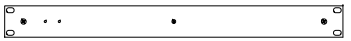
DEMULTIPLEX-60



Contents

1.General description

Demultiplex-60 is a 60 channels conversor of digital signal received in USITT DMX-512 protocol,to analog signal 0-10V d.c. with common negative.

It has two,5 contacts,XLR connectors,one male and other female for the input and output of the DMX signal.The analog outputs are made through 5 Sub D 15 contacts female connectors.
The coding of the channels of each Demultiplex-60 is made through the miniswitch located inside the device.

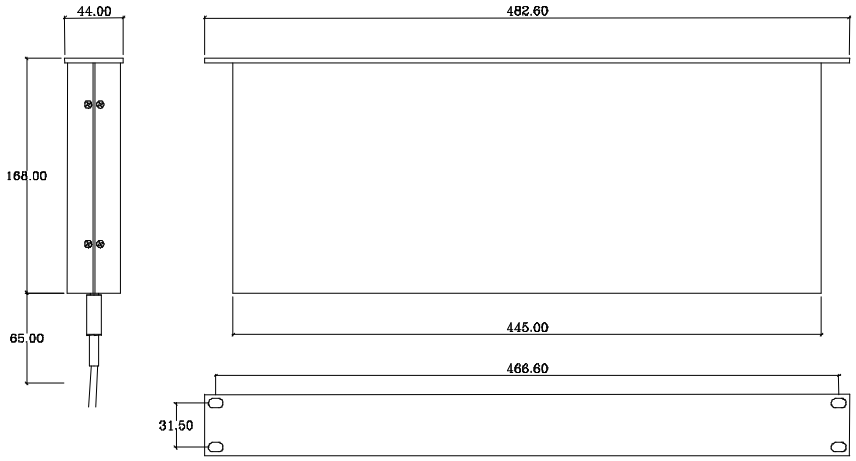
It has a red led for signaling that the device is under voltage and another green led for signaling that the DMX signal is received in the right way.

2.Characteristics

Power supply	220V 50Hz monophase
Power absorbed	15W
Protection fuse	5x20 1 A F.F.
Digital input signal	USITT DMX-512 1990
Digital output signal	USITT DMX-512 1990
Analog output signal	0-10V c.c.
Intensity max. Per channel	10 mA
Digital input connector	XLR 5 contacts male
Digital output connector	XLR 5 contacts female
Analog outputs connectors	Sub D15 contacts fem.
Front panel dimmensions	482 x 44mm
Window to fix	450 x 40mm
Net Weight	3 Kg

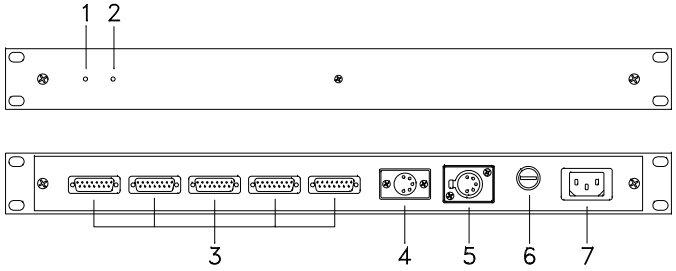
3.Measurements

Figure 1



4.Connections

Figure 2



1.- ON led
2.- DMX signal led
3.- Analog outputs 0-10V
4.- DMX signal output
5.- DMX signal input
6.- Protection fuse
7.- Power supply 220V 50Hz

	FRESNEL S.A.	DC-01
	STATEMENT OF COMPLIANCE	FECHA: 1/1/98

We hereby declare that the product:

Brand: STRONG

Model: DEMULTIPLEX – 60

Year of construction: 2001

Conforms to Directive 73/23 in respect of safety requirements for electrical material,to be used within specific voltage limits, and to Directive 89/336 in respect of the electromagnetic compatibility of equipment,systems and installations.

Sole Administrator

Angel Torrecillas Redón Barcelona, 2 January 2001

Fresnel S.A.

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7.Most common problems

Problems	Usual causes	Solutions
Don´t lid the ON led	The unit hasn´t power	Check mains connection
	Faulty fuse	Replace fuse
Don´t lid the SIG led	Defective DMX signal.	Check installation of DMX line(See part 4)
The unit hasn´t the outputs on the choose channels.	Miniswitch incorrectly installed	Check assignment of channels. (See part 5)

If the problem persists despite these measures, contact the Technical Support Service of FRESNEL S.A.

