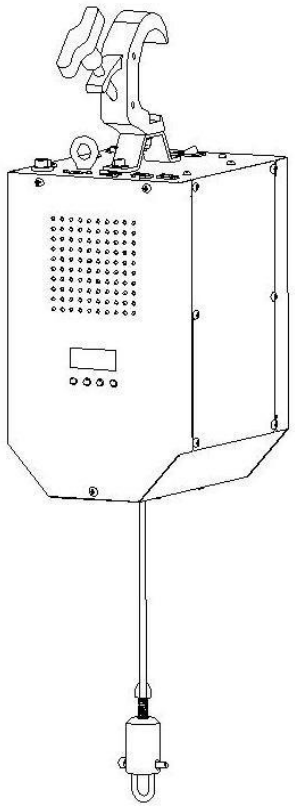
KINETIC FLY M9

DMX KINETIC WINCH SYSTEM · 9 M LIFT · 5 KG LOAD



MODEL **Kinetic Fly M9**
MANUFACTURER **FX Lighting**
PROTECTION **IP20 (Indoor)**
POWER **200 W**

USER'S GUIDE

(Read the instructions carefully and keep them for future reference)

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01 Safety Instructions

Before installing, operating, or maintaining this product, carefully read this manual and comply with all safety precautions listed below, as well as all warnings printed on the motor.

1. Indoor Use Only

- This device is designed for professional indoor use only.
- Not suitable for household use — may cause injury or equipment damage.

2. Environmental Restrictions

- DO NOT expose to moisture, corrosive/flammable gases, or ambient temperatures exceeding 50°C (104°F).
- Risk of fire or equipment failure if operated in prohibited conditions.

3. Load Capacity Compliance

- Strictly adhere to rated load limits and approved lifting materials specified in technical parameters.
- Overloading may cause structural failure, injury or equipment damage.

4. No Unauthorized Modifications

- DO NOT alter load-bearing cable connections or modify the device.
- Tampering may result in mechanical failure and personal injury.

5. Before Each Use

- Before each operation, inspect cables for bends, cracks, or corrosion.
- Immediately discontinue use if defects are detected.

6. High-Voltage Hazard

- This device contains high-voltage servo drives. Only certified electromechanical technicians may perform repairs.
- Unauthorized servicing risks electric shock or severe injury.

7. Genuine Parts Requirement

- Use only FX Lighting OEM components for repairs/replacements.
- Third-party parts may compromise safety and void warranties.

8. Legal Compliance

- Follow all local laws and regulations governing equipment use.

Warning Symbols

The following symbols are used to identify important safety information on the product and in this manual:

Symbol	Meaning
⚠ **DANGER**	Implies a potential hazard that, if not complied with, could result in serious or fatal injury to a person.
⚠ **WARNING**	Implies there may be a potential hazard that, if not complied with, could cause moderate injury to personnel, or cause serious damage or malfunction of the product.
□ **PROHIBITED**	Implies actions that are absolutely prohibited and may result in damage to the product, or even malfunction, and may render it unusable.
⚙ **INSTALLATION**	Implies before powering on, please fix the installation vertically and confirm that the load or counterweight has been connected.

> **WARNING**
> Do not use the winch if any damage or error is found!

02 Product Overview & Technical Specification

Product Introduction

The stage winch is a critical component in stage lighting systems, providing high load capacity, smooth lifting, precise control, safety and reliability. As an essential part of modern stage technology, the unique functionality and design of stage lighting winches provide unprecedented flexibility and creative possibilities for performances and dynamic lighting installations. DMX winches, with their distinctive lighting effects and dynamic performance, are widely used in theatres, shows, concerts and exhibitions.

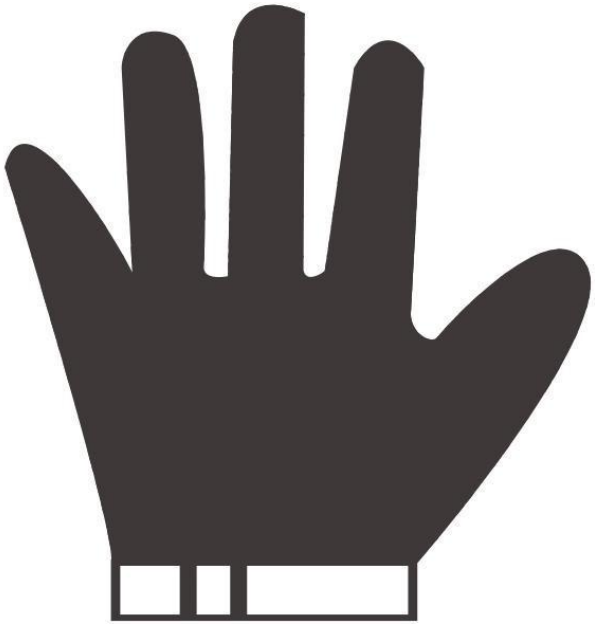
“Where engineering precision meets artistic expression” — DMX winches redefine stage dynamics, enabling limitless creative possibilities.



