



Structured Cabling

OPTICAL FIBERS, DATA NETWORK, DOMOTICS

ARMONICA

TECHNOLOGICAL SYSTEMS

armonica-tech.com

*“Let’s make spaces intelligent
to live them at the best”*

About

Cutting-edge Electrical Systems

Armonica was born in 2003 as the brainchild of Paolo Molino and Fabio Poggio, combining the competences acquired in the fields of **engineering** and **architecture** to create cutting-edge electrical systems.

After having gained a position on both the Italian and international markets, we can meet the most demanding needs of private and corporate customers with **innovative solutions**, thanks to a technological team constantly updated in the fields of **domotics, building automation, energy efficiency** of both electrical and digital systems as well as of optical fiber networks.

We therefore represent today a well-established reference point concerning **domotics, video surveillance, lighting** and **museum installations**.

We distinguish ourselves among electrical systems companies for our constant training and update



Companies and museal installations require a **strongly suggestive visual component**. And there the technical expertise is combined with our particular propensity for both **design** and the **emotional dimension**. The choice of **materials, lighting and interventions**, during the design phase first and the operational one in a second moment, is in fact what determines the success of an outcome.



We communicate emotions

What will **surprise** and **excite** the visitors in showrooms and great expositions will be a **technologically advanced and functional installation** able to awaken sensations, stimulate the observation and to **convey an unforgettable experience** to the audience.

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Structured Cabling

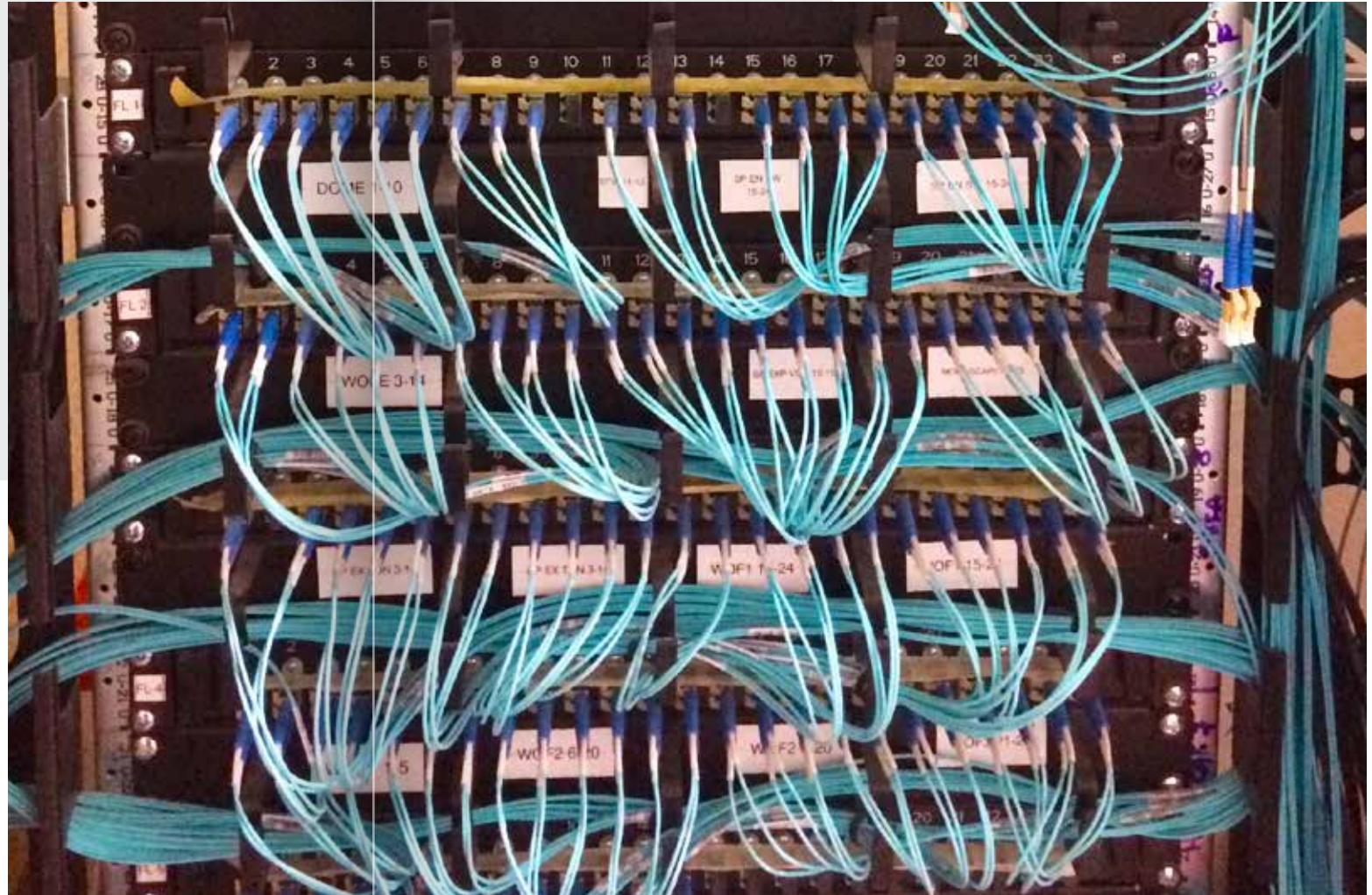
*Cutting-edge
Electrical Systems*

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In which contexts are they employed?