Telf: 34 (93)210 7351 / 2199460
Fax:34 (93)213 7661

For connecting the device to a power supply,use the standard plug that is supplied with him, using 1mm2 section cables.

The cables to be used for connecting the DMX signal should be braided pair and shielded,low capacity, with a type 24AWG (0.2047mm2)minimum calibre and an impedance of 120 Ohms.It is extremely important to remember that the type of cable used,significantly conditions any problems that may arise subsequently due to the introduction of parasites through the line.

Similarly,DO NOT USE the type of shielded cables usually used for microphone connection.

The cables should be connected in such a way that pin 1 of the male connector at one end coincides with pin 1 of the female at the other , and so on respectively for pins 2 and 3: pins 4 and 5 are not used.

The maximum number of devices that can be connected to the same line without installing an amplifier or a splitter is 32 and the maximum length is 1 km, but it is advisable to use an amplifier over 500 meters.

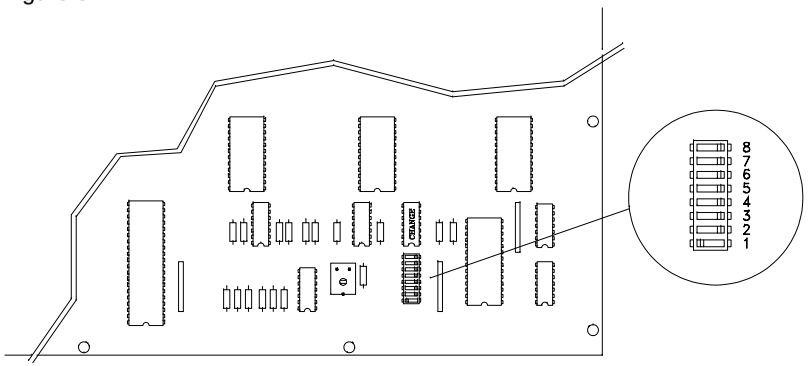
The analog outputs of each one of the channels through the Sub D connectors is as follow:

Connector	Pin/Channel
1/12	1/1 2/2 3/3 4/4 ....10/10 11/11 12/12 13,14,15/0Vcc.
13/24	1/13 2/14 3/15 .... 10/22 11/23 12/24 13,14,15/0Vcc
25/36	1/25 2/26 3/27 ....10/34 11/35 12/36 13,14,15/0Vcc
37/48	1/37 2/38 3/39 ....10/46 11/47 12/48 13,14,15/0Vcc
49/60	1/49 2/50 3/51 ....10/58 11/59 12/60 13,14,15/0Vcc

5.Giving codes

Inside the demultiplex are located miniswitch for changing the codes of the 60 channels of the unit.

Figure 3



The channel asignment depending on the position of the miniswitch is as follow:

Position ON =1		Position OFF =0	
12345678		12345678	
00000000	No output	00000100	229-289
10000000	1-60	10000100	241-301
01000000	13-72	01000100	253-313
11000000	25-84	11000100	265-325
00100000	37-96	00100100	277-337
10100000	49-108	10100100	289-349
01100000	61-120	01100100	301-361
11100000	73-132	11100100	313-373
00010000	85-144	00010100	325-385
10010000	97-156	10010100	337-397
00001000	109-169	00001100	349-409
10001000	121-181	10001100	361-421
01001000	133-193	01001100	373-433
11001000	145-205	11001100	385-445
00101000	157-217	00101100	397-457
10101000	169-229	10101100	409-469
01101000	181-241	01101100	421-481
11101000	193-265	11101100	433-493
00011000	205-265	00011100	445-509
10011000	217-277	10011100	457-512

6.Maintenance

6.1 Regular cleaning

To prevent the accumulation of dust and dirt which may impair correct functioning, the equipment should be cleaned regularly.

For cleaning use a soft ,slightly damp cloth.If there is considerable amount of accumulated dirt,apply a little liquid detergent to the cloth.

ATTENTION!: Do not use solvents or products containing alcohol. Makesure that no liquids get inside the equipment.

6.2 Changing a fuse

For changing a fuse unplug the unit from the mains,turn the lid of the fuse box anticlockwise until it can be removed,put the new fuse in place and screw the lid back on again .

IMPORTANT: use only the indicated fuses.