BACKLIT CHAMELEON TRACKBALLS
7-COLOUR BACKLIT PANEL MOUNT 50mm TRACKBALL

These panel mount industrial grade 50mm trackballs, feature 7-colour illumination of the total ball surface and of the mouse button legends. Up to seven different colours can be selected by internal settings on the trackball or by remote dynamic selection via an output connector. For both selection methods, internal or remote, the illumination intensity can be dimmed. The total unit is sealed to IP65 static and comes with a silicon sponge to seal the carrier plate into the users' cabinet or console. The output is combo PS/2 & USB with auto-recognition and in both cases the current for the illumination is drained from the mouse ports.

Two basic versions are offered :
- with aluminium carrier plate, two short travel switches and dark coloured polyester overlay : TCL50F1
- with stainless steel carrier plate and two long travel stainless steel switches : TCS50F4

TCL50F1 polyester surface

Main features
full backlighting of ball and switches in up to 7 different colours
colours selectable internally (fixed) or remote (dynamic)
illumination intensity can be dimmed internally (fixed) or remotely (dynamic)
illumination power directly from mouse port, no extra power supply
proven industrial grade 50mm large trackball
sealed trackball, switches and panel (silicon seal added)
PS/2 & USB output

Typical applications
low light environments : studio's, naval, transportation, …
industrial control equipment : indication of control status
security equipment : alarm status via trackball
entertainment

TCS50F4 stainless steel surface

• SPECIFICATIONS

Ball diameter	: 50,8 mm
Ball material	: epoxy resin, translucent
Trackball sealing	: IP65 static (ball in rest)
Tracking force	: nom. 50 gr.
Operating temp. range	: -10°C to +60°C
Storage temp. range	: -25°C to +80°C

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

Black overlay version (TCL50)
Switches :
tactile, short travel 0,3mm
operating force : 2,55 N
mechanical life : 1 million oper.
Carrier plate : aluminium
Overlay : polyester, charcoal grey, chemical resistant

Stainless steel version (TCS50)
Switches :
tactile, travel 3,0 mm
operating force : 0,6 N
mechanical life : 10 million oper.
Carrier plate : stainless steel AISI 316

• CONNECTIVITY

This combo PS/2 & USB trackball unit has a 1,6 meter long shielded straight cable ended by a PS/2 plug. An adaptor to USB type A 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.*

• ORDERING INFO

Polyester, Charcoal Grey	Stainless Steel	
TCL50F1	**TCS50F4**	Standard factory setting : blue baclit.

Output : PS/2 & USB Combo
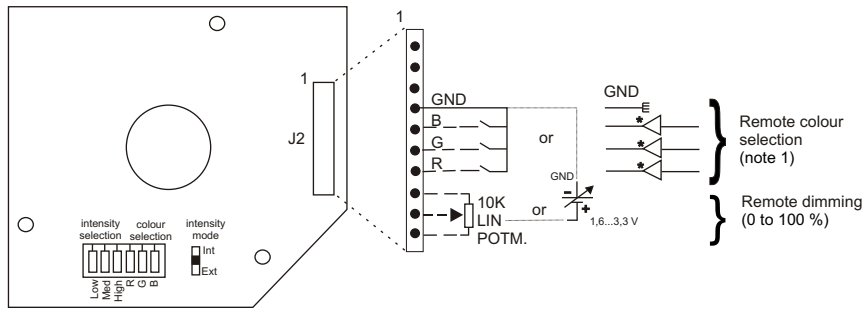
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• COLOUR AND INTENSITY SELECTION

View on rearside of trackball

Colour selection table

Inputs			Colour
B	G	R	
I	I	I	None
I	I	0	Red
I	0	I	Green
I	0	0	Yellow
0	I	I	Blue
0	I	0	Magenta
0	0	I	Cyan
0	0	0	White

"0" means :
 internal settings :
  relevant DIP switch to "ON"
 remote (external) settings :
  remote switches closed or
"O" state of digital circuit

