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DMX-HUB-2CH

HUB DMX 2 channels

Scheda Tecnica - Data Sheet

Made in Italy

- For the whole and updated *Device Manual* refer to producer's website: *http://www.dalcnet.com*
- Per il manuale del dispisitivo completo e aggiornato consultare il sito internet del costruttore: *http://www.dalcnet.com*

Descrizione del prodotto

DMX-HUB-2CH è un'accessorio che rende il cablaggio DMX semplice e veloce.
Il prodotto dispone di ingresso/uscita DMX mediante connettore RJ45 e questo permette l'utilizzo di cavi Cat5/Cat6 per la trasmissione del segnale DMX.
Il dispositivo è dotato di due uscite a morsetto per il collegamento delle centraline DALCNET. Questo rende il cablaggio più semplice e assicura una qualità ottima del segnale.

Product Descriptions

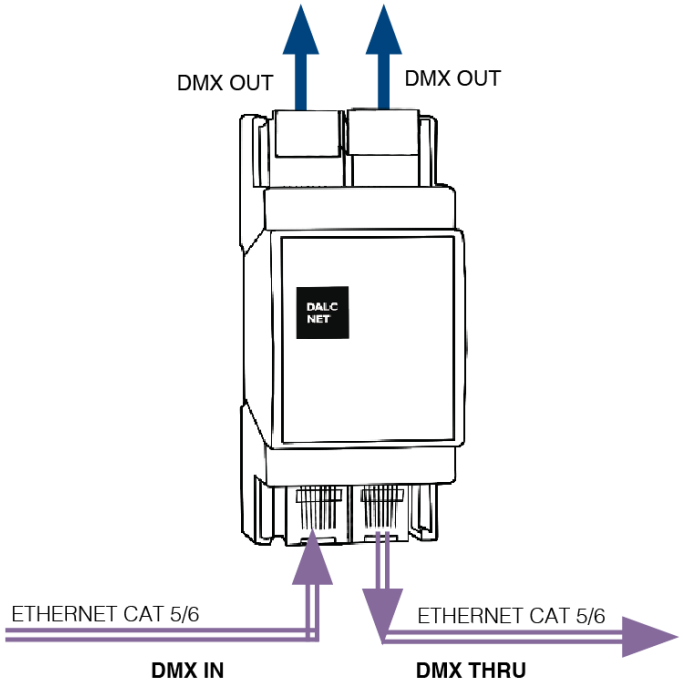
DMX-HUB-2CH is a device that makes DMX wiring quick and easy.
This product has a DMX input/output using an RJ45 connector that allows Cat5/Cat6 wiring for DMX signal transmission.
The device provides two output terminals to connect DALCNET controllers. This makes wiring easy to do and guarantees an optimal signal quality.

CODE	Channels	Command	
DMX-HUB-2CH	2	DMX512	HUB

Standard di riferimento - *Reference Standards*

IEC 61547	Equipment for general lighting purposes - EMC immunity requirements
ANSI E1.11	Entertainment Technology - USITT DMX512-A - Asynchronous Serial Digital Data Transmission Standard for Controlling Lighting Equipment and Accessories
ANSI E1.20	Entertainment Technology-RDM-Remote Device Management over USITT DMX512 Networks

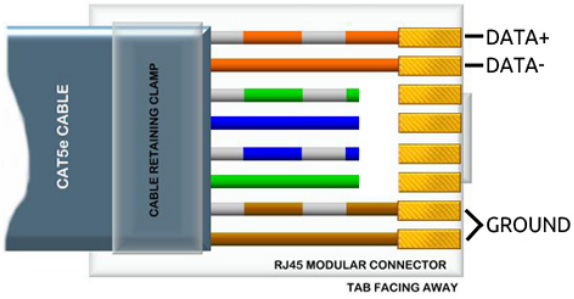
Installazione - *Installation*



Rules for using Ethernet cables

4-twisted pair ISO/IEC 11801 Category 5 or higher cable wire pair numbering and color in accordance with ANSI/TIA/EIA-568 scheme T568B.
Using Ethernet standard cables for Ethernet 10base-T/100base-T, known as Cat5, Cat5e or Cat6, may be used for DMX in many circumstances with identical results to EIA-485 cable.

