT. |  |  |  |
|  |  |  | W LOT. |  |  |  |
|  | DMX Val | Powr | 0-255 |  |  |  |
|  |  | : |  |  |  |  |
|  |  | Dimm F | 0-255 |  |  |  |
|  | Temps | Base Tmp | Current |  |  |  |
|  |  |  | Highest |  |  |  |
|  |  |  | High Res. |  |  |  |
|  |  | LB Tmp | Current |  |  |  |
|  |  |  | Highest |  |  |  |
|  |  |  | High Res. |  |  |  |
|  |  | LED 1 Tmp | Current |  |  |  |
|  |  |  | Highest |  |  |  |
|  |  |  | High Res. |  |  |  |
|  |  | LED 2 Tmp | Current |  |  |  |
|  |  |  | Highest |  |  |  |
|  |  |  | High Res. |  |  |  |
|  |  | LED 3 Tmp* | Current |  |  |  |
|  |  |  | Highest |  |  |  |
|  |  |  | High Res. |  |  |  |
|  |  | LED 4 Tmp* | Current |  |  |  |
|  |  |  | Highest |  |  |  |
|  |  |  | High Res. |  |  |  |
|  | RDM UID | RDM U. 1 |  |  |  |  |
|  |  | : |  |  |  |  |
|  |  | RDM U. 6 |  |  |  |  |
|  | SW Ver | IC-M |  |  |  |  |
|  |  | IC-ME |  |  |  |  |
|  |  | IC-L1 |  |  |  |  |
|  |  | IC-L2 |  |  |  |  |
|  |  | IC-L3 |  |  |  |  |
|  |  |  |  |  |  |  |
| Pers | DMX In | Wired |  |  |  |  |
|  |  | Wireless |  |  |  |  |
|  |  | Wrle Out |  |  |  |  |
|  | Display | Turn |  |  |  |  |
|  |  | On/Off T | On, Off |  |  |  |
|  |  | Contrast | 0-100\% |  |  |  |
|  |  | Backlight | 0-100\% |  |  |  |
|  | Tungsten | Off |  |  |  |  |
|  |  | 750 W |  |  |  |  |
|  |  | 1000 W |  |  |  |  |
|  |  | 1200 W |  |  |  |  |
|  |  | 2000 W |  |  |  |  |
|  |  | 2500 W |  |  |  |  |
|  | White P | On, Off |  |  |  |  |


| Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | Level 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dimmer C | Square, Linear |  |  |  |  |
|  | LED Freq | 300 |  |  |  |  |
|  |  | 600 |  |  |  |  |
|  |  | 1200 |  |  |  |  |
|  |  | 2400 |  |  |  |  |
|  |  | High |  |  |  |  |
|  | LED Fadj | -126,-05..00..05, 126 |  |  |  |  |
|  | Temp Uni | ${ }^{\circ} \mathrm{C},{ }^{\circ} \mathrm{F}$ |  |  |  |  |
|  | 1 Ef Pos | Powr | 0-255 |  |  |  |
|  |  | : |  |  |  |  |
|  |  | Dim F | 0-255 |  |  |  |
|  |  | Store |  |  |  |  |
|  | Res WPas | No, Yes |  |  |  |  |
|  | Defaults |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Manual | Pan | 0-255 |  |  |  |  |
|  | : |  |  |  |  |  |
|  | Dimm F | 0-255 |  |  |  |  |
|  |  |  |  |  |  |  |
| Test Prg |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| St Alone | Auto Run | Off |  |  |  |  |
|  |  | Test |  |  |  |  |
|  |  | Prog 1 |  |  |  |  |
|  |  | Prog 2 |  |  |  |  |
|  |  | Prog 3 |  |  |  |  |
|  | Pr Play | Test Prg |  |  |  |  |
|  |  | Prog 1 |  |  |  |  |
|  |  | Prog 2 |  |  |  |  |
|  |  | Prog 3 |  |  |  |  |
|  | Pr Edit | Prog 1 | Step 1 | Pwr |  |  |
|  |  | Prog 2 | : | : |  |  |
|  |  | Prog 3 | Step 40 | F.Tim | 0-25.5 |  |
|  |  |  |  | S.Tim | 0-25.5 |  |
|  |  |  |  | COPY |  |  |
|  |  |  |  | Prg End | 1-40 |  |
|  |  |  |  |  |  |  |
| Reset |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Special | RDM Low |  |  |  |  |  |
|  | RDM Hight |  |  |  |  |  |
|  | Wireless | Stat |  |  |  |  |
|  |  | Unlink |  |  |  |  |
|  | Adjust | DMX Val | Powr | 0-255 |  |  |
|  |  |  | : |  |  |  |
|  |  |  | Dimm F | 0-255 |  |  |
|  |  | Calib | Cal Col | Red C | R X, RY, RI, RT |  |
|  |  |  |  | Gre C | G X, GY, GI, GT |  |
|  |  |  |  | Blu C | B X, BY, BI, BT |  |
|  |  |  |  | Whi C | W X, WY, WI, WT |  |
|  |  |  |  | Store |  |  |
|  |  |  | Cal Load |  |  |  |
|  | Sw Upd | On, Off |  |  |  |  |

[^0]
## 7. Control menu

The Robin Footsie is equipped with a 2-row LCD display which allows you to set the fixture's behaviour according to your needs, obtain information on its operation, control all range of effects and program it in stand-alone mode.
The fixture supports NFC (Near-Field Communication).


NFC interface, display and control buttons on the front panel
[ESCAPE] button used to leave the menu without saving changes. [NEXT] , [PREVIOUS] buttons for moving between menu items and symbols, adjusting values.
[ENTER] button used to enter the selected menu (menu item) and to confirm adjusted value.
After switching the fixture on, display shows current DMX address.

## Locking/unlocking the screen

To lock the screen, display the screen with DMX address, touch the [ESCAPE] button and slide your finger clockwise in a circular track of $360^{\circ}$ across buttons [ESCAPE] --> [NEXT] --> [ENTER] -->[PREV]--> [ESCAPE]. The sign "Locked" will appear on the screen. If this sign will not appear, repeat finger sliding again with a different speed.


To unlock the screen, touch the [ESCAPE] button and slide your finger clockwise in a circular track of $360^{\circ}$ across buttons [ESCAPE] --> [NEXT] --> [ENTER] -->[PREV]--> [ESCAPE].
The sign "Locked" will disappear from the screen. If this sign still remains on the screen, repeat finger sliding again with a different speed.


### 7.1 DMXA (Addressing)

Set DMXA (DMX Address) - use this menu item to set the DMX start address of the fixture, which is defined as the first channel from which the ROBIN Footsie will respond to the controller.
If you set, for example, the address 23, the ROBIN Footsie 2 WW will use channels 23-35for control.
Please, be sure that you do not have any overlapping channels in order to control each ROBIN Footsie correctly and independently from any other fixture on the DMX data link.
If there is no data received at the DMX input, the display will start to flash "0001" with actually stored DMX address.

### 7.2 Info (Fixture information)

Times - the menu item allows you to get information about fixture times.
PO Time (Power On Time) - Select the menu to read the number of fixture operation hours.
Total - the item shows the total number of the operation hours since the ROBIN Footsie has been fabricated.
Reset - the item shows the number of operation hours that the ROBIN Footsie has been powered on since the counter was last reset.
In order to reset this counter to 0, press and hold both [NEXT] and [PREV] buttons and the [Enter] button at the same time.

LOTi (LEDs On Time) - Select the menu item to read the number of operation hours of individual LEDs (Red, Green, Blue, White).

R LOT. - Red LEDs on time.
G LOT. - Green LEDs on time.
B LOT. - Blue LEDs on time.
W LOT. - White LEDs on time.
DMX Val. (DMX readout) - The menu is used to read DMX values of each channel received by the fixture.
Temps - The menu allows you to read temperatures inside of the fixture.
LB Tmp (LEDs Board Temperature) - the menu shows temperatures on the LEDs control PCB.
Current - a current temperature of the LEDs control PCB.
Highest - a maximum temperature of the LEDs control PCB since the fixture has been fabricated.
High Res (High Resettable) - a maximum temperature of the LEDs control PCB since the counter was last reset.
In order to reset this counter, press and hold both [NEXT] and [PREV] buttons and the [Enter] button at the same time.
Base Tmp (Base temperature) - the menu shows temperatures in the fixture base (on the display PCB).

Current - a current temperature in the fixture base.
Highest - a maximum temperature in the fixture base since the fixture has been fabricated. High Res (High Resetable) - a maximum temperature in the fixture base since the counter was last reset.
In order to reset this counter, press and hold both [NEXT] and [PREV] buttons and the [Enter] button at the same time.

LED 1 Tmp (LEDs PCB 1 Temperature) - the menu shows temperatures on the LEDs PCB 1.
Current - a current temperature of the LEDs PCB 1.
Highest - a maximum temperature of the LEDs PCB 1 since the fixture has been fabricated. High Res (High Resettable) - a maximum temperature of the LEDs PCB 1 since the counter was last reset.
In order to reset this counter, press and hold both [NEXT] and [PREV] buttons and the [Enter] button at the same time.

LED 2 Tmp (LEDs PCB 2 Temperature) - the menu shows temperatures on the LEDs PCB 2.
Current - a current temperature of the LEDs PCB 2.
Highest - a maximum temperature of the LEDs PCB 2 since the fixture has been fabricated.
High Res (High Resettable) - a maximum temperature of the LEDs PCB 2 since the counter was last reset.
In order to reset this counter, press and hold both [NEXT] and [PREV] buttons and the [Enter] button at the same time.

LED 3 Tmp (LEDs PCB 3 Temperature*) - the menu shows temperatures on the LEDs PCB 3.
Current - a current temperature of the LEDs PCB 3.
Highest - a maximum temperature of the LEDs PCB 3 since the fixture has been fabricated.
High Res (High Resettable) - a maximum temperature of the LEDs PCB 3 since the counter was last reset.
In order to reset this counter, press and hold both [NEXT] and [PREV] buttons and the [Enter] button at the same time.

