

DALI 1...10 V 0-10V PUSH



Il dispositivo ADV576DALIN1 è un dimmer monocanale con uscita in tensione sino a 12A e range di alimentazione di 12/24/48 Vdc. Il dispositivo ADV576DALIN1 permette il dimming di moduli led attraverso le seguenti modalità di controllo:

The ADV576DALIN1 device is a single channel dimmer with voltage output up to 12A and power supply range of 12/24/48 Vdc. The ADV576DALIN1 device enable the dimming of LED modules through the following control modes:

- INGRESSO POTENZIOMETRO (100KΩ) / *POTENTIOMETER INPUT (100KΩ)*
- INGRESSO ANALOGICO 0-10V o 1-10V / *ANALOG INPUT 0-10V or 1-10V*
- INGRESSO PUSH (ISOLATO) / *PUSH INPUT (ISOLATED)*
- INGRESSO DALI / *DALI INPUT*

SPECIFICHE TECNICHE / *TECHNICAL FEATURES*

- Dimmer Monocanale con Uscita in Tensione PWM. / *- Monochannel Dimmers with Output Voltage PWM.*
- Range di alimentazione: 8-53V DC. / *- Input Range: 8-53V DC.*
- Potenza erogata 144W a 12V, 288W a 24V, 576W a 48V. / *- Power 144W @ 12V, 288W @ 24V, 576W @ 48V.*
- Il dispositivo non è dotato di messa a terra. / *- The device is not equipped with earth connection.*

La protezione da contatti accidentali è garantita dall'involucro. / *Protection against accidental contact with live parts is guaranteed by the enclosure.*

- Interfaccia di alimentazione diametro dei conduttori 14-30 AWG (0.05-2.08 mm²). / *- Power Connector Cross-section of conductors 14-30 AWG (0.05-2.08 mm²).*
- Interfaccia di controllo diametro dei conduttori 15-30 AWG (0.05-1.65 mm²). / *- Interface Connector Cross-section of conductors 15-30 AWG (0.05-1.65 mm²).*
- Uscita in Tensione PWM 8-53V DC con corrente da 0A a 12A (576W a 48V DC). / *- Output Voltage PWM 8-53V DC with current from 0A to 12A (576W at 48V DC).*

Ingressi di Controllo: / <i>Input Controls:</i>	Pulsante isolato x1, DALI x1, Potenziometro Lineare 100K x1, 0-10V Passivo (non isolato) x1, 1-10V Passivo (non isolato) x1. / <i>Insulated Push button x1, DALI x1, Linear Potentiometer 100K x1, 0-10V Passive x1, 1-10V Passive x1.</i>
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Uscite di sincronia: / <i>Output Sync:</i>	PWM x1
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Nota su 0-10V(1-10V): / <i>Notice on 0-10V (1-10V):</i>	questo circuito di controllo non è isolato, utilizzare solo un generatore di segnale isolato 0-10V(1-10V). / <i>this control circuits is not insulated, use only insulated 0-10V(1-10V) source generator.</i>
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Frequenza PWM: / <i>PWM Frequency:</i>	390 Hz
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Intervento Termico: / <i>Thermal foldback:</i>	150 Gradi C. su uC. / <i>150 C. Degrees on uC.</i>
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Temperatura stoccaggio / <i>Storage Temperature</i>	Min: -40 Max: 60 Gradi C. / <i>Min: -40 Max: 60 C. Degrees</i>
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Temperatura di funzionamento / <i>Working Temperature</i>	Min: -20 Max: 50 Gradi C. / <i>Min: -20 Max: 50 C. Degrees</i>
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Circuito stampato / <i>Printed circuit</i>	UL
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Classe di protezione: / <i>Protection Class:</i>	IP20
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Peso: / <i>Weight:</i>	44 gr
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Dimensioni Standard / <i>Standard Dimension</i>	40x80x24.45 mm
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Dimensioni con Accessori / <i>Dimension with accessories</i>	40x100x24.45 mm
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Protezione da inversione di polarità, Protezione circuito aperto, Protezione da picchi tensione, Protezione da sovratemperatura. / *Reverse polarity protection, Open circuit protection, Surge voltage protection, Over temperature protection.*

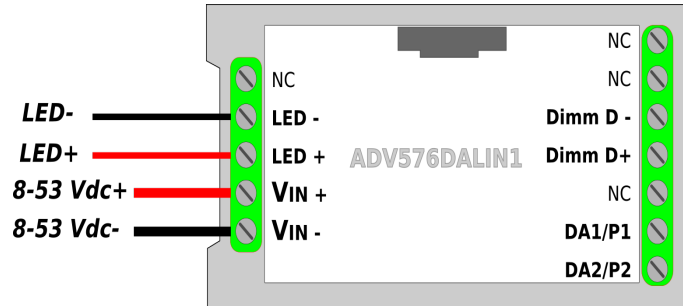
Per alimentare il dispositivo deve essere utilizzato un alimentatore SELV al fine di mantenere il livello di sicurezza elettrica richiesta. / *To supply the device you have to use a SELV power supply in order to maintain the required electrical security level.*

Tutti i collegamenti devono essere realizzati con apparati non in tensione ed effettuati da personale specializzato. / *All connections must be made with non-live devices and carried out by specialized personnel.*

Se la tensione di controllo dell'ingresso PUSH è superiore alla tensione SELV è necessario l'utilizzo del coprimorsetto/stringicavo OPZIONALE per mantenere il prodotto in CLASSE II. / *If the control voltage of the PUSH input is higher than the SELV voltage it is necessary to use the OPTIONAL terminal / cable cover to keep the product in CLASS II.*

Utilizzare solo in ambienti asciutti.
Use only in dry conditions.

ALIMENTAZIONE DEL DISPOSITIVO E CONNESSIONE AL MODULO LED DEVICE SUPPLY AND CONNECTION TO THE LED MODULE



Collegamento alimentazione e led (fig. 2) / Connecting power supply and LED (pic. 2)

Il dimmer ADV576DALIN1 deve essere alimentato secondo la polarità indicata in fig. 2 attraverso i morsetti DC IN (+ e -).

Nel caso in cui la polarità di alimentazione venga invertita il dispositivo non subisce nessun danno.

Il LED (LED PWR) presente a bordo scheda segnala la presenza di alimentazione.

Il LED (LED DIM) indica lo stato di dimming dell'uscita.

La connessione del carico LED deve essere effettuata utilizzando i morsetti OUT (L+ e L-).

The ADV576DALIN1 dimmer must be fed according to the polarity indicated in pic. 2 by DC IN terminals (+ and -).

If the power supply polarity is reversed the device does not undergo any damage.

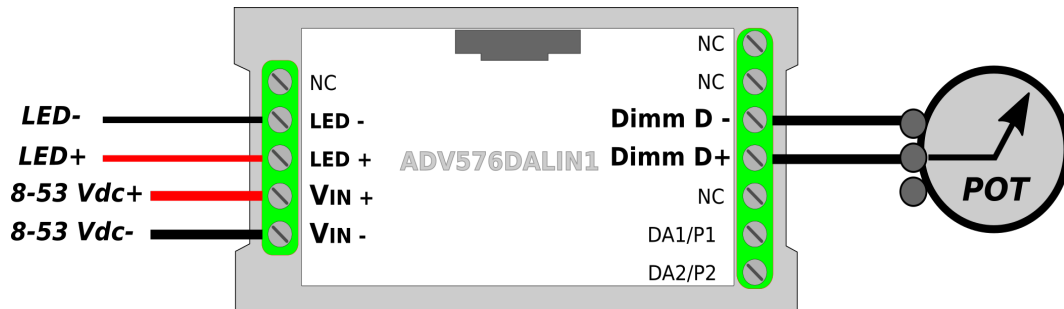
The LED (PWR) present on the board indicates the presence of power.

The LED (LED DIM) indicates the state of output dimming.

The LED load connection must be made using the OUT terminals (L + and L-).

MODALITÀ DI FUNZIONAMENTO MODES OF OPERATION

Modalità potenziometro 100KΩ / 100KΩ potentiometer mode



Collegamento potenziometro (fig. 3) / Potentiometer connection (pic. 3)

Al fine di attivare tale modalità di controllo/funzionamento è sufficiente connettere un potenziometro da 100KΩ tra l'ingresso D+ e D- e disconnettere i restanti ingressi.

Di default la curva di dimming segue un andamento logaritmico proporzionale al valore di resistenza impostata dal potenziometro. Un valore di resistenza inferiore ad 5 KΩ viene interpretato come carico spento. Il valore di massima luminosità si raggiunge al superamento del valore di 95 KΩ.

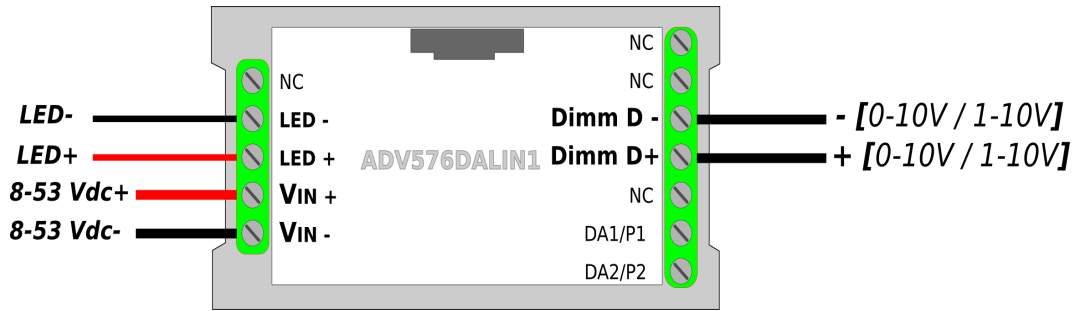
In caso di distacco del potenziometro, il dimmer imposta l'output al livello salvato. Il valore di preset è di default zero.

To enable this control/operation mode just connect a 100KΩ potentiometer between input D+ and D- and disconnect the remaining inputs.

By default the dimming curve follows a logarithmic pattern proportional to the resistance value set by the potentiometer. A resistance value less than 5 KΩ is interpreted as a load off. The maximum brightness value is reached an overrun of 95 KΩ value.

If you detach the potentiometer, the dimmer sets the output to the saved level. The preset value by default is zero.

Modalità 0-10V / 0-10V mode



Collegamento 0-10V (fig. 4) / 0-10V connection (pic. 4)

Al fine di attivare tale modalità di controllo/funzionamento è sufficiente connettere il segnale 0-10V/1-10V di controllo tra l'ingresso D+ e D- (facendo attenzione a rispettare la corretta polarità) e disconnettere i restanti segnali di controllo.

La corrente max assorbita dal dimmer dall'interfaccia 0-10V è di 0,1mA.

