

# USER MANUAL 2AMDI622IDN

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# 2AMDI622IDN

Mono channel constant current dimmer for A.A.G. Stucchi Track

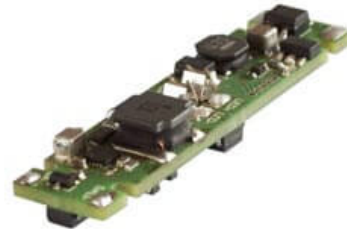
Monochannel Dimmers with constant current output with hybrid analogue dimming.

Suitable for electrified tracks in extra low voltage A.A.G Stucchi.

Input Range: 10-53V DC.

Current output programmable from 0.25A to 1.05A - 64 step (See current / power table).

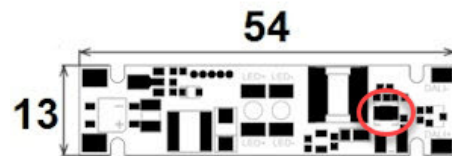
*In order to set the output current you will need the 2AMIN4030000N interface sold separately. Default current 0.35A.*



Input Controls	
Type	Qty
DALI	1

## TECHNICAL NOTES

- Monochannel Dimmers with constant current output with hybrid analogue dimming.
  - The analogue / hybrid constant current output provides analogue dimming between 1050 mA and 250 mA regardless of the current set. The remaining average current values are generated by performing the frequency PWM dimming (390 hz) on the current value of 250 mA.
  - Suitable for electrified tracks in extra low voltage A.A.G Stucchi.
  - Input Range: 10-53V DC.
  - Current output programmable from 0.25A to 1.05A - 64 step (See current / power table).
  - Power 12.6W @ 12V, 25.2W @ 24V, 50.4W @ 48V.
  - The device is not equipped with earth connection. Protection against accidental contact with live parts is guaranteed by the enclosure.
  - Power input connection and signals by the soldered pad.
  - Output connection to the load via AWG18-24 vertical wireto board connectors.
  - Input Controls: DALI x1.
  - Thermal foldback: 150 C. Degrees on uC.
  - Storage Temperature Min: -40 Max: 60 C. Degrees.
  - Working Temperature Min: -20 Max: 50 C. Degrees.
  - Printed Circuit UL.
  - Protection Class: IP20.
  - Weight: 44 gr.
  - Standard Dimension 13x54x10 mm.
  - Reverse polarity protection.
  - Open circuit protection.
  - Surge voltage protection.
  - Short circuit protection.
  - Built-in EMC Filter compliant with EN55105.
  - To supply the device you have to use a SELV power supply in order to maintain the required electrical security level.
- All connections must be made with non-live devices and carried out by specialized personnel.
- Use only in dry conditions.
  - Maximum temperature on component Tc 105° C.

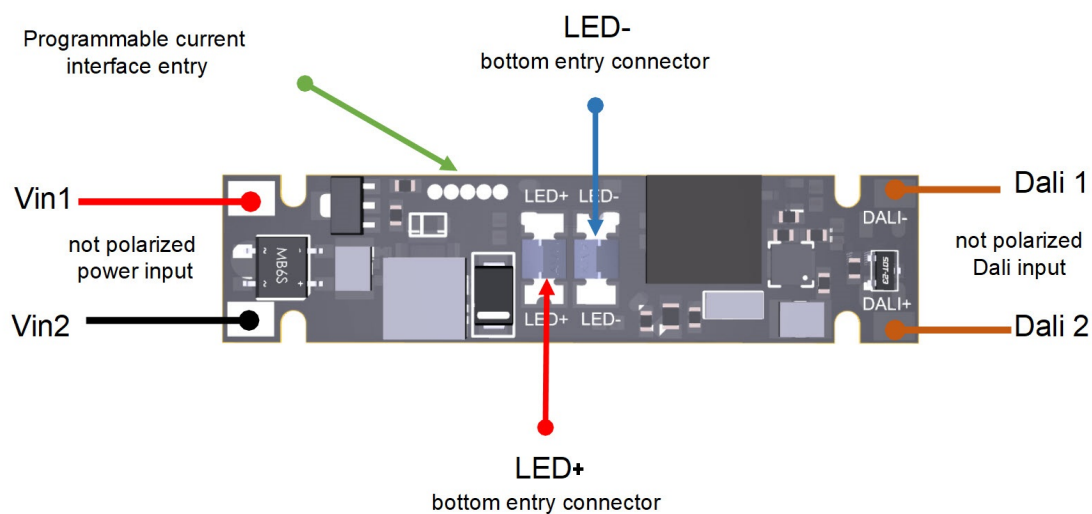


CODE	INPUT VOLTAGE	(MAX) OUTPUT CURRENT	N. OUTPUT CHANNELS	CONTROL INPUTS	CASE	DIMENSION mm
2AMD1622IDN	10-53V DC	from 0.25A to 1.05A	1	DALI x1	NO	13x54 h 10

