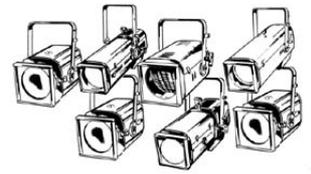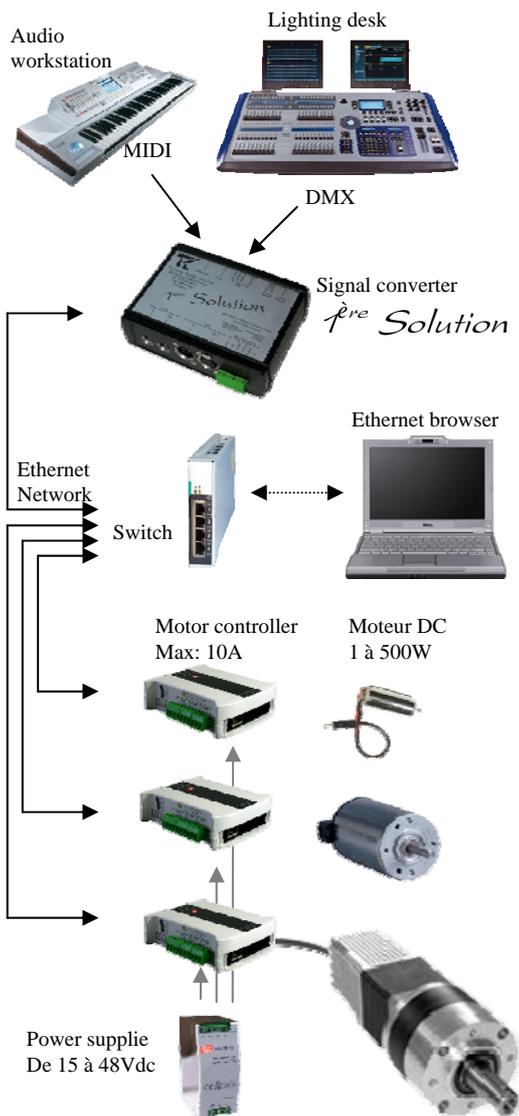# 1ère Solution

DMX/Midi Converter for motor control over Ethernet

With the converter '1ère Solution' you can now motorise your performances and robotic creations over Ethernet, thus adding movement and automation for a wide range of installation and performance applications in a simple user environment.

Now the speed, direction, position, and rotation of motorized theatrical elements or music instrument can be mastered. Absolute precision ! Permanent torque !

Drive a complete machine automation sequence from your DMX lighting board <u>without additional levels of programming.</u>

Audio workstation

Lighting desk

MIDI

DMX

Signal converter
1ère Solution

Ethernet browser

Ethernet Network

Switch

Motor controller
Max: 10A

Moteur DC
1 à 500W

Power supplie
De 15 à 48Vdc

From the output of the lighting desk in DMX or from the audio workstation on Midi, the '1ère Solution' interface then passes the control data over Ethernet to the motors. All cabling of the system is run on IP protocol standard RJ45 Ethernet cabling.

Multiple motorized devices simply require an Ethernet switch to distribute the signal.

16 motors can be connect to the converter
3 channel by motor
Manuel control for 2 motors

Configuring the motors is done using a computer, but once configured and during a performance the computer is not necessary as the show is driven from either the DMX or Midi signals.

The configuration of the motor parameters is simply accessed and performed on web pages.

The essential parameters include:

For the Converter: - The IP addresses of the Ethernet motor controller.
                             - The mapping of DMX or Midi signal.
                             - The motor modes (rotating or displacing).
For the Ethernet motor controller:
                             - The characteristics of the motors and the auto tuning of the system.

Motor can vary between 1w to 500w depending on the required power.

Motor can be powered from 12Vdc to 48Vdc without changing the power supplies.

Motor controllers allow for motors to be automatically calibrated (auto tuning) during the creation of a new motorized device.

The range of movement is calibrated each time the system is started up. The working range is automatically divided over the range of the fader.
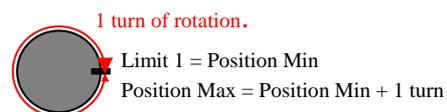
2 motor modes:

Displacing

Limit 1 = Position Min

Displacement range.

Limit 2 = Position Max

Function in 16 bit: 65025 steps between the two

1st channel = speed
2nd channel = 255 steps range of displacement
3rd channel = 255 steps from the 2nd channel

Rotating

1 turn of rotation.

Limit 1 = Position Min
Position Max = Position Min + 1 turn

Functions like a gobo wheel (see user manual).

1st channel = speed
2nd channel = 7 Functions (positioning, rotating, scan, etc)
3rd channel = Function of your choice