【DCM5】
Pulse Installation Reference V1.0

ICT - FAE

22nd March, 2021

Revision History

Version	Date(YYYY/MM/DD)	Comments
1.0	2021/03/22	First edition.

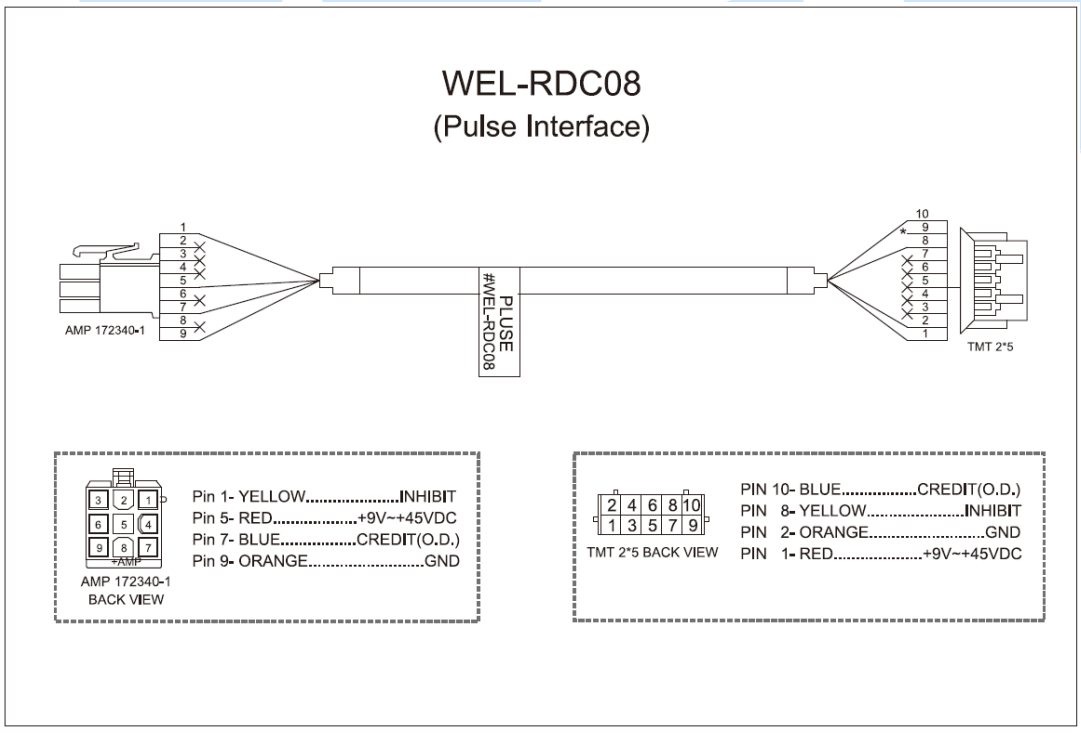
■ The Setting of DIP Switch.

- Set dip switch1~4 OFF、ON、ON、ON

DIP SW				
Function	SW1	SW2	SW3	SW4
MDB	OFF	OFF		
Pulse(Age Limit 16 years)	ON	OFF		
Pulse(Age Limit 18 years)	OFF	ON		
RS232	ON	ON		
Communication after Swiping Card: (under MDB protocol)			OFF	
keep Communication			ON	
Sleep Mode (Outdoor)				OFF
Normal Mode (Indoor)				ON

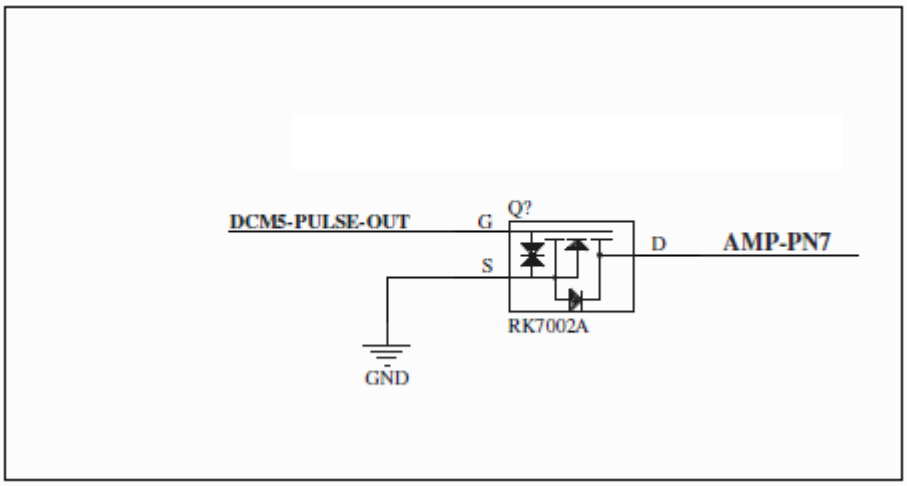
■ The cable for Pulse interface.