Internal settings
   put intensity mode switch to "INT"
   select intensity on 6-way DIP switch by putting only one switch "LOW" or "MED" or "HIGH" to ON
   select colour on 6-way DIP switch by putting the relevant "R", "G" and/or "B" to ON. See "colour selection table"
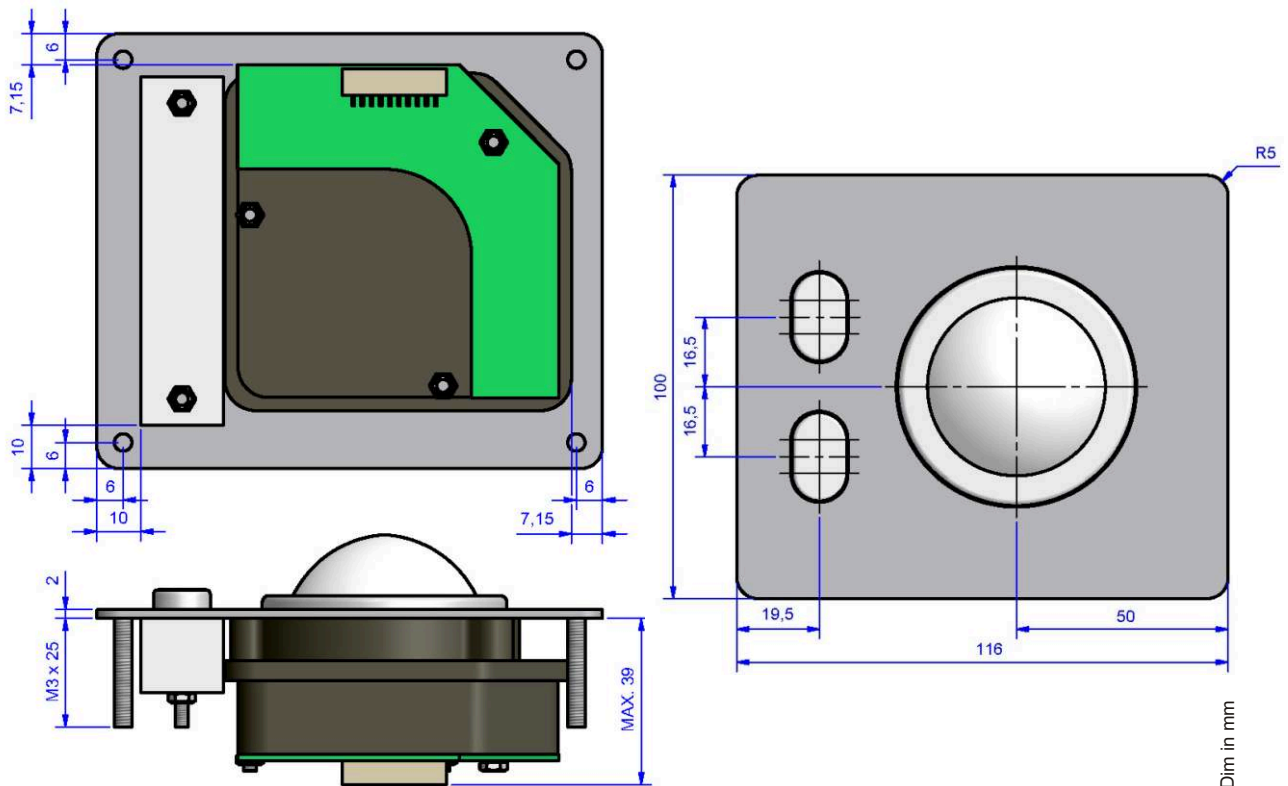
Remote (external) settings
   put intensity mode switch to "EXT"
   remote dimming between 0% and 100% of the max. intensity can be accomplished by :
      a) connecting a 10K linear potentiometer as per drawing   or
      b) applying a variable DC voltage of 1,6 volts to 3,3 volts between pin 9 and pin 4 (GND)
   select colour by :
      a) remote switches as per drawing   or
      b) remote digital selection as per drawing (use "open collector" outputs only).
      Colour selection is as per "colour selection table".

Note : when remote colour selection is used, all DIP switches of the internal colour selection must be put to "OFF"

• DIMENSIONAL DRAWING

TCS50F4 (TCL50F1 has the same outside dimensions and mounting stud details)

Dim in mm

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