Di default la curva di dimming segue un andamento logaritmico* proporzionale alla tensione di controllo. Un valore di tensione inferiore ad 1V viene interpretato come carico spento.

In caso di distacco del segnale 0-10V/1-10V, il dimmer imposta l'output al livello salvato. Il valore di preset è di default zero.

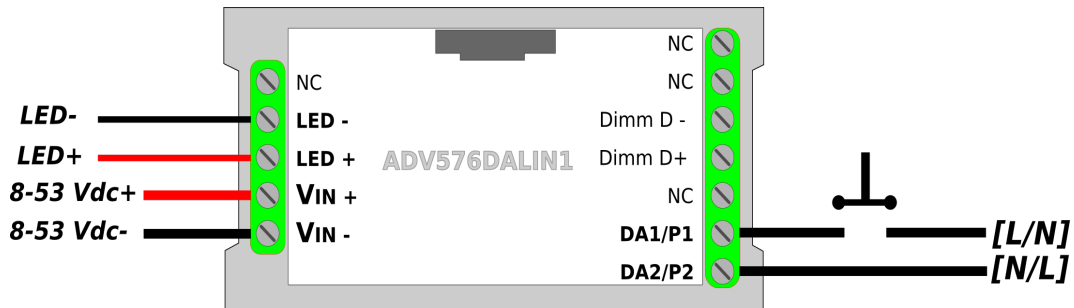
To enable this control/operation mode simply connect the control signal 0-10V / 1-10V between the input D+ and D- (being careful to observe the correct polarity) and disconnect the remaining inputs.

The max current absorbed by the dimmer from the 0-10V interface is 0.1mA.

By default the dimming curve follows a logarithmic pattern proportional to the control voltage. A voltage value lower than 1V is interpreted as a load off.*

If you detach the 0-10V / 1-10V signal, the dimmer sets the output to the saved level. The preset value by default is zero.

Modalità PUSH / PUSH mode



Collegamento pulsante (fig. 5) / Push button connection (pic. 5)

Al fine di attivare tale modalità di controllo/funzionamento è necessario rimuovere eventuali segnali di controllo dagli ingressi D+ e D- e connettere tra gli ingressi DALI/P1 e DALI/P2 un segnale in tensione continua o alternata (range di tensione DC: 10÷265V; AC: 12÷265Vac 50÷65Hz) interrotto da un pulsante normalmente aperto (N.O.). Il segnale di ingresso non necessita di polarizzazione.

La corrente max assorbita dall'interfaccia PUSH è di circa 2mA.

Il dimmer salva lo stato dell'output in maniera da ripristinare il livello impostato in caso di assenza di alimentazione (preset).

Funzionamento interfaccia PUSH

Singolo Click [pressione rapida (<1sec)]
Accende o spegne l'output (ON/OFF).

Doppio Click [pressione rapida (<1sec)]
Imposta massima luminosità (output= 100%).

Long Press [pressione prolungata (>1sec)]
Se il dimmer è in stato di OFF, imposta l'output al valore di minimo (impostabile tramite interfaccia di programmazione, default= 1%)
Se il dimmer è in stato di ON, la pressione prolungata permette la dimmerazione dell'output (salita/discesa).

To enable this control/operation mode is necessary to remove any control signals from the D+ and D- inputs and connect between DALI/P1 and DALI/P2 inputs a signal in direct or alternating voltage (DC voltage range: 10 — 265V, AC: 12 — 265Vac 50 — 65Hz) interrupted by a normally open push button (N.O.). The input signal does not require polarization.

The max current absorbed by the dimmer from the PUSH interface is 0.1mA.

The dimmer saves the state of the output so as to restore the level set in the event of a power failure (preset).

PUSH interface operation

Single Click [quick press (<1sec)]

Turns on or off the output (ON/OFF).

Double Click [quick press (<1sec)]

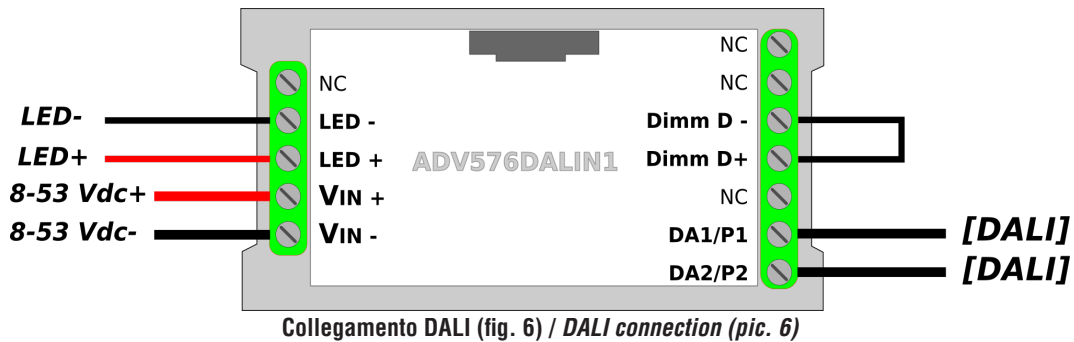
Sets maximum brightness (output= 100%).

Long Press [prolonged press (>1sec)]

If the dimmer is in the OFF state, set the output to the minimum value (settable through programming interface default= 1%)

If the dimmer is in the ON state, the prolonged press enables the dimming output (up / down).

Modalità DALI / DALI mode



Al fine di attivare tale modalità di controllo/funzionamento cortocircuitare gli ingressi D+ e D- e connettere tra gli ingressi DALI/P1 e DALI/P2 il bus DALI.

Il dimmer alla prima ricezione di un pacchetto DALI formattato correttamente si configura in modalità DALI. Una volta configurato in modalità DALI e disconnesso dal bus DALI, il dimmer passa allo stato POWER ON LEVEL impostato tramite bus DALI.

La corrente max assorbita dal bus DALI è di circa 2mA.

Qui di seguito i comandi standard implementati:

To enable this control/operation mode short-circuit the D+ and D- inputs and connect the DALI bus between the DALI / P1 and DALI / P2 inputs.

At the first receipt of a properly formatted DALI package, the dimmer is configured in DALI mode. Once configured in DALI mode and disconnected from the DALI bus, the dimmer switches to POWER ON LEVEL set via DALI bus.

The max current absorbed by the dimmer from the DALI bus is about 2mA.

Below the standard controls implemented:

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

DALI 1...10 V 0-10V PUSH



L'appareil ADV576DALIN1 est une alimentation gradable monocanal avec une tension de sortie jusqu'à 12A et une plage d'alimentation de 12/24/48 Vdc. L'appareil ADV576DALIN1 permet la variation d'intensité des modules LED via les modes de commande suivants :

The ADV576DALIN1 device is a single channel dimmer with voltage output up to 12A and power supply range of 12/24/48 Vdc. The ADV576DALIN1 device enable the dimming of LED modules through the following control modes:

- ENTRÉE POTENTIOMÈTRE (100KΩ) / POTENTIOMETER INPUT (100KΩ)
- ENTRÉE ANALOGIQUE 0-10V ou 1-10V / ANALOG INPUT 0-10V or 1-10V
- ENTRÉE PUSH (ISOLÉE) / PUSH INPUT (ISOLATED)
- ENTRÉE DALI / DALI INPUT

SPÉCIFICATIONS TECHNIQUES / TECHNICAL FEATURES

- Alimentation gradable monocanal avec sortie de tension PWM. / - Monochannel Dimmers with Output Voltage PWM.

- Plage d'alimentation : 8-53V DC. / - Input Range: 8-53V DC.

- Puissance 144W à 12V, 288W à 24V, 576W à 48V. / - Power 144W @ 12V, 288W @ 24V, 576W @ 48V.

- L'appareil n'est pas équipé de mise à la terre. / - The device is not equipped with earth connection.

La protection contre les contacts accidentels est garantie par le boîtier. / Protection against accidental contact with live parts is guaranteed by the enclosure.

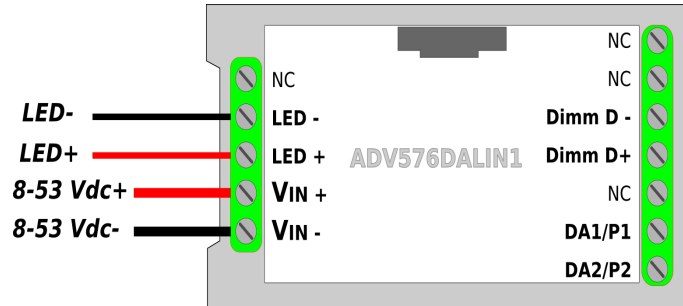
- Interface d'alimentation diamètre des conducteurs 14-30 AWG (0.05-2.08 mm²). / - Power Connector Cross-section of conductors 14-30 AWG (0.05-2.08 mm²).

- Interface de contrôle diamètre des conducteurs 15-30 AWG (0.05-1.65 mm²). / - Interface Connector Cross-section of conductors 15-30 AWG (0.05-1.65 mm²).

- Sortie en tension PWM 8-53V DC avec courant de 0A à 12A (576W à 48V DC). / - Output Voltage PWM 8-53V DC with current from 0A to 12A (576W at 48V DC).

Entrées de commande : / Input Controls:	Bouton isolé x1, DALI x1, Potentiomètre linéaire 100K x1, 0-10V passif (non isolé) x1, 1-10V passif (non isolé) x1. / Insulated Push button x1, DALI x1, Linear Potentiometer 100K x1, 0-10V Passive x1, 1-10V Passive x1.
Sorties de synchronisation : / Output Sync:	PWM x1
Remarque sur 0-10V(1-10V) : / Notice on 0-10V (1-10V):	ce circuit de commande n'est pas isolé, utiliser uniquement un générateur de signal isolé 0-10V(1-10V). / this control circuits is not insulated, use only insulated 0-10V(1-10V) source generator.
Fréquence PWM : / PWM Frequency:	390 Hz
Intervention thermique : / Thermal foldback:	150 degrés C. sur uC. / 150 C. Degrees on uC.
Température de stockage / Storage Temperature	Min : -40 Max : 60 degrés C. / Min: -40 Max: 60 C. Degrees
Température de fonctionnement / Working Temperature	Min : -20 Max : 50 degrés C. / Min: -20 Max: 50 C. Degrees
Circuit imprimé / Printed circuit	UL
Indice de protection : / Protection Class:	IP20
Poids : / Weight:	44 g
Dimensions standard / Standard Dimension	40x80x24.45 mm
Dimensions avec accessoires / Dimension with accessories	40x100x24.45 mm
Protection contre l'inversion de polarité, Protection contre les circuits ouverts, Protection contre les surtensions, Protection contre les surchauffes / Reverse polarity protection, Open circuit protection, Surge voltage protection, Over temperature protection	
Pour alimenter l'appareil, un boîtier d'alimentation SELV doit être utilisé afin de maintenir le niveau de sécurité électrique requis / To supply the device you have to use a SELV power supply in order to maintain the required electrical security level	
Tous les raccordements doivent être effectués avec des équipements hors tension et par du personnel spécialisé. / All connections must be made with non-live devices and carried out by specialized personnel.	
Si la tension de commande de l'entrée PUSH est supérieure à la tension SELV, il est nécessaire d'utiliser le cache-bornes / serre-câbles EN OPTION pour maintenir le produit en CLASSE II. / If the control voltage of the PUSH input is higher than the SELV voltage it is necessary to use the OPTIONAL terminal / cable cover to keep the product in CLASS II.	
Utiliser uniquement dans un environnement sec. / Use only in dry conditions.	

