

TRACKBALL UNITS

TCX50

50 MM "CHAMELEON" TRACKBALL WITH RGB HALO BACKLIGHTING Selection of color and intensity : internal or external PWM driven - IP68 sealed





The TCX50F8 is the latest addition to the Chameleon products NSI has put into the market since many years. This new version features an IP68 version of the Chameleon trackball. It's equipped with the latest generation of laser trackballs and is highly suited for harsh industrial environments thanks to its' IP68 grade, robustness and ease of maintenance. It features a removable top ring facilitating the cleaning of ball and ball compartment for use in even the most dusty environments.

Dimming and color control can be achieved by using the internal dip switch which will fix one color and one intensity. More dynamic control can be achieved by using a PWM signal.

The use of stainless steel for the various parts ensures the best resistance in salty or greasy environments. Due to its outstanding sealing, its professional style and its industrial robustness, this trackball unit is the best suited pointing device for all harsh or hostile environments.

The TCX50F8 is supplied with a silicone sponge seal ring for adequate sealing into the customers' panel or console. A cover plate on the rear side protects the components.

GENERAL TECHNICAL SPECIFICATIONS

Sealing	: IP68 waterproof trackball module
Carrier plate	: stainless steel
Ball diameter	: 50,8 mm (2'')
Ball material	: polyester
Dimensions	: 100 x 116 x 40 mm
Weight	: 0,6 kg
Resolution	: 155 pulses per ball revolution
Lifetime	: >= 2 million ball revolutions
Tracking force	: nom. 50 grams
Output	: PS/2 & USB Combo
Cable	: 1 shielded, straight 1,6 m long
Operating temperature range	
Storage temperature range	: -25°C to +80°C

Short travel button switches Sealing

Sealing	: IP68
Material	: stainles
Mechanical life	: 3 mil. cy
Contacts	: stainles
Travel	:0,5mm
Operating force	: 4N typ
Operating temperature	: -20°C to

IP68 stainless steel, brushed 3 mil. cycles min stainless steel dome on gold 0,5mm 4N typ -20°C to +60°C

CE

Compliant to EMC Directive 89/336/EEC for Electromagnetic Compatibility. Low Voltage Directive 73/23/EEC not applicable for our trackballs.

ORDER INFO

TCX50F8 combo PS/2 & USB output

TCX50F8PWM

combo PS/2 & USB output with extra outputcable for PWM

VER. 1.1



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CONNECTIVITY

Combo PS/2 & USB trackball units are supplied with a 1,6 meter long shielded straight cable ended by a USB type A plug. An adaptor to PS/2 is added. No special device driver is needed, use standard available drivers of your operating system.

* Due to the increasing differences of the PS/2 mouse port specifications of the various PC manufacturers, we do recommend that this unit should be tested on the final PC configuration and operating system prior to installing it in series.

DIMENSIONAL DRAWING



The company reserves the right to alter without prior knowledge the specification or design of any standard product or service.



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DIP SWITCH FUNCTIONS SW2

DIP Switch	Function	OFF	ON
1	Intensity LOW (1)	-	Low LED intensity
2	Intensity MEDIUM (1)	-	Medium LED intensity
3	Intensity HIGH (1)	-	High LED intensity
4	Red Control		
5	Green Control	See colour control table	
6	Blue Control		1
7	External Intensity	LED intensity selected from	-
	selection	switches 1,2 & 3	
8	Demo feature	Disabled	Enabled

DIP switch functions on SW2

Notes ·

(1) Only one intensity switch (1-3) should be enabled at a time. If several switches are ON, the highest intensity will take effect.

Factory default setting: All DIP switches OFF

Colour control		Colour	
Red	Green	Blue	COIOUI
OFF ON OFF ON OFF	OFF OFF ON ON OFF	OFF OFF OFF OFF	OFF Red Green Yellow Blue
ON OFF	OFF ON	ON ON	Magenta Cyan
ON	ON	ON	White

CONNECTION DETAILS FOR PWM VERSION - TSX50F8PWM

CN4 - output connector for color control with an external PWM signal*

Pin Number	Function
1	-
2	0V
3	RED LED CONTROL
4	GREEN LED CONTROL
5	BLUE LED CONTROL
6	-
7	-
8	-

extra outputcable of 50 cm with "open ends" connected with pins 2 - 3 - 4- 5 via 8 way JST connector.



grey wire red wire blue wire

* Please note that for this option DIP switch 3 of Sw2 must be set in the ON position while all other dipswitches of Sw2 must be set in the OFF position.

The ball color can be selected by applying either an open collector / open drain or TTL compatible active low signal to the led on pin 3,4,5 with respect to 0V on pin 2.

Connector CN3: Not applicable on this product.