LED 4 Tmp (LEDs PCB 4 Temperature*) - the menu shows temperatures on the LEDs PCB 4.
Current - a current temperature of the LEDs PCB 4.
Highest - a maximum temperature of the LEDs PCB 4 since the fixture has been fabricated.
High Res (High Resettable) - a maximum temperature of the LEDs PCB 4 since the counter was last reset.
In order to reset this counter, press and hold both [NEXT] and [PREV] buttons and the [Enter] button at the same time.

* Footsie 2 only.

RDM UID - the menu allows you to read RDM UID of the fixture.
Sw Ver (Software versions) - Select this item to read the software version of the fixture processors.
IC-M - Display processor
IC-ME - EEprom
IC-L1 - LED control processor 1.
IC-L2 - LED control processor 2.
IC-L3 - LED control processor 3.

### 7.3 Pers (Personality)

DMX In (DMX input) - use the menu to select mode of DMX signal receiving.
Wired - DMX signal is received by means of the standard DMX cable.
Wireless - DMX signal is received by means on inbuilt wireless DMX module.
Wrle Out - the fixture receives wireless DMX and sends the signal to its wired DMX output.
The fixture behaves as " Wireless/Wired" adapter.
Display (Display adjusting) - this menu allows you to adjust the display behaviour. Turn - the function turns the display by $180^{\circ}$.
On/Off T - the function allows you to keep the display permanent on or turn it off two minutes after last pressing any button on the control panel.
Contrast- use the function to adjust contrast of the display (0-100\%).
Backlight- use this function to adjust back-light of the display (0-100\%).
Tungsten (Tungsten simulation) - the function simulates behaviour of a halogen lamp during dimming at calibrated whites $2700 \mathrm{~K}-4200 \mathrm{~K}$. You can select from various lamp wattage simulation: 750W, 1000W, 1200W, 2000W, 2500W.

White $\mathbf{P}$ (White Point $\mathbf{8 0 0 0 K}$ ) - if the function is on, the CTC channel allows you to set desired white in range of 8000K-2700K (0 DMX=8000K, 255 DMX=2700K). Necessary condition is, that RGBW channels have to be full or set at the same DMX values, e.g. 150.
If this function is off, the range of whites is not uniform and may be different for each fixture.
Dimmer C (Dimmer curve) - use the menu to select desired dimmer curve.
Linear - a linear curve.
Square - a square law curve.
LED Freq. (LEDs frequency selection) - the function allows you to set the PWM (Pulse Width Modulation) output frequency of LEDs to Standard or High. You can select from the following values:

300 Hz
600 Hz
1200 Hz
2400 Hz
High

LED Fadj (LEDs frequency fine adjustment) - The function allows you to change the selected PWM output frequency of LEDs in 126 levels up and down around the selected frequency in the menu "LED Freq".
-126...-001 - Frequence levels 1-126 under selected frequency.
000 - Selected frequency
001... 126 - Frequence levels 1-126 above selected frequency.

Temp. Uni. (Temperature unit) - use the menu item to change temperature unit from ${ }^{\circ} \mathrm{C}$ to ${ }^{\circ} \mathrm{F}$.
I. Ef. Pos. (Init effect positions) - use the menu to set all effects to the desired positions at which they will stay after switching the fixture on without DMX signal connected.

Defaults - The menu item allows you to set all fixture parameters to the default (factory) values.

### 7.4 Manual (Manual Control)

Use the menu to control all fixture channels by means of control buttons.

### 7.5 Test Prg (Test program)

Use this menu to run a special demo-test sequences without an external controller, which will show you some possibilities of using ROBIN Footsie.

### 7.6 St Alone (Stand-alone)

Auto Run (Presetting playback) - the function allows you to select the program which will be played in the stand-alone mode after switching the fixture on. Selected program will be played continuously in a loop.

Off - the option disables „Auto Run" function.
Test - the option will start built-in test program.
Prog 1 - the option will start user-created program 1
Prog 2 - the option will start user-created program 2
Prog 3 - the option will start user-created program 3
Pr. Play (Playing program) - use the menu to run a user-created program in a loop.
Test Prg - the option runs built-in test program.
Prog 1 - the option runs user-created program 1
Prog 2 - the option runs user-created program 2
Prog 3 - the option runs user-created program 3
Select the program you wish and press [ENTER]. The selected program will start running. By Pressing [ENTER] again, program pauses its running.

Pr. Edit (Editing program) - select this menu to edit or create the program. The ROBIN Footsie has one built-in program and three user-editable programs up to 40 steps each. Each program step has a step time - during which effects last in the current step and a fade time- during which effects move to new positions.
To edit program:

1. Touch [NEXT] or [PREVIOUS] button to select the menu "Edit" and touch [ENTER].
2. Touch [NEXT] or [PREVIOUS] button to select the desired program step and touch [ENTER] button.
3. Touch [NEXT] or [PREVIOUS] button to select the desired item and touch [ENTER] button. Now you can edit

DMX value (0-255) for selected item by touching [NEXT] or [PREVIOUS] buttons:

| Prg End. | a total number of the program steps (value 1-40). This value you should be set before <br> starting of programming (e.g. if you want to create program with the 10 steps, <br> set Prg End=10). |
| :--- | :--- |
| Powr | power/special functions |
| L Fre | LEDs frequency |
| L Fr S | LEDs frequency fine adjusting |
| Virt C | a virtual colour wheel |
| Red | a red colour coarse |
| Red F | a red colour fine |
| Green | a green colour coarse |


| Green F | a green colour fine |
| :--- | :--- |
| Blue | a blue colour coarse |
| Blue F | a blue colour fine |
| White | a white colour |
| White F | a white colour fine |
| Warm | a warm white colour* |
| Warm F | a warm white colour fine* |
| Cool | a cool white colour* |
| Cool F | a cool white colour fine* |
| BPL | Blue position LEDs intensity |
| CTC | a colour temperature correction |
| C Mix C | a colour mix control |
| C Mix Z | a colour mix control of zones |
| Zoom | a zoom function |
| Zoom F | a zoom function fine |
| Stro | a strobe/shutter function |
| Dimm | a dimmer function coarse |
| Dim F | a dimmer function fine |
| F.Tim | a fade time (0-25.5 sec) |
| S.Tim | a step time (0-25.5 sec) |
| COPY | copying the current prog. step to |
|  | the next prog. step |

### 7.7 Reset

This option enables the ROBIN Footsie to index all effects and return to their standard positions.

### 7.8 Special (Special functions)

RDM Low - the menu item shows the first part of the RDM identification code.
RDM High - the menu item shows the second part of the RDM identification code.
Wireless (Wireless DMX information) - the menu allows you to read some information about Wireless DMX operation

Stat (Wireless status) - Use the menu to read wireless DMX status.
Unlink - use this item to unlink fixture from wireless DMX transmitter .
Adjust (Adjustment) - the menu allows you fine adjustment of effects.
DMX Val. (DMX values) - use the menu to set DMX values of fixture's channels.
Calib (Calibration) - calibration of effects.
Cal. Col. (Calibration of Colours) - the menu serves for calibration of colours in the factory. User should not change settings in this menu.

Cal. Load - the item loads default (factory) calibration values.
Sw Upd (Software update) - the menu item allows you to update software in the fixture via either serial or USB port of PC.
The following items are required in order to update software:

- PC running Windows or Linux or macOS
- DSU file
- Flash cable RS232/DMX, P/N13050624 (if you want to use a serial port of PC)
- Robe Universal Interface or Robe Universal interface WTX (if you want to use an USB port of PC)

To update software in the fixture:

1. DSU file is available from Robe web site at WWW.robe.cz.

File with extension zip is intended for Windows (used and tested from XP to W10 on 32/64bit systems).
File with extension tbz is intended for Linux (used and tested on Debian and Ubuntu 32/64bit).

File with extension dmg is intended for macOS (used and tested on OSX up to Sierra) XQuartz required, install it from https://www.xquartz.org/.
Save the download file to a folder on your computer.
In case that you use windows, extract files in the zip file (e.g. DSU_Footsie_18041738.zip)
2. Disconnect the fixture from DMX controller.
3. If you use the flash cable RS232/DMX, connect a serial port of your computer with DMX input of the fixture by means of the cable.
If you use the Robe Universal Interface, connect a USB port of your computer with the Robe Universal Interface by means of the USB cable and DMX input of the fixture with the DMX output of the Robe Universal Interface via a DMX cable.
4. Switch the fixture to the update mode (Special --> SW Upd).

Note: If you do not want to continue in the software update, you have to switch off and on the fixture to escape from the updating mode.
We recommend to cancel all running programs on your computer before starting the software update.
5. Double-click the software uploader file (e.g. DSU_Footsie_18041738.exe) in
the extracted files. The Software Uploader program will start running.

6. Select correct "COM " number if you use a Flash cable RS232/DMX or select "Robe Universal Interface 1 " if you use the Robe Universal Interface/Robe Universal Interface WTX and then click on the "Connect" button.
7. If the connection is OK, click the "Start Uploading" button to start software uploading. It will take several minutes to perform software update.
If the option "Incremental Update" is not checked, all processors will be updated (including processors with the same software version).
If you wish to update only processors with new version of software, check the "Incremental Update box".
Avoid interrupting the process. Update status is being displayed in the "Info Box" window.
When the update is finished, the line with the text "Fixture is successfully updated" will appear in this window.

In case upload process is interrupted (e.g. power loss), the fixture stays in "Updating mode" and you will have to repeat the software update again.

Another way, how to update software in the fixtures (especially large installation of fixtures) is to use the ROBE Uploader. It is a software for automatized software update of Robe fixtures. It takes advantage of RDM support).
For more information please see https://www.robe.cz/robe-uploader/.