ALIMENTATION DE L'APPAREIL ET BRANCHEMENT AU MODULE LED DEVICE SUPPLY AND CONNECTION TO THE LED MODULE



Branchement alimentation et LED (fig. 2) / Connecting power supply and LED (pic. 2)

L'alimentation gradable ADV576DALIN1 doit être alimentée selon la polarité indiquée dans la fig. 2 via les bornes DC IN (+ et -).

Si la polarité d'alimentation est inversée, l'appareil ne subit aucun dommage.

La LED (LED PWR) sur la carte indique la présence de courant.

La LED (LED DIM) indique l'état de la variation d'intensité de la sortie.

Le branchement de la charge LED doit être effectué en utilisant les bornes OUT (L + et L-).

The ADV576DALIN1 dimmer must be fed according to the polarity indicated in pic. 2 by DC IN terminals (+ and -).

If the power supply polarity is reversed the device does not undergo any damage.

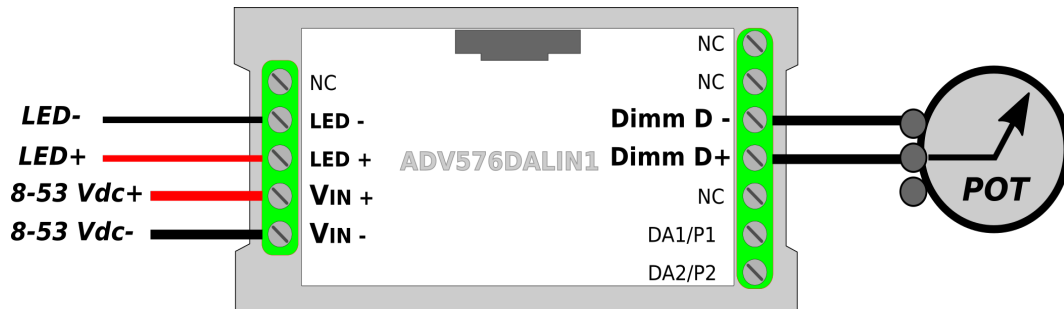
The LED (PWR) present on the board indicates the presence of power.

The LED (LED DIM) indicates the state of output dimming.

The LED load connection must be made using the OUT terminals (L + and L-).

MODES DE FONCTIONNEMENT MODES OF OPERATION

Mode potentiomètre 100KΩ / 100KΩ potentiometer mode



Branchement potentiomètre (fig. 3) / Potentiometer connection (pic. 3)

Pour activer ce mode de commande / fonctionnement, il suffit de brancher un potentiomètre de 100KΩ entre les entrées D+ et D- et de débrancher les entrées restantes.

Par défaut, la courbe de variation d'intensité suit une tendance logarithmique proportionnelle à la valeur de résistance définie par le potentiomètre. Une valeur de résistance inférieure à 5 KΩ est interprétée comme une charge hors tension. La valeur de luminosité maximale est atteinte lorsque la valeur de 95 KΩ est dépassée.

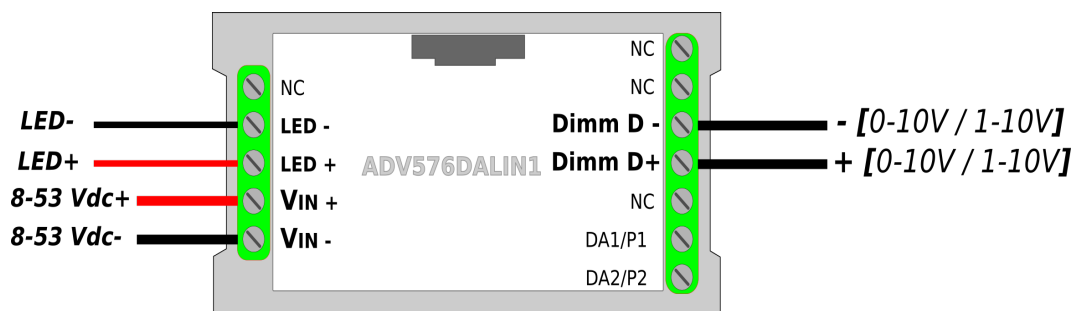
En cas de débranchement du potentiomètre, l'alimentation gradable règle la sortie sur le niveau enregistré. La valeur prédéfinie par défaut est zéro.

To enable this control/operation mode just connect a 100KΩ potentiometer between input D+ and D- and disconnect the remaining inputs.

By default the dimming curve follows a logarithmic pattern proportional to the resistance value set by the potentiometer. A resistance value less than 5 KΩ is interpreted as a load off. The maximum brightness value is reached an overrun of 95 KΩ value.

If you detach the potentiometer, the dimmer sets the output to the saved level. The preset value by default is zero.

Mode 0-10V / 0-10V mode



Branchement 0-10V (fig. 4) / 0-10V connection (pic. 4)

Afin d'activer ce mode de commande / fonctionnement, il suffit de brancher le signal de commande 0-10V / 1-10V entre les entrées D+ et D- (en prenant soin de respecter la bonne polarité) et de débrancher les signaux de commande restants.

Le courant maximum absorbé par l'alimentation gradable de l'interface 0-10V est de 0,1 mA.

Par défaut, la courbe de variation d'intensité suit une tendance logarithmique* proportionnelle à la tension de commande. Une valeur de tension inférieure à 1 V est interprétée comme une charge hors tension.

En cas de débranchement du signal 0-10V/1-10V, l'alimentation gradable règle la sortie sur le niveau enregistré. La valeur prédéfinie par défaut est zéro.

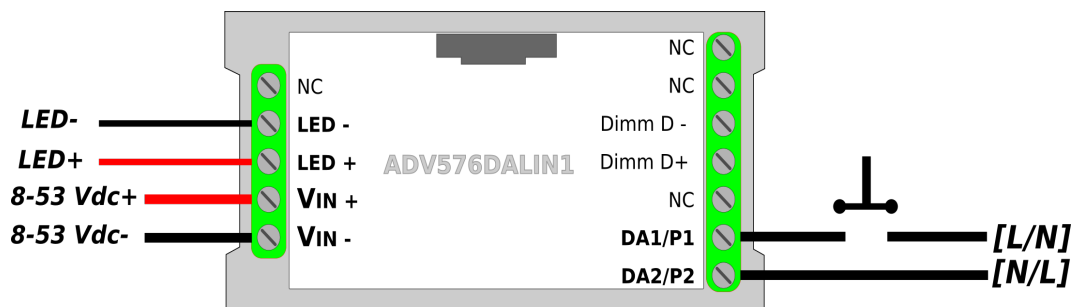
To enable this control/operation mode simply connect the control signal 0-10V / 1-10V between the input D+ and D- (being careful to observe the correct polarity) and disconnect the remaining inputs.

The max current absorbed by the dimmer from the 0-10V interface is 0.1mA.

By default the dimming curve follows a logarithmic pattern proportional to the control voltage. A voltage value lower than 1V is interpreted as a load off.*

If you detach the 0-10V / 1-10V signal, the dimmer sets the output to the saved level. The preset value by default is zero.

Mode PUSH / PUSH mode



Branchement bouton-poussoir (fig. 5) / Push button connection (pic. 5)

Pour activer ce mode de commande / fonctionnement, il est nécessaire de débrancher les signaux de commande des entrées D+ et D- et de brancher un signal en tension continue ou alternative entre les entrées DALI/P1 et DALI/P2 (plage de tension DC : 10 ÷ 265V ; AC : 12 ÷ 265Vac 50 ÷ 65Hz) interrompu par un bouton normalement ouvert (N.O.). Le signal d'entrée ne nécessite pas de polarisation.

Le courant max absorbé par l'interface PUSH est d'environ 2mA.

L'alimentation gradable enregistre l'état de la sortie afin de rétablir le niveau réglé en cas de panne de courant (préréglage).

Fonctionnement de l'interface PUSH

Simple clic [pression rapide (<1s)]

Active ou désactive la sortie (ON/OFF).

Double-clic [pression rapide (<1s)]

Règle la luminosité maximale (sortie = 100%).

Pression longue [pression prolongée (> 1s)]

Si l'alimentation gradable est en état de OFF, elle définit la sortie à la valeur minimale (réglable via l'interface de programmation, par défaut = 1%).

Si l'alimentation gradable est en état de ON, la pression prolongée permet la variation d'intensité de la sortie (montée / descente).

To enable this control/operation mode is necessary to remove any control signals from the D+ and D- inputs and connect between DALI/P1 and DALI/P2 inputs a signal in direct or alternating voltage (DC voltage range: 10 — 265V, AC: 12 — 265Vac 50 — 65Hz) interrupted by a normally open push button (N.O.). The input signal does not require polarization.

The max current absorbed by the dimmer from the PUSH interface is 0.1mA.

The dimmer saves the state of the output so as to restore the level set in the event of a power failure (preset).

PUSH interface operation

Single Click [quick press (<1sec)]

Turns on or off the output (ON/OFF).

Double Click [quick press (<1sec)]

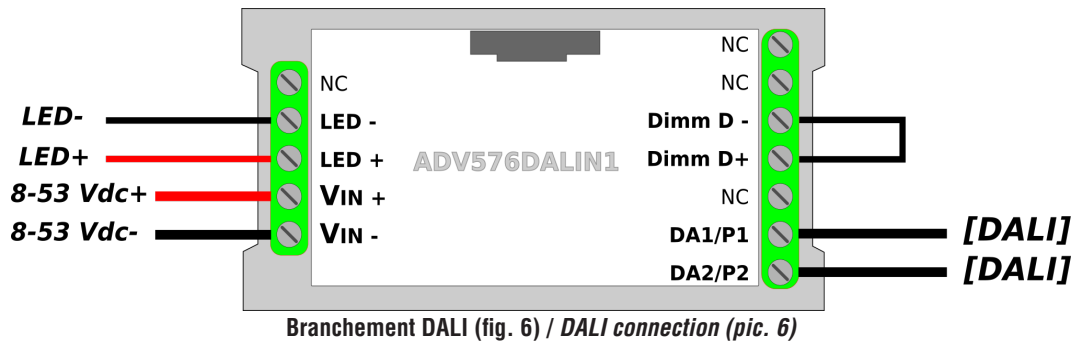
Sets maximum brightness (output= 100%).

