The Pellet Dispenser
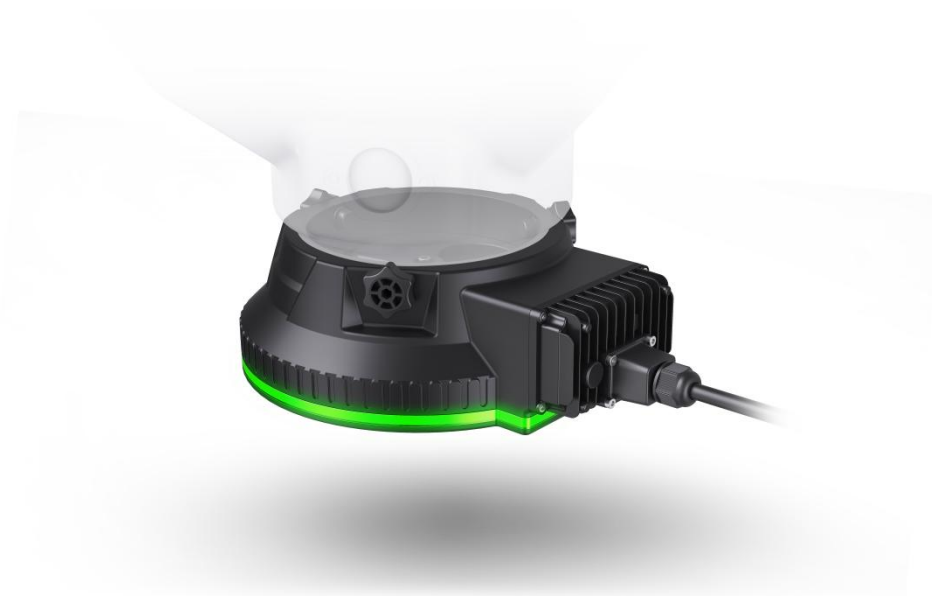
(Adaptive model：Z series / G series)

User Manual

Version1.0 cn

Contents

Part 1 Forward

1.1 Introduction

This document contains the operating instructions and technical specifications of the dispenser, helping users to have an in-depth understanding and safe operation.

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Welcome to learn more from Official Website: www.effort-tech.com

1.2 Disclaimer

Please read this User Manual carefully before using this product, as the pellet dispenser is special. You shall be deemed to have read, understood, agreed and acknowledged all terms and conditions and information stated herein upon activation of the product.

Not being a toy, for certain safety risks, the product is NOT suitable for those who are under 18 years old, or those who have no or limited capacity for civil conduct, or those with mobility impairments. Please keep the produ6ct out of reach of children and be particularly cautions while there are children present.

You understand that in the use of any products, accidents may occur due to single or combined factors, including but not limited to improper operation, surroundings and accident factor. Please understand and be willing to bear all the losses caused by the accident, and that EFT shall not be held accountable for such accidents.

Please do not disassemble, modify ,retrofit or use the product for non-specified purpose. All injuries and losses directly or indirectly caused shall be afforted by the users.

On any account, you shall comply with the laws and regulations of the country and the region where the product is used. EFT shall assume no liability arising from your violation of relevant laws and regulations.

To the extent permitted by law, EFT reserves the rights for final explanation and revision of the terms and conditions here in above. EFT also has the right to update, modify or terminate these terms and conditions via channels including its official website, the User Manual and online App, without prior notice.

Part 2 Product Overview

2.1 Introduction

This professional dispenser is EFT designed for throwing large granule, convenient and high efficiency operation . It can be matched with Z series or G series agricultural drones, mounted on the spreading tank . and the multi-turnplates can be switched according to different size granules.