Kinetic Fly M9 — overview



Kinetic Fly M9 — side view



Kinetic Fly M9 — detail

Winch Size Drawing

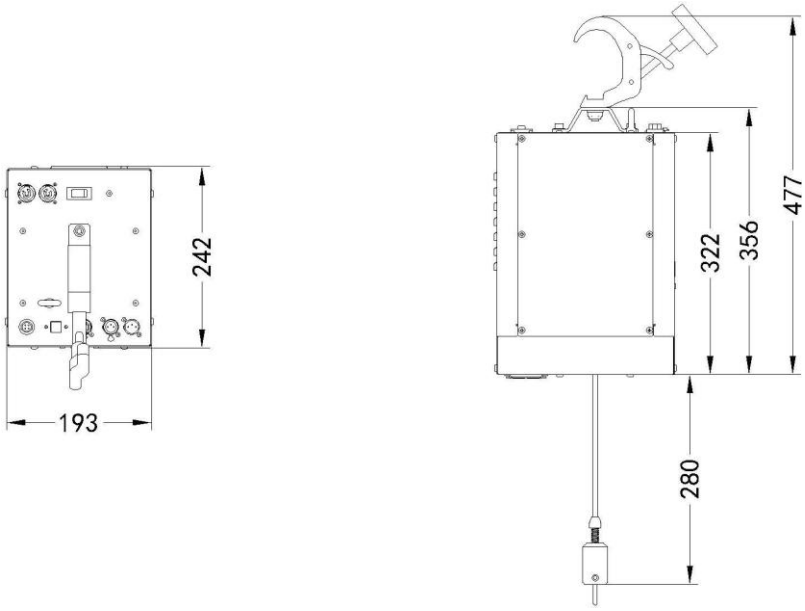


Figure 1 — Winch size drawing (242 × 193 × 477 mm incl. clamp)

Winch Interface

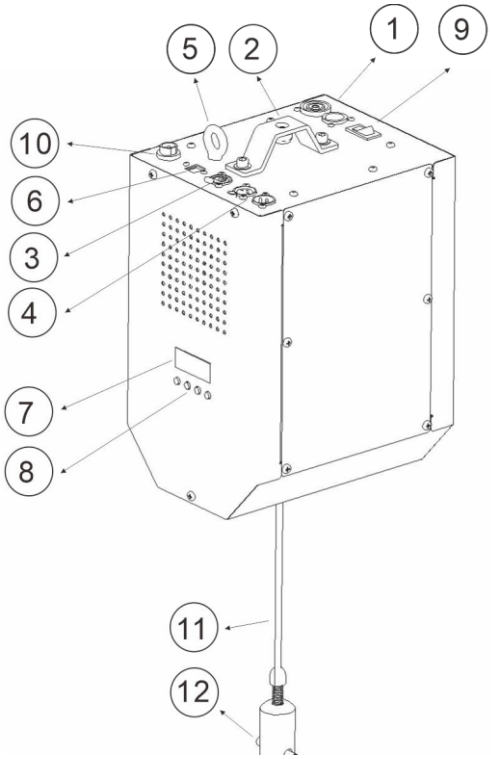


Figure 2 — Winch interface connectors

No.	Interface
1	Main Power Connector
2	Aluminum Clamp

No.	Interface
3	RJ45 Pass-through Input
4	3-PIN XLR Connector
5	Safety Hook
6	Teamwork
7	Display Screen
8	Menu
9	Power Switch
10	GX16 4-Pin Pass-through Input
11	Load-bearing Wire
12	Counterweight Hanging Drum

Technical Specification

Parameter	Value
Winch Model	T15A
Loading Weight	5 KG
Lifting Height	9 M
Fast Speed	60 CM/S
Control Mode	DMX-512
RDM	Standard
Channel	9 CH / 12 CH / 4 CH+
Internal Control Pixel Points	Max 75 points (option)
Pass-through Connector	GX-16 4-PIN
Pass-through External Control	Plug switching
DMX Connection	3 PIN / 5 PIN XLR In/Out
Screen	4 digital tube display
Lifting Cable Diameter	3.6 MM
Synchronization Error	Less than 6 MM
Slack Detection Protection	Standard
Voltage	AC 90–240 V / 50–60 Hz
Output Mode	24 V_150 W / 220 V_1300 W / RJ45
Total Power	200 W (excluding direct output power)
IP Rating	IP20
Environment Temperature	−10 ~ 50 °C
Safety Security	Physical braking, electronic protection
E-Stop	Customized
Weight Detection Protection	Standard
LINK (Teamwork)	Standard
Installation	Vertical lifting
Winch Size	242 × 193 × 477 MM (including clamp)

Parameter	Value
Winch Weight	8.6 KG
Package	Carton / Flight case
DMX Signal Cable	2×0.5 × 2 m × 1 pcs
PowerCon True1 Cable	3×1.25 × 2 m × 1 pcs
Safety Cable	3 MM × 430 MM × 1 pcs
Aluminum Clamp	30 MM × 110 MM × 82 MM × 1 pcs