Long Press [prolonged press (>1sec)]

If the dimmer is in the OFF state, set the output to the minimum value (settable through programming interface default= 1%)

If the dimmer is in the ON state, the prolonged press enables the dimming output (up / down).

Mode DALI / DALI mode



Pour activer ce mode de commande / fonctionnement, court-circuiter les entrées D+ et D- et brancher le bus DALI entre les entrées DALI/P1 et DALI/P2.

À la première réception d'un paquet DALI correctement formaté, l'alimentation gradable se configure en mode DALI. Une fois configurée et débranchée du bus DALI, l'alimentation gradable passe à l'état POWER ON LEVEL défini via le bus DALI.

Le courant max absorbé par le bus DALI est d'environ 2mA.

Nous reportons ci-dessous les commandes standard implémentées :

To enable this control/operation mode short-circuit the D+ and D- inputs and connect the DALI bus between the DALI / P1 and DALI / P2 inputs.

At the first receipt of a properly formatted DALI package, the dimmer is configured in DALI mode. Once configured in DALI mode and disconnected from the DALI bus, the dimmer switches to POWER ON LEVEL set via DALI bus.

The max current absorbed by the dimmer from the DALI bus is about 2mA.

Below the standard controls implemented:

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

DALI 1...10 V 0-10V PUSH



ADV576DALIN1 ist ein Einkanal-Dimmer für LED-Module mit Ausgangsspannung bis 12A und Versorgungsspannung von 12/24/48 Vdc.

Folgende Steuerungsarten zum Dimmen sind möglich:

The ADV576DALIN1 device is a single channel dimmer with voltage output up to 12A and power supply range of 12/24/48 Vdc. The ADV576DALIN1 device enable the dimming of LED modules through the following control modes:

- POTENTIOMETER-EINGANG (100KΩ) / *POTENTIOMETER INPUT (100KΩ)*
- ANALOG-EINGANG 0-10V oder 1-10V / *ANALOG INPUT 0-10V or 1-10V*
- ENTRÉE PUSH (ISOLÉE) / *PUSH-EINGANG (ISOLIERT)*
- ENTRÉE DALI / *DALI-EINGANG*

TECHNISCHE DATEN / TECHNICAL FEATURES

- Einkanal-Dimmer mit PWM-Spannungsausgang. / - *Monochannel Dimmers with Output Voltage PWM.*

- Spannungsbereich: 8-53V DC. / - *Input Range: 8-53V DC.*

- Leistungsabgabe 144W bei 12V, 288W bei 24V, 576W bei 48V. / - *Power 144W @ 12V, 288W @ 24V, 576W @ 48V.*

- Das Gerät ist nicht mit Erdung ausgestattet. / - *The device is not equipped with earth connection.*

Der Schutz vor versehentlicher Berührung von stromführenden Teilen wird durch das Gehäuse gewährleistet. / *Protection against accidental contact with live parts is guaranteed by the enclosure.*

- Stromschnittstelle Leitungsquerschnitt 14-30 AWG (0.05-2.08 mm²). / - *Power Connector Cross-section of conductors 14-30 AWG (0.05-2.08 mm²).*

- Steuerschnittstelle Leitungsquerschnitt 15-30 AWG (0.05-1.65 mm²). / - *Interface Connector Cross-section of conductors 15-30 AWG (0.05-1.65 mm²).*

- PWM-Spannungsausgang 8-53V DC mit Strom von 0A bis 12A (576W bei 48V DC). / - *Output Voltage PWM 8-53V DC with current from 0A to 12A (576W at 48V DC).*

Steuereingänge: / *Input Controls:*

Isolierter Druckschalter x1, DALI x1, Linearpotentiometer 100K x1, 0-10V Passiv x1, 1-10V Passiv x1. / *Insulated Push button x1, DALI x1, Linear Potentiometer 100K x1, 0-10V Passive x1, 1-10V Passive x1.*

Synchrone Ausgänge: / *Output Sync:*

PWM x1

Hinweis zu 0-10V (1-10V): / *Notice on 0-10V (1-10V):*

Dieser Steuerkreis ist nicht isoliert. Nur isolierten 0-10V-Signalgeber (1-10V) verwenden. / *this control circuits is not insulated, use only insulated 0-10V(1-10V) source generator.*

PWM-Frequenz: / *PWM Frequency:*

390 Hz

Übertemperaturschutz: / *Thermal foldback:*

150 Grad C. auf uC. / *150 C. Degrees on uC.*

Lagertemperatur / *Storage Temperature*

Min: -40 Max: 60 Grad C. / *Min: -40 Max: 60 C. Degrees*

Betriebstemperatur / *Working Temperature*

Min: -20 Max: 50 Grad C. / *Min: -20 Max: 50 C. Degrees*

Leiterplatte / *Printed circuit*

UL

Schutzart: / *Protection Class:*

IP20

Gewicht: / *Weight:*

44 g

Standardabmessungen / *Standard Dimension*

40x80x24.45 mm

Abmessungen mit Zubehör / *Dimension with accessories*

40x100x24.45 mm

Schutz vor Verpolung, offenem Stromkreis, Überspannung, Überhitzung. /

Reverse polarity protection, Open circuit protection, Surge voltage protection, Over temperature protection.

Zur Stromversorgung des Geräts ist ein SELV-Netzteil zu verwenden, um das erforderliche elektrotechnische Sicherheitsniveau zu gewährleisten. /

To supply the device you have to use a SELV power supply in order to maintain the required electrical security level.

Alle Anschlüsse sind von Fachpersonal an spannungsfreien Geräten vorzunehmen. /

All connections must be made with non-live devices and carried out by specialized personnel.

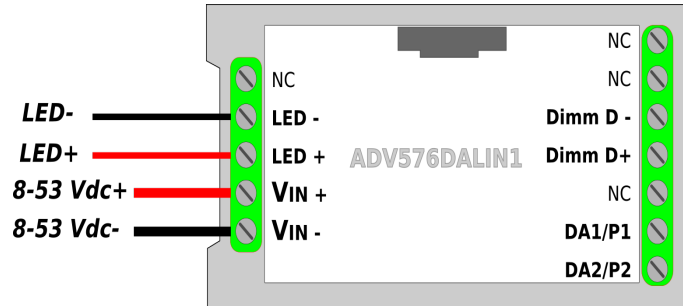
Ist die Steuerspannung des PUSH-Eingangs höher als die SELV-Spannung, so muss die OPTIONALE Klemmenabdeckung/ Kabelklemme verwendet werden, damit die SCHUTZKLASSE II weiterhin gewährleistet ist. /

If the control voltage of the PUSH input is higher than the SELV voltage it is necessary to use the OPTIONAL terminal / cable cover to keep the product in CLASS II.

Nur in trockener Arbeitsumgebung verwenden.

Use only in dry conditions.

STROMVERSORGUNG DES GERÄTS UND ANSCHLUSS AN DAS LED-MODUL DEVICE SUPPLY AND CONNECTION TO THE LED MODULE



Anschluss Stromversorgung und LED (Abb. 2) / Connecting power supply and LED (pic. 2)

Die Stromversorgung des Dimmers ADV576DALIN1 hat mittels der Anschlussklemmen DC IN (+ und -) entsprechend der in Abb. 2 angegebenen Polarität zu erfolgen. Das Gerät verfügt jedoch auch über Verpolungsschutz.

Die in der Platine eingebaute LED (LED PWR) zeigt an, ob das Gerät mit Strom versorgt wird.

Die LED (LED DIM) gibt den Dimm-Status des Ausgangs an.

Der Anschluss der LED-Last hat über die Anschlussklemmen OUT (L+ und L-) zu erfolgen.

The ADV576DALIN1 dimmer must be fed according to the polarity indicated in pic. 2 by DC IN terminals (+ and -).

If the power supply polarity is reversed the device does not undergo any damage.

The LED (PWR) present on the board indicates the presence of power.

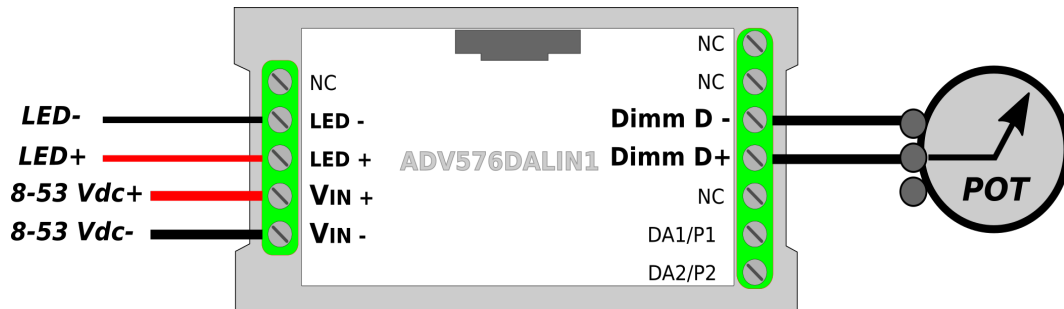
The LED (LED DIM) indicates the state of output dimming.

The LED load connection must be made using the OUT terminals (L + and L-).

BETRIEBSARTEN

MODES OF OPERATION

Betriebsart 100KΩ-Potentiometer / 100KΩ potentiometer mode



Anschluss Potentiometer (Abb. 3) / Potentiometer connection (pic. 3)

Um diese Betriebsart zu aktivieren, schalten Sie ein 100KΩ-Potentiometer zwischen den D+ und den D- Eingang und trennen Sie die anderen Eingänge vom Netz. Standardmäßig verläuft die logarithmische Dimmkurve proportional zum Widerstand des Potentiometers. Ein Widerstand von weniger als 5 KΩ wird als ausgeschaltete Last interpretiert. Der maximale Helligkeitsgrad wird nach Überschreiten der Marke von 95 KΩ erreicht.