Structured cabling allows the creation of a network integrating the different communication devices within a building.

They are therefore employed in the structure of domotic systems for both private homes and business facilities, but also of multimedia systems for museal installations, exhibitions and expos.



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Can benefit from structured cabling:

1. Building automation system.
Intelligent Building Management System
Energy Management System
SCADA
2. Lighting Control System
Dimming & Dali System
Lighting Projection System
Theatrical and Stage Lighting System
3. HVAC System
4. Sound Diffusion System
5. Multimedia and Optical Fiber System
6. Converged Network system
Active Network & Passive
7. Audio Visual System for Meeting rooms & Ballrooms
Video Conferencing System
8. Security System
Security Access control System
CCTV with Video Management
Video And Audio Intercom System
Intrusion Alarm System
Disabled Toilet Alarm System
Nurse Calling Station
9. Fire Alarm System
Emergency Central Battery System
10. PV Solar System

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STRUCTURED CABLING

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Modern private homes and buildings for commercial or industrial use need **cutting-edge structured cabling** compliant with all the **technical standard regulations** for both the information technology and the telecommunications sectors.



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Armonica's expertise, associated with the acquired **certifications** and the most performing machinery employed, will guarantee a quality intervention in managing of the connection of the network internal signals.

Case study

Type of intervention

Multimedia Systems Installation

Location

EXPO 2020 in Dubai, Azerbaijan pavilion

Place and year of realization

Dubai, United Arab Emirates – 2021

Demand

Simmetrico Operations DWC LLC has commissioned the Armonica team to build the multimedia systems of the Azerbaijan pavilion for EXPO 2020 in Dubai.





EXPO 2020 in Dubai

Azerbaijan pavilion

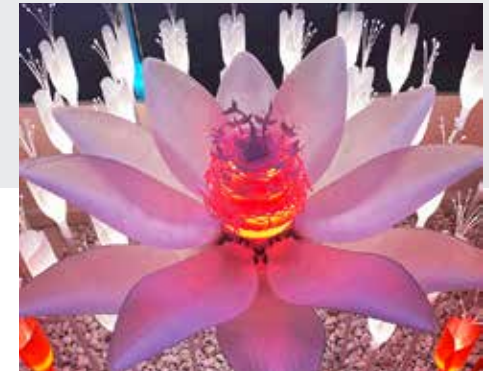
The work

All the electrical and signal wiring (audio and video) were created by the Armonica team, as well as the assembly and calibration of all the LED screens in the pavilion.



SOME NUMBERS OF THE PROJECT:

- Over 4000 meters of network cable to manage video signals and control the various devices that carry out the interactions.
 - About 1400 meters of audio cable, 1500 meters of DMX cable for controlling the lights of the Exhibit.
 - Installation and wiring of 700 LED flowers and all the external lighting fixtures of the pavilion.
 - Assembly and wiring of the entire internal and external audio system of the pavilion.
- Implementation and programming of the entire control system for managing the lights in the pavilion, using the DALI system, thanks to which it is possible to remotely control the lighting and lighting scenarios of the entire pavilion.
- With the help of an iPad, the user can set preconfigured scenarios or individually manage the switching on and off of the lights.



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Case study

Demand

The main contractor Interfiere srl was awarded the contract for the construction of the exhibition area of the **STEP FuturAbility District Museum** at the new NEXT spaces of Fastweb spa.

Armonica was involved in the creation of the multimedia system of the space with a specific request aimed at accompanying the visitor on an “active visit” through the use of the dedicated App to be installed on smartphone.