03 Installation & Safety Precautions

- Check that the rigging clamp is undamaged and that the rigging structure can support at least 10 times the combined weight of all winches and equipment to be installed on it.
- The motor is equipped with a slack rope detection device. During installation, ensure the cable end is properly weighted (min 1 KG), otherwise the winch will not work. Fix the motor on the TRUSS with a special stage lamp hook or use bolt-mount to square tubing with the wire exit port vertically downward, as shown in Figure 3.
- Before energizing the winch, confirm: all bolts are torque-tightened; safety locks are engaged; lights or weights are already hanging; lights are locked with the motor.
- Leave enough space under the winch, and do not use the winch above the head of personnel.
- Don't use the winch to hang persons or animals — approved static loads only.
- When the processor detects a winch malfunction (e.g. over speed or overload), the system automatically engages the brake.
- After a power outage, the machine must detect the load and automatically reset to the initial position before it can operate again.
- The default speed setting is 0, keeping the winch in brake mode. A value higher than 0 must be set for the winch to operate — Channel 3 and Channel 4 have a braking function.
- Do not disassemble or install the light source while the winch is running and the power is on.
- In an emergency, all equipment can be stopped using the emergency stop handle.
- This model comes standard with an upper limit switch (electronic limit switch, physical limit switch, automatic protection and power cut-off upon impact) and a lower limit switch (electronic limit switch).

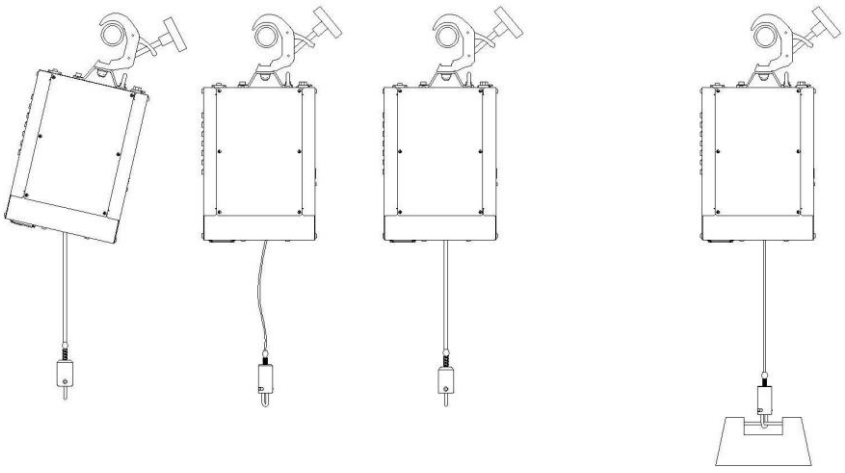


Figure 3 — TRUSS mounting diagram (wire exit port vertically downward)

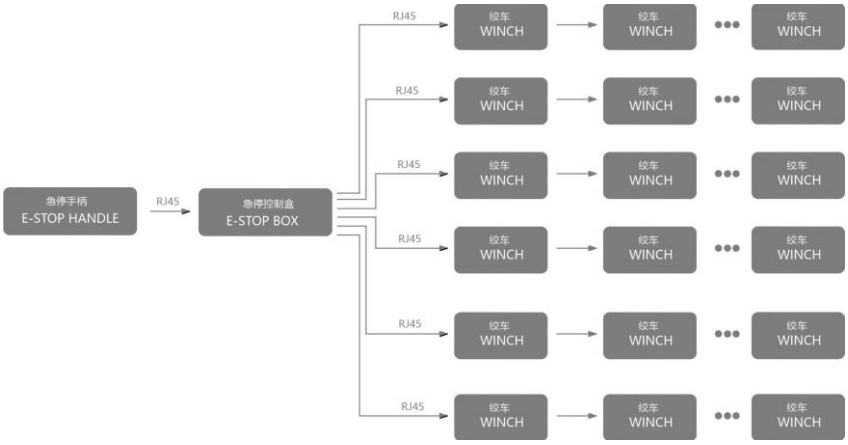


Figure 4 — Limit switch and safety components

04 Teamwork & Power Supply

Teamwork

When multiple winches are used in combination, they can be connected via USB or RJ45 cable daisy-chain. If one winch faults, all connected units stop to prevent cable strain.

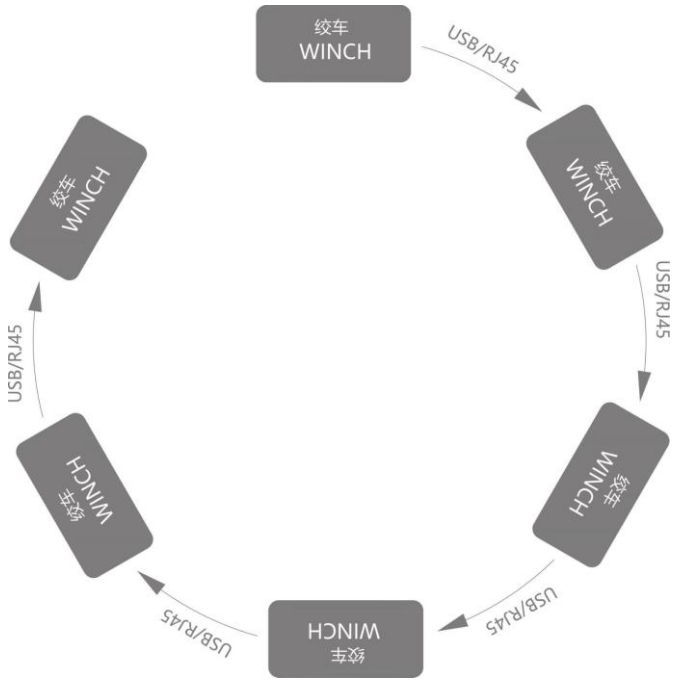


Figure 5 — Teamwork connection of multiple winches

Power Supply Requirements

1. Input Voltage & Protection

- Voltage Range: 90–240 V AC.
- Use only connectors compliant with local electrical codes.
- Must include fault-protected fuses or circuit breakers.
- Must have overload & ground-fault protection to prevent electric shock or winch damage due to overcurrent.