- The connector "AMP172340-1" is for controller side.
- The connector "TMT 2*5" is for DCM5 side.

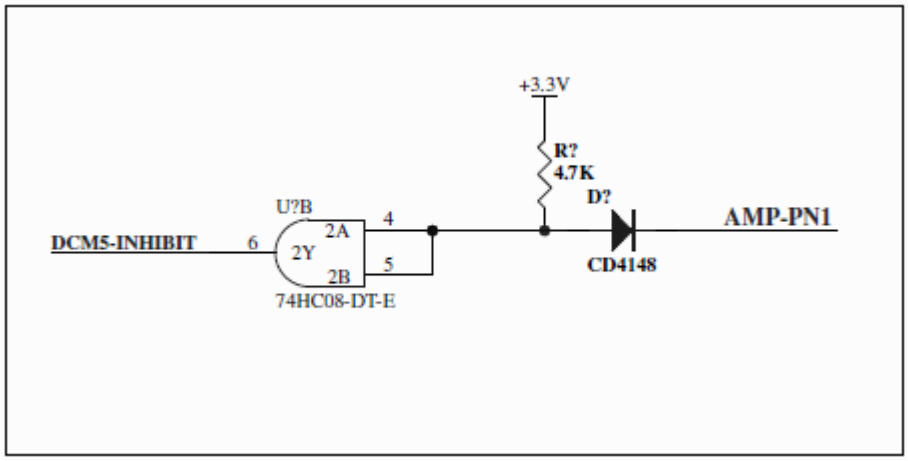


■ The internal Circuit of Pulse interface.

- The pin of pulse credit (O.D.)
- This output signal is that DCM5 sends the pulse to the host/controller while it receives the permissible card.



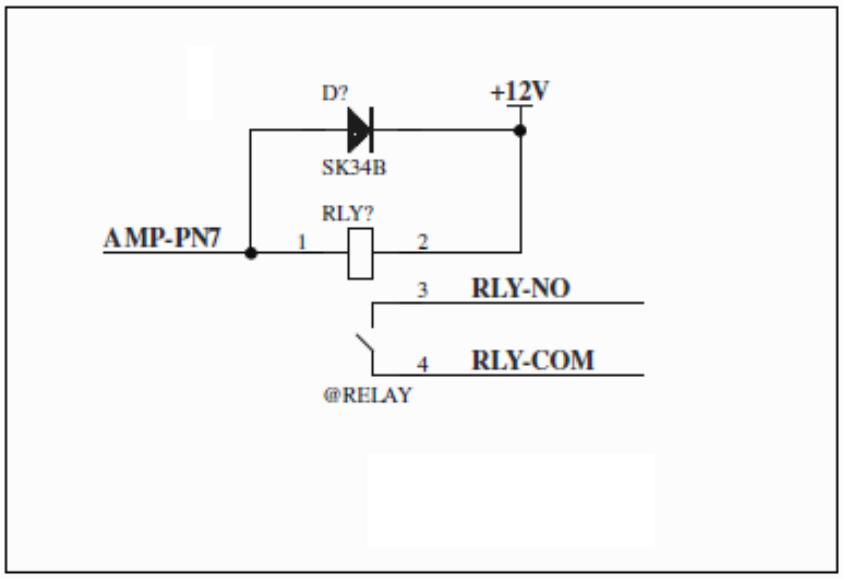
- The pin of Inhibit
- This input signal is that the host/controller commands DCM5 to stop working.



■ The example Circuit that DCM5 connects to the Relay directly.

The circuit is provided for connecting the pin of pulse credit (O.D.)