## 8. RDM

This fixture supports RDM operation. RDM (Remote Device Management) is a bi-directional communications protocol for use in DMX512 control systems, it is the new open standard for DMX512 device configuration and status monitoring.
The RDM protocol allows data packets to be inserted into a DMX512 data stream without adversely affecting existing non-RDM equipment. By using a special „Start Code," and by complying with the timing specifications for DMX512, the RDM protocol allows a console or dedicated RDM controller to send commands to and receive messages from specific moving lights.
RDM allows explicit commands to be sent to a device and responses to be received from it.
The list of commands for Robin Footsie is the following.

| Parameter ID | Discovery command | SET command | GET command |
| :--- | :---: | :---: | :---: |
| DISC_UNIQUE_BRANCH | ${ }^{*}$ |  |  |
| DISC_MUTE | ${ }^{*}$ |  |  |
| DISC_UN_MUTE | ${ }^{*}$ |  |  |
| DEVICE_INFO |  |  | ${ }^{*}$ |
| SUPPORTED_PARAMETERS |  | ${ }^{*}$ | ${ }^{*}$ |
| SOFTWARE_VERSION_LABEL |  | ${ }^{*}$ | ${ }^{*}$ |
| DMX_START_ADDRESS |  |  | ${ }^{*}$ |
| IDENTIFY_DEVICE |  |  | ${ }^{*}$ |
| DEVICE_MODEL_DESCRIPTION |  | ${ }^{*}$ |  |
| MANUFACTURER_LABEL |  | ${ }^{*}$ | ${ }^{*}$ |
| DEVICE_LABEL |  | ${ }^{*}$ | ${ }^{*}$ |
| SENSOR_DEFINITION |  | ${ }^{*}$ |  |
| SENSOR_VALUE |  | ${ }^{*}$ |  |
| DISPLAY_INVERT |  |  |  |
| DISPLAY_LEVEL |  |  |  |


| PAN_INVERT |  | ${ }^{*}$ | ${ }^{*}$ |
| :--- | :---: | :---: | :---: |
| TILT_INVERT |  | ${ }^{*}$ | ${ }^{*}$ |
| DEVICE_RESET |  | ${ }^{*}$ | ${ }^{*}$ |
| DMX_PERSONALITY |  |  | ${ }^{*}$ |
| DMX_PERSONALITY_DESCRIPTION |  |  | ${ }^{*}$ |
| STATUS_MESSAGES |  |  | ${ }^{*}$ |
| STATUS_ID_DESCRIPTION |  | ${ }^{*}$ | ${ }^{*}$ |
| DEVICE_HOURS ${ }^{2}$ |  | ${ }^{*}$ | ${ }^{*}$ |
| ROBE_DMX_INPUT |  |  |  |
| ROBE_WIRELESS_UNLINK |  |  |  |

${ }^{2}$...Commands relative resetable values
RDM model IDs for the Robin Footsies:
Footsie 1 RGBW: 0x0139
Footsie 1 TW: 0x013b
Footsie 2 RGBW: 0x013a
Footsie 2 TW: 0x013c

## 9. NFC

The fixture supports NFC. Using the mobile phone application ROBE COM you can read and set the Robin Footsie parameters (DMX address, display, white point...etc.), get information about temperatures, operation hours, RDM identification etc.

The NFC point is situated on the front panel of the fixture.


Download and install the ROBE COM from Google Play (for Android 5.0 and higher) or App Store (for iOS 12.0 and higher) to your mobile phone. Your mobile phone has to support NFC (Near-Field Communication).
Hold the mobile phone on the side of the fixture base, if NFC connection is OK, discovered fixture will appear on the screen, after touching the fixture name the following the following menu items will appear:

DMX/RDM settings
Colour settings
Display settings
Standalone settings
Other settings
Software versions
Device hours
Device temperatures
Touch desired menu item to enter its submenu.

## 10. Error and information messages

## Red Shrt

The message informs you that short circuit has occurred in the red LEDs circuit on the LEDs PCB.

## Green Shrt

The message informs you that short circuit has occurred in the green LEDs circuit on the LEDs PCB.

## Blue Shrt

The message informs you that short circuit has occurred in the blue LEDs circuit on the LEDs PCB.

## White Shrt

The message informs you that short circuit has occurred in the white LEDs circuit on the LEDs PCB.

## Red Unp

The message informs you that red LEDs circuit has been interrupted on the LEDs PCB.

## Green Unp

The message informs you that green LEDs circuit has been interrupted on the LEDs PCB.

## Blue Unp

The message informs you that blue LEDs circuit has been interrupted on the LEDs PCB.

## White Unp

The message informs you that white LEDs circuit has been interrupted on the LEDs PCB.

## 11. Technical Specifications

## Electrical

Power supply: electronic auto-ranging
Input voltage range: $100-240 \mathrm{~V}, 50-60 \mathrm{~Hz}$
Max. power consumption:
Footsie 1: 45W max. (power factor 0.96)
Footsie 2: 85W:max. (power factor 0.96)
Optic
Light source:
Footsie 1: $24 \times$ RGBW or WW or TW LED single chips
Footsie 2: $48 \times$ RGBW or WW or TW LED single chips
CRI:
WW version: 90+
TW version: 70+
RGBW version: 70+
Optional diffusers: medium or wide frost filters
LED life expectancy: min. 50.000 hours
Typical lumen maintenance: L70/B50 @ 50.000 hours

## Colour mixing mode

RGBW or CMY (RGBW version only)

Virtual colour wheel (RGBW version)
66 preset colours
CTC in range of $2700 \mathrm{~K}-8000 \mathrm{~K}$
Rainbow effect with in both directions with variable speed

## Number of individually controllable zones

Footsie 1: 2
Footsie 1: 4

## Beam angle

Footsie 1: asymmetrical field angle $55^{\circ} \times 50^{\circ}$
Footsie 2: asymmetrical field angle $55^{\circ} \times 50^{\circ}$

## Strobe

Strobe effect with variable speed (0.3-20Hz)

## Dimmer

Smooth dimmer from 0-100 \%

## Control

2-row display and four touch buttons for fixture setting and addressing
NFC app controller
Readout fixture and LED module usage, receiving DMX values, temperatures, etc
Built-in analyzer for easy fault finding, error messages
Built-in demo sequences
Individual zone control
Stand-alone operation
3 user editable programs, each up to 40 steps
Supported protocols: USITT DMX 512, RDM
Support of RDM (Remote Device Management)
DMX control channels:1
Footsie 1: 28 (RGBW), 16 (TW), 11 (WW)
Footsie 2: 36 (RGBW), 20 (TW), 13 (WW)

## Wireless DMX/RDM module (type RW 001)

Supported protocols: full RDM support, CRMX , W-DMX ${ }^{\text {TM }}$ G2, G3,G4 and G4S
Operational frequency range: 2402-2480 MHz
Output power: 100 mW
Receiver sensitivity ( $0.1 \% \mathrm{BER}$ ): -93 dBm
Crystal Clock Frequency : 16.0 MHz
Contains FCC ID: 2A6PL-DMXRDMRW001
Contains IC: 29573-DMXRDMRW001

## Connection

DMX data IN/OUT: IP65 Locking 5-pin XLR connectors Neutrik on cables
AC power IN/OUT: IP65 power connectors Seetronic

## Temperatures

Maximum ambient temperature: $+45^{\circ} \mathrm{C}$
Minimum ambient temperature: $-20^{\circ} \mathrm{C}$
Maximum housing temperature: $+50^{\circ} \mathrm{C}$

## Minimum distances

Min. distance from flammable surfaces: 0.1 m
Min. distance to lighted object: 0.2 m

## Cooling system

Convection

## Total heat dissipation

Footsie 1: 115 BTU/hr (calculated)
Footsie 2: 218 BTU/hr (calculated)

## Ingress protection

IP65

## IK Rating

IK06 (without diffuser)

## IIncluded items

$1 \times$ power cable (IP65 rating)
1 x user manual

## Weight

Footsie 1: $9.4 \mathrm{~kg}(20.7 \mathrm{lbs}), 10.6$ (23.4 lbs) with diffuser
Footsie 2: $17.1 \mathrm{~kg}(37.7 \mathrm{lbs}), 19.7 \mathrm{~kg}(43.4 \mathrm{lbs})$ with diffuser

## Dimensions (mm)

Footsie 1


Top covers in open position
Fixture with diffuser


## Footsie 2



Top covers in open position


Fixture with diffuser


## Accessories

1 x Jumper Cable

## Optional accessories

Angled corner $15^{\circ}$ Footsie $1 / 2$ (P/N 10980827)
Angled corner $30^{\circ}$ Footsie1/2 (P/N 10980828)
Angled corner $60^{\circ}$ Footsie1/2 (P/N 10980829)
Angled corner $90^{\circ}$ Footsie1/2 (P/N 10980830)
End cap Footsie1/2 (P/N 10980831)
Diffusion filter medium for Footsie 1: (P/N 10980820)
Diffusion filter wide for Footsie 1: (P/N 10980822)
Diffusion filter medium for Footsie 2: (P/N 10980821)
Diffusion filter wide for Footsie 2: (P/N 10980823)

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Made in CZECH REPUBLIC by ROBE LIGHTING s.r.o. Palackeho 416/20 CZ 75701 Valasske Mezirici

Robin Footsie ${ }^{\text {TM }} 1$ RGBW - DMX protocol
Version: 1.2 Mode 1-Standard 16-bit