2. Input Cable Specifications

- Conductor Size: at least 3×1.5 mm² (AWG16) per Chinese National Standard (GB).
- Cable Diameter: 7–15 mm. Heat Resistance: 90°C (194°F).

3. Series Connection Rules

- Connector Type: locking POWERCON connector for daisy-chaining.
- Max units per circuit: refer to Table 1 — DO NOT EXCEED LIMITS.

4. Risk of Overload in Series Connection

- Excessive chaining causes cable overheating, insulation degradation and potential fire hazard.

5. Multi-Functional Model Winch (Special Wiring)

- Lighting power (LED/stage lighting) and winch power are fully isolated.
- Winch only powers travel-length current paths. Max current: 7 A — exceeding this damages the winch and risks fire.

6. Wiring & Installation

- Certified electricians only. Proper cable routing (tray, conduit or raceway). Secure terminations with insulation tape or heat-shrink tubing.

7. Safety Disconnection

- Always power off when under maintenance, being cleaned, or idle.

8. External Control Equipment

- Follow the same series connection way as above when hanging LED screens / stage lighting.

Maximum Chain Length (Table 1)

Model	QL_815F	QL_336M	T15A	T15T	T15T pro	T20A	T20T	T20TC	T20T pro	T30A	T30T
Fuse	F2A/250V	F2A/250V	F5A/250V	F8A/250V	F8A/250V	F5A/250V	F10A/250V	F2A/250V	F2A/250V	F8A/250V	F8A/250V

Model	QL_815F	QL_336M	T15A	T15T	T15T pro	T20A	T20T	T20TC	T20T pro	T30A	T30T
Peak Power	75W	36W	200W	300W	400W	400W	700W	1200W	1200W	700W	1200W
Power Chain Capacity (PCS)	15	15	15	10	10	10	5	4	4	5	4
DMX Chain Capacity (PCS)	15	15	15	15	15	15	15	15	15	15	15

05 DMX-512 Connection

1. Control Protocol

DMX 512 — Addressing: each winch requires 1 unique address, set via the digital display (see Control Panel section).

2. XLR Connector Standards

Item	Description
Types	XLR 3-PIN or XLR 5-PIN
PIN Definition	1 PIN: Ground; 2 PIN: DMX−; 3 PIN: DMX+; 4/5 PIN: Spare
Connector Type	Male plug: pins; Female plug: jacks
Signal Flow	Input: female plug/socket; Output: male plug/socket

3. Installation Best Practices

- Avoid parallel routing with power cables or other strong power cables to minimize EMI (electromagnetic interference).
- Prevent cable damage: no sharp bends, stretching or crushing.
- Ensure proper XLR alignment and correct pin-to-socket mating and signal flow direction.

4. XLR Signal Cable Standard

Item	Description
Diameter per PIN	0.5 mm² (CAT 5 alternative)
Standard XLR	2 PIN DMX+ / DMX−; Shield: Ground
CAT 5 alternative	Blue: DMX+; Blue White: DMX−; Brown + Brown White: Ground
Connection Way	Daisy-chain: Controller Output → Winch 1 Input → Winch 1 Output → Winch 2 Input …
Bypass Characteristics	When the winch is powered off, signal bypass remains active
Termination Resistor	A 120 Ω (1/4 W) resistor must be connected between PIN 2 (DMX−) and PIN 3 (DMX+) at the last device's output
Length Limit	Single cable ≤ 100 m; total length suggested ≤ 300 m
Standard Configuration	1.5 m (with XLR female/male)

5. Winch Limits Per Chain

- Recommended max: 15 devices per DMX chain (to avoid signal degradation).
- For larger setups: use opto-isolated DMX splitters/amplifiers.

6. External Stage Lights

- Follow the same DMX wiring rules as above.