Type of intervention

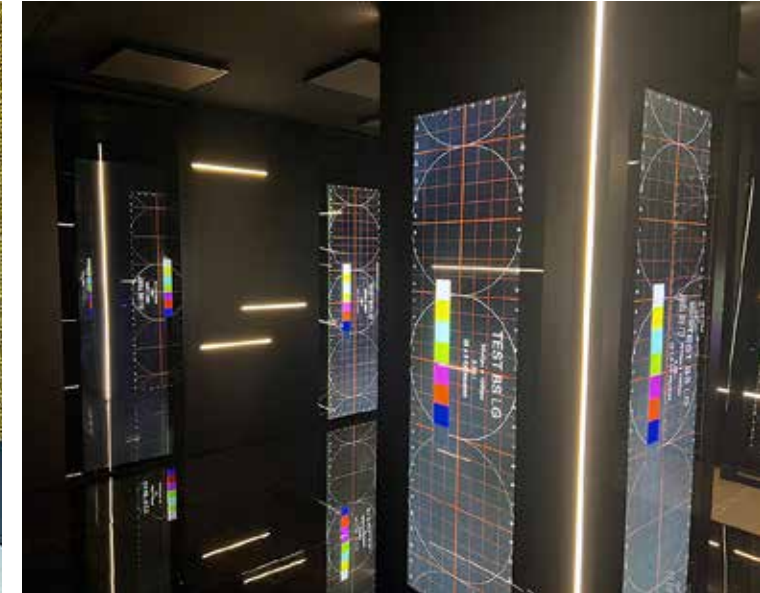
Multimedia Systems Installation

Location

STEP Museum – FuturAbility District

Place and year of realization

Milano, Italy – 2022



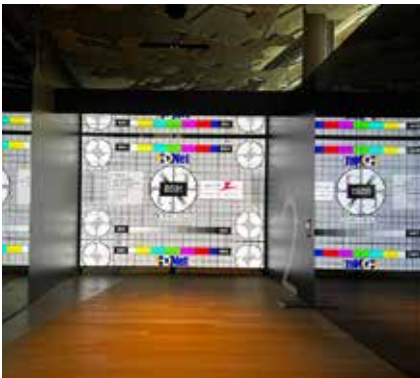
Our Solution

We have chosen the latest technologies available in the field of interactivity with the aim of being able to integrate them perfectly into space and make the visit to the museum “Active”.



The Armonica technical team took care of the laying and distribution of the network cabling for the control of all the equipment, the connection of the **optical fiber** for the transmission of video signals and the connection of the entire audio system of the installations (managed by a digital processor).

He also managed the assembly of three **videowalls** consisting of 55-inch seamless monitors and two large LED walls. One of these was placed inside a room completely covered with mirrors while the second is made up of six totems 6 meters high, each capable of rotating 180 degrees in order to be seen even from the square outside the space. These are also directly linked to the video direction for the broadcasting of contents during the conferences.



The space, thanks to its multifunctional character, can be used in “event mode” thus providing a visiting experience or for “individual installations” to show customized contents created by those who rent the space.



Case study

Type of intervention

AVL Installation

Location

Heydar Aliyev Center Baku

Place and year of realization

Baku, Azerbaijan - 2013



Our Solution

Our project involved **the use of an ultrasonic sensor with regulation of the range** to guarantee a greater reliability, if compared to a pressure pad.

Today, the exhibition is still open and the sensor is working properly, without requiring maintenance or substitution.

Demand

In 2013 we were asked to develop and install some **pressure sensors** to activate a sequence of in sync video projections and audio events on a raised platform in the context of a permanent exhibition.





Type of intervention

Domotic Systems

Location

Industrial Warehouse

Place and Year

Moncalieri (TO), Italy - 2015



CASE STUDY



Demand

In a spacious warehouse used as a showroom it was required the implementation of a **domotic system** to control the existing alarm system, the opening and closing of the entry doors for both the visitors and the staff, as well as to control and manage an air-conditioning system and the installation of photovoltaic panels for energy saving.

Our Solution

We decided to manage everything by means of a single **K-blue control system**, using specific structured cabling with different modules communicating through network connections.

Using a **customized graphical interface**, the client can manage each component of the system, from the photovoltaic system consumption to the status of the alarms, as well as turning off the lights remotely.



Interface **K-blue**

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How We Work

- » **Study and creation of the initial project:** the client presents a request that we examine together in order to propose a draft project resolution.
- » **Creation of graphic drawings with a CAD model:** we represent the patterns of all the optical fiber systems and LAN cable for the transmission of both audio and video signals as well as for the connection with the control devices.

- » **Installation of the infrastructures for the passage of the signal cables:** directly on the spot we proceed assembling all the devices (multimedia rack, audio amplifiers, video transmitters and receivers, control monitors).
- » **Final tests:** once completed the cabling of the devices, before programming we perform a test of the lines (fiber and data) to provide a certification for the client. Finally, we program devices and functional tests for all the assembled components.

Our method “step by step”

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HOW WE WORK



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STRENGTHS



Strengths

Our firm boasts **more than 15 years of experience** in the fields of domotics and design of structured cabling, well-established in the **Italian and international markets**, with relevant collaborations in the world of both museal and corporate installations, as well as in the private domotic sector.

Why Choose Us

We boast a deep knowledge of the sector, also thanks to the expertise of our **specialized and constantly updated team**, that is composed by a variegated **pool of Italian workers**. We employ **cutting-edge equipment and machinery** as well as devices to test and certify both optical fibers and LAN networks.

Headquarters in Dubai

Armonica has **operational headquarters in the Arab Emirates, in Dubai**, to be actually present on the territory and to combine its expertise to a deeper **knowledge of the current regulations**. The close proximity to the clients allows us to **know the most required typologies of interventions and the related technical peculiarities**.



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Certifications:



ARMONICA

Dubai Subsidiary

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