DMX protocol

| Mode/Total channels | DMX | Function | Type of |
| :---: | :---: | :---: | :---: |
| 1/28 | Value | Function | control |
|  |  | Factory display menu setting: 600Hz |  |
|  |  | Select desired PWM output frequency of LEDs on the channel above . |  |
|  | 0-1 | Selected LED Frequency | step |
|  | 2 | LED Frequency (step -126) | step |
|  | 3 | LED Frequency (step -125) | step |
|  | 4 | LED Frequency (step -124) | step |
|  | : |  |  |
|  | 125 | LED Frequency (step -3) | step |
|  | 126 | LED Frequency (step -2) | step |
|  | 127 | LED Frequency (step-1) | step |
|  | 128 | Selected LED Frequency (128=default) | step |
|  | 129 | LED Frequency (step +1 ) | step |
|  | 130 | LED Frequency (step +2) | step |
|  | 131 | LED Frequency (step +3) | step |
|  | : |  |  |
|  | 252 | LED Frequency (step +124) | step |
|  | 253 | LED Frequency (step +125) | step |
|  | 254 | LED Frequency (step +126) | step |
|  | 255 | Selected LED Frequency | step |
| 4 |  | Virtual colour wheel -all zones |  |
|  | 0 | No function (0=default) | step |
|  | 1-2 | Filter 4 (Medium Bastard Amber) | step |
|  | 3-4 | Filter 25 (Sunset Red) | step |
|  | 5-6 | Filter 19 (Fire) | step |
|  | 7-8 | Filter 26 (Bright Red) | step |
|  | 9-10 | Filter 58 (Lavender) | step |
|  | 11-12 | Filter 68 (Sky Blue) | step |
|  | 13-14 | Filter 36 (Medium Pink) | step |
|  | 15-16 | Filter 89 (Moss Green) | step |
|  | 17-18 | Filter 88 (Lime Green) | step |
|  | 19-20 | Filter 90 (Dark Yellow Green) | step |
|  | 21-22 | Filter 49 (Medium Purple) | step |
|  | 23-24 | Filter 52 (Light Lavender) | step |
|  | 25-26 | Filter 102 (Light Amber) | step |
|  | 27-28 | Filter 103 (Straw) | step |
|  | 29-30 | Filter 140 (Summer Blue) | step |
|  | 31-32 | Filter 124 (Dark Green) | step |
|  | 33-34 | Filter 106 (Primary Red) | step |
|  | 35-36 | Filter 111 (Dark Pink) | step |
|  | 37-38 | Filter 115 (Peacock Blue) | step |
|  | 39-40 | Filter 126 (Mauve) | step |
|  | 41-42 | Filter 117 (Steel Blue) | step |
|  | 43-44 | Filter 118 (Light Blue) | step |
|  | 45-46 | Filter 122 (Fern Green) | step |
|  | 47-48 | Filter 182 (Light Red) | step |
|  | 49-50 | Filter 121 (Filter Green) | step |
|  | 51-52 | Filter 128 (Bright Pink) | step |
|  | 53-54 | Filter 131 (Marine Blue) | step |
|  | 55-56 | Filter 132 (Medium Blue) | step |

DMX protocol

| Mode/Total channels | DMX | Function | Type of |
| :---: | :---: | :---: | :---: |
| 1/28 | Value | function | control |
|  | 57-58 | Filter 134 (Golden Amber) | step |
|  | 59-60 | Filter 135 (Deep Golden Amber) | step |
|  | 61-62 | Filter 136 (Pale Lavender) | step |
|  | 63-64 | Filter 137 (Special Lavender) | step |
|  | 65-66 | Filter 138 (Pale Green) | step |
|  | 67-68 | Filter 798 (Chrysalis Pink) | step |
|  | 69-70 | Filter 141 (Bright Blue) | step |
|  | 71-72 | Filter 147 (Apricot) | step |
|  | 73-74 | Filter 148 (Bright Rose) | step |
|  | 75-76 | Filter 152 (Pale Gold) | step |
|  | 77-78 | Filter 154 (Pale Rose) | step |
|  | 79-80 | Filter 157 (Pink) | step |
|  | 81-82 | Filter 143 (Pale Navy Blue) | step |
|  | 83-84 | Filter 162 (Bastard Amber) | step |
|  | 85-86 | Filter 164 (Flame Red) | step |
|  | 87-88 | Filter 165 (Daylight Blue) | step |
|  | 89-90 | Filter 169 (Lilac Tint) | step |
|  | 91-92 | Filter 170 (Deep Lavender) | step |
|  | 93-94 | Filter 172 (Lagoon Blue) | step |
|  | 95-96 | Filter 194 (Surprise Pink) | step |
|  | 97-98 | Filter 180 (Dark Lavender) | step |
|  | 99-100 | Filter 181 (Congo Blue) | step |
|  | 101-102 | Filter 197 (Alice Blue) | step |
|  | 103-104 | Filter 201 (Full C.T. Blue) | step |
|  | 105-106 | Filter 202 (Half C.T. Blue) | step |
|  | 107-108 | Filter 203 (Quarter C.T. Blue) | step |
|  | 109-110 | Filter 204 (Full C.T. Orange) | step |
|  | 111-112 | Filter 219 (Fluorescent Green) | step |
|  | 113-114 | Filter 206 (Quarter C.T. Orange) | step |
|  | 115-116 | Filter 247 (Filter Minus Green) | step |
|  | 117-118 | Filter 248 (Half Minus Green) | step |
|  | 119-120 | Filter 281 (Three Quarter C.T. Blue) | step |
|  | 121-122 | Filter 285 (Three Quarter C.T. Orange) | step |
|  | 123-124 | Filter 352 (Glacier Blue) | step |
|  | 125-126 | Filter 353 (Lighter Blue) | step |
|  | 127-128 | Filter 507 (Madge) | step |
|  | 129-130 | Filter 778 (Millennium Gold) | step |
|  | 131-132 | Filter 793 (Vanity Fair) | step |
|  | 133-235 | Raw DMX | proportional |
|  | 236-245 | Rainbow effect (with fade time) from slow-> fast | proportional |
|  | 246-255 | Rainbow effect (without fade time) from slow-> fast | proportional |
| 5 |  | Red/Cyan (8 bit)* - all zones |  |
|  | 0-255 | Colour saturation control coarse 0-100\% (255=default) | proportional |
| 6 |  | Red/Cyan (16bit)* - all zones |  |
|  | 0-255 | Colour saturation control fine (255=default) | proportional |
| 7 |  | Green/Magenta (8 bit)* - all zones |  |
|  | 0-255 | Colour saturation control coarse 0-100\% (255=default) | proportional |
| 8 |  | Green/Magenta (16bit)*- all zones |  |
|  | 0-255 | Colour saturation control fine (255=default) | proportional |

DMX protocol

| Mode/Total channels | DMX | Function |  |
| :---: | :---: | :---: | :---: |
| 1/28 | Value | Function | control |
| 9 |  | Blue/Yellow (8 bit)*- all zones |  |
|  | 0-255 | Colour saturation control coarse 0-100\% (255=default) | proportional |
| 10 |  | Blue/ Yellow (16bit)* - all zones |  |
|  | 0-255 | Colour saturation control fine (255=default) | proportional |
| 11 |  | White (8 bit)* - all zones |  |
|  |  | If $R G B W$ mode is selected: |  |
|  | 0-255 | Colour saturation control coarse 0-100\% (255=default) | proportional |
|  |  | If CMY mode is selected: |  |
|  | 0-255 | No function |  |
| 12 |  | White (16 bit)* - all zones |  |
|  | 0-255 | Colour saturation control fine (255=default) | proportional |
| 13 |  | CTO (all zones) |  |
|  |  | If function "White Point 8000K" is On: |  |
|  | 0-255 | Col. temperature correction from 8000 K to 2700 K -for whites only | proportional |
|  |  | ( $0=8000 \mathrm{~K}, 64=5600 \mathrm{~K}, 128=4200 \mathrm{~K}, 192=3200 \mathrm{~K}, 255=2700 \mathrm{~K}$ ) |  |
|  |  | To get colour temperatures stated above, RGBW channels have to be set at the same value e.g. 255DMX ( $0=$ default) |  |
|  |  | If function "White Point 8000K" is Off: |  |
|  | 0-255 | Colour temperature correction for from cool white to 2700K | proportional |
| 14 |  | Green correction- all zones |  |
|  | 0 | Uncorrected white | step |
|  | 1-127 | Minus green --> uncorrected white | proportional |
|  | 128 | Uncorrected white (128=default) | step |
|  | 129-255 | Uncorrected white --> Plus green | proportional |
| 15 |  | Colour Mix control |  |
|  |  | Defines relation between Virtual Colour wheel and Colour channels |  |
|  |  | "Virtual" = Virtual Colour Wheel |  |
|  |  | "Colour mix" = Colour channels (CMY/RGBW/CTO) |  |
|  | 0-9 | "Virtual " has priority over "Colour mix" (0=default) |  |
|  | 10-19 | Maximum mode (highest values have priority) | step |
|  | 20-29 | Minimum mode (lowest values have priority) | step |
|  | 30-39 | Multiply mode (multiply "Virtual" and "Colour mix") | step |
|  | 40-49 | Addition mode ("Virtual" + "Colour mix") | step |
|  | 50-59 | Subtraction mode ("Virtual" - "Colour mix") | step |
|  | 60-69 | Inverted Subtraction mode ("Colour mix"-"Virtual") | step |
|  | 70-79 | White Point Off (CTO+Green Cor.+Virtual Colour Wheel deactivated) | step |
|  | 80-128 | Reserved |  |
|  | 129 | Crossfade "Virtual" only | step |
|  | 130-254 | Crossfade between "Virtual" and "Colour mix" | proportional |
|  | 255 | Crossfade "Colour mix" only | step |
| 16 |  | Colour Mix control zones |  |
|  |  | The channel defines relation between Virtual colour wheel + Colour channels and zones |  |
|  |  | "Global" = Global Colours (RGBW/CMY colours, Virtual Colour Wheel, CTO) |  |
|  |  | "Pixel" = Zone Colours (RGBW individual zones) |  |
|  | 0-9 | Global colours (Global has priority) | step |
|  | 10-19 | Maximum mode (highest values have priority) | step |
|  | 20-29 | Minimum mode (lowest values have priority) | step |
|  | 30-39 | Multiply mode (multiply Global and Pixel) | step |
|  | 40-49 | Addition mode (Global + Pixel) (45=default) | step |