It is intelligent and has two working modes, Auto mode and Fixed-point mode. Each falling with green flashing and red light means empty. Which can meet specific throwing and spreading operation needs.
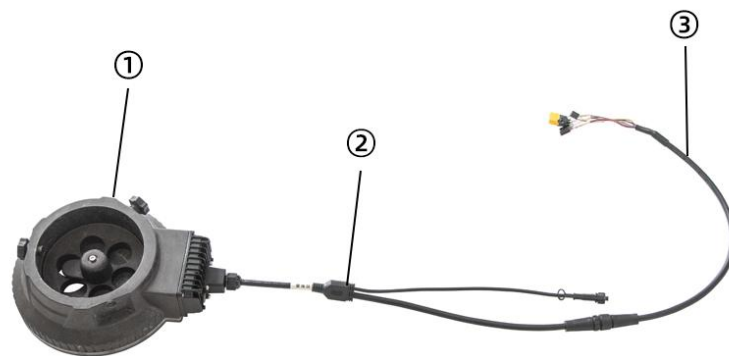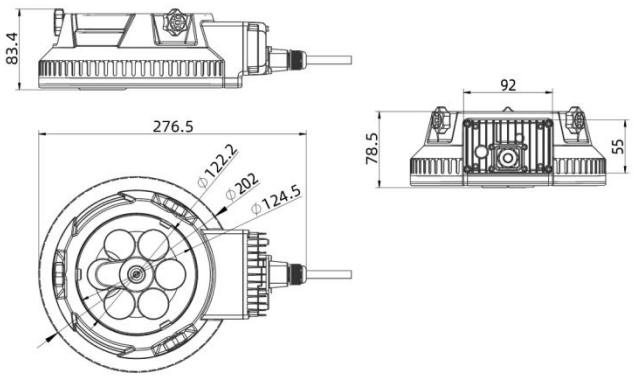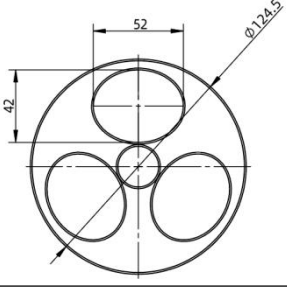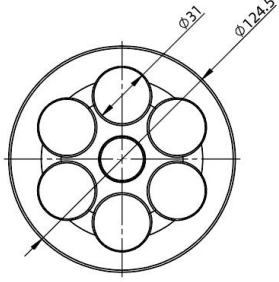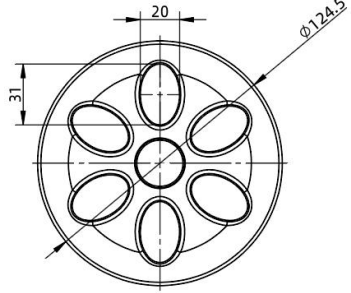
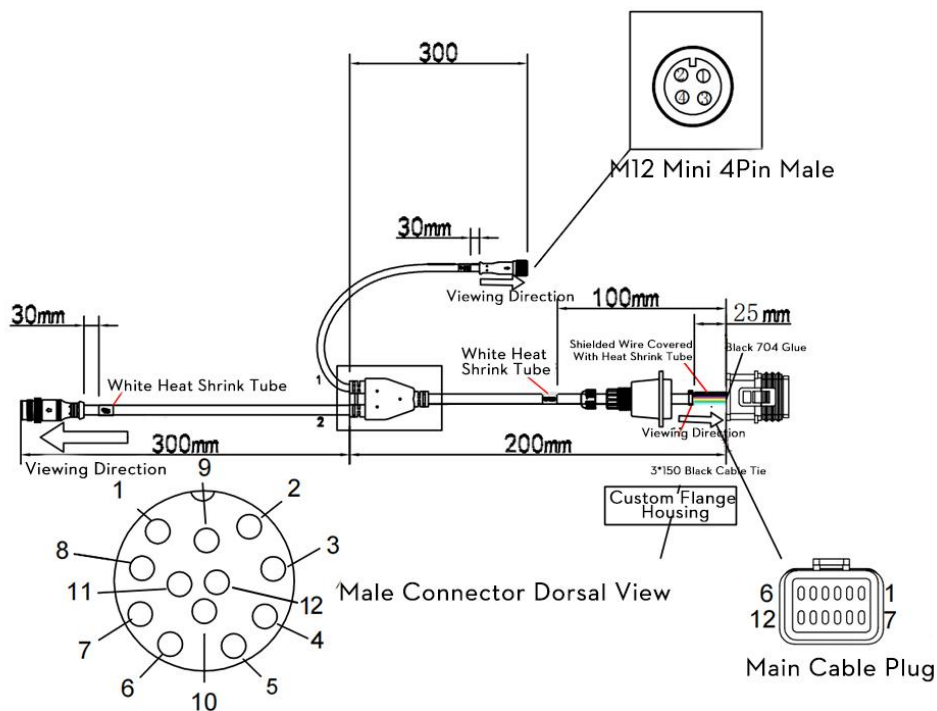| No.	Name
①	The Pellet Dispenser
②	Connecting cable
③	Cable connecting flight controller (Only for G series)