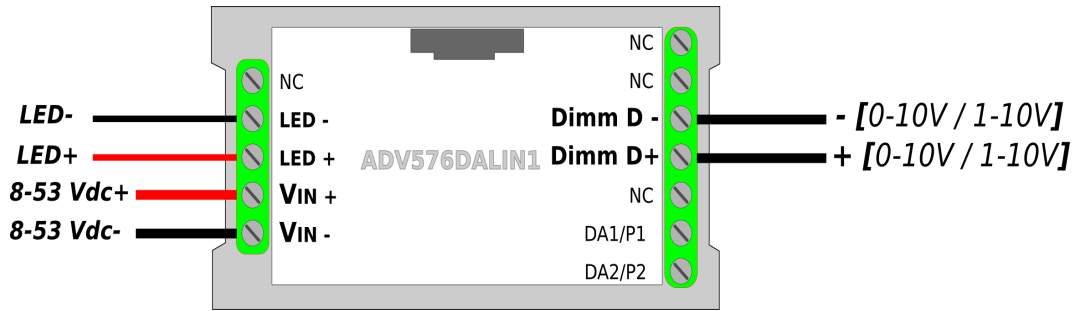
Wird das Potentiometer vom Stromkreis getrennt, so schaltet der Dimmer wieder auf die vorab gespeicherte Helligkeitsstufe. Der Standardwert gemäß Werks-einstellungen ist Null.

To enable this control/operation mode just connect a 100KΩ potentiometer between input D+ and D- and disconnect the remaining inputs.

By default the dimming curve follows a logarithmic pattern proportional to the resistance value set by the potentiometer. A resistance value less than 5 KΩ is interpreted as a load off. The maximum brightness value is reached an overrun of 95 KΩ value.

If you detach the potentiometer, the dimmer sets the output to the saved level. The preset value by default is zero.

Betriebsart 0-10V / 0-10V mode



Anschluss 0-10V (Abb. 4) / 0-10V connection (pic. 4)

Um diese Betriebsart zu aktivieren, schalten Sie das 0-10V/1-10V-Steuersignal zwischen den D+-Eingang und den D-Eingang (bitte beachten Sie die richtige Polarität) und trennen Sie die anderen Kontrollsignale vom Netz.

Die max. Stromaufnahme des Dimmers von der 0-10V-Schnittstelle beträgt 0,1 mA.

Standardmäßig verläuft die logarithmische* Dimmkurve proportional zur Steuerspannung. Eine Spannung von weniger als 1V wird als ausgeschaltete Last interpretiert.

Wird die 0-10V/1-10V-Schnittstelle vom Netz getrennt, so schaltet der Dimmer wieder auf die vorab gespeicherte Helligkeitsstufe. Der Standardwert gemäß Werkseinstellungen ist Null.

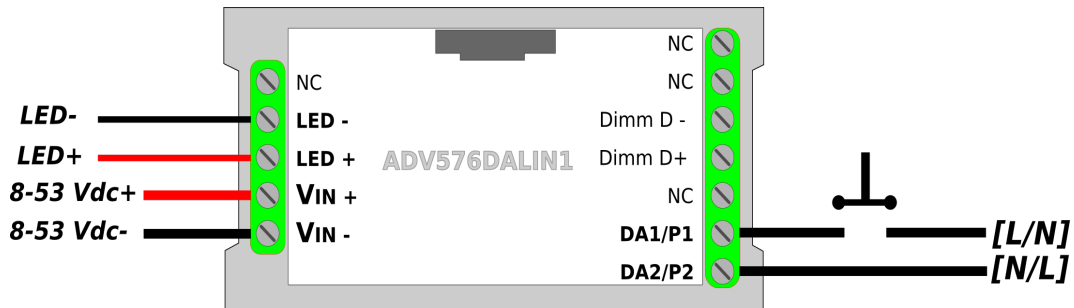
To enable this control/operation mode simply connect the control signal 0-10V / 1-10V between the input D+ and D- (being careful to observe the correct polarity) and disconnect the remaining inputs.

The max current absorbed by the dimmer from the 0-10V interface is 0.1mA.

By default the dimming curve follows a logarithmic pattern proportional to the control voltage. A voltage value lower than 1V is interpreted as a load off.*

If you detach the 0-10V / 1-10V signal, the dimmer sets the output to the saved level. The preset value by default is zero.

Betriebsart PUSH / PUSH mode



Anschluss PUSH-Schnittstelle (Abb. 5) / Push button connection (pic. 5)

Um diese Betriebsart zu aktivieren, trennen Sie alle anderen Steuersignale von den D+ und D-Eingängen und schalten Sie ein Signal in Gleich- oder Wechselspannung zwischen die DALI/P1 und DALI/P2 Eingänge (DC-Spannungsbereich: 10÷265V; AC: 12÷265Vac 50÷65Hz), unterbrochen von einem normal offenen Schalter (N.O.). Für das Eingangssignal ist keine Polarität erforderlich.

Die max. Stromaufnahme der PUSH-Schnittstelle beträgt zirka 2mA.

Der Dimmer speichert den Helligkeitsgrad und stellt ihn bei fehlender Versorgungsspannung wieder her (Werkseinstellungen).

Funktionsweise PUSH-Schnittstelle

Einfacher Klick [kurze Betätigung der Taste (<1sec)]
Ein- oder Ausschalten der Beleuchtung (ON/OFF).

Doppelklick [kurze Betätigung der Taste (<1sec)]
Dimmen der Helligkeit bis zur Höchststufe (Output= 100%).

Long Press [längere Betätigung der Taste (>1sec)]
Wenn der Dimmer ausgeschaltet ist (OFF), stellen Sie die Helligkeit auf die Mindeststufe (mittels der Programmierungsschnittstelle einstellbar, Default= 1%).
Wenn der Dimmer eingeschaltet ist (ON), kann durch längere Betätigung der Taste die Helligkeit geregelt werden (bis zur Mindest- oder Höchststufe).

To enable this control/operation mode is necessary to remove any control signals from the D+ and D- inputs and connect between DALI/P1 and DALI/P2 inputs a signal in direct or alternating voltage (DC voltage range: 10 — 265V, AC: 12 — 265Vac 50 — 65Hz) interrupted by a normally open push button (N.O.). The input signal does not require polarization.

The max current absorbed by the dimmer from the PUSH interface is 0.1mA.

The dimmer saves the state of the output so as to restore the level set in the event of a power failure (preset).

PUSH interface operation

Single Click [quick press (<1sec)]

Turns on or off the output (ON/OFF).

Double Click [quick press (<1sec)]

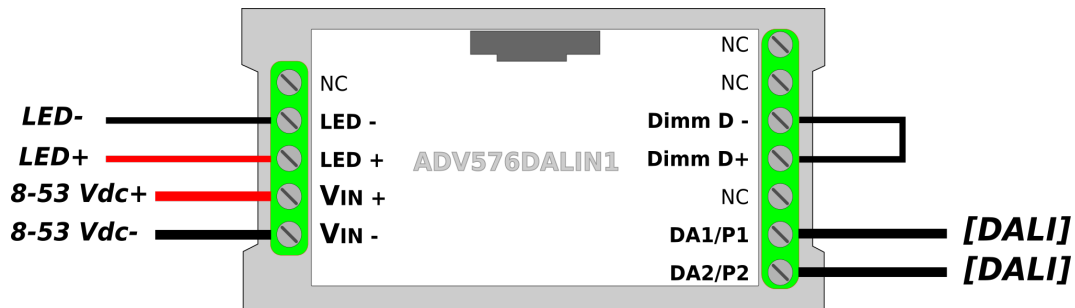
Sets maximum brightness (output= 100%).

Long Press [prolonged press (>1sec)]

If the dimmer is in the OFF state, set the output to the minimum value (settable through programming interface default= 1%)

If the dimmer is in the ON state, the prolonged press enables the dimming output (up / down).

Betriebsart DALI / DALI mode



Anschluss DALI-Schnittstelle (Abb. 6) / DALI connection (pic. 6)

Um diese Betriebsart zu aktivieren, schließen Sie die D+ und D-Eingänge kurz und schalten Sie den DALI-Bus zwischen die DALI/P1 und DALI/P2 Eingänge. Bei Erhalt des ersten korrekt formatierten DALI-Pakets schaltet der Dimmer automatisch auf DALI-Betrieb. Befindet sich der Dimmer im DALI-Betrieb und wird dann vom DALI-Bus getrennt, so geht das Gerät in den POWER ON LEVEL, der vorab mittels DALI-Bus eingestellt wurde. Die max. Stromaufnahme des DALI-Bus beträgt zirka 2mA. Im Folgenden eine Übersicht der Standard-Befehle:

To enable this control/operation mode short-circuit the D+ and D- inputs and connect the DALI bus between the DALI / P1 and DALI / P2 inputs. At the first receipt of a properly formatted DALI package, the dimmer is configured in DALI mode. Once configured in DALI mode and disconnected from the DALI bus, the dimmer switches to POWER ON LEVEL set via DALI bus.

The max current absorbed by the dimmer from the DALI bus is about 2mA.

Below the standard controls implemented:

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 PHISICAL 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

DALI 1...10 V 0-10V PUSH



El dispositivo ADV576DALIN1 es un dimmer de un único canal con salida de voltaje de hasta 12A y margen de alimentación de 12/24/48 Vcc. El dispositivo ADV576DALIN1 permite la atenuación de módulos LED a través de las siguientes modalidades de control:

The ADV576DALIN1 device is a single channel dimmer with voltage output up to 12A and power supply range of 12/24/48 Vdc. The ADV576DALIN1 device enable the dimming of LED modules through the following control modes:

- ENTRADA POTENCIÓMETRO (100KΩ) / *POTENTIOMETER INPUT (100KΩ)*
- ENTRADA ANALÓGICA 0-10V o 1-10V / *ANALOG INPUT 0-10V or 1-10V*
- ENTRADA PUSH (AISLADO) / *PUSH-EINGANG (ISOLIERT)*
- ENTRADA DALI / *DALI-EINGANG*

ESPECIFICACIONES TÉCNICAS / *TECHNICAL FEATURES*

- Dimmer Monocanal con tensión de salida PWM. / *- Monochannel Dimmers with Output Voltage PWM.*
- Margen de alimentación: 8-53V CC. / *- Input Range: 8-53V DC.*
- Potencia de salida 144W a 12V, 288W a 24V, 576W a 48V. / *- Power 144W @ 12V, 288W @ 24V, 576W @ 48V.*
- El dispositivo no está equipado con puesta a tierra. / *- The device is not equipped with earth connection.*

La envoltura asegura la protección contra contactos involuntarios. / *Protection against accidental contact with live parts is guaranteed by the enclosure.*

- Interfaz de alimentación diámetro de los conductores 14-30 AWG (0.05-2.08 mm²). / *- Power Connector Cross-section of conductors 14-30 AWG (0.05-2.08 mm²).*
- Interfaz de control diámetro de los conductores 15-30 AWG (0.05-1.65 mm²). / *- Interface Connector Cross-section of conductors 15-30 AWG (0.05-1.65 mm²).*
- Tensión de salida PWM 8-53V CC con corriente de 0A a 12A (576W a 48V CC). / *- Output Voltage PWM 8-53V DC with current from 0A to 12A (576W at 48V DC).*

