



VMA02

Modular Armrest

VOLBUFF

SENSORS

VOLBUFF ELECTRONIC | www.volbuff.com

ADDR: Building 5,#118,Lane 2129,South Lianhua Rd.,Minhang District, Shanghai, 210011, China.

TEL: 021-54293326

EMAIL: sales06@volbuff.com

1 Product Description

VMA modular intelligent multifunctional electronic control armrest box, can be equipped with a full electrical control handle or mechanical handle, A variety of rocker switches or button modules are available to customize upon request, Ergonomic design, more user-friendly, improve driving comfort, designed for small and medium-sized cabs. Meet personalized needs.

The fingertip operation is used to mobilize the switch to easily control the hydraulic function, making your agricultural machine operation more convenient. Thumb wheel and rocker switches, It is convenient for you to quickly adjust agricultural machinery and equipment to improve work efficiency, The specialized handle operation module meets the safety requirements and ensures your operational safety.

The main features are as follows:

- Clearly designed: Colours, symbols, function and night illumination
- Plug&play: CANopen
- The modular armrest box is equipped with a multifunctional handle, which can achieve fatigue-free operation
- The handrail has a cushioned, which makes the operator feel comfortable and has sustainability and environmental protection.

2 Technical parameters

Electrical parameters

Operating voltage	9-30VDC
Current consumption	≤3A Max
Protocol	CANopen
Polarity reversal protection	Yes
Node ID/Source address	Variable/adjustable
Baud rate	250Kbps(125Kbps、500Kbps Optional)
Transmission cycle	Variable/adjustable milliseconds

Environmental parameters

Mechanical protection level	IP44 ISO20653
Electrical protection level	IP53 ISO20653
Working temperature	-25℃~85℃
Storage temperature	-40℃~85℃

3 Armrest module



Joystick& hand throttle module

1 Heavy duty joystick

Heavy-duty joysticks are available for a variety of mechanical modules. You choose whether to have a limit or not, a single axis or a double axis. This joystick comes with a button module so you can perform your machine functions in the best possible way.

2 Multi-function joystick

The newly designed multi-function handle also allows for fatigue-free operation, ergonomic design, and can be configured with multiple buttons for precise control of the

3 Hand throttle

The hand throttle is designed to control engine speed, and the housing can be selected with a symbol for clearly marking the function. Three buttons can also be installed in place of the manual throttle.

Operating unit module

1 Push buttons

The buttons are very durable, the buttons are available in a variety of colors, and come with a wear-resistant silkscreen symbol as well as a night lighting feature.

2 PTOS

The PTO switch is a rugged, intuitive pushbutton with an emergency stop function, primarily used in agricultural machinery for the safe opening and closing of the front or rear PTO shaft.

3 Fingertip joysticks

The fingertip joystick is designed with a small structure size and ergonomic design, which can accurately operate the fingertip on a certain axis, and ensure the user's maximum operating comfort.



Knob switch & potentiometer module



1 Knob switch

A potentiometer is used for position and tension control of accessories such as plows. Inlays can be used to clearly mark features using standardized symbols.

2 Potentiometer switch

2 potentiometers are used to control the rising or descending speed of accessories such as plows.

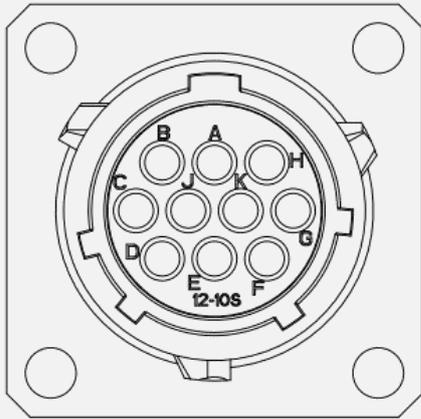
Connect the module

1 Connector connection

Convenient direct connection via connectors integrated into the housing. Signals from all operating elements are collected as standard on the main board in the armrest and transmitted externally via the CAN bus using connectors.

