



DESCRIPTION

The Curtis TH series are tiller heads packaged in a rugged housing that offer an attractive and practical method of controlling 24V electric vehicles.

APPLICATION

Equipped with an emergency reverse switch, electronic throttle, and lift and lower switches rated at IP-67, these tiller heads are ideal for both indoor and outdoor vehicles such as pallet jacks, walkies, stackers and tow tractors.

FEATURES

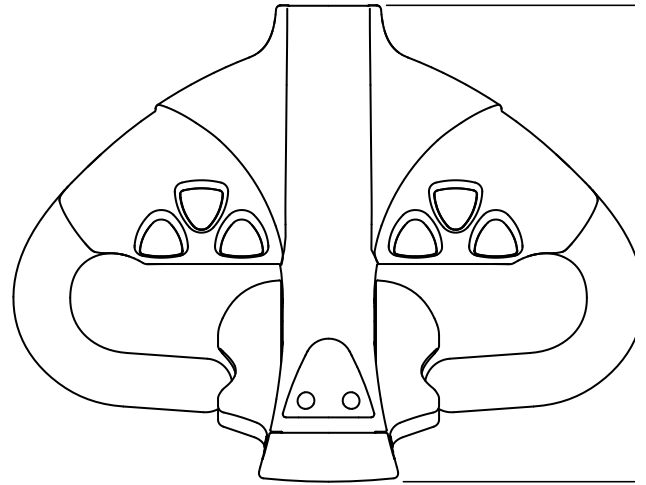
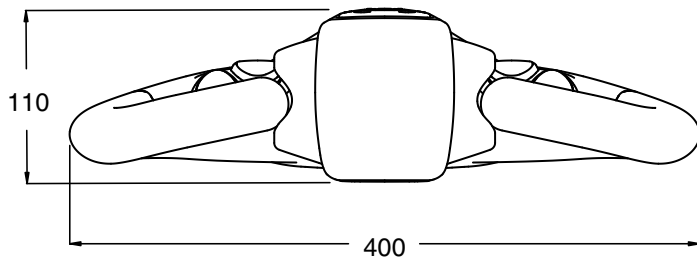
- Ergonomic design maximizes vehicle and operator productivity while minimizing operator fatigue.
- Nylon PA6-GF30 housing and sealed electronics make the tiller head ideal for use in all types of environments – the tiller head can even be used reliably in the rain.
- Optional proportional switches provide more precise lift and lower control, thereby improving safety.
- A single electrical connector makes wiring easy to install, reducing vehicle assembly costs and eliminating costly wiring errors.
- Highly configurable - Curtis can supply tiller heads for all of your different applications.
- Curtis tiller heads integrate seamlessly with applicable Curtis motor controllers, contactors, and instrumentation.

SPECIFICATIONS

- Throttle Output:
0.2 - 5.0VDC nominal (0.15VDC - 5.3VDC, absolute)
- Operating Voltage:
24VDC nominal (19.2VDC - 28.8VDC, absolute)
- Maximum current, output switches:
2A each (lift, lower, horn, turtle)
- Weight:
3.3 lbs., maximum (1.5 kg)
- Force required to engage lift, lower, horn and turtle switches:
2.2 lbs. (10N)
- Force required to engage belly button switch:
2.2 lbs. (10N)

TH SERIES

DIMENSIONS



TYPICAL WIRING

Analog Connector (all Models)

Pin	Function
1	B+
2	Belly button NO
3	Throttle
4	Lift switch
5	SW2
6	None
7	Belly button NC
8	Lift Speed
9	B-
10	Forward, 24V active high
11	Reverse, 24V active high
12	Lower
13	SW4
14	None

Multiplex Connector (Model TH-2,3 and 6)

Pin	Function
1	None
2	B-
3	Data
4	Clock
5	None
6	B+ (15V)



Connectors (found inside the tiller head on the PCB): Use Molex Mini-Fit, Jr. type 5557D connector with appropriate Molex Mini-Fit type 5556 family terminal contacts.

OPTIONS (contact your local sales office)

Proportional switches (maximum of 2, output varies with the amount of pressure on the switch)

Up to 6 triangular switches (of which 2 can be proportional)

Serial communication

CAN communication

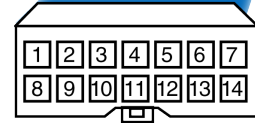
Keypad

Emergency-off button

BDI

Custom colors for buttons and/or housing

Custom icons or artwork on buttons



WARRANTY Two year limited warranty from time of delivery.