Pin	Function	DMX pin	Color
1	Data 1 +	Pin 3	White/Orange
2	Data 1 -	Pin 2	Orange
3	Data 2 +	Pin 5	White/Green
4	Optional DC+ (eg. 5V)	-	Blue
5	Optional DC+ (eg. 5V)	-	White/Blue
6	Data 2 -	Pin 4	Green
7	Common (0V)	Pin 1	White/Brown
8	Common (0V)	Pin 1	Brown



Wires 4 and 5 are used for various purposes in other wiring standards, including telephone ringing voltage. Some DALCNET products require low voltage DC power may use these wires for this purpose. Because of these various uses, misplugging unlike systems could cause serious damage.

The cable must be suitably mechanically protected from abrasion and crushing. Cat5 cables are not very physically robust. Do not use them unless they are well protected.
The cable must not be subjected to repeated bending. Cat5 cables have stiff cores that will break after a few flexings.
There must be no sources of high-energy electromagnetic interference nearby. Cat5 cables (the unshielded type, which is the most common) do not provide the same degree of protection from interference as a proper EIA-485 shielded cable.
Ethernet cable cores are small-gauge and fragile and are not suited to screw-down connectors and terminals. The action of screwing down on to a cable core will often break it or weaken it so it breaks later. Cat5 and similar wire should only be terminated in insulation-displacement connectors or in pressure terminals with protective leaves suitable for fine-gauge signal wires. The cable should be secured so that no mechanical strain is put on the cores.

The maximum length recommended for Cat5 cable used for DMX is shown as 90m. In practice the cable is capable of somewhat longer distances when carrying DMX signals. The 90m value is given for a different reason: it ensures that if a system is built based on Cat5 cable it is potentially possible to upgrade it later to carry Ethernet signals.
However, in the meantime, limiting the cable length to 90m means that it may be possible to upgrade. If Cat5 cable are run longer than 90m then it will not be possible to re-utilise them to carry Ethernet later.

Warning: Accidental connection to non-DMX512 equipment likely to be encountered (e.g., an Ethernet Hub at a patch bay) may result in damage to equipment.
Ethernet cable used for DMX512 and wired on RJ45 connectors must not be plugged into either Ethernet equipment, such as hubs, switches, computers, modems or data terminals nor into telephone equipment. Such connections may cause severe damage or malfunction.
Ensure that Ethernet cables wired for DMX512 are clearly marked to advise users against mis-plugging with incompatible equipment. Particular attention should be given to patch bay systems in proximity to similar Ethernet patch bays.

Note Tecniche - *Technical Notes*

Installazione:
• L'installazione e la manutenzione deve essere eseguita solamente da personale qualificato nel rispetto delle normative vigenti.
• Il prodotto deve essere installato all'interno di un quadro elettrico protetto da sovratensioni.
• Il prodotto deve essere installato in posizione verticale o orizzontale con il frontalino/etichetta verso l'alto o in verticale; non sono ammesse altre posizioni. Non è ammessa la posizione bottom-up (con frontalino/etichetta in basso).
• Mantenere separati i circuiti a 230V (LV) e i circuiti non SELV dai circuiti a bassissima tensione di sicurezza (SELV) e da tutti i collegamenti di questo prodotto. E' assolutamente vietato collegare, per qualunque motivo, direttamente o indirettamente, la tensione di rete 230V al bus o ad altri parti del circuito.

Comandi:
• La lunghezza e la tipologia dei cavi di collegamento ai bus (DMX512 o altro) deve rispettare quanto definito dalle specifiche dei rispettivi protocolli e dalle normative vigenti; vanno isolati da eventuali cablaggi o parti a tensione non SELV. Utilizzare cavi in doppio isolamento schermati e twistati.
• Tutti i dispositivi ed i segnali di controllo collegati ai bus (DMX512 o altro) devono essere di tipo SELV (gli apparecchi collegati devono essere SELV o comunque fornire un segnale SELV).

Installation:

• Installation and maintenance must be performed only by qualified personnel in compliance with current regulations.
• The product must be installed inside an electrical panel protected against overvoltages.
• The product must be installed in a vertical or horizontal position with the cover / label upwards or vertically; Other positions are not permitted. It is not permitted to bottom-up position (with the cover / label updown).
• Keep separated the circuits at 230V (LV) and the circuits not SELV from circuits to low voltage (SELV) and from any connection with this product. It is absolutely forbidden to connect, for any reason whatsoever, directly or indirectly, the 230V mains voltage to the bus or to other parts of the circuit.

Command:
• The length and type of the connection cables at the BUS (DMX512 or other) use cables as per specification of the respective protocols and regulations and they should be isolated from every wiring or parts at voltage not SELV. Use double insulated shielded and twisted cables.
• All the product and the control signal connect at the bus (DMX512 or other) must be SELV (the devices connected must be SELV or supply a SELV signal)