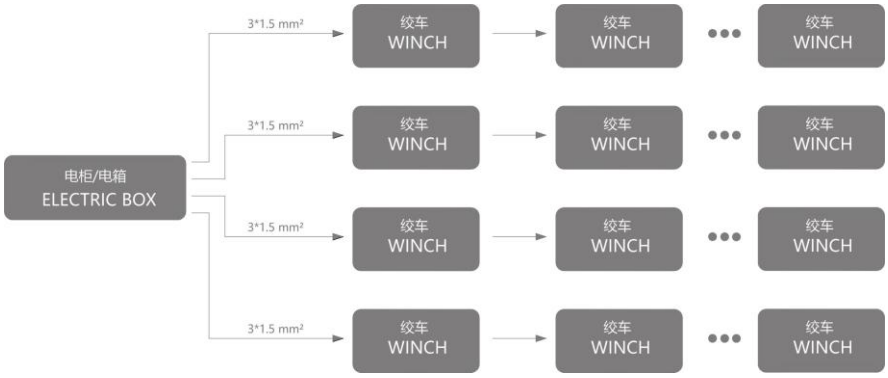


Figure 6 — DMX daisy-chain connection

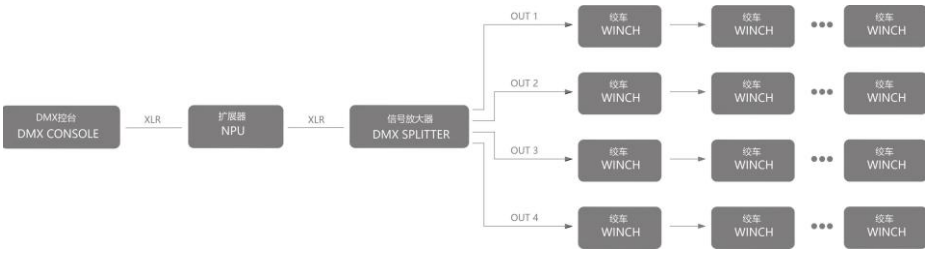


Figure 7 — Chain wiring diagram

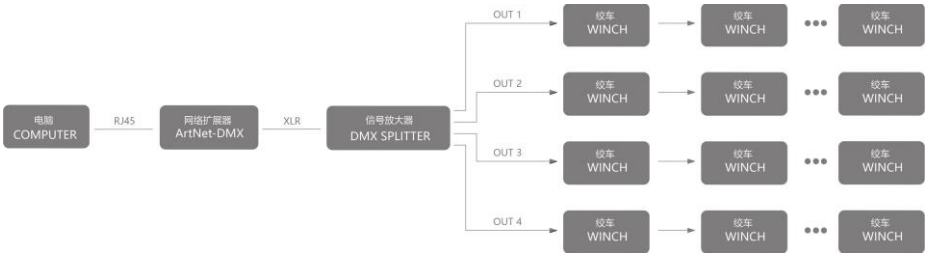


Figure 8 — Chain wiring diagram (continued)

06 Control Panel & Basic Settings

Indicator Light Description

Action	Digital Screen	Bottom Indicator
Power On	Show "Rest" or firmware version	Steady on
No Signal	Show DMX address (slow flash)	Steady on
Signal On	Screen off	Steady on
Teamwork	\	Steady on
Error	Error code displayed	Fast flash / alternate fast and slow flash / off

Control Panel (Table 2)

Key	Function
Main Menu Setting key	Turn Page Up
Scroll Down key	Confirm

Basic Setting

NO.	Function	Display Code	Operation Instructions
1	Channel Mode Selection	h001 c001 n001	Press the 1 key to select the channel mode. H prefix = 9-channel mode, C prefix = 12-channel mode, N prefix = 125-channel mode. Press 4 to save.
2	DMX Address Setting	DMX address 1–504	Press 2 or 3 to adjust the value, then press 4 to save. Long-press 1+2 to enter the lifting height menu.
3	Lifting Height Setting	L020 L030 L040 L050 L060 L070 L080 L090	Select the target code (e.g. L050 for 5 m lifting), then press 4 to confirm. Press 1 to exit, or wait 3 s for auto-return.
4	Anti-Slack Rope Protection	P-ON ON / P-OFF OFF	Press 2+3 to toggle: P-ON = protection on; P-OFF = protection off. Press 1 to exit.
5	Light Source Option	CP 0, CP 1	Press 3+4 simultaneously: CP 0 = connect the glowing ball; CP 1 = connect the football light. Press 1 to exit.

NO.	Function	Display Code	Operation Instructions
6	Manual Operation	Numeric value	Long-press 1 for 3 s — the lifting cable rises 3 cm; long-press 4 for 3 s — the cable lowers 3 cm.
7	Maintenance / Error code Mode	\	View: press 1+4 simultaneously. Reset: long-press 1+4 while powering on.

07 Channel Description

H Mode (9 CH)

CH	Function	Description
1	Lifting	0→255 (0–100%): Down; 255 (100%)→0: Up.
2	Fine-tune	0–255 (100%): 16-bit fine-tuning.
3	Brake & speed	0: Brake (default); 1–255 (1–100%): speed from slow to fast.
4	Speed & Reset	0: Brake (default); 1–77 (0–30%): slow speed mode (25 cm/s); 78 (31%)–153 (60%): medium speed (40 cm/s); 154 (61%)–231 (90%): high speed (70 cm/s); 232 (91%)–252 (99%): hold for 8 seconds, auto reset.
5	Total dimming	0–255 (0–100%): global brightness, from dark to bright.
6	Red (R) dimming	0–255 (0–100%): red brightness.
7	Green (G) dimming	0–255 (0–100%): green brightness.
8	Blue (B) dimming	0–255 (0–100%): blue brightness.
9	White (W) dimming	0–255 (0–100%): white brightness.

C Mode (12 CH)

CH	Function	Description
1	Lifting	0→255 (0–100%): Down; 255 (100%)→0: Up.
2	Fine-tune	0–255 (100%): 24-bit fine-tuning.
3	Brake & speed	0: Brake (default); 1–255: speed from slow to fast.
4	Speed & Reset	Same speed ranges as H Mode (25 / 40 / 70 cm/s; 232–252 auto reset).
5	Total dimming	0–255 (0–100%): global brightness.
6	Red (R) dimming	0–255 (0–100%): red brightness.
7	Green (G) dimming	0–255 (0–100%): green brightness.
8	Blue (B) dimming	0–255 (0–100%): blue brightness.
9	White (W) dimming	0–255 (0–100%): white brightness.
10	Built-in Effects	See the built-in effects table (values 0–126).