2.2 Sepcification

Item	Specification
Weight	805g
Voltage Range	40-80V
Temperature	-20℃-60℃
Particle Diameter	20-40mm（Customizable Plate）
Maximum Area	1740mm²
Maximum speed	16.7RPM
Empty Signal	Slow Red Flash
Control signal pulse width	1000us-2000us
Maximum Power	10W
Operation Mode	Auto/Manual
Control Mode	PWM/CAN

2.3 Dimension

Item		Size
The Pellet Dispenser		83.4 276.5 Ø122.2 Ø202 Ø124.5 92 78.5 55
Turnplate	Tree-hole plate	52 Ø124.5 42
	Round six-hole plate	Ø31 Ø124.5
	Oval six-hole plate	20 Ø124.5 31

2.4 Line Sequence Definition

The Pellet Dispenser connecting cable

Plug Name	Hole	Definiton	Hole	Definition
Main Cable Plug 12PIN	1	Pink 60V	7	Black GND
	2	Null	8	Null
	3	Speed	9	Purple GND
	4	Feedback	10	Null
	5	Null	11	Gray GND
	6	Green CANH	12	Brown CANL
Male Plug 12PIN	1	Null	7	0.3mm² Gray/ Black （GND)
	2	0.3mm² Blue(V+)Valve	8	Null
	3	Null	9	0.3mm²Purple /Orange(GND)
	4	0.3mm² Pink(60V)	10	0.3mm² White(E+)Feedback
	5	0.3mm² Brown(CANL)	11	Null
	6	0.3mm² Green(CANH)	12	Null
M12 MINI 4 4PIN	1	Yellow CANL	3	Red 12V
	2	White CANH	4	Black GND
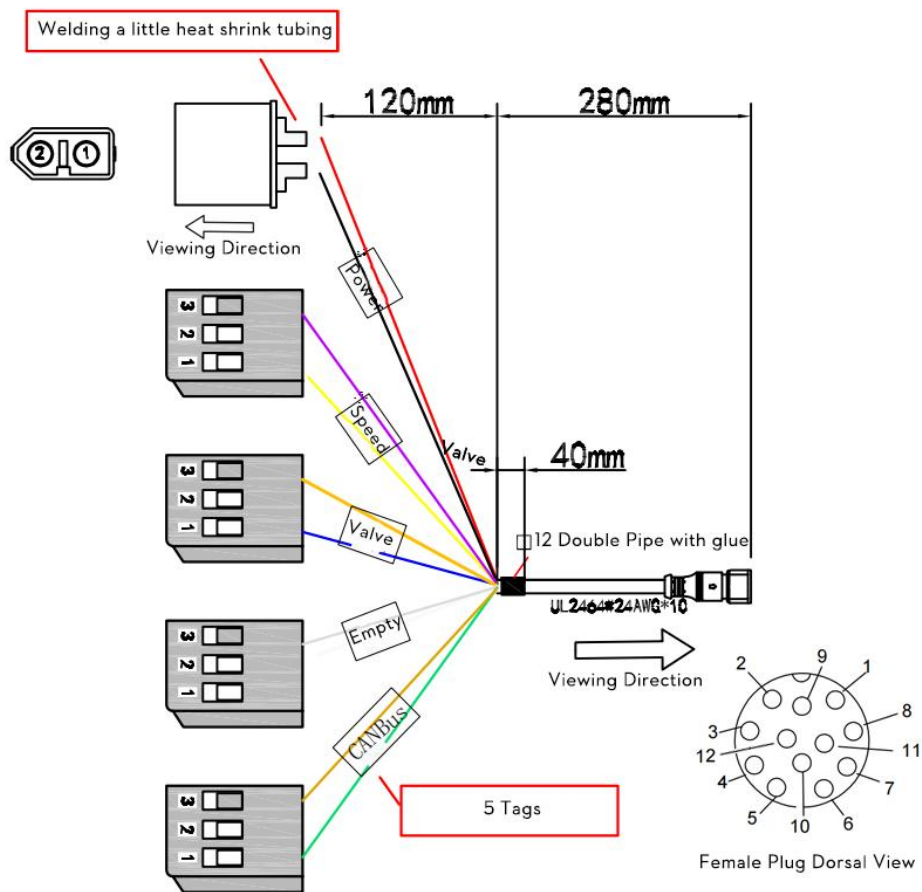
Flight control connecting cable （Only for G series）