DMX protocol

| Mode/Total channels | DMX | Function | Type of |
| :---: | :---: | :---: | :---: |
| 1/28 | Value | Function | control |
|  | 50-59 | Subtraction mode (Global - Pixel) | step |
|  | 60-69 | Inverted Subtraction mode (Pixel - Global) | step |
|  | 70-127 | Raw DMX | proportional |
|  | 128 | Global colours only (Global has priority) | step |
|  | 129-254 | Crossfade (crossfade between Global and Pixel) | proportional |
|  | 255 | Zone colours ("Pixel" has priority) | step |
| 17 |  | Blue positional light |  |
|  | 0-128 | Blue LED intensity 0-100\% (128=default) | proportional |
|  | 129-150 | Blue LED pulsing from slow to fast | proportional |
|  | 151-255 | Reserved |  |
| 18 |  | Shutter/ strobe -all zones |  |
|  | 0-31 | Shutter closed | step |
|  | 32-63 | Shutter open (32=default) | step |
|  | 64-95 | Strobe-effect from slow to fast | proportional |
|  | 96-127 | Shutter open | step |
|  | 128-143 | Opening pulse in sequences from slow to fast | proportional |
|  | 144-159 | Closing pulse in sequences from fast to slow | proportional |
|  | 160-191 | Shutter open | step |
|  | 192-223 | Random strobe-effect from slow to fast | proportional |
|  | 224-255 | Shutter open | step |
| 19 |  | Dimmer intensity (8 bit) - all zones |  |
|  | 0-255 | Dimmer intensity from 0\% to 100\% (0=default) | proportional |
| 20 |  | Dimmer intensity fine (16 bit) - all zones |  |
|  | 0-255 | Fine dimming (0=default) | proportional |
| 21 |  | Red zone 1 |  |
|  | 0-255 | Red LEDs saturation control 0-100\% (0=default) | proportional |
| 22 |  | Green zone 1 |  |
|  | 0-255 | Green LEDs saturation control 0-100\% (0=default) | proportional |
| 23 |  | Blue zone 1 |  |
|  | 0-255 | Blue LEDs saturation control 0-100\% (0=default) | proportional |
| 24 |  | White zone 1 |  |
|  | 0-255 | White LEDs saturation control 0-100\% (0=default) | proportional |
| 25 |  | Red zone 2 |  |
|  | 0-255 | Red LEDs saturation control 0-100\% (0=default) | proportional |
| 26 |  | Green zone 2 |  |
|  | 0-255 | Green LEDs saturation control 0-100\% (0=default) | proportional |
| 27 |  | Blue zone 2 |  |
|  | 0-255 | Blue LEDs saturation control 0-100\% (0=default) | proportional |
| 28 |  | White zone 2 |  |
|  | 0-255 | White LEDs saturation control 0-100\% (0=default) | proportional |
|  |  |  |  |
| *Select RGBW or CMY mixing mode on channel "Power/Special functions" . |  |  |  |
|  |  |  |  |
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| All Specifications subject to change without notice |  |  |  |
|  |  |  |  |

## Robin Footsie ${ }^{\text {TM }} 1$ Tunable White - DMX protocol

Version: 1.1 Mode 1-Standard 16-bit

| Mode/Total channels | DMX | Function | Type of |
| :---: | :---: | :---: | :---: |
| 1/16 | Value |  | control |
| 1 |  | Power/Special functions |  |
|  | 0-9 | Reserved (0=default) |  |
|  |  | To activate following functions, stop in DMX value for at least 3 s and shutter must be closed at least 3 sec. („Shutter,Strobe" channel 10 must be at range: 0-31 DMX). Corresponding menu items are temporarily overriden. |  |
|  | 10-14 | DMX input: Wired DMX * | step |
|  | 15-19 | DMX input: Wireless DMX * | step |
|  |  | * function is active only 10 seconds after switching the fixture on |  |
|  | 20-59 | Reserved |  |
|  | 60-64 | Dimmer curve - square law | step |
|  | 65-69 | Dimmer curve - linear | step |
|  | 70-79 | Reserved |  |
|  | 80-84 | Blue positional light On | step |
|  | 85-89 | Blue positional light Off | step |
|  | 90-255 | Reserved |  |
| 2 |  | LED frequency selection |  |
|  |  | Factory display menu setting: 600 Hz |  |
|  |  | Select PWM output frequency of LEDs. Selected PWM frequency can be fine adjusted in 127 steps up/down around selected PWM frequency on the channel below. Corresponding menu item (Frequency Setup) is temporarily overridden. |  |
|  | 0-4 | PWM frequency from Display menu (fixture utilizes PWM | step |
|  |  | frequency set in the display menu item Frequency Setup). |  |
|  | 5-9 | 300 Hz | step |
|  | 10-14 | 600 Hz (10=default) | step |
|  | 15-19 | 1200 Hz | step |
|  | 20-24 | 2400 Hz | step |
|  | 25-29 | High | step |
|  | 30-255 | Reserved (fixture utilizes PWM frequency set in the display menu item |  |
|  |  | Frequency Setup). |  |
| 3 |  | LED frequency fine adjusting |  |
|  |  | Factory display menu setting: 600 Hz |  |
|  |  | Select desired PWM output frequency of LEDs on the channel above. |  |
|  | 0-1 | Selected LED Frequency | step |
|  | 2 | LED Frequency (step -126) | step |
|  | 3 | LED Frequency (step-125) | step |
|  | 4 | LED Frequency (step -124) | step |
|  | : |  |  |
|  | 125 | LED Frequency (step-3) | step |
|  | 126 | LED Frequency (step-2) | step |
|  | 127 | LED Frequency (step-1) | step |
|  | 128 | Selected LED Frequency (128=default) | step |
|  | 129 | LED Frequency (step +1) | step |
|  | 130 | LED Frequency (step +2) | step |
|  | 131 | LED Frequency (step +3) | step |
|  | : |  |  |

DMX protocol

| Mode/Total channels | DMX <br> Value | Function | Type of control |
| :---: | :---: | :---: | :---: |
| 1/16 |  |  |  |
|  | 252 | LED Frequency (step +124) | step |
|  | 253 | LED Frequency (step +125) | step |
|  | 254 | LED Frequency (step +126) | step |
|  | 255 | Selected LED Frequency | step |
| 4 |  | Virtual colour wheel -all pixels |  |
|  | 0 | No function (0=default) | step |
|  | 1-2 | White 3200K | step |
|  | 3-4 | White 3800K | step |
|  | 5-6 | White 4200K | step |
|  | 7-8 | White 4600K | step |
|  | 9-10 | White 5000K | step |
|  | 11-12 | White 5600K | step |
|  | 13-14 | White 6300K | step |
|  | 15-16 | White 6500K | step |
|  | 17-255 | Warm white --> Cool white | proportional |
| 5 |  | Warm white (8 bit) - all zones |  |
|  | 0-255 | Colour saturation control coarse 0-100\% (255=default) | proportional |
| 6 |  | Warm white (16bit) - all zones |  |
|  | 0-255 | Colour saturation control fine (255=default) | proportional |
| 7 |  | Cool white (8 bit) - all zones |  |
|  | 0-255 | Colour saturation control coarse 0-100\% (255=default) | proportional |
| 8 |  | Cool white (16bit)- all zones |  |
|  | 0-255 | Colour saturation control fine (255=default) | proportional |
| 9 |  | Blue positional light |  |
|  | 0-128 | Blue LED intensity 0-100\% (128=default) | proportional |
|  | 129-150 | Blue LED pulsing from slow to fast | proportional |
|  | 151-255 | Reserved |  |
| 10 |  | Shutter/ strobe -all zones |  |
|  | 0-31 | Shutter closed | step |
|  | 32-63 | Shutter open (32=default) | step |
|  | 64-95 | Strobe-effect from slow to fast | proportional |
|  | 96-127 | Shutter open | step |
|  | 128-143 | Opening pulse in sequences from slow to fast | proportional |
|  | 144-159 | Closing pulse in sequences from fast to slow | proportional |
|  | 160-191 | Shutter open | step |
|  | 192-223 | Random strobe-effect from slow to fast | proportional |
|  | 224-255 | Shutter open | step |
| 11 |  | Dimmer intensity (8 bit) - all zones |  |
|  | 0-255 | Dimmer intensity from 0\% to 100\% (0=default) | proportional |
| 12 |  | Dimmer intensity - fine (16 bit) - all zones |  |
|  | 0-255 | Fine dimming (0=default) | proportional |
| 13 |  | Warm white zone 1 |  |
|  | 0-255 | LEDs saturation control 0-100\% (0=default) | proportional |
| 14 |  | Cool white zone 1 |  |
|  | 0-255 | LEDs saturation control 0-100\% (0=default) | proportional |
| 15 |  | Warm white zone 2 |  |
|  | 0-255 | LEDs saturation control 0-100\% (0=default) | proportional |
| 16 |  | Cool white zone 2 |  |
|  | 0-255 | LEDs saturation control 0-100\% (0=default) | proportional |

DMX protocol

| Mode/Total channels | DMX <br> Value | Function | Type of <br> control |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 / 1 6}$ |  |  |  |  |  |
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Robin Footsie ${ }^{\mathrm{TM}} \mathbf{1}$ Warm White - DMX protocol
Version: 1.2 Mode 1-Standard 16-bit

| Mode/Total channels | DMX <br> Value | Function | Type of control |
| :---: | :---: | :---: | :---: |
| 1/11 |  |  |  |
| 1 |  | Power/Special functions |  |
|  | 0-9 | Reserved (0=default) |  |
|  |  | To activate following functions, stop in DMX value for at least 3 s and shutter must be closed at least 3 sec . (,/Shutter,Strobe" channel 7 must be at range: 0-31 DMX). Corresponding menu items are temporarily overriden. |  |
|  | 10-14 | DMX input: Wired DMX * | step |
|  | 15-19 | DMX input: Wireless DMX * | step |
|  |  | * function is active only 10 seconds after switching the fixture on |  |
|  | 20-59 | Reserved |  |
|  | 60-64 | Dimmer curve - square law | step |
|  | 65-69 | Dimmer curve - linear | step |
|  | 70-79 | Reserved |  |
|  | 80-84 | Blue positional light On | step |
|  | 85-89 | Blue positional light Off | step |
|  | 90-255 | Reserved |  |
| 2 |  | LED frequency selection |  |
|  |  | Factory display menu setting: 600 Hz |  |
|  |  | Select PWM output frequency of LEDs. Selected PWM frequency can be fine adjusted in 127 steps up/down around selected PWM frequency on the channel below. Corresponding menu item (Frequency Setup) is temporarily overridden. |  |
|  | 0-4 | PWM frequency from Display menu (fixture utilizes PWM | step |
|  |  | frequency set in the display menu item Frequency Setup). |  |
|  | 5-9 | 300 Hz | step |
|  | 10-14 | 600 Hz (10=default) | step |
|  | 15-19 | 1200 Hz | step |
|  | 20-24 | 2400 Hz | step |
|  | 25-29 | High | step |
|  | 30-255 | Reserved (fixture utilizes PWM frequency set in the display menu item |  |
|  |  | Frequency Setup). |  |
| 3 |  | LED frequency fine adjusting |  |
|  |  | Factory display menu setting: 600 Hz |  |
|  |  | Select desired PWM output frequency of LEDs on the channel above. |  |
|  | 0-1 | Selected LED Frequency | step |
|  | 2 | LED Frequency (step -126) | step |
|  | 3 | LED Frequency (step -125) | step |
|  | 4 | LED Frequency (step -124) | step |
|  | : |  |  |
|  | 125 | LED Frequency (step-3) | step |
|  | 126 | LED Frequency (step -2) | step |
|  | 127 | LED Frequency (step-1) | step |
|  | 128 | Selected LED Frequency (128=default) | step |
|  | 129 | LED Frequency (step +1) | step |
|  | 130 | LED Frequency (step +2) | step |
|  | 131 | LED Frequency (step +3) | step |
|  | : |  |  |