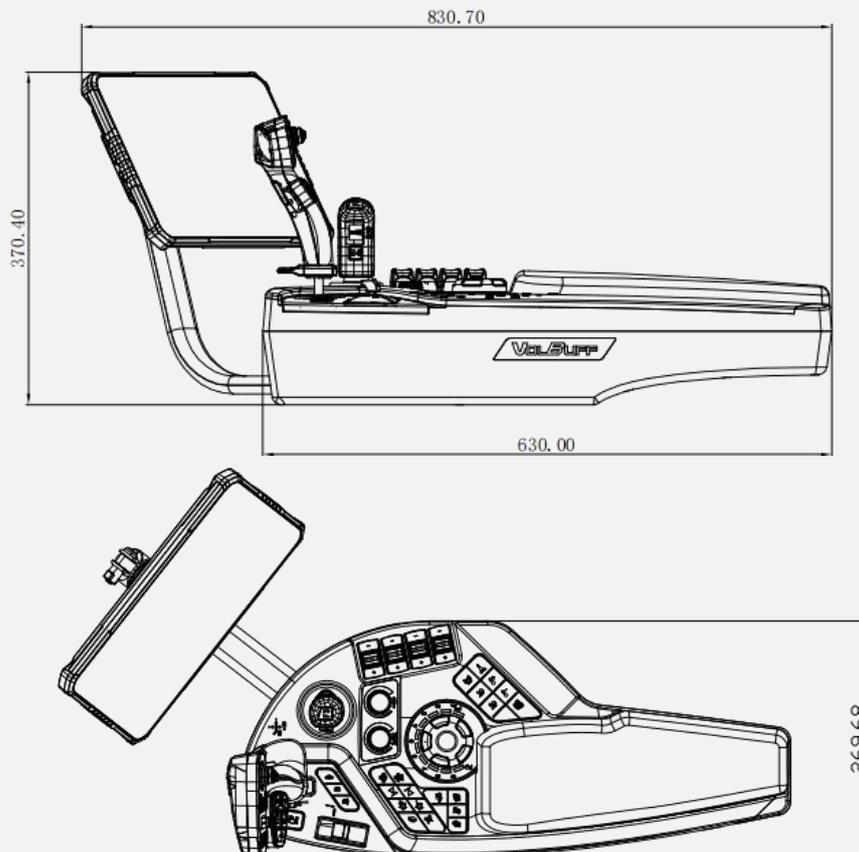


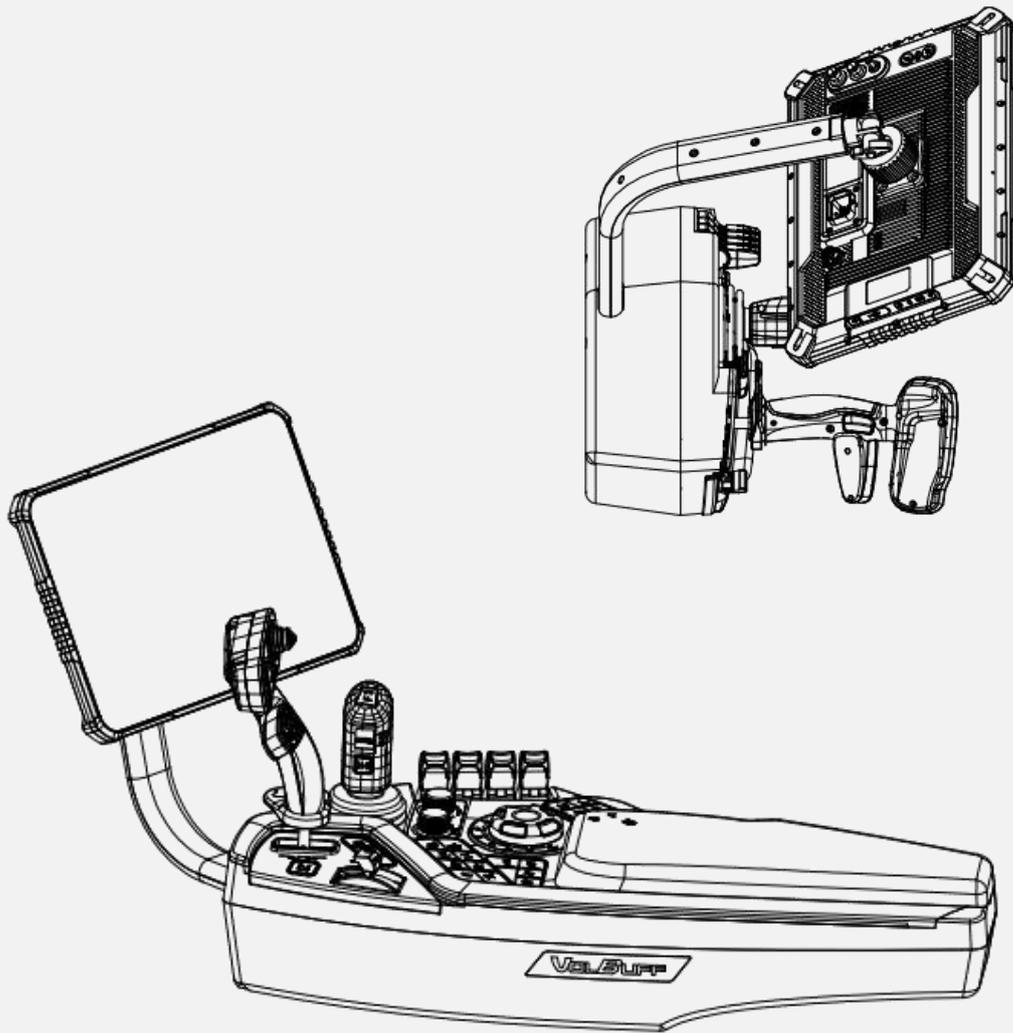
4 Interface definition



PIN	Definition description
A	VCC
B	GND
C	CAN-H
D	CAN-L
E~K	N.C

5 Installation size





6 Precautions for use

(1) The power supply of this product uses an independent power supply. It is recommended not to connect with other loads. During use, the power supply does not allow serious safety hazards or instability, otherwise it will cause the product to fail!



(2) When using the product, please operate strictly in accordance with the specified wiring method under the specified power supply voltage to prevent short circuits caused by error operation and damage the armrest box.

(3) Do not dismantle the armrest box without permission, so as not to cause the armrest box to work properly.

(4) Control panels are forbidden to touch at will.

(5) If the control panel is accidentally exposed to the liquid, wipe it with a dry towel in time to avoid liquid penetration, causing the circuit board to burn.