Plug Name	Hole	Definiton	Hole	Definition
Female Plug Dorsal View 12PIN	1	Null	7	0.3mm² Gray Black （GND）
	2	0.3mm² Blue(V+)valve	8	Null
	3	Null	9	0.3mm²Purple Orange(GND)
	4	0.3mm² Pink(60V)	10	0.3mm² White(E+)Feedback
	5	0.3mm² Brown(CANL)	11	Null
	6	0.3mm² Green(CANH)	12	Null
Power	1	0.3mm² Pink(60V)	2	0.3mm² Black(GND)
Speed	1	0.3mm² Purple(GND)	2	Null
	3	0.3mm² Yellow(S+)	/	
Valve	1	0.3mm² Orange(GND)	2	Null
	3	0.3mm² Blue(V+)	/	
Empty	1	0.3mm² Gray(GND)	2	Null
	3	0.3mm² White(S+)	/	
CANBUS	1	0.3mm² Brown(CANL)	2	Null
	3	0.3mm² Green(CANH)	/	

Part 3 Cable Connection

3.1 Match with G Series

1）Mount the pellet dispenser under the tank , then connect the pellet dispenser to flight control (As Picture 1).

2）Wiring instruction：Insert the square main cable plug (12PIN) into 12PIN hole of control box， and connect the round male plug (12PIN) to the female head of the FC cable (12PIN). Round 4PIN can be sealed. （According to the definition, connect the plugs to flight controller , the POW、Vavle、Empty、CANBUS must be connected.）

Picture 1 : Match with G series

3.2 Match with Z Series

1）Mount the pellet dispenser under the tank, connect it to flight control by the Z sereis multi- function cable (As Picture 2)

2）Wiring instruction：Insert the square main cable plug (12PIN) into 12PIN hole of control box, connect the round male with the multi-functioncable. Round 4PIN can be sealed.

Picture 2: Match with G series

Part 4 Operation Mode

4.1 Mode Description

1) Manual Mode：During the flight of the drone, Press the A button to throw the material, One press drops one at a time. (The A button is set as Pump in RC channes)

Light Flash	Mean
🟢Long green light	Normal
🟢Green flash once	Fall one
🟢Green flash twice	Fall two
🔴Long red light	Sign lost
🔴Short red flash	Block
🔴Long red flash	Empty

light color description under Manual mode

2) Auto Mode：During the flight ,press the A button to start, the dispenser will throw one by one , press A again to stop. (The A button is set as Pump in RC channes)

Light Flash	Mean
🟡Long yellow light	Normal
🟡Yellow flash once	Fall one
🟡Yellow flash twice	Fall two
🔴Long red light	Sign lost
🔴Short red flash	Block
🔴Long red flash	Empty

light color description under Auto mode

4.2 Mode Switch

Complete this operation 5 times within 7 seconds (i.e. press the A button 10 times continuously) to switch the operating mode

Indicator changing means switch success：

Switch auto mode to manual mode: The indicator changes green 🟢 to yellow 🟡;

Switch manual mode to auto mode: The indicator changes yellow 🟡 to green 🟢.

Part 5 Upgrade

Plug the USB of IC Programmer into computer and white cable to port P3 on the board as shown. （Follow the

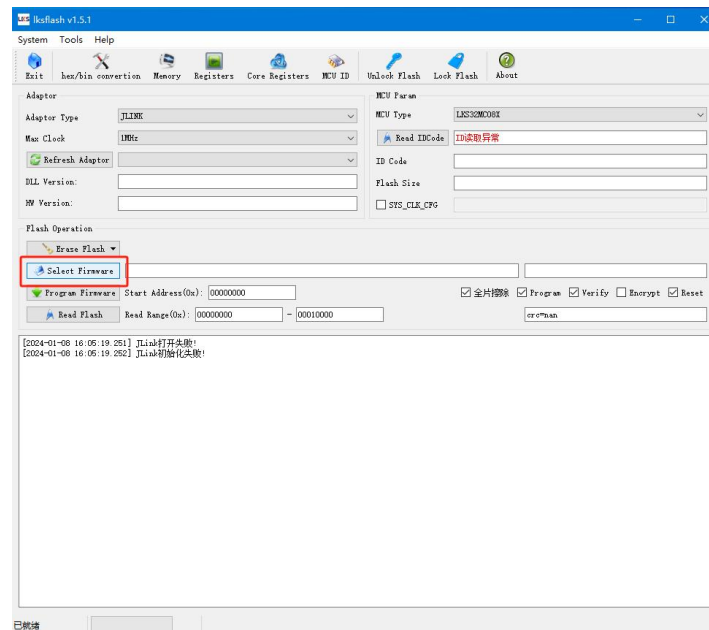direction as the picture , Keep the interface close to the chip to avoid wrong connection.）.

