



## **FD100 DCC decoder**

**Ver:100**

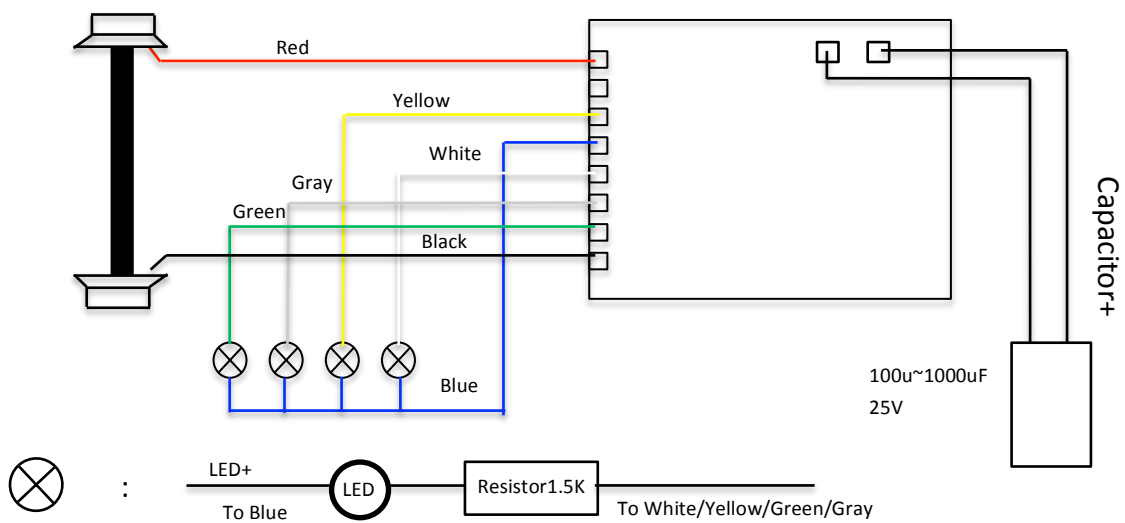
### **1. Feature**

- Four output port, max 250mA each port and max 500mA in total.
- Short Circuit protection.
- Support POM(program on main).
- Size : 15 x 15 x 5mm.
- Settable locomotive address : 1~9999.
- Support nine light effect each port.
- Support Railcom.
- Support external capacitor connection with 100uF~1000uF.
- Support for all form of programming as described in NMRA RP-9.2.3

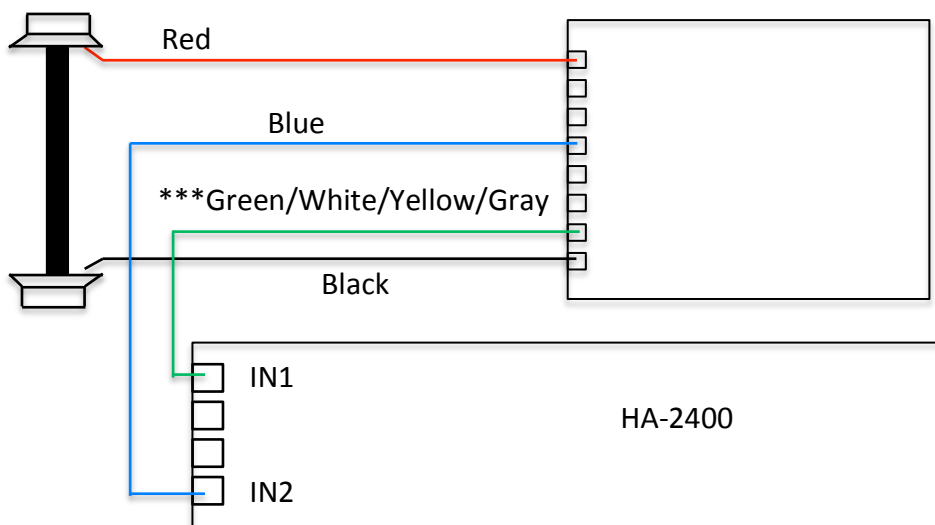
## 2. Connection

- Basic connection

Red	Connect to Right hand rail
Black	Connect to Left hand rail
White	Output port A
Yellow	Output port B
Green	Output port C
Gray	Output port D
Blue	Common connection V+



- Connect HA-2400 light bar



\*\*\* Connect specific wire for its particular function

## 3. CV

CV	Description	Range	Default
1	Short Address	1-127	3
7	Software version		
8	Reset Manufacture ID	8	164
17	Long address - Hi byte	192-231	
18	Long address - Low byte	0-255	
28	Railcom Bit0->CH1, Bit1->CH2	0,1,2,3	3
29	Basic setting Bit0 Bit1 Bit2 Bit3 Bit4 Bit5 Bit6 Bit7		
33-46	Function mapping #33->FL #34->FR #35->F1 ~ #46->F12 Bit0-> Output port A Bit1-> Output port B Bit2-> Output port C Bit3-> Output port D		#33 : 1 #34 : 2 #35 : 4 #36 : 8 #37 : 0 #38 : 0 #39 : 0 #40 : 0 #41 : 0 #42 : 0 #43 : 0 #44 : 0 #45 : 0 #46 : 0
56	Light effect The unit digit is for output port A The ten digit is for output port B 0->No effect 1->Dyno-light	0-99	11

	2-> Fluorescent 3-> Pickup 4-> Single flash strobe: 5-> Double flash strobe 6-> Mars Light 7-> Weak 8-> Warning 9-> Flame		
57	Light effect The unit digit is for output port C The ten digit is for output port D 0->No effect 1->Dyno-light 2-> Fluorescent 3-> Pickup 4-> Single flash strobe: 5-> Double flash strobe 6-> Mars Light 7-> Weak 8-> Warning 9-> Flame	0-99	0
58	Brightness of port A	0-15	15
59	Brightness of port B	0-15	15
60	Brightness of port C	0-15	15
61	Brightness of port D	0-15	15
105	User define 1	0-255	255
106	User define 2	0-255	255

#### 4. Edit

- Support CV reading/programming by POM, Page mode or Direction mode.
- Please refer to the manual of controller for correct CV reading/programming.

#### 5. Notice

- Please correctly connected before turn on the power.
- DO NOT modify, change or remove any components on the decoder to prevent from damage.
- Please do not put with any conductor (eg. metal) over decoder.
- Please ensure the isolation between decoder and metal portion of train.