Entradas de control: / <i>Input Controls:</i>	Botón aislado x1, DALI x1, Potenciómetro Linear 100K x1, 0-10V Pasivo (no aislado) x1, 1-10V Pasivo (no aislado) x1. / <i>Insulated Push button x1, DALI x1, Linear Potentiometer 100K x1, 0-10V Passive x1, 1-10V Passive x1.</i>
Salidas de sincronización: / <i>Output Sync:</i>	PWM x1
Aviso sobre 0-10V(1-10V): / <i>Notice on 0-10V (1-10V):</i>	este circuito de control no está aislado, utilizar solo un generador de señal aislado 0-10V(1-10V). / <i>this control circuits is not insulated, use only insulated 0-10V(1-10V) source generator.</i>
Frecuencia PWM: / <i>PWM Frequency:</i>	390 Hz
Intervención térmica: / <i>Thermal foldback:</i>	150 grados C. en uC. / <i>150 C. Degrees on uC.</i>
Temperatura de almacenamiento / <i>Storage Temperature</i>	Mín.: -40 máx.: 60 grados C. / <i>Min: -40 Max: 60 C. Degrees</i>
Temperatura de mecanismo / <i>Working Temperature</i>	Mín.: -20 máx.: 50 grados C. / <i>Min: -20 Max: 50 C. Degrees</i>
Circuito impreso / <i>Printed circuit</i>	UL
Clase de protección: / <i>Protection Class:</i>	IP20
Peso: / <i>Weight:</i>	44 gr
Dimensiones estándares / <i>Standard Dimension</i>	40x80x24.45 mm
Dimensiones con accesorios / <i>Dimension with accessories</i>	40x100x24.45 mm

Protección de inversión de polaridad, Protección de circuito abierto, Protección contra picos de tensión, Protección contra la sobretemperatura. / *Reverse polarity protection, Open circuit protection, Surge voltage protection, Over temperature protection.*

Para alimentar el dispositivo se debe utilizar un alimentador SELV para mantener el nivel de seguridad eléctrica requerido. / *To supply the device you have to use a SELV power supply in order to maintain the required electrical security level.*

To supply the device you have to use a SELV power supply in order to maintain the required electrical security level.

Todas las conexiones se deben realizar con dispositivos que no estén en tensión y deben ser llevados al cabo por un equipo especializado. / *All connections must be made with non-live devices and carried out by specialized personnel.*

All connections must be made with non-live devices and carried out by specialized personnel.

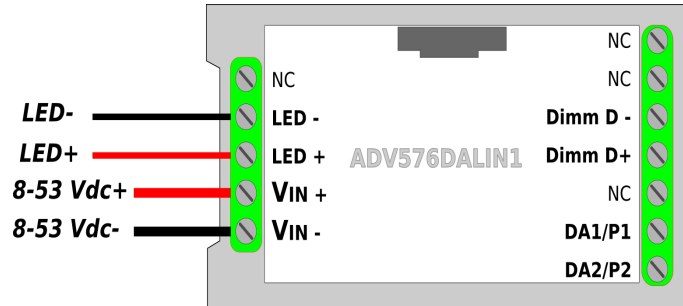
Si la tensión de control de la entrada PUSH es mayor que la tensión SELV es necesario utilizar un protector de bornes/cubierta de cable OPCIONAL para mantener el producto en CLASE II. / *If the control voltage of the PUSH input is higher than the SELV voltage it is necessary to use the OPTIONAL terminal / cable cover to keep the product in CLASS II.*

If the control voltage of the PUSH input is higher than the SELV voltage it is necessary to use the OPTIONAL terminal / cable cover to keep the product in CLASS II.

Utilizar únicamente en ambientes secos.

Use only in dry conditions.

ALIMENTACIÓN DEL DISPOSITIVO Y CONEXIÓN AL MÓDULO LED DEVICE SUPPLY AND CONNECTION TO THE LED MODULE



Conexión alimentación y LED (fig.2) / Connecting power supply and LED (pic. 2)

El dimmer ADV576DALIN1 debe alimentarse según la polaridad indicada en la fig. 2 a través de los bornes DC IN (+ y -).

En el caso en que se invierta la polaridad el dispositivo no se dañará.

El LED (LED PWR) en la placa indica la presencia de alimentación.

El LED (LED DIM) indica el estado de atenuación de la salida.

La conexión de la carga LED debe realizarse mediante los bornes OUT (L + y L-).

The ADV576DALIN1 dimmer must be fed according to the polarity indicated in pic. 2 by DC IN terminals (+ and -).

If the power supply polarity is reversed the device does not undergo any damage.

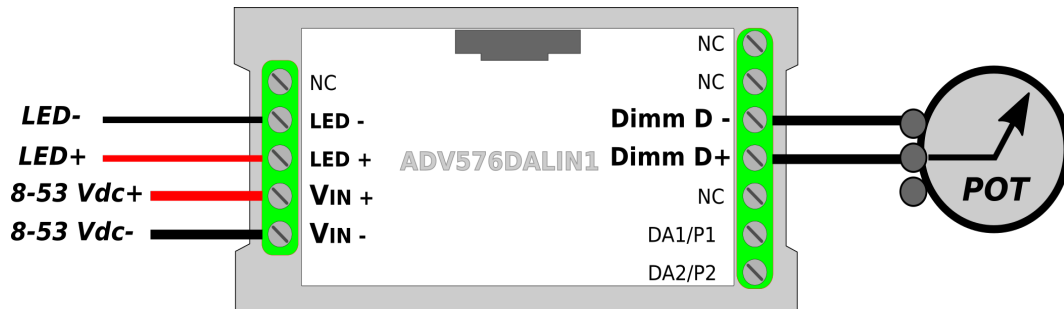
The LED (PWR) present on the board indicates the presence of power.

The LED (LED DIM) indicates the state of output dimming.

The LED load connection must be made using the OUT terminals (L + and L-).

MODALIDADES DE FUNCIONAMIENTO MODES OF OPERATION

Modo de potenciómetro 100KΩ / 100KΩ potentiometer mode



Conexión potenciómetro (fig.3) / Potentiometer connection (pic. 3)

Para activar esta modalidad de control/funcionamiento es suficiente con conectar un potenciómetro de 100KΩ entre las entradas D + y D- y desconectar las entradas restantes.

Por defecto, la curva de atenuación sigue una tendencia logarítmica proporcional al valor de resistencia establecido por el potenciómetro. Un valor de resistencia inferior a 5 KΩ se interpreta como una carga desconectada. El valor máximo de luminosidad se alcanza cuando se excede el valor de 95 KΩ.

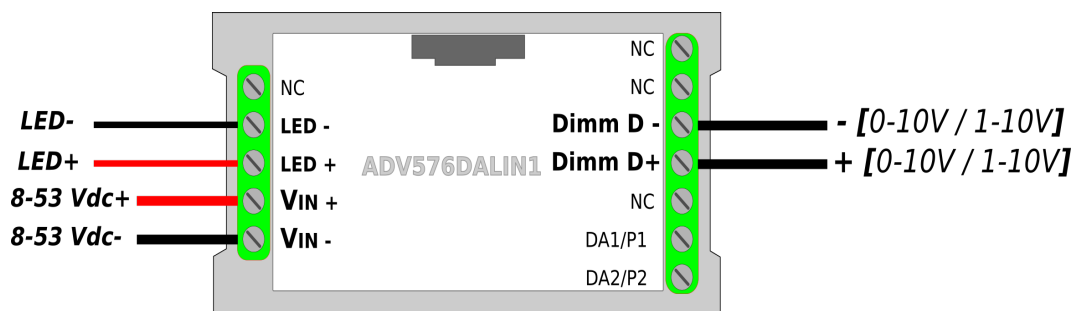
Si se desconecta el potenciómetro, el dimmer establece la salida al nivel guardado. El valor predeterminado es cero por defecto.

To enable this control/operation mode just connect a 100KΩ potentiometer between input D+ and D- and disconnect the remaining inputs.

By default the dimming curve follows a logarithmic pattern proportional to the resistance value set by the potentiometer. A resistance value less than 5 KΩ is interpreted as a load off. The maximum brightness value is reached an overrun of 95 KΩ value.

If you detach the potentiometer, the dimmer sets the output to the saved level. The preset value by default is zero.

Modo 0-10 V / 0-10V mode



Conexión 0-10V (fig.4) / 0-10V connection (pic. 4)

Para activar esta modalidad de control/funcionamiento es suficiente con conectar la señal de control 0-10V / 1-10V entre las entradas D + y D- (prestando atención a respetar la correcta polaridad) y desconectar las señales de control restantes. La corriente máxima absorbida por el dimmer de la interfaz de 0-10 V es de 0,1 mA. Por defecto, la curva de dimming sigue una tendencia logarítmica* proporcional a la tensión de control. Un valor de voltaje inferior a 1V se interpreta como una carga desconectada.

En caso de desconexión de la señal 0-10V/1-10V, el dimmer establece la salida al nivel guardado. El valor predeterminado es cero por defecto.

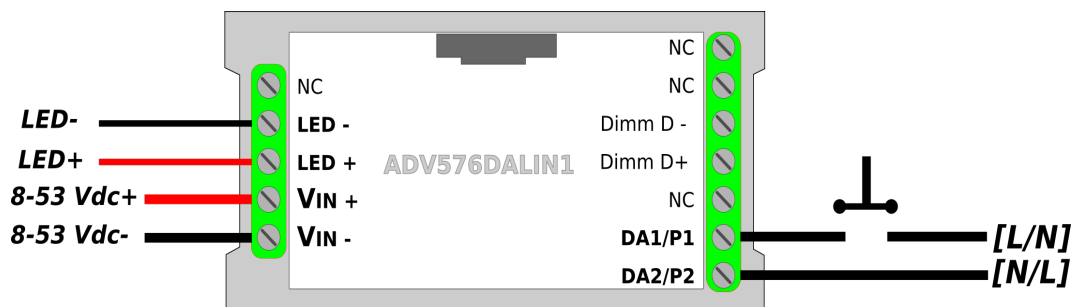
To enable this control/operation mode simply connect the control signal 0-10V / 1-10V between the input D+ and D- (being careful to observe the correct polarity) and disconnect the remaining inputs.

The max current absorbed by the dimmer from the 0-10V interface is 0.1mA.

By default the dimming curve follows a logarithmic pattern proportional to the control voltage. A voltage value lower than 1V is interpreted as a load off.*

If you detach the 0-10V / 1-10V signal, the dimmer sets the output to the saved level. The preset value by default is zero.