CH	Function	Description
11	Effect Speed	0–255 (0–100%): adjusts effect speed from slow to fast.
12	Strobe & Trailing Effects	0–255 (0–100%): trailing effect (LED increases by 1 number); works with Channel 10 effect values 119–126.

N Mode (125 CH)

CH	Function	Description
1	Lifting	0→255 (0–100%): Down; 255→0: Up.
2	Fine-tune	0–255 (100%): 24-bit fine-tuning.
3	Brake & speed	0: Brake; 1–255: speed slow to fast.
4	Speed & Reset	Speed ranges as above; 232–252 auto reset.
5	Total dimming	0–255 (0–100%): global brightness.
6–125	LED 1–30 : R/G/B/W	Each of the 30 LEDs occupies 4 consecutive channels (R, G, B, W), each 0–255 (0–100%): LED 1: R=CH6, G=CH7, B=CH8, W=CH9; LED 2: R=CH10 … LED 30: W=CH125.



Figure 9 — Pixel ball accessory (independent RGBW control)

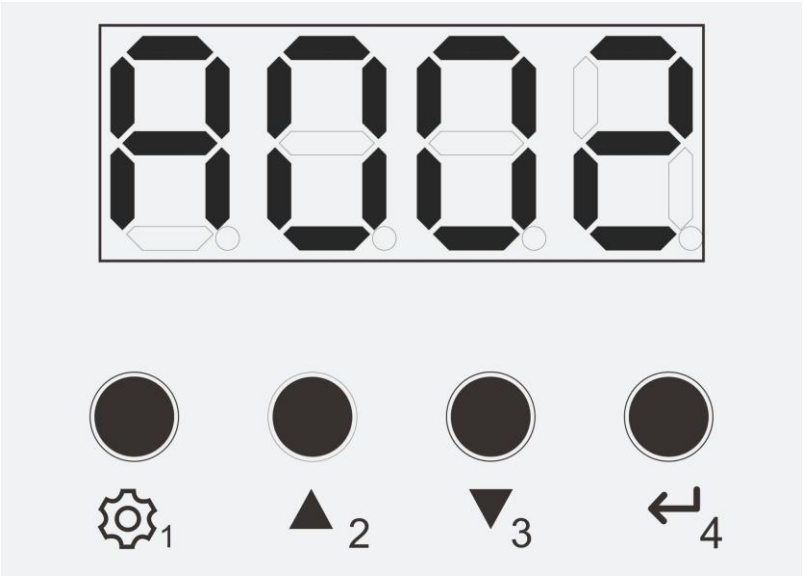


Figure 10 — Built-in effects demonstration

C Mode Channel 10 — Built-in Effects (0–126)

Value	Effect Description
0	Control all 30 LEDs simultaneously, each can be independently controlled in color (RGBW).
1	Control the 1st LED, independent color (RGBW) control.
2	Control the 2nd LED, independent color (RGBW) control.
3	Control the 3rd LED, independent color (RGBW) control.
4	Control the 4th LED, independent color (RGBW) control.
5	Control the 5th LED, independent color (RGBW) control.
6	Control the 6th LED, independent color (RGBW) control.
7	Control the 7th LED, independent color (RGBW) control.
8	Control the 8th LED, independent color (RGBW) control.
9	Control the 9th LED, independent color (RGBW) control.
10	Control the 10th LED, independent color (RGBW) control.
11	Control the 11th LED, independent color (RGBW) control.
12	Control the 12th LED, independent color (RGBW) control.
13	Control the 13th LED, independent color (RGBW) control.
14	Control the 14th LED, independent color (RGBW) control.
15	Control the 15th LED, independent color (RGBW) control.
16	Control the 16th LED, independent color (RGBW) control.
17	Control the 17th LED, independent color (RGBW) control.
18	Control the 18th LED, independent color (RGBW) control.
19	Control the 19th LED, independent color (RGBW) control.
20	Control the 20th LED, independent color (RGBW) control.
21	Control the 21st LED, independent color (RGBW) control.
22	Control the 22nd LED, independent color (RGBW) control.
23	Control the 23rd LED, independent color (RGBW) control.
24	Control the 24th LED, independent color (RGBW) control.
25	Control the 25th LED, independent color (RGBW) control.
26	Control the 26th LED, independent color (RGBW) control.
27	Control the 27th LED, independent color (RGBW) control.
28	Control the 28th LED, independent color (RGBW) control.
29	Control the 29th LED, independent color (RGBW) control.