DMX protocol

| Mode/Total channels | DMX | Function | Type of |
| :---: | :---: | :---: | :---: |
| 1/11 | Value | Function | control |
|  | 252 | LED Frequency (step +124) | step |
|  | 253 | LED Frequency (step +125) | step |
|  | 254 | LED Frequency (step +126) | step |
|  | 255 | Selected LED Frequency | step |
| 4 |  | Warm white (8 bit) - all zones |  |
|  | 0-255 | Colour saturation control coarse 0-100\% (255=default) | proportional |
| 5 |  | Warm white (16bit) - all zones |  |
|  | 0-255 | Colour saturation control fine (255=default) | proportional |
| 6 |  | Blue positional light |  |
|  | 0-128 | Blue LED intensity 0-100\% (128=default) | proportional |
|  | 129-150 | Blue LED pulsing from slow to fast | proportional |
|  | 151-255 | Reserved |  |
| 7 |  | Shutter/ strobe -all zones |  |
|  | 0-31 | Shutter closed | step |
|  | 32-63 | Shutter open (32=default) | step |
|  | 64-95 | Strobe-effect from slow to fast | proportional |
|  | 96-127 | Shutter open | step |
|  | 128-143 | Opening pulse in sequences from slow to fast | proportional |
|  | 144-159 | Closing pulse in sequences from fast to slow | proportional |
|  | 160-191 | Shutter open | step |
|  | 192-223 | Random strobe-effect from slow to fast | proportional |
|  | 224-255 | Shutter open | step |
| 8 |  | Dimmer intensity (8 bit) - all zones |  |
|  | 0-255 | Dimmer intensity from 0\% to 100\% (0=default) | proportional |
| 9 |  | Dimmer intensity - fine (16 bit) - all zones |  |
|  | 0-255 | Fine dimming (0=default) | proportional |
| 10 |  | Warm white zone 1 |  |
|  | 0-255 | LEDs saturation control 0-100\% (0=default) | proportional |
| 11 |  | Warm white zone 2 |  |
|  | 0-255 | LEDs saturation control 0-100\% (0=default) | proportional |
|  |  |  |  |
|  |  |  |  |
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|  |  |  |  |

Robin Footsie ${ }^{\text {TM }} \mathbf{2}$ RGBW - DMX protocol
Version: 1.2 Mode 1-Standard 16-bit


DMX protocol

| $\begin{array}{\|c} \hline \text { Mode/Total channels } \\ \hline 1 / 36 \end{array}$ | DMX <br> Value | Function | Type of control |
| :---: | :---: | :---: | :---: |
|  |  | Factory display menu setting: 600Hz |  |
|  |  | Select desired PWM output frequency of LEDs on the channel above . |  |
|  | 0-1 | Selected LED Frequency | step |
|  | 2 | LED Frequency (step -126) | step |
|  | 3 | LED Frequency (step -125) | step |
|  | 4 | LED Frequency (step -124) | step |
|  | : |  |  |
|  | 125 | LED Frequency (step-3) | step |
|  | 126 | LED Frequency (step -2) | step |
|  | 127 | LED Frequency (step-1) | step |
|  | 128 | Selected LED Frequency (128=default) | step |
|  | 129 | LED Frequency (step +1 ) | step |
|  | 130 | LED Frequency (step +2) | step |
|  | 131 | LED Frequency (step +3) | step |
|  | : |  |  |
|  | 252 | LED Frequency (step +124) | step |
|  | 253 | LED Frequency (step +125) | step |
|  | 254 | LED Frequency (step +126) | step |
|  | 255 | Selected LED Frequency | step |
| 4 |  | Virtual colour wheel -all zones |  |
|  | 0 | No function (0=default) | step |
|  | 1-2 | Filter 4 (Medium Bastard Amber) | step |
|  | 3-4 | Filter 25 (Sunset Red) | step |
|  | 5-6 | Filter 19 (Fire) | step |
|  | 7-8 | Filter 26 (Bright Red) | step |
|  | 9-10 | Filter 58 (Lavender) | step |
|  | 11-12 | Filter 68 (Sky Blue) | step |
|  | 13-14 | Filter 36 (Medium Pink) | step |
|  | 15-16 | Filter 89 (Moss Green) | step |
|  | 17-18 | Filter 88 (Lime Green) | step |
|  | 19-20 | Filter 90 (Dark Yellow Green) | step |
|  | 21-22 | Filter 49 (Medium Purple) | step |
|  | 23-24 | Filter 52 (Light Lavender) | step |
|  | 25-26 | Filter 102 (Light Amber) | step |
|  | 27-28 | Filter 103 (Straw) | step |
|  | 29-30 | Filter 140 (Summer Blue) | step |
|  | 31-32 | Filter 124 (Dark Green) | step |
|  | 33-34 | Filter 106 (Primary Red) | step |
|  | 35-36 | Filter 111 (Dark Pink) | step |
|  | 37-38 | Filter 115 (Peacock Blue) | step |
|  | 39-40 | Filter 126 (Mauve) | step |
|  | 41-42 | Filter 117 (Steel Blue) | step |
|  | 43-44 | Filter 118 (Light Blue) | step |
|  | 45-46 | Filter 122 (Fern Green) | step |
|  | 47-48 | Filter 182 (Light Red) | step |
|  | 49-50 | Filter 121 (Filter Green) | step |
|  | 51-52 | Filter 128 (Bright Pink) | step |
|  | 53-54 | Filter 131 (Marine Blue) | step |
|  | 55-56 | Filter 132 (Medium Blue) | step |

DMX protocol

| Mode/Total channels <br> $1 / 36$ | DMX <br> Value | Function | Type of control |
| :---: | :---: | :---: | :---: |
|  | 57-58 | Filter 134 (Golden Amber) | step |
|  | 59-60 | Filter 135 (Deep Golden Amber) | step |
|  | 61-62 | Filter 136 (Pale Lavender) | step |
|  | 63-64 | Filter 137 (Special Lavender) | step |
|  | 65-66 | Filter 138 (Pale Green) | step |
|  | 67-68 | Filter 798 (Chrysalis Pink) | step |
|  | 69-70 | Filter 141 (Bright Blue) | step |
|  | 71-72 | Filter 147 (Apricot) | step |
|  | 73-74 | Filter 148 (Bright Rose) | step |
|  | 75-76 | Filter 152 (Pale Gold) | step |
|  | 77-78 | Filter 154 (Pale Rose) | step |
|  | 79-80 | Filter 157 (Pink) | step |
|  | 81-82 | Filter 143 (Pale Navy Blue) | step |
|  | 83-84 | Filter 162 (Bastard Amber) | step |
|  | 85-86 | Filter 164 (Flame Red) | step |
|  | 87-88 | Filter 165 (Daylight Blue) | step |
|  | 89-90 | Filter 169 (Lilac Tint) | step |
|  | 91-92 | Filter 170 (Deep Lavender) | step |
|  | 93-94 | Filter 172 (Lagoon Blue) | step |
|  | 95-96 | Filter 194 (Surprise Pink) | step |
|  | 97-98 | Filter 180 (Dark Lavender) | step |
|  | 99-100 | Filter 181 (Congo Blue) | step |
|  | 101-102 | Filter 197 (Alice Blue) | step |
|  | 103-104 | Filter 201 (Full C.T. Blue) | step |
|  | 105-106 | Filter 202 (Half C.T. Blue) | step |
|  | 107-108 | Filter 203 (Quarter C.T. Blue) | step |
|  | 109-110 | Filter 204 (Full C.T. Orange) | step |
|  | 111-112 | Filter 219 (Fluorescent Green) | step |
|  | 113-114 | Filter 206 (Quarter C.T. Orange) | step |
|  | 115-116 | Filter 247 (Filter Minus Green) | step |
|  | 117-118 | Filter 248 (Half Minus Green) | step |
|  | 119-120 | Filter 281 (Three Quarter C.T. Blue) | step |
|  | 121-122 | Filter 285 (Three Quarter C.T. Orange) | step |
|  | 123-124 | Filter 352 (Glacier Blue) | step |
|  | 125-126 | Filter 353 (Lighter Blue) | step |
|  | 127-128 | Filter 507 (Madge) | step |
|  | 129-130 | Filter 778 (Millennium Gold) | step |
|  | 131-132 | Filter 793 (Vanity Fair) | step |
|  | 133-235 | Raw DMX | proportional |
|  | 236-245 | Rainbow effect (with fade time) from slow-> fast | proportional |
|  | 246-255 | Rainbow effect (without fade time) from slow-> fast | proportional |
| 5 |  | Red/Cyan (8 bit)* - all zones |  |
|  | 0-255 | Colour saturation control coarse 0-100\% (255=default) | proportional |
| 6 |  | Red/Cyan (16bit)* - all zones |  |
|  | 0-255 | Colour saturation control fine (255=default) | proportional |
| 7 |  | Green/Magenta (8 bit)* - all zones |  |
|  | 0-255 | Colour saturation control coarse 0-100\% (255=default) | proportional |
| 8 |  | Green/Magenta (16bit)*- all zones |  |
|  | 0-255 | Colour saturation control fine (255=default) | proportional |