Modalidad PUSH / PUSH mode



Conexión del botón (fig.5) / Push button connection (pic. 5)

Para activar esta modalidad de control/funcionamiento, es necesario eliminar las señales de control de las entradas D + y D- y conectar una señal de tensión directa o alterna entre las entradas DALI/P1 y DALI/P2 (margen de tensión DC: 10 ÷ 265V; CA: 12 ÷ 265Vca 50 ÷ 65Hz) interrumpido por un botón normalmente abierto (N.O.). La señal de entrada no requiere polarización.

La corriente máxima absorbida por la interfaz PUSH es de aproximadamente 2mA.

El dimmer guarda el estado de la salida para reanudar el nivel establecido en caso de falta de energía (predeterminado).

Funcionamiento de interfaz PUSH

Un solo clic [pulsación rápida (<1 segundo)]
Activar o desactivar la salida (ON / OFF).

Doble clic [pulsación rápida (<1 segundo)]
Configurar la luminosidad máxima (salida = 100%).

Pulsación larga [pulsación prolongada (>1sec)]
Si el dimmer está en el estado OFF, establecer la salida al valor mínimo (se puede configurar a través de la interfaz de programación, por defecto = 1%).
Si el dimmer está en el estado ON, la pulsación larga permite la regulación de la salida (subida/bajada).

To enable this control/operation mode is necessary to remove any control signals from the D+ and D- inputs and connect between DALI/P1 and DALI/P2 inputs a signal in direct or alternating voltage (DC voltage range: 10 — 265V, AC: 12 — 265Vac 50 — 65Hz) interrupted by a normally open push button (N.O.). The input signal does not require polarization.

The max current absorbed by the dimmer from the PUSH interface is 0.1mA.

The dimmer saves the state of the output so as to restore the level set in the event of a power failure (preset).

PUSH interface operation

Single Click [quick press (<1sec)]

Turns on or off the output (ON/OFF).

Double Click [quick press (<1sec)]

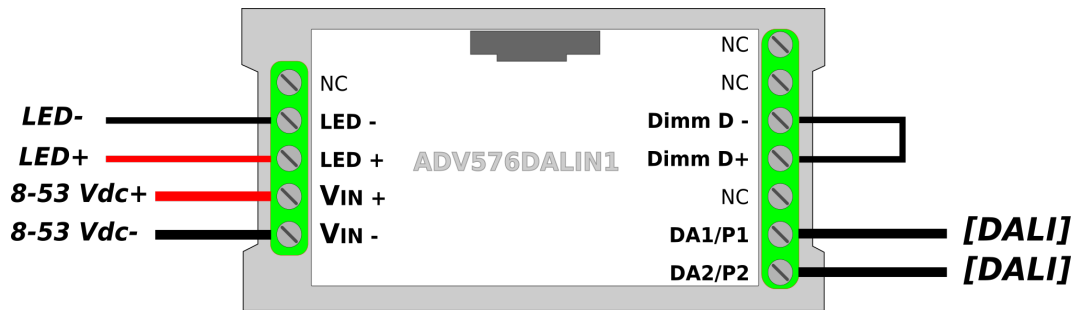
Sets maximum brightness (output= 100%).

Long Press [prolonged press (>1sec)]

If the dimmer is in the OFF state, set the output to the minimum value (settable through programming interface default= 1%)

If the dimmer is in the ON state, the prolonged press enables the dimming output (up / down).

Betriebsart DALI / DALI mode



Modalidad DALI (fig.6) / DALI connection (pic. 6)

Para activar esta modalidad de control/funcionamiento, cortocircuitar las entradas D+ y D- y conectar el bus DALI entre las entradas DALI/P1 y DALI/P2.

El dimmer, después de la primera recepción de un paquete DALI correctamente formateado, se configura en modalidad DALI. Una vez configurado en modalidad DALI y desconectado del bus DALI, el dimmer pasa al estado POWER ON LEVEL configurado a través del bus DALI.

La corriente máxima absorbida por el bus DALI es de aproximadamente 2 mA. Aquí abajo se encuentran las operaciones estándar implementados:

To enable this control/operation mode short-circuit the D+ and D- inputs and connect the DALI bus between the DALI / P1 and DALI / P2 inputs. At the first receipt of a properly formatted DALI package, the dimmer is configured in DALI mode. Once configured in DALI mode and disconnected from the DALI bus, the dimmer switches to POWER ON LEVEL set via DALI bus.

The max current absorbed by the dimmer from the DALI bus is about 2mA.

Below the standard controls implemented:

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 PHISICAL 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

DALI 1...10 V 0-10V PUSH


O dispositivo ADV576DALIN1 é um dimmer de canal único com saída de tensão até 12A e intervalo de alimentação de 12/24/48 Vdc. O dispositivo ADV576DALIN1 permite o escurecimento de módulos de led através das seguintes modalidades de controlo:

The ADV576DALIN1 device is a single channel dimmer with voltage output up to 12A and power supply range of 12/24/48 Vdc. The ADV576DALIN1 device enable the dimming of LED modules through the following control modes:

- ENTRADA DO POTENCIÓMETRO (100KΩ) / *POTENTIOMETER INPUT (100KΩ)*
- ENTRADA ANALÓGICA 0-10V ou 1-10V / *ANALOG INPUT 0-10V or 1-10V*
- ENTRADA PUSH (ISOLADO) / *PUSH-EINGANG (ISOLIERT)*
- ENTRADA DALI / *DALI-EINGANG*

ESPECIFICAÇÕES TÉCNICAS / TECHNICAL FEATURES

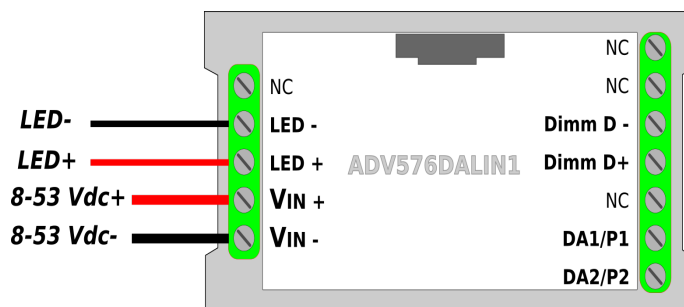
- Dimmer Monocanal com Saída sob Tensão PWM. / *Monochannel Dimmers with Output Voltage PWM.*
- Faixa de alimentação: 8-53V DC. / *Input Range: 8-53V DC.*
- Potência fornecida 144W a 12V, 288W a 24V, 576W a 48V. / *Power 144W @ 12V, 288W @ 24V, 576W @ 48V.*
- O dispositivo não possui aterramento. / *The device is not equipped with earth connection.*

A proteção por contactos acidentais é garantida pelo invólucro. / *Protection against accidental contact with live parts is guaranteed by the enclosure.*

- Interface de alimentação do diâmetro dos condutores 14-30 AWG (0,05-2,08 mm²). / *Power Connector Cross-section of conductors 14-30 AWG (0.05-2.08 mm²).*
- Interface de controlo do diâmetro dos condutores 15-30 AWG (0,05-1,65 mm²). / *Interface Connector Cross-section of conductors 15-30 AWG (0.05-1.65 mm²).*
- Saída sob Tensão PWM 8-53V DC com corrente de 0A a 12A (576W a 48V DC). / *Output Voltage PWM 8-53V DC with current from 0A to 12A (576W at 48V DC).*

Entradas de Controlo: / <i>Input Controls:</i>	Botão isolado x1, DALI x1, Potenciômetro Linear 100K x1, 0-10V Passivo (não isolado) x1, 1-10V Passivo (não isolado) x1. / <i>Insulated Push button x1, DALI x1, Linear Potentiometer 100K x1, 0-10V Passive x1, 1-10V Passive x1.</i>
Saídas de sincronia: / <i>Output Sync:</i>	PWM x1
Nota em 0-10V(1-10V): / <i>Notice on 0-10V (1-10V):</i>	esse circuito de controlo não é isolado, utilizar só um de sinal isolado 0-10V(1-10V). / <i>this control circuits is not insulated, use only insulated 0-10V(1-10V) source generator.</i>
Frequência PWM: / <i>PWM Frequency:</i>	390 Hz
Intervento Termico: / <i>Thermal foldback:</i>	150 Graus C em uC. / <i>150 C. Degrees on uC.</i>
Temperatura de armazenamento / <i>Storage Temperature</i>	Mín.: -40 Máx.: 60 Graus C. / <i>Min: -40 Max: 60 C. Degrees</i>
Temperatura de funcionamento / <i>Working Temperature</i>	Mín.: -20 Máx.: 50 Graus C. / <i>Min: -20 Max: 50 C. Degrees</i>
Circuito impresso / <i>Printed circuit</i>	UL
Classe de proteção: / <i>Protection Class:</i>	IP20
Peso: / <i>Weight:</i>	44 gr
Dimensões Padrão / <i>Standard Dimension</i>	40x80x24.45 mm
Dimensões com Acessórios / <i>Dimension with accessories</i>	40x100x24.45 mm
Proteção contra inversão de polaridade, Proteção de circuito aberto, Proteção contra picos tensão, Proteção contra sobretemperatura. / <i>Reverse polarity protection, Open circuit protection, Surge voltage protection, Over temperature protection.</i>	
Para alimentar o dispositivo deve ser utilizado um alimentador SELV a fim de manter o nível de segurança elétrica exigida. / <i>To supply the device you have to use a SELV power supply in order to maintain the required electrical security level.</i>	
Todas as conexões devem ser realizadas com aparatos não sob tensão e efetuados por pessoal especializado. / <i>All connections must be made with non-live devices and carried out by specialized personnel.</i>	
Se a tensão de controlo da entrada PUSH for superior à tensão SELV é necessário o uso de cobertura de cabo/abraçadeira OPCIONAL para manter o produto em CLASSE II. / <i>If the control voltage of the PUSH input is higher than the SELV voltage it is necessary to use the OPTIONAL terminal / cable cover to keep the product in CLASS II.</i>	
Utilizar apenas em ambientes secos. / <i>Use only in dry conditions.</i>	

ALIMENTAÇÃO DO DISPOSITIVO E CONEXÃO AO MÓDULO DE LED DEVICE SUPPLY AND CONNECTION TO THE LED MODULE



Conexão da alimentação e led (fig. 2) / Connecting power supply and LED (pic. 2)

O dimmer ADV576DALIN1 deve ser alimentado segundo a polaridade indicada na fig. 2 através dos terminais DC IN (+ e -).

Se a polaridade de alimentação for invertida, o dispositivo não sofre qualquer dano.

O LED (LED PWR) presente a bordo da placa sinaliza a presença de alimentação.

O LED (LED DIM) indica o estado de escurecimento de saída.

