



Pin Connection Information

Cable Colour	Description	Connects To
Red	+Vcc	9-12Vdc
Black	Gnd	0V
Yellow	RxD	TxD
White	TxD	RxD
Black	Screen	NC or 0V



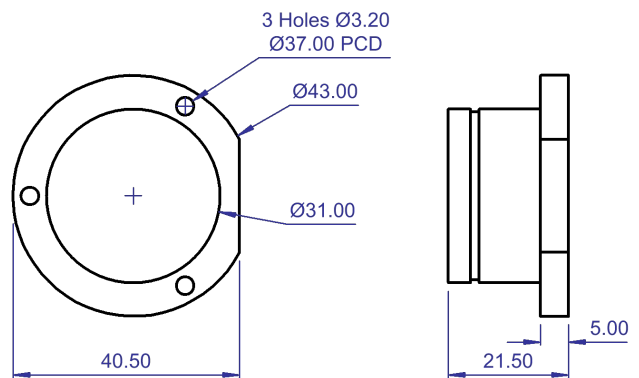
Connection to an RS232 Serial Port

The following table shows the connection information for a 9 pin (DB9) RS232 serial port connection

Cable Colour	Description	Connects To	DB9 Serial Port
Red	+Vcc	9-12Vdc	-
Black	Gnd	0V	Pin 5
Yellow	RxD	TxD	Pin 3
White	TxD	RxD	Pin 2
Black	Screen	NC or 0V	-

Link Pin 4 and Pin 6 of DB9 connector (DTR and DSR)
Link Pin 7 and Pin 8 of DB9 connector (RTS and CTS)

Dimensions



RS232 Interface

- Baud Rate : 9600 bps
- Parity : None
- Data Bits : 8
- Stop Bits : 1

Output Format : (19 Bytes)

Bytes	1	1	6			1	1	1	6			1	1					
O/P	x	=	+	3	.	0	2	,	y	=	-	1	7	.	4	5	CR	LF

The full duplex RS232 interface allows commands can be sent to and data received from the device simultaneously. The output by default transmits the angle data continuously (polling mode), however using the Set Mode command, this can be switched to command mode so the device only replies in response to a CALL command. The complete list of commands is shown below. The commands are case sensitive and should be exactly as detailed below. After receiving any of the commands the device responds with 'OK' except for the CALLxx command where it returns the angle data.

Command	No Of Bytes	Description	Explanation	Response
Set_Mode_P	10	Polling Mode	Switches inclinometer into polling mode (continuous output)	OK
Set_Mode_C	10	Command Mode	Switches inclinometer into command mode. In this mode data is only transmitted in response to a CALL command	OK
Set_Idxx	8	Setting Device ID	Sets the device ID to the value indicated by xx, in the range 00-99	OK
CALLxx	6	Call Angle	Requests angle data from a device with an ID of xx, where xx is in the range 00-99	Angle Data
Set_R_Zero	10	Absolute / Relative Mode	Toggles between absolute and relative measuring. The reading will be relative to the angle when the instruction is sent.	OK
Set_A_Zero	10	Set Absolute Zero	Resets the device absolute zero position. The measurement range of ±30° is valid from a level position, and is not increased by setting the zero in a non level plane.	OK
Set_Avgxx	10	Set Averaging Filter	The device internally averages readings from the sensor. The number of readings averaged is set by the value of xx from 06-25. A higher number gives a slower response time.	OK
Set_Default	11	Master Reset	Resets all the above settings back to factory defaults.	OK