DMX protocol

| Mode/Total channels | DMX | Function | Type of |
| :---: | :---: | :---: | :---: |
| 1/36 | Value | Function | control |
| 9 |  | Blue/Yellow (8 bit)*- all zones |  |
|  | 0-255 | Colour saturation control coarse 0-100\% (255=default) | proportional |
| 10 |  | Blue/ Yellow (16bit)* - all zones |  |
|  | 0-255 | Colour saturation control fine (255=default) | proportional |
| 11 |  | White (8 bit)* - all zones |  |
|  |  | If RGBW mode is selected: |  |
|  | 0-255 | Colour saturation control coarse 0-100\% (255=default) | proportional |
|  |  | If CMY mode is selected: |  |
|  | 0-255 | No function |  |
| 12 |  | White (16 bit)* - all zones |  |
|  | 0-255 | Colour saturation control fine (255=default) | proportional |
| 13 |  | CTO (all zones) |  |
|  |  | If function "White Point 8000K" is On: |  |
|  | 0-255 | Col. temperature correction from 8000 K to 2700 K -for whites only | proportional |
|  |  | ( $0=8000 \mathrm{~K}, 64=5600 \mathrm{~K}, 128=4200 \mathrm{~K}, 192=3200 \mathrm{~K}, 255=2700 \mathrm{~K}$ ) |  |
|  |  | To get colour temperatures stated above, RGBW channels have to be set at the same value e.g. 255DMX ( $0=$ default) |  |
|  |  | If function "White Point 8000K" is Off: |  |
|  | 0-255 | Colour temperature correction for from cool white to 2700K | proportional |
| 14 |  | Green correction - all zones |  |
|  | 0 | Uncorrected white | step |
|  | 1-127 | Minus green --> uncorrected white | proportional |
|  | 128 | Uncorrected white (128=default) | step |
|  | 129-255 | Uncorrected white --> Plus green | proportional |
| 15 |  | Colour Mix control |  |
|  |  | Defines relation between Virtual Colour wheel and Colour channels |  |
|  |  | "Virtual" = Virtual Colour Wheel |  |
|  |  | "Colour mix" = Colour channels (CMY/RGBW/CTO) |  |
|  | 0-9 | "Virtual " has priority over "Colour mix" (0=default) |  |
|  | 10-19 | Maximum mode (highest values have priority) | step |
|  | 20-29 | Minimum mode (lowest values have priority) | step |
|  | 30-39 | Multiply mode (multiply "Virtual" and "Colour mix") | step |
|  | 40-49 | Addition mode ("Virtual" + "Colour mix") | step |
|  | 50-59 | Subtraction mode ("Virtual" - "Colour mix") | step |
|  | 60-69 | Inverted Subtraction mode ("Colour mix"-"Virtual") | step |
|  | 70-79 | White Point Off (CTO+Green Cor.+Virtual Colour Wheel deactivated) | step |
|  | 80-128 | Reserved |  |
|  | 129 | Crossfade "Virtual" only | step |
|  | 130-254 | Crossfade between "Virtual" and "Colour mix" | proportional |
|  | 255 | Crossfade "Colour mix" only | step |
| 16 |  | Colour Mix control zones |  |
|  |  | The channel defines relation between Virtual colour wheel + Colour channels and zones |  |
|  |  | "Global" = Global Colours (RGBW/CMY colours, Virtual Colour Wheel, CTO) |  |
|  |  | "Pixel" = Zone Colours (RGBW individual zones) |  |
|  | 0-9 | Global colours (Global has priority) | step |
|  | 10-19 | Maximum mode (highest values have priority) | step |
|  | 20-29 | Minimum mode (lowest values have priority) | step |
|  | 30-39 | Multiply mode (multiply Global and Pixel) | step |
|  | 40-49 | Addition mode (Global + Pixel) (45=default) | step |

DMX protocol

| Mode/Total channels | $\begin{gathered} \text { DMX } \\ \text { Value } \end{gathered}$ | Function | Type of control |
| :---: | :---: | :---: | :---: |
| 1/36 |  |  |  |
|  | 50-59 | Subtraction mode (Global - Pixel) | step |
|  | 60-69 | Inverted Subtraction mode (Pixel - Global) | step |
|  | 70-127 | Raw DMX | proportional |
|  | 128 | Global colours only (Global has priority) | step |
|  | 129-254 | Crossfade (crossfade between Global and Pixel) | proportional |
|  | 255 | Zone colours ("Pixel" has priority) | step |
| 17 |  | Blue positional light |  |
|  | 0-128 | Blue LED intensity 0-100\% (128=default) | proportional |
|  | 129-150 | Blue LED pulsing from slow to fast | proportional |
|  | 151-255 | Reserved |  |
| 18 |  | Shutter/ strobe -all zones |  |
|  | 0-31 | Shutter closed | step |
|  | 32-63 | Shutter open (32=default) | step |
|  | 64-95 | Strobe-effect from slow to fast | proportional |
|  | 96-127 | Shutter open | step |
|  | 128-143 | Opening pulse in sequences from slow to fast | proportional |
|  | 144-159 | Closing pulse in sequences from fast to slow | proportional |
|  | 160-191 | Shutter open | step |
|  | 192-223 | Random strobe-effect from slow to fast | proportional |
|  | 224-255 | Shutter open | step |
| 19 |  | Dimmer intensity (8 bit) - all zones |  |
|  | 0-255 | Dimmer intensity from 0\% to 100\% (0=default) | proportional |
| 20 |  | Dimmer intensity fine (16 bit) - all zones |  |
|  | 0-255 | Fine dimming (0=default) | proportional |
| 21 |  | Red zone 1 |  |
|  | 0-255 | Red LEDs saturation control 0-100\% (0=default) | proportional |
| 22 |  | Green zone 1 |  |
|  | 0-255 | Green LEDs saturation control 0-100\% (0=default) | proportional |
| 23 |  | Blue zone 1 |  |
|  | 0-255 | Blue LEDs saturation control 0-100\% (0=default) | proportional |
| 24 |  | White zone 1 |  |
|  | 0-255 | White LEDs saturation control 0-100\% (0=default) | proportional |
| 25 |  | Red zone 2 |  |
|  | 0-255 | Red LEDs saturation control 0-100\% (0=default) | proportional |
| 26 |  | Green zone 2 |  |
|  | 0-255 | Green LEDs saturation control 0-100\% (0=default) | proportional |
| 27 |  | Blue zone 2 |  |
|  | 0-255 | Blue LEDs saturation control 0-100\% (0=default) | proportional |
| 28 |  | White zone 2 |  |
|  | 0-255 | White LEDs saturation control 0-100\% (0=default) | proportional |
| 29 |  | Red zone 3 |  |
|  | 0-255 | Red LED saturation control 0-100\% (0=default) | proportional |
| 30 |  | Green zone 3 |  |
|  | 0-255 | Green LEDs saturation control 0-100\% (0=default) | proportional |
| 31 |  | Blue zone 3 |  |
|  | 0-255 | Blue LEDs saturation control 0-100\% (0=default) | proportional |
| 32 |  | White zone 3 |  |
|  | 0-255 | White LEDs saturation control 0-100\% (0=default) | proportional |
| 33 |  | Red zone 4 |  |

DMX protocol

| Mode/Total channels | DMX <br> Value | Function | Type of control |
| :---: | :---: | :---: | :---: |
| 1/36 |  |  |  |
|  | 0-255 | Red LEDs saturation control 0-100\% (0=default) | proportional |
| 34 |  | Green zone 4 |  |
|  | 0-255 | Green LEDs saturation control 0-100\% (0=default) | proportional |
| 35 |  | Blue zone 4 |  |
|  | 0-255 | Blue LEDs saturation control 0-100\% (0=default) | proportional |
| 36 |  | White zone 4 |  |
|  | 0-255 | White LEDs saturation control 0-100\% (0=default) | proportional |
|  |  |  |  |
| *Select RGBW or CMY mixing | de on ch | nel "Power/Special functions" . |  |
|  |  |  |  |
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|  |  |  |  |

## Robin Footsie ${ }^{\text {TM }} 2$ Tunable White - DMX protocol

Version: 1.1 Mode 1-Standard 16-bit

| Mode/Total channels | DMX <br> Value | Function | Type of control |
| :---: | :---: | :---: | :---: |
| 1/20 |  |  |  |
| 1 |  | Power/Special functions |  |
|  | 0-9 | Reserved (0=default) |  |
|  |  | To activate following functions, stop in DMX value for at least 3 s and shutter must be closed at least 3 sec . (,/Shutter,Strobe" channel 10 must be at range: 0-31 DMX). Corresponding menu items are temporarily overriden. |  |
|  | 10-14 | DMX input: Wired DMX * | step |
|  | 15-19 | DMX input: Wireless DMX * | step |
|  |  | * function is active only 10 seconds after switching the fixture on |  |
|  | 20-59 | Reserved |  |
|  | 60-64 | Dimmer curve - square law | step |
|  | 65-69 | Dimmer curve - linear | step |
|  | 70-79 | Reserved |  |
|  | 80-84 | Blue positional light On | step |
|  | 85-89 | Blue positional light Off | step |
|  | 90-255 | Reserved |  |
| 2 |  | LED frequency selection |  |
|  |  | Factory display menu setting: 600 Hz |  |
|  |  | Select PWM output frequency of LEDs. Selected PWM frequency can be fine adjusted in 127 steps up/down around selected PWM frequency on the channel below. Corresponding menu item (Frequency Setup) is temporarily overridden. |  |
|  | 0-4 | PWM frequency from Display menu (fixture utilizes PWM | step |
|  |  | frequency set in the display menu item Frequency Setup). |  |
|  | 5-9 | 300 Hz | step |
|  | 10-14 | 600 Hz (10=default) | step |
|  | 15-19 | 1200 Hz | step |
|  | 20-24 | 2400 Hz | step |
|  | 25-29 | High | step |
|  | 30-255 | Reserved (fixture utilizes PWM frequency set in the display menu item |  |
|  |  | Frequency Setup). |  |
| 3 |  | LED frequency fine adjusting |  |
|  |  | Factory display menu setting: 600 Hz |  |
|  |  | Select desired PWM output frequency of LEDs on the channel above. |  |
|  | 0-1 | Selected LED Frequency | step |
|  | 2 | LED Frequency (step -126) | step |
|  | 3 | LED Frequency (step -125) | step |
|  | 4 | LED Frequency (step -124) | step |
|  | : |  |  |
|  | 125 | LED Frequency (step-3) | step |
|  | 126 | LED Frequency (step -2) | step |
|  | 127 | LED Frequency (step-1) | step |
|  | 128 | Selected LED Frequency (128=default) | step |
|  | 129 | LED Frequency (step +1) | step |
|  | 130 | LED Frequency (step +2) | step |
|  | 131 | LED Frequency (step +3) | step |
|  | : |  |  |