A conexão da carga de LED deve ser efetuada utilizando os terminais OUT (L+ e L-).

The ADV576DALIN1 dimmer must be fed according to the polarity indicated in pic. 2 by DC IN terminals (+ and -).

If the power supply polarity is reversed the device does not undergo any damage.

The LED (PWR) present on the board indicates the presence of power.

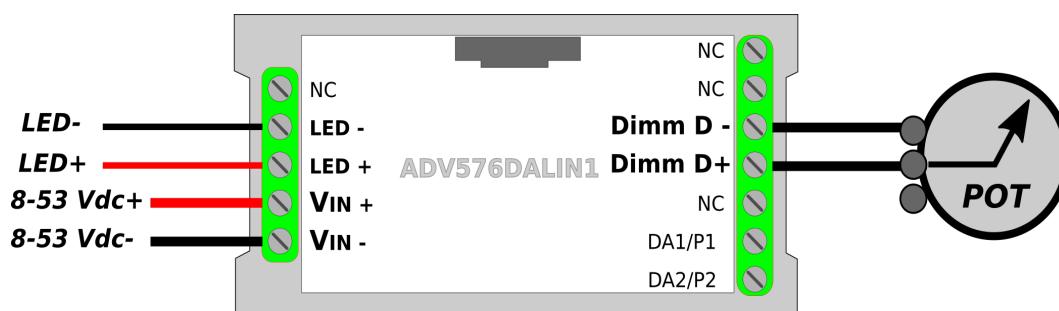
The LED (LED DIM) indicates the state of output dimming.

The LED load connection must be made using the OUT terminals (L + and L-).

MODALIDADES DE FUNCIONAMENTO

MODES OF OPERATION

Modalidade do potenciômetro 100KΩ / 100KΩ potentiometer mode



Conexão do potenciômetro (fig. 3) / Potentiometer connection (pic. 3)

A fim de ativar essa modalidade de controlo/funcionamento é suficiente conectar um potenciômetro de 100KΩ entre a entrada D+ e D- e desconectar as demais entradas.

Por padrão, a curva de escurecimento segue uma tendência logarítmica proporcional ao valor de resistência definida pelo potenciômetro. Um valor de resistência inferior a 5 KΩ é interpretado como carga desligada. O valor de máxima luminosidade é atingido ao ultrapassar o valor de 95 KΩ.

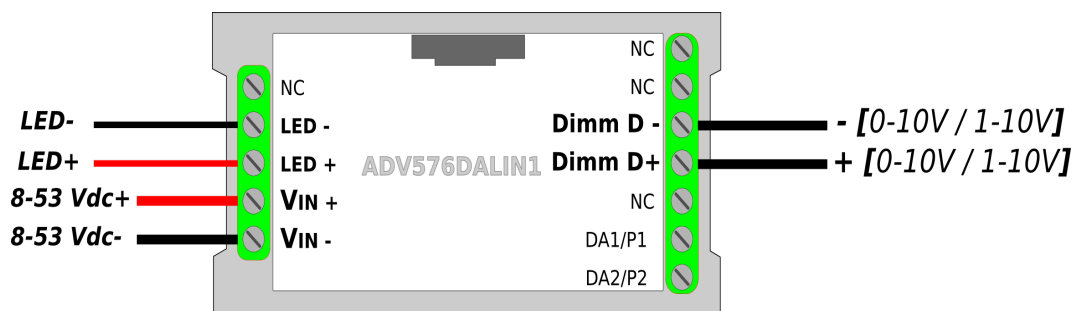
Em caso de desligamento do potenciômetro, o dimmer define a saída no nível guardado. O valor de predefinição é padrão zero.

To enable this control/operation mode just connect a 100KΩ potentiometer between input D+ and D- and disconnect the remaining inputs.

By default the dimming curve follows a logarithmic pattern proportional to the resistance value set by the potentiometer. A resistance value less than 5 KΩ is interpreted as a load off. The maximum brightness value is reached an overrun of 95 KΩ value.

If you detach the potentiometer, the dimmer sets the output to the saved level. The preset value by default is zero.

Modalidade 0-10V / 0-10V mode



Conexão 0-10V (fig. 4) / 0-10V connection (pic. 4)

A fim de ativar essa modalidade de controlo/funcionamento é suficiente conectar o sinal 0-10V/1-10V de controlo entre a entrada D+ e D- (prestando atenção em respeitar a correta polaridade) e desconectar os demais sinais de controlo.

A corrente máx. absorvida pelo dimmer da interface 0-10V é de 0,1mA.

Por padrão, a curva de escurecimento segue uma tendência logarítmica* proporcional à tensão de controlo. Um valor de tensão inferior a 1V é interpretado como carga desligada.

Em caso de desligamento do sinal 0-10V/1-10V, o dimmer define a saída no nível guardado. O valor de predefinição é padrão zero.

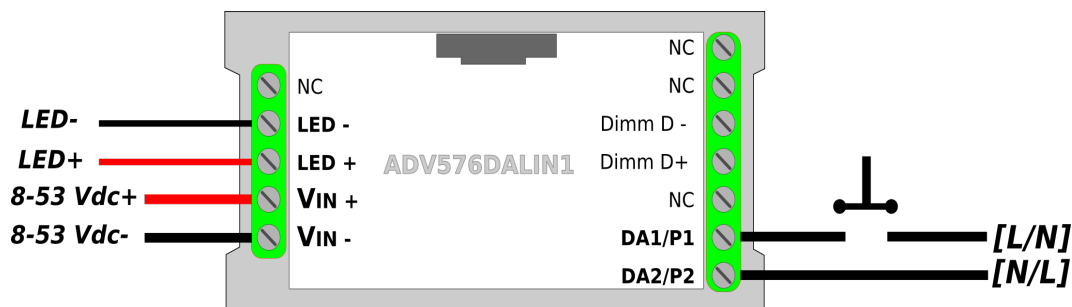
To enable this control/operation mode simply connect the control signal 0-10V / 1-10V between the input D+ and D- (being careful to observe the correct polarity) and disconnect the remaining inputs.

The max current absorbed by the dimmer from the 0-10V interface is 0.1mA.

By default the dimming curve follows a logarithmic pattern proportional to the control voltage. A voltage value lower than 1V is interpreted as a load off.*

If you detach the 0-10V / 1-10V signal, the dimmer sets the output to the saved level. The preset value by default is zero.

Modalidade PUSH / PUSH mode



Conexão do botão (fig. 5) / Push button connection (pic. 5)

A fim de ativar essa modalidade de controlo/funcionamento é necessário remover eventuais sinais de controlo das entradas D+ e D- e conectar entre as entradas DALI/P1 e DALI/P2 um sinal sob tensão contínua ou alternada (faixa de tensão DC: 10÷265V; AC: 12÷265Vac 50÷65Hz) interrompido por um botão normalmente aberto (N.O.). O sinal de entrada não precisa de polarização.

A corrente máx. absorvida pela interface PUSH é de cerca 2mA.

O dimmer salva o estado da saída de modo a restaurar o nível em caso de ausência de alimentação (preset).

Funcionamento da interface PUSH

Clique único [premir rapidamente (<1s)]
Acende ou apaga a saída (ON/OFF).

Duplo Clique [premir rapidamente (<1s)]
Define máxima luminosidade (output= 100%).

Long Press [premir por mais tempo (>1s)]
Se o dimmer estiver no estado OFF, define a saída ao valor de mínimo (configurável por meio da interface de programação, padrão= 1%).
Se o dimmer estiver no estado ON, ao premir de modo prolongado permite o escurecimento da saída (subida/descida).

To enable this control/operation mode is necessary to remove any control signals from the D+ and D- inputs and connect between DALI/P1 and DALI/P2 inputs a signal in direct or alternating voltage (DC voltage range: 10 — 265V, AC: 12 — 265Vac 50 — 65Hz) interrupted by a normally open push button (N.O.). The input signal does not require polarization.

The max current absorbed by the dimmer from the PUSH interface is 0.1mA.

The dimmer saves the state of the output so as to restore the level set in the event of a power failure (preset).

PUSH interface operation

Single Click [quick press (<1sec)]

Turns on or off the output (ON/OFF).

Double Click [quick press (<1sec)]

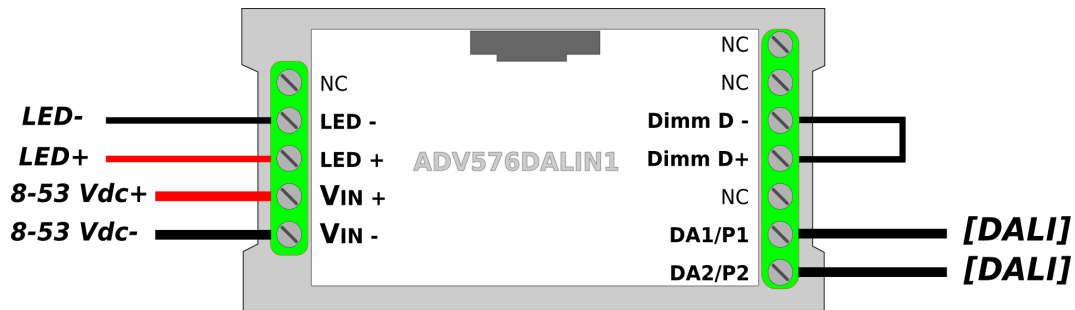
Sets maximum brightness (output= 100%).

Long Press [prolonged press (>1sec)]

If the dimmer is in the OFF state, set the output to the minimum value (settable through programming interface default= 1%)

If the dimmer is in the ON state, the prolonged press enables the dimming output (up / down).

Modalidade DALI / DALI mode



Conexão DALI (fig. 6) / DALI connection (pic. 6)

A fim de ativar essa modalidade de controlo/funcionamento efetuar o curto-circuito das entradas D+ e D- e conectar entre as entradas DALI/P1 e DALI/P2 o bus DALI. Na primeira recepção de um pacote DALI formatado corretamente, o dimmer é configurado na modalidade DALI. Uma vez configurado na modalidade DALI e desconectado do bus DALI, o dimmer passa ao estado POWER ON LEVEL definido por meio do bus DALI.

A corrente máx. absorvida pelo dimmer do bus DALI é de cerca 2mA. A seguir, os comandos padrão implementados:

To enable this control/operation mode short-circuit the D+ and D- inputs and connect the DALI bus between the DALI / P1 and DALI / P2 inputs. At the first receipt of a properly formatted DALI package, the dimmer is configured in DALI mode. Once configured in DALI mode and disconnected from the DALI bus, the dimmer switches to POWER ON LEVEL set via DALI bus.

The max current absorbed by the dimmer from the DALI bus is about 2mA.

Below the standard controls implemented:

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 PHISICAL 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