1）Setup JINK driver

- Unzip and open the driver application.（provided by EFT）
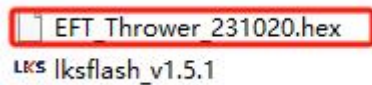
- Click Next, setup it according to the indication.

2) Firmware flashing software

- Uncompress the file and open the programme.

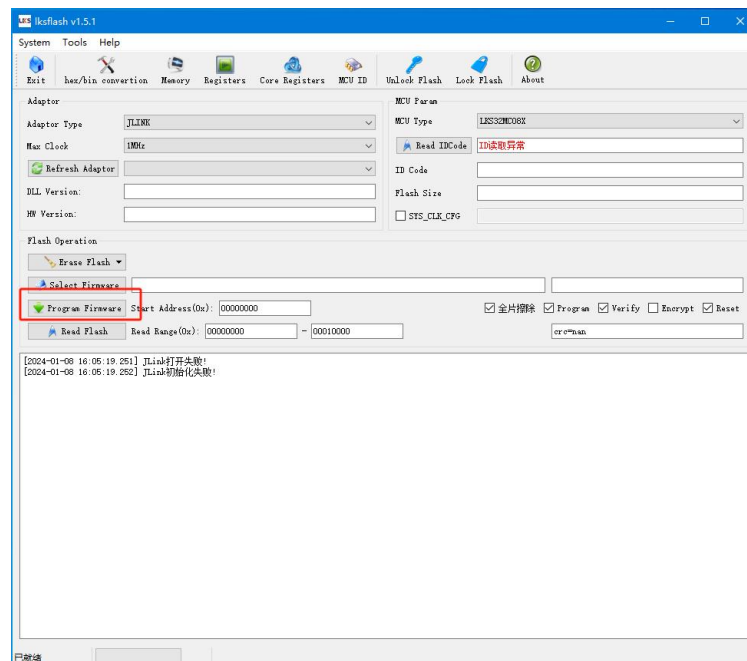- Click Select Firmware

- Find and open the hex file .

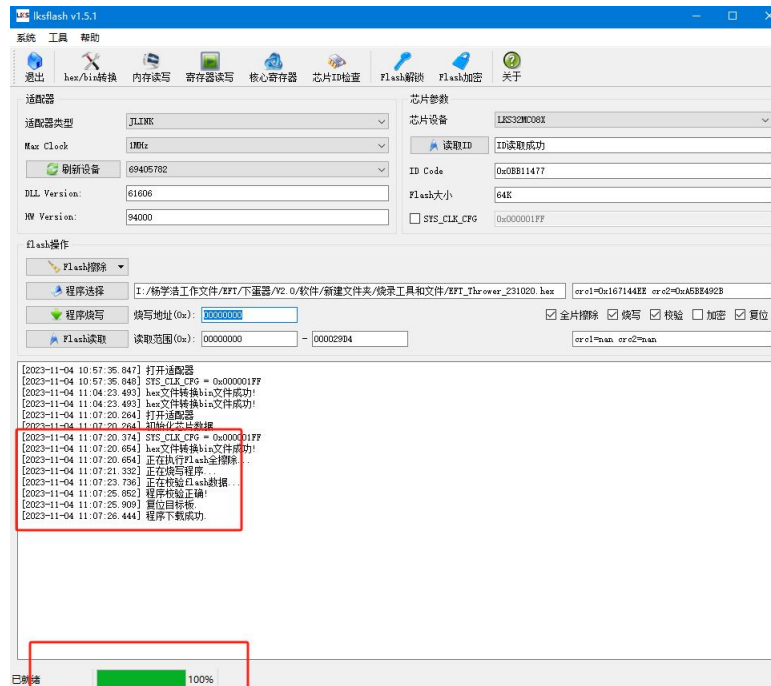| EFT_Thrower_231020.hex | 2023/11/4 10:27 | HEX 文件 |
| LKS lksflash_v1.5.1 | 2023/8/23 1:00 | 应用程序 |

- Click Program Firmware

-When it shows that the program success, the progress bar is 100%, which means the pallet dispenser program has been upgraded.

Thank you for reading this manual. Please contact our after-sales if you have any question or suggestion.

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