Value	Effect Description
30	Control the 30th LED, independent color (RGBW) control.
31	Control the 1st, 2nd and 3rd LED, independent color (RGBW) control.
32	Control the 2nd, 3rd and 4th LED, independent color (RGBW) control.
33	Control the 3rd, 4th and 5th LED, independent color (RGBW) control.
34	Control the 4th, 5th and 6th LED, independent color (RGBW) control.
35	Control the 5th, 6th and 7th LED, independent color (RGBW) control.
36	Control the 6th, 7th and 8th LED, independent color (RGBW) control.
37	Control the 7th, 8th and 9th LED, independent color (RGBW) control.
38	Control the 8th, 9th and 10th LED, independent color (RGBW) control.
39	Control the 9th, 10th and 11th LED, independent color (RGBW) control.
40	Control the 10th, 11th and 12th LED, independent color (RGBW) control.
41	Control the 11th, 12th and 13th LED, independent color (RGBW) control.
42	Control the 12th, 13th and 14th LED, independent color (RGBW) control.
43	Control the 13th, 14th and 15th LED, independent color (RGBW) control.
44	Control the 14th, 15th and 16th LED, independent color (RGBW) control.
45	Control the 15th, 16th and 17th LED, independent color (RGBW) control.
46	Control the 16th, 17th and 18th LED, independent color (RGBW) control.
47	Control the 17th, 18th and 19th LED, independent color (RGBW) control.
48	Control the 18th, 19th and 20th LED, independent color (RGBW) control.
49	Control the 19th, 20th and 21st LED, independent color (RGBW) control.
50	Control the 20th, 21st and 22nd LED, independent color (RGBW) control.
51	Control the 21st, 22nd and 23rd LED, independent color (RGBW) control.
52	Control the 22nd, 23rd and 24th LED, independent color (RGBW) control.
53	Control the 23rd, 24th and 25th LED, independent color (RGBW) control.
54	Control the 24th, 25th and 26th LED, independent color (RGBW) control.
55	Control the 25th, 26th and 27th LED, independent color (RGBW) control.
56	Control the 26th, 27th and 28th LED, independent color (RGBW) control.
57	Control the 27th, 28th and 29th LED, independent color (RGBW) control.
58	Control the 28th, 29th and 30th LED, independent color (RGBW) control.
59	Control the 1st, 2nd, 3rd, 4th and 5th LED, independent color (RGBW) control.
60	Control the 2nd, 3rd, 4th, 5th and 6th LED, independent color (RGBW) control.

Value	Effect Description
61	Control the 3rd, 4th, 5th, 6th and 7th LED, independent color (RGBW) control.
62	Control the 4th, 5th, 6th, 7th and 8th LED, independent color (RGBW) control.
63	Control the 5th, 6th, 7th, 8th and 9th LED, independent color (RGBW) control.
64	Control the 6th, 7th, 8th, 9th and 10th LED, independent color (RGBW) control.
65	Control the 7th, 8th, 9th, 10th and 11th LED, independent color (RGBW) control.
66	Control the 8th, 9th, 10th, 11th and 12th LED, independent color (RGBW) control.
67	Control the 9th, 10th, 11th, 12th and 13th LED, independent color (RGBW) control.
68	Control the 10th, 11th, 12th, 13th and 14th LED, independent color (RGBW) control.
69	Control the 11th, 12th, 13th, 14th and 15th LED, independent color (RGBW) control.
70	Control the 12th, 13th, 14th, 15th and 16th LED, independent color (RGBW) control.
71	Control the 13th, 14th, 15th, 16th and 17th LED, independent color (RGBW) control.
72	Control the 14th, 15th, 16th, 17th and 18th LED, independent color (RGBW) control.
73	Control the 15th, 16th, 17th, 18th and 19th LED, independent color (RGBW) control.
74	Control the 16th, 17th, 18th, 19th and 20th LED, independent color (RGBW) control.
75	Control the 17th, 18th, 19th, 20th and 21st LED, independent color (RGBW) control.
76	Control the 18th, 19th, 20th, 21st and 22nd LED, independent color (RGBW) control.
77	Control the 19th, 20th, 21st, 22nd and 23rd LED, independent color (RGBW) control.
78	Control the 20th, 21st, 22nd, 23rd and 24th LED, independent color (RGBW) control.
79	Control the 21st, 22nd, 23rd, 24th and 25th LED, independent color (RGBW) control.
80	Control the 22nd, 23rd, 24th, 25th and 26th LED, independent color (RGBW) control.
81	Control the 23rd, 24th, 25th, 26th and 27th LED, independent color (RGBW) control.
82	Control the 24th, 25th, 26th, 27th and 28th LED, independent color (RGBW) control.
83	Control the 25th, 26th, 27th, 28th and 29th LED, independent color (RGBW) control.
84	Control the 26th, 27th, 28th, 29th and 30th LED, independent color (RGBW) control.
85	Every 5 beads flow upwards, independent color (RGBW) control, adjustable speed (CH 11).
86	Every 5 beads flow downwards, independent color (RGBW) control, adjustable speed (CH 11).
87	Every 5 up, down, back and forth, independent color (RGBW) control, speed adjustable (CH 11).
88	Every 10 pieces flow up, down, back and forth, independent color (RGBW) control, speed adjustable (CH 11).
89	25 upwards flowing, independent color (RGBW) control, speed adjustable (CH 11).
90	25 drop-flow chips, independent color (RGBW) control, speed adjustable (CH 11).