## TABLE VOLTAGE OUTPUT / MAX POWER

I OUT(mA)	MIN VDC	MAX VDC	MAX POWER (W)
350	2.5	43	15.05
500	2.5	43	21.50
600	2.5	43	25.80
700	2.5	43	30.1
1050	2.5	10	10.5

## DEVICE CONNECTION



DEVICE CONNECTION 2AMD1622IDN - FIGURE N. 1

The 2AMD1622IDN dimmer has to be powered according to the wiring diagram showed in FIG. 1 through the Vin 1 e Vin 2 not polarized terminals.

The LED load must be connected to the LED + and LED connectors.

The DALI signal must be connected to the not polarized inputs DALI 1 and DALI 2

The maximum current absorbed by the DALI bus is about 2mA.

**Below you can find the implemented standard commands:**

DIRECT ARC POWER  
 OFF  
 UP  
 DOWN  
 STEP UP  
 STEP DOWN  
 RECALL MAX LEVEL  
 RECALL MIN LEVEL  
 STEP DOWN AND OFF  
 ON AND STEP UP  
 GO TO SCENE (0-15)  
 RESET  
 STORE ACTUAL LEVEL IN THE DTR

STORE THE DTR AS MAX LEVEL  
STORE THE DTR AS MIN LEVEL  
STORE THE DTR AS SYSTEM FAILURE LEVEL  
STORE THE DTR AS POWER ON LEVEL  
STORE THE DTR AS FADE TIME  
STORE THE DTR AS FADE RATE  
STORE THE DTR AS SCENE (0-15)  
REMOVE FROM SCENE (0-15)  
ADD TO GROUP (0-15)  
REMOVE FROM GROUP (0-15)  
STORE DTR AS SHORT ADDRESS  
QUERY STATUS  
QUERY BALLAST  
QUERY LAMP POWER ON  
QUERY LIMIT ERROR  
QUERY RESET STATE  
QUERY MISSING SHORT ADDRESS  
QUERY VERSION NUMBER  
QUERY DEVICE TYPE  
QUERY PHYSICAL MINIMUM LEVEL  
QUERY POWER FAILURE  
QUERY CONTENT DTR1  
QUERY CONTENT DTR2  
QUERY ACTUAL LEVEL  
QUERY MAX LEVEL  
QUERY MIN LEVEL  
QUERY POWER ON LEVEL  
QUERY SYSTEM FAILURE LEVEL  
QUERY FADE TIME/FADE RATE  
QUERY SCENE LEVEL (0-15)  
QUERY GROUPS (0-7)  
QUERY GROUPS (8-15)  
QUERY RANDOM ADDRESS H  
QUERY RANDOM ADDRESS M  
QUERY RANDOM ADDRESS L

**Manual update 18/09/2017**

## PARAMETERS CONFIGURATION

CLICK ON THE WANTED CONFIGURATION TO VIEW PROGRAMMER IMAGE

Reset														
Configuration	A	B	C	D	1	2	3	4	5	6	7	8	9	10
Reset	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON

Current														
Configuration	A	B	C	D	1	2	3	4	5	6	7	8	9	10
170 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
182 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
195 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
210 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON
222 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
235 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
250 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF
260 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
270 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
290 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
300 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF
315 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON
330 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
345 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
355 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF
370 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON
385 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
395 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
410 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF
425 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON
438 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
450 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
465 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF
480 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON
490 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
500 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
515 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF
530 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON
545 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
560 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON
575 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF
585 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON
600 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
615 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON
626 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF
640 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	ON
653 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
667 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	ON
680 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF
694 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON
707 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF

721 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	ON
734 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF
748 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	ON
761 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
775 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	ON
788 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF
802 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	ON	ON
815 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
829 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
840 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF
855 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON
870 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
880 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	ON
895 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF
910 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	ON	ON
920 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
935 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	ON
950 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF
965 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	ON	ON
975 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF
990 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	ON
1020 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF
1050 mA	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON