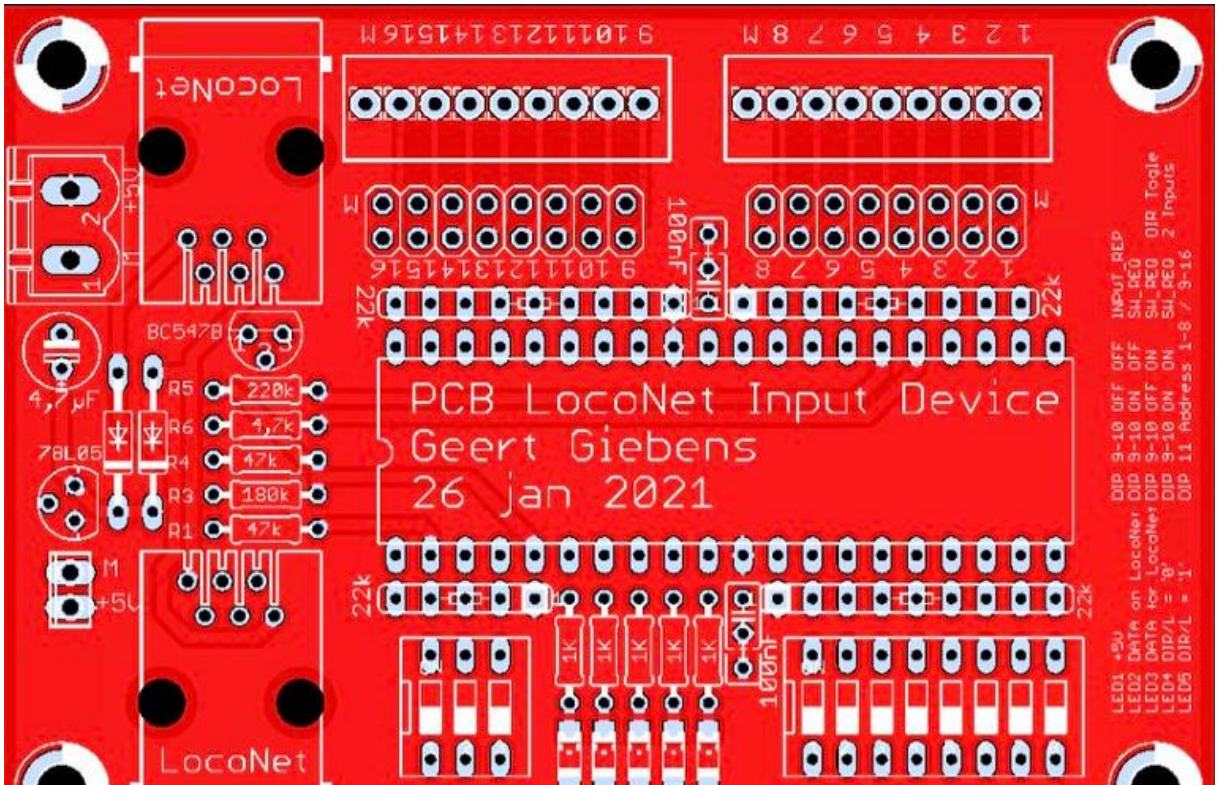
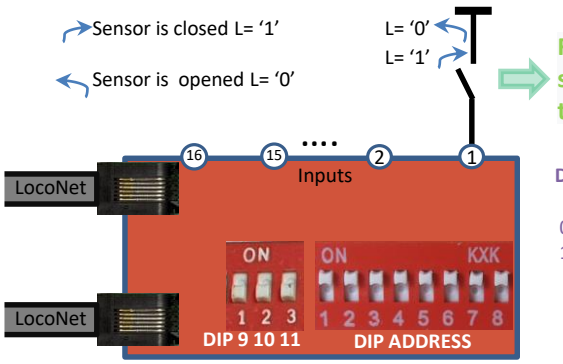
This device can send a LocoNet message. This device has 16 inputs that all have the same function.
With this device it has been chosen to perform the settings of function and address with dip switches. No programming with a computer or central station is required.
There are several options for cabling connections on this device, including plug-in connections for easy device exchange.
The function can be selected via DIP9 and DIP10. The address can be set with DIP for ADDRESS1-8 (and optionally DIP11)



DIP 9 = 'OFF'
DIP10 = 'OFF'
DIP11 = XXX

Device give LocoNet command OPC_INPUT_REP with selected address .Sensor is high L='1' as switch is closed, and sensor is low L='0' where switch is opened.