- The current from VCC (12V) to AMP-PN7(pulse credit) must lower than 60mA.
- It needs connect a diode (e.g., 1N4007) between AMP-PN7 (pulse credit) and VCC(12V).
  Otherwise the internal circuit of DCM5 will be damaged.

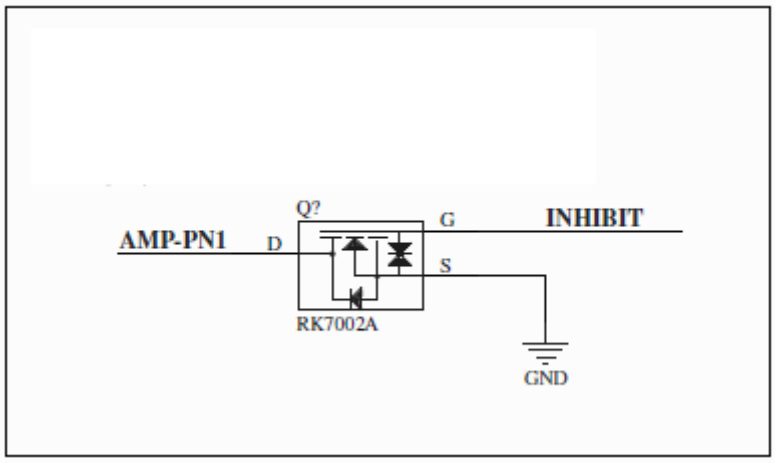


Normally the relay's specification (see the table below) includes the information about nominal current.

COIL RATINGS (at 20℃)

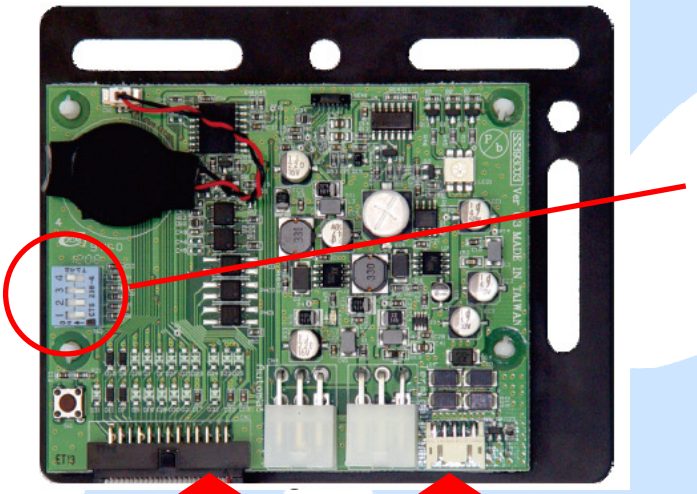
COIL TYPE	Coil Nominal Voltage (V)	Coil Resistance (Ω ±10%)	Pick-Up Voltage (V) ≤	Drop-Out Voltage (V) ≥	Nominal Current (mA)
DC Standard Coils	3	12.5	2.1	0.3	240
	5	36	3.5	0.5	138.9
	6	50	4.2	0.6	120
	9	115	6.3	0.9	78.3
	12	200	8.4	1.2	60
	24	820	16.8	2.4	29.3
	48	3300	33.6	4.8	14.5
	100/110	14144	70	10	7
DC High Sensitive Coils	3	17	2.25	0.3	176.5
	5	47	3.75	0.5	106.4
	6	68	4.5	0.6	88
	9	155	6.75	0.9	58
	12	270	9	1.2	44.4
	24	1100	18	2.4	21.8
	48	4400	36	4.8	10.9
	100/110	18860	75	10	5.3
AC	6	16.5	4.8	1.8	
	12	63	9.6	3.6	
	24	250	19.2	7.2	
	110/120	5600	88	33	
	220/240	22000	176	66	

If the system needs the function that DCM5 stops working, the Host/Controller needs the switch circuit to achieve that the AMP-PN1 (Inhibit) reaches to GND.



■ The Connection between DCM5 and controller via pulse interface.

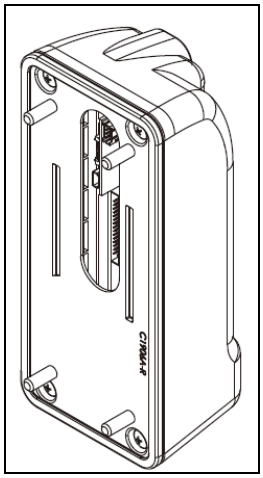
The current from Pin of host/Controller to AMP-PN7 (pulse credit) must lower than 60mA. Otherwise the internal circuit of DCM5 will be damaged.