DMX protocol

| $\begin{gathered} \hline \text { Mode/Total channels } \\ \hline 1 / 20 \end{gathered}$ | DMX <br> Value | Function | Type of control |
| :---: | :---: | :---: | :---: |
|  | 252 | LED Frequency (step +124) | step |
|  | 253 | LED Frequency (step +125) | step |
|  | 254 | LED Frequency (step +126) | step |
|  | 255 | Selected LED Frequency | step |
| 4 |  | Virtual colour wheel -all pixels |  |
|  | 0 | No function (0=default) | step |
|  | 1-2 | White 3200K | step |
|  | 3-4 | White 3800K | step |
|  | 5-6 | White 4200K | step |
|  | 7-8 | White 4600K | step |
|  | 9-10 | White 5000K | step |
|  | 11-12 | White 5600K | step |
|  | 13-14 | White 6300K | step |
|  | 15-16 | White 6500K | step |
|  | 17-255 | Warm white --> Cool white | proportional |
| 5 |  | Warm white (8 bit) - all zones |  |
|  | 0-255 | Colour saturation control coarse 0-100\% (255=default) | proportional |
| 6 |  | Warm white (16bit) - all zones |  |
|  | 0-255 | Colour saturation control fine (255=default) | proportional |
| 7 |  | Cool white (8 bit) - all zones |  |
|  | 0-255 | Colour saturation control coarse 0-100\% (255=default) | proportional |
| 8 |  | Cool white (16bit)- all zones |  |
|  | 0-255 | Colour saturation control fine (255=default) | proportional |
| 9 |  | Blue positional light |  |
|  | 0-128 | Blue LED intensity 0-100\% (128=default) | proportional |
|  | 129-150 | Blue LED pulsing from slow to fast | proportional |
|  | 151-255 | Reserved |  |
| 10 |  | Shutter/ strobe -all zones |  |
|  | 0-31 | Shutter closed | step |
|  | 32-63 | Shutter open (32=default) | step |
|  | 64-95 | Strobe-effect from slow to fast | proportional |
|  | 96-127 | Shutter open | step |
|  | 128-143 | Opening pulse in sequences from slow to fast | proportional |
|  | 144-159 | Closing pulse in sequences from fast to slow | proportional |
|  | 160-191 | Shutter open | step |
|  | 192-223 | Random strobe-effect from slow to fast | proportional |
|  | 224-255 | Shutter open | step |
| 11 |  | Dimmer intensity (8 bit) - all zones |  |
|  | 0-255 | Dimmer intensity from 0\% to 100\% (0=default) | proportional |
| 12 |  | Dimmer intensity - fine (16 bit) - all zones |  |
|  | 0-255 | Fine dimming (0=default) | proportional |
| 13 |  | Warm white zone 1 |  |
|  | 0-255 | LEDs saturation control 0-100\% (0=default) | proportional |
| 14 |  | Cool white zone 1 |  |
|  | 0-255 | LEDs saturation control 0-100\% (0=default) | proportional |
| 15 |  | Warm white zone 2 |  |
|  | 0-255 | LEDs saturation control 0-100\% (0=default) | proportional |
| 16 |  | Cool white zone 2 |  |
|  | 0-255 | LEDs saturation control 0-100\% (0=default) | proportional |

DMX protocol

| Mode/Total channels | $\begin{gathered} \text { DMX } \\ \text { Value } \end{gathered}$ | Function | Type of control |
| :---: | :---: | :---: | :---: |
| 1/20 |  |  |  |
| 17 |  | Warm white zone 3 |  |
|  | 0-255 | LEDs saturation control 0-100\% (0=default) | proportional |
| 18 |  | Cool white zone 3 |  |
|  | 0-255 | LEDs saturation control 0-100\% (0=default) | proportional |
| 19 |  | Warm white zone 4 |  |
|  | 0-255 | LEDs saturation control 0-100\% (0=default) | proportional |
| 20 |  | Cool white zone 4 |  |
|  | 0-255 | LEDs saturation control 0-100\% (0=default) | proportional |
|  |  |  |  |
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| All Specifications subject to change without notice |  |  |  |
|  |  |  |  |

Robin Footsie ${ }^{\mathrm{TM}} \mathbf{2}$ Warm White - DMX protocol
Version: 1.2 Mode 1-Standard 16-bit

| Mode/Total channels | DMX <br> Value | Function | Type of control |
| :---: | :---: | :---: | :---: |
| 1/13 |  |  |  |
| 1 |  | Power/Special functions |  |
|  | 0-9 | Reserved (0=default) |  |
|  |  | To activate following functions, stop in DMX value for at least 3 s and shutter must be closed at least 3 sec . („Shutter,Strobe" channel 7 must be at range: 0-31 DMX). Corresponding menu items are temporarily overriden. |  |
|  | 10-14 | DMX input: Wired DMX * | step |
|  | 15-19 | DMX input: Wireless DMX * | step |
|  |  | * function is active only 10 seconds after switching the fixture on |  |
|  | 20-59 | Reserved |  |
|  | 60-64 | Dimmer curve - square law | step |
|  | 65-69 | Dimmer curve - linear | step |
|  | 70-79 | Reserved |  |
|  | 80-84 | Blue positional light On | step |
|  | 85-89 | Blue positional light Off | step |
|  | 90-255 | Reserved |  |
| 2 |  | LED frequency selection |  |
|  |  | Factory display menu setting: 600 Hz |  |
|  |  | Select PWM output frequency of LEDs. Selected PWM frequency can be fine adjusted in 127 steps up/down around selected PWM frequency on the channel below. Corresponding menu item (Frequency Setup) is temporarily overridden. |  |
|  | 0-4 | PWM frequency from Display menu (fixture utilizes PWM | step |
|  |  | frequency set in the display menu item Frequency Setup). |  |
|  | 5-9 | 300 Hz | step |
|  | 10-14 | 600 Hz (10=default) | step |
|  | 15-19 | 1200 Hz | step |
|  | 20-24 | 2400 Hz | step |
|  | 25-29 | High | step |
|  | 30-255 | Reserved (fixture utilizes PWM frequency set in the display menu item |  |
|  |  | Frequency Setup). |  |
| 3 |  | LED frequency fine adjusting |  |
|  |  | Factory display menu setting: 600Hz |  |
|  |  | Select desired PWM output frequency of LEDs on the channel above. |  |
|  | 0-1 | Selected LED Frequency | step |
|  | 2 | LED Frequency (step -126) | step |
|  | 3 | LED Frequency (step-125) | step |
|  | 4 | LED Frequency (step -124) | step |
|  | : |  |  |
|  | 125 | LED Frequency (step -3) | step |
|  | 126 | LED Frequency (step -2) | step |
|  | 127 | LED Frequency (step -1) | step |
|  | 128 | Selected LED Frequency (128=default) | step |
|  | 129 | LED Frequency (step +1) | step |
|  | 130 | LED Frequency (step +2) | step |
|  | 131 | LED Frequency (step +3) | step |
|  | : |  |  |

DMX protocol

| Mode/Total channels | DMX | Function | Type of |
| :---: | :---: | :---: | :---: |
| 1/13 | Value |  | control |
|  | 252 | LED Frequency (step +124) | step |
|  | 253 | LED Frequency (step +125) | step |
|  | 254 | LED Frequency (step +126) | step |
|  | 255 | Selected LED Frequency | step |
| 4 |  | Warm white (8 bit) - all zones |  |
|  | 0-255 | Colour saturation control coarse 0-100\% (255=default) | proportional |
| 5 |  | Warm white (16bit) - all zones |  |
|  | 0-255 | Colour saturation control fine (255=default) | proportional |
| 6 |  | Blue positional light |  |
|  | 0-128 | Blue LED intensity 0-100\% (128=default) | proportional |
|  | 129-150 | Blue LED pulsing from slow to fast | proportional |
|  | 151-255 | Reserved |  |
| 7 |  | Shutter/ strobe -all zones |  |
|  | 0-31 | Shutter closed | step |
|  | 32-63 | Shutter open (32=default) | step |
|  | 64-95 | Strobe-effect from slow to fast | proportional |
|  | 96-127 | Shutter open | step |
|  | 128-143 | Opening pulse in sequences from slow to fast | proportional |
|  | 144-159 | Closing pulse in sequences from fast to slow | proportional |
|  | 160-191 | Shutter open | step |
|  | 192-223 | Random strobe-effect from slow to fast | proportional |
|  | 224-255 | Shutter open | step |
| 8 |  | Dimmer intensity (8 bit) - all zones |  |
|  | 0-255 | Dimmer intensity from 0\% to 100\% (0=default) | proportional |
| 9 |  | Dimmer intensity - fine (16 bit) - all zones |  |
|  | 0-255 | Fine dimming (0=default) | proportional |
| 10 |  | Warm white zone 1 |  |
|  | 0-255 | LEDs saturation control 0-100\% (0=default) | proportional |
| 11 |  | Warm white zone 2 |  |
|  | 0-255 | LEDs saturation control 0-100\% (0=default) | proportional |
| 12 |  | Warm white zone 3 |  |
|  | 0-255 | LEDs saturation control 0-100\% (0=default) | proportional |
| 13 |  | Warm white zone 4 |  |
|  | 0-255 | LEDs saturation control 0-100\% (0=default) | proportional |
|  |  |  |  |
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[^0]:    * Footsie 2 only