For example, sensor can be mass-sensing or current-sensing when track is occupied

DIP ADRESS: 1 2 3 4 5 6 7 8

	0 0 0 0 0 0 0 0 →	0
0='OFF'	1 0 0 0 0 0 0 0 →	16
1='ON'	0 1 0 0 0 0 0 0 →	32
	....	
	1 1 1 1 1 1 1 1 →	4080

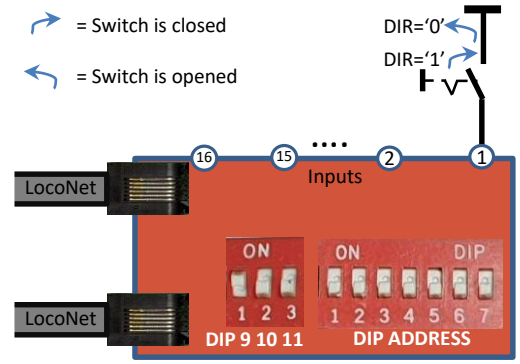
Selected address is sum

OPC_INPUT_REP & DIP ADDRESS +0 → INPUT 1
+1 → INPUT 2
.....
+16 → INPUT 16
& Sensor Level

OPCODE= 0xB2
A3,A4,A5,A6 A7,A8,A9,A10
I,A0,A1,A2
L= '0' or '1'

DIP 9 = ‘ON’
DIP10 = ‘OFF’
DIP11 = XXX

Device give LocoNet command OPC_SW_REQ with selected address, and DIR = '1' as switch is closed, and DIR = '0' where switch is opened.



DIP ADRESS: 1 2 3 4 5 6 7

0=‘OFF’ 1=‘ON’

0 0 0 0 0 0 0 → 0
1 0 0 0 0 0 0 → 16
0 1 0 0 0 0 0 → 32
....
1 1 1 1 1 1 1 → 2032

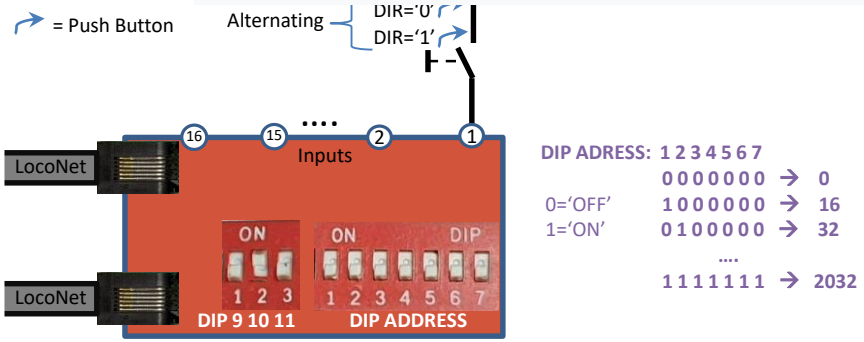
Selected address is sum

OPC_SW_REQ & DIP ADDRESS +0 → INPUT 1 & DIR
+1 → INPUT 2
.....
+15 → INPUT 16

OPCODE= 0xB0 | **A4,A5,A6,A7 A8,A9,A10** | **A0,A1,A2,A3** | **DIR= ‘0’ or ‘1’**

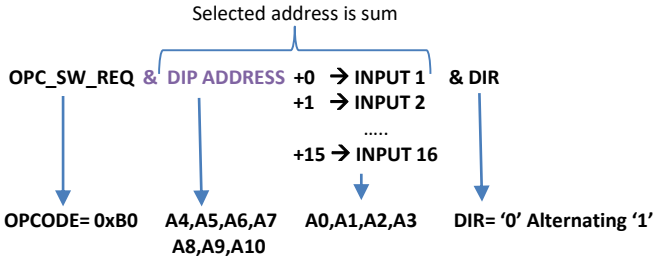
DIP 9 = ‘OFF’
DIP10 = ‘ON’
DIP11 = XXX

Device give LocoNet command OPC_SW_REQ with selected address, and DIR is alternating between ‘0' and ‘1’ every time the button is pressed.
The current DIR state is stored in EEPROM, so that it can be taken over after power-on.



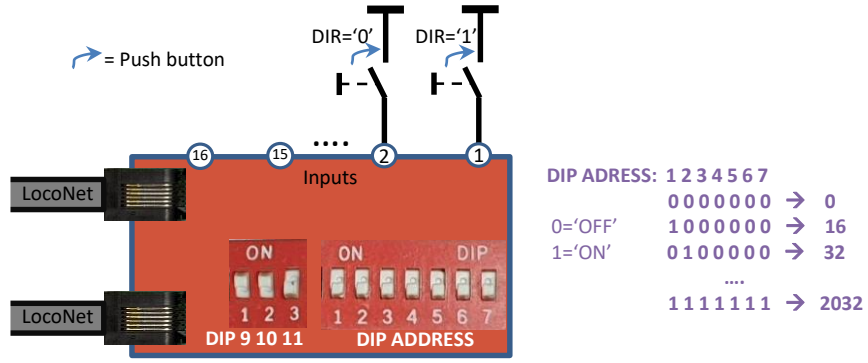
DIP ADRESS: 1 2 3 4 5 6 7

	0 0 0 0 0 0 0 →	0
0=‘OFF’	1 0 0 0 0 0 0 →	16
1=‘ON’	0 1 0 0 0 0 0 →	32
	....	
	1 1 1 1 1 1 1 →	2032



DIP 9 =‘ON’
DIP10 = ‘ON’
DIP11 =‘OFF’ or ‘ON’

Device give LocoNet command OPC_SW_REQ and two consecutive inputs with the same selected address. First input gives DIR=‘1’ when button closed. Second input gives DIR=‘0’ when button closed.



DIP ADRESS: 1 2 3 4 5 6 7

0=‘OFF’ 1=‘ON’

0 0 0 0 0 0 0 → 0
1 0 0 0 0 0 0 → 16
0 1 0 0 0 0 0 → 32
....
1 1 1 1 1 1 1 → 2032