1. An electric drive launching device, characterized by comprising a hollow spiral tube (1), a propeller (2), a vertical handrail (3), a clamping column (4), a landing gear (5), an ammunition clip (6), a motor driver (7), a power supply (8), a voltage converter (9), a microcomputer (10), a spring (11), a pressure-receiving plate (12), a booster rod (13), a display (14), a camera (15), a wind speed sensor (16), a radar device (17), an instrument adjustment base (18), a relay (19), a launch handle (20), an Internet of Things module (21), a multi-layer metal box (22), a power display module (23), a silencing cushion (24), and a thermal insulation interlayer (25).
2. According to the system described in claim 1, characterized in that the radioactive items, such as steel balls, are placed through the hollow spiral tube (1) and the ammunition clip (6).
3. According to the system described in claim 1, characterized in that the pressure-receiving plate (12) is pushed to a specified position by the propeller (2).
4. According to the system described in claim 1, characterized in that the vertical handrail (3) enables a person to stably pick up the device.
5. According to the system described in claim 1, characterized in that the movement range of the pressure-receiving plate (12) is limited by the clamping column (4).
6. According to the system described in claim 1, characterized in that the clamping column (4) is raised and lowered by the landing gear (5).
7. According to the system described in claim 1, characterized in that the pressure-receiving plate (12) can be rebounded to its original position by the spring (11).
8. According to the system described in claim 1, characterized in that the power supply (8) provides energy to all components in the device.
9. According to the system described in claim 1, characterized in that the power supply voltage is reduced by the voltage converter (9), and an appropriate voltage is distributed to different components.
10. According to the system described in claim 1, characterized in that the landing gear (5), the relay (19), the display (14), the camera (15), the wind speed sensor (16), the radar device (17), and the instrument adjustment base (18) are controlled by the microcomputer (10). Moreover, the microcomputer (10) has a serial communication function and an artificial intelligence system for special processing of data.
11. According to the system described in claim 1, characterized in that the spring (11) is compressed to a specified position by the pressure-receiving plate (12).
12. According to the system described in claim 1, characterized in that the impact force on the target object is increased by the booster rod (13).
13. According to the system described in claim 1, characterized in that the display (14) receives the video stream data sent by the microcomputer (10).
14. According to the system described in claim 1, characterized in that the camera (15) collects the image data in front and transmits it to the microcomputer (10), which can more accurately identify the target.
15. According to the system described in claim 1, characterized in that the wind speed sensor (16) collects the data of the current environmental wind speed and direction and transmits it to the microcomputer (10).
16. According to the system described in claim 1, characterized in that the radar device (17) collects the biological characteristic signal data in front and transmits it to the microcomputer (10), and can identify the target behind the cover.
17. According to the system described in claim 1, characterized in that the rotation and elevation angle of the launch port can be controlled by the instrument adjustment base (18).
18. According to the system described in claim 1, characterized in that the expansion and contraction of the propeller (2) is controlled by the relay (19).
19. According to the system described in claim 1, characterized in that by pressing the button on the launch handle (20), the microcomputer (10) can control the landing gear (5) to lower the clamping column (4).
20. According to the system described in claim 1, characterized in that the Internet of Things module (21) can remotely communicate with other devices, and the Internet of Things module (21) can communicate with the microcomputer (10) through a serial port.
21. According to the system described in claim 1, characterized in that the multi-layer metal box (22) can be divided into an upper and a lower layer, and a left and a right inner and outer layer. The inner layer is equipped with a thermal insulation interlayer (25) and is fully sealed for protection against electromagnetic attacks and waterproofing. The main components are installed in the thermal insulation interlayer (25), and only the serial line of the microcomputer (10), the charging line of the power supply (8), and the connection line of the power supply (8) are introduced into the outer layer. The outer layer includes the power display module (23) and the Internet of Things module (21).
22. According to the system described in claim 1, characterized in that the remaining power of the power supply is displayed by the power display module (23).
23. According to the system described in claim 1, characterized in that by fitting the silencing cushion (24) to the pressure-receiving plate (12), the sound and damage caused by the impact can be reduced.
24. According to the system described in claim 1, characterized in that the thermal insulation interlayer (25) can resist the interference caused by cold or heat to the device and increase the service life of the device.
25. According to the system described in claims 3, 5, and 6, characterized in that the pressure-receiving plate (12) is pushed to a specified position by the propeller (2), and the change in the position of the pressure-receiving plate (12) will compress the spring (11) to a specified position. When the spring (11) reaches the specified position, the landing gear (5) raises the clamping column (4) to limit the movement of the pressure-receiving plate (12). Then, retracting the propeller (2) can load the launching device.
26. According to the system described in claims 2, 6, 7, and 19, characterized in that by pressing the button on the launch handle (20) to lower the clamping column (4), the spring (11) rebounds to the initial position, causing a large impact force from the booster rod (13) to enter the hollow spiral tube (1), and the object inside the hollow spiral tube (1) is struck and ejected straight.
27. According to the claims 10, 13, 14, 15, and 16, characterized in that the microcomputer (10) receives the data sent by the camera (15), the wind speed sensor (16), and the radar device (17), and then performs special processing on the data through the artificial intelligence system of the microcomputer (10) to obtain the hit rate and the video stream data for synthesis and sending to the display (14). The microcomputer (10) can also extract the biological characteristic information from the data collected by the radar device (17) and the camera (15) through deep learning. The microcomputer (10) then configures and operates the biological characteristic information through communication with mobile phones or other devices, such as automatic strike on similar targets, data networking sharing, data persistent reporting and automatic alarm for next identification, target behavior recognition, such as automatic strike in case of riots, and target movement trajectory prediction.
28. According to the claims 10, 17, and 20, characterized in that by communicating with the mobile phone or other devices through the microcomputer (10), the display (14) data can be shared, and then instructions, such as shooting, can be sent to the microcomputer (10) from the mobile phone or other devices, and the instrument adjustment base (18) is controlled to perform the corresponding actions. By connecting the Internet of Things module (21) to the power display module (23), the remaining power of the power supply can be monitored. By connecting the serial line of the microcomputer (10) in the inner layer of the multi-layer metal box (22) to the Internet of Things module (21), other devices can remotely control the microcomputer (10) to achieve the purpose of simultaneous control of multiple devices.