Value	Effect Description
91	25 drop-flow chips, independent color (RGBW) control, speed adjustable (CH 11).
92	Single upstream, independent color (RGBW) control, speed adjustable (CH 11).
93	Single down-flow, independent color (RGBW) control, speed adjustable (CH 11).
94	Disorder flash from less to more, independent background color (RGBW) control, speed adjustable (CH 11).
95	1 white light flowing upwards, independent background color (RGBW) control, speed adjustable (CH 11).
96	1 white light flowing downwards, independent background color (RGBW) control, speed adjustable (CH 11).
97	Single white light disorder from less to more flash, independent background color (RGBW) control, speed adjustable (CH 11).
98	Blue-white light flows upwards, speed adjustable (CH 11).
99	Blue and white light flows downwards, speed adjustable (CH 11).
100	Orange-white light flows upwards, speed adjustable (CH 11).
101	Orange-white light flows downwards, speed adjustable (CH 11).
102	Colorful light flows upwards, speed adjustable (CH 11).
103	Colorful light flows downwards, speed adjustable (CH 11).
104	10 blue rays flowing upwards, background color white control, speed adjustable (CH 11).
105	10 blue rays flowing downward, background color white control, speed adjustable (CH 11).
106	10 orange rays flowing upwards, background color white control, speed adjustable (CH 11).
107	10 orange rays flowing downward, background color white control, speed adjustable (CH 11).
108	10 rainbow lights flowing upwards, no background color, speed adjustable (CH 11).
109	10 rainbow lights flowing downward, no background color, speed adjustable (CH 11).
110	5 blue rays flowing upwards, background color white control, speed adjustable (CH 11).
111	5 blue rays flowing downward, background color white control, speed adjustable (CH 11).
112	5 orange rays flowing upwards, background color white control, speed adjustable (CH 11).
113	5 orange rays flowing downward, background color white control, speed adjustable (CH 11).
114	5 rainbow lights flowing upwards, no background color, speed adjustable (CH 11).
115	5 rainbow lights flowing downward, no background color, speed adjustable (CH 11).
116	6 blue rays flow up, down, back and forth, background color white control, speed adjustable (CH 11).
117	6 orange rays flow up, down, back and forth, background color white control, speed adjustable (CH 11).
118	6 colorful lights flow up, down, back and forth, no background color, speed adjustable (CH 11).

Value	Effect Description
119	Flows up every 4 pcs, independent color (RGBW) control, speed adjustable (CH 11).
120	Descending increments of 4 pcs, independent color (RGBW) control, speed adjustable (CH 11).
121	Flows upwards in increments of 4, at 16 intervals, independent color (RGBW) control, speed adjustable (CH 11).
122	Flows down in increments of 4 at 16 intervals, independent color (RGBW) control, speed adjustable (CH 11).
123	Ascending every 4 pcs, 11 at intervals, independent color (RGBW) control, speed adjustable (CH 11).
124	Descending in increments of 4 in 11 intervals, independent color (RGBW) control, speed adjustable (CH 11).
125	Flows up every 4 in increments of 5 at intervals, independent color (RGBW) control, speed adjustable (CH 11).
126	Flows down in increments of 4 at 5 intervals, independent color (RGBW) control, speed adjustable (CH 11).

NOTE

DMX values above 126 are empty (no function).

Load-Adapted Speed

Speed	Slowly speed	Medium speed	High speed
Speed	25 cm/s	40 cm/s	70 cm/s
Safety Loading	Maximum 5 KG	Maximum 5 KG	Maximum 3 KG

DMX Channel 1 Distance Percentage (9 m example)

Channel Value	Distance	Percentage
0	0 m	0%
25	0.9 m	10%
51	1.8 m	20%
76	2.7 m	30%
102	3.6 m	40%
127	4.5 m	50%
153	5.4 m	60%
178	6.3 m	70%
204	7.2 m	80%
230	8.1 m	90%
255	9 m	100%

08 Error Codes

Error Code	Description	Solution
Err1	Fall Protection	Power off and check if the load (projector or fixture) exceeds the maximum weight limit at the winch cable end.
Err2	Overload Alarm	Power off immediately and verify the total suspended load complies with rated capacity specifications.
Err3	Top Strike Warning (on reset)	Inspect homing position and limit switches for mechanical obstruction or misalignment.
Err4	Count Alarms	Power off and check for cable jamming. Inspect the motor assembly. Verify the optical encoder signal.
Err5	Teamwork Error	Check all winches in the same DMX chain for individual faults (test winches one by one).
Err6	Top Strike Warning (runtime)	Verify vertical installation. Correct the cable exit angle.
Err9	Manual Service Mode	—
No Display / Blank Screen	Power issue	Check all power cable connections. Test fuse continuity. Verify the switching PSU output voltage.

09 Maintenance & Package Content

Maintenance Guide

Cycle	Items of Detection
Daily Inspection	Visual & operational check: inspect for physical damage and verify no error codes (e.g. Err1–Err9). Electrical quick test: check power/DMX cables; monitor voltage stability under load.
Monthly Inspection	Electrical system: test insulation resistance with a megohmmeter. Mechanical components: inspect the winch lifting cable, motor, roller alignment and reset switches. Tighten winch bolts with a torque wrench. Abnormal noise detection during winch operation.
Annual Inspection	Motor & gearbox maintenance: service the motor and replace key parts. Lifting cable full inspection: check for internal breaks with a magnetic particle tester.

Package Content

Item	Specification	Quantity
PowerCon True1 Cable	3×1.25 × 2 m	1 PCS
DMX Signal Cable	2×0.5 × 2 m	1 PCS
Aluminum Clamp	Thickness 30 MM × Height 110 MM × Width 82 MM	1 PCS
Safety Cable	3 MM × 430 MM	1 PCS
Teamwork Cable	1.5 M	0 PCS
Balance Bar	4×4×50 CM	0 PCS
User Manual	/	1 PCS

FX LIGHTING

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