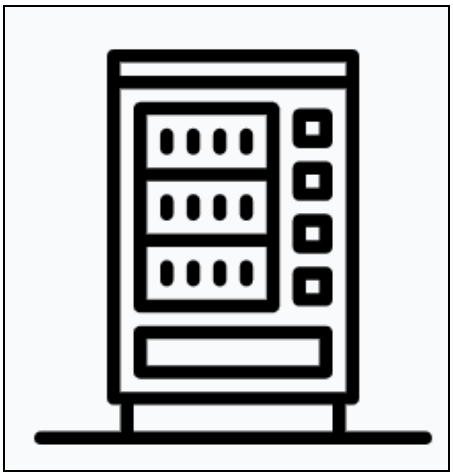


Dip switch 1~4 should be set OFF、ON、ON、ON for Pulse mode

WEL-RDIV-01

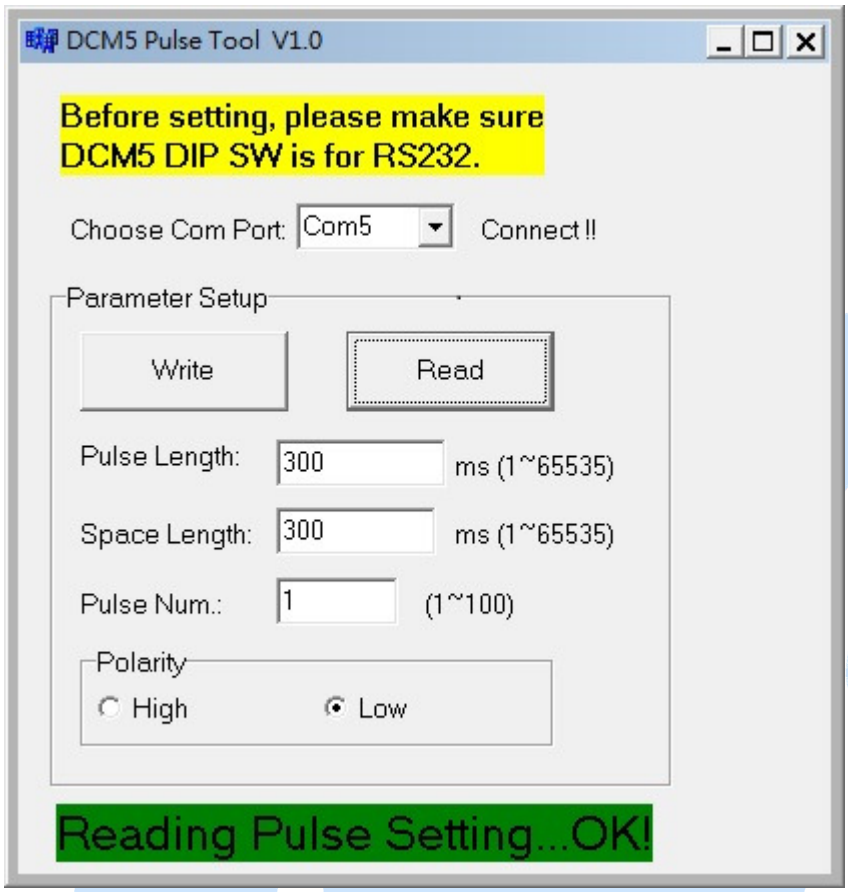
WEL-RDC08





■ The setting of pulse parameter

- We have the PC tool which can modify the setting of parameter in pulse interface.
- The detail operation is provided in the document "DCM5 pulse setting SOP" for reference.
- The exact setting is depending on the client's request.



- ➢ Pulse Length: the width of Pulse.
- ➢ Space Length: the interval time between two pulses.
- ➢ Pulse Num: DCM5 should send how many pulses after the card is permitted.
- ➢ Polarity: The pin of pulse credit should keep normal High or normal Low(Here we suggest that DCM5 works in normal High.)
  Low → Normal High (default setting/ Recommendation)
  High → Normal Low