

# TECHNOLOGY FOR FOUNTAINS

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In the field of fountain technology, and thanks to our unwavering commitment to quality, excellence and customer service, SafeRain is proud to present its most ambitious range yet.

**Our intelligent control systems for fountains.**

These types of systems are ideal for working with both static and dynamic architectural fountains.

## 01. STATIC FOUNTAINS

Static fountains are those that we encounter on our daily journeys, bringing life to our parks and squares. They are simple architectural fountains to which we can add an easy-to-use intelligent control system.

These types of architectural fountains are ideal for use with our **ESSENTIAL control panel**, which offers all the features necessary for optimal and simple operation, both for switching the fountains on and off and for controlling the lighting system.

## 02. DYNAMIC OR MUSICAL FOUNTAINS

Dynamic fountains are those that allow us to create movement in the water and, in turn, synchronize this with the lighting. They are also known as **dancing or ballerina fountains.**

As an added bonus, they offer us the possibility of including a third element: **music.**

For installations that require a simple and preset solution, we offer t**he ESSENTIAL PLUS control panel**, the most basic option within our dynamic fountain systems.

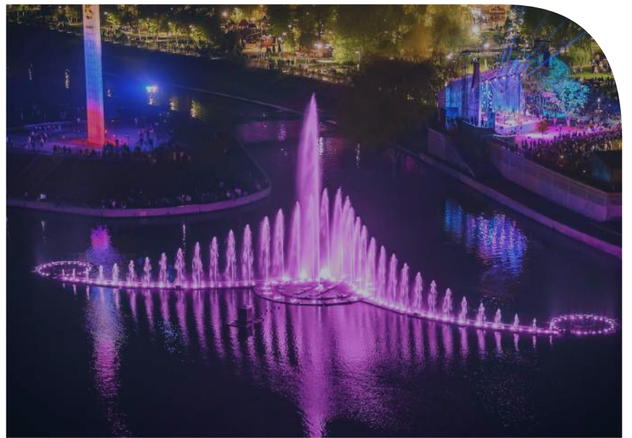
For clients seeking more advanced solutions in the management of these fountains, our intelligent control system is born:

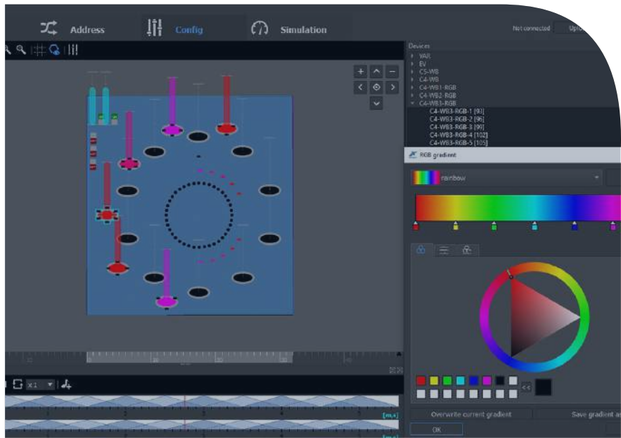
### SMART FOUNTAIN MANAGER (SFM)

With this system, we have created a complete and tailored solution for controlling architectural fountains. We offer **three versions**, depending on the complexity of the project:

- PRO
- PROMAX
- PROMAX MUSIC

Whatever type of architectural fountain you have, we have an intelligent control system to manage it. With these systems, we will bring dynamism and splendour to any of your projects.





# INTELLIGENT CONTROL SYSTEMS FOR FOUNTAINS

| | | | | HYDRAULIC | | LIGHTING | TECHNOLOGY | | | | PROGRAMMING | | FUNCIONALITIES | | | | TYPE CONTROL PANEL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N° HYDRAULIC CIRCUITS | HEIGHT CONTROL JETS | LIGHTING CONTROL | FOUNTAIN SOFTWARE | DMX PROTOCOL | REMOTE CONTROL | MUSIC + MUSIC ANALYZER | MODIFIABLE SCENARIO | 1 SET WATER INCLUDED | WEEKLY SCHEDULE | ASTRONOMICAL PROGRAMMING | ANEMOMETER | AUTO FILING | STANDARD PANEL | CUSTOM PANEL |
| FOUNTAIN TYPES | STATICS | ESSENTIAL PANEL | | 1 pump (no VDF) | NO Incl. | PARTIAL | NO Incl. | NO Incl. | NO Incl. | NO Incl. | NO Incl. | NO Incl. | Include | NO Incl. | NO Incl. | NO Incl. | Include | Include |
| | DINAMIC & MUSICAL | ESSENTIAL PLUS PANEL | | 3 pumps 3 VDF | Include | PARTIAL | NO Incl. | NO Incl. | NO Incl. | NO Incl. | NO Incl. | Include | Include | NO Incl. | OPTIONAL | OPTIONAL | NO Incl. | Include |
| | | SFM | PRO | 6 pumps 6VDF x 15 outlets | Include | PARTIAL | Include | NO Incl. | OPTIONAL | NO Incl. | NO Incl. | Include | Include | NO Incl. | Include | Include | Include | Include |
| | | | PRO MAX | 64 pumps 64 VDF | Include | TOTAL | Include | Include | Include | NO Incl. | Include | Include | Include | Include | Include | Include | NO Incl. | Include |
| | | | PRO MAX MUSIC | Unlimited | Include | TOTAL | Include | Include | Include | Include | Include | Include | Include | Include | Include | Include | NO Incl. | Include |

## CAPTION

- No include
- Include

SFM =
Smart Fountain Manager

HYDRAULIC:
- **NO. OF HYDRAULIC CIRCUITS:** It usually tells us the number of pumps and nozzles, which in turn determines the size of the fountain.
- **CONTROL HEIGHT JETS:** Possibility to vary the height of the jets including variable frequency drives.

LIGHTING CONTROL:
- **PARTIAL:** Lighting colors are managed by a standard RGB controller external to the control software.
- **TOTAL:** Each color of each spotlight is individually controlled with the fountain software.

TECHNOLOGY:
- **FOUNTAIN SOFTWARE:** Fountain control is done from software designed specifically for this function.
- **DMX PROTOCOL:** The DMX protocol is used to control each element of the fountain.
- **REMOTE CONTROL:** It is possible to view and manage the fountain software remotely from a PC or smartphone.
- **MUSIC AND MUSIC ANALYZER:** The movement of water responds to a musical choreography, either created specifically by programming or by the automatic response of an integrated musical analyzer.

PROGRAMMING:
- **DEFINITION OF MODIFICABLE SCENARIO:** The original scenario, which includes the existing hydraulic circuits and the existing fountains, can be adapted according to the specific requirements of the installer.
- **1 SET OF WATER INCLUDED:** The control panel includes the programming of a choreography of water game for a specific duration.

FUNCIONALITIES:
- **WEEKLY HOURS:** Possibility to configure different operating hours for pumps and spotlights, from Monday to Sunday.
- **ASTRONOMICAL PROGRAM:** Allows you to set different operating times for pumps and spotlights according to the patterns of sunlight.
- **ANEMOMETER:** A device that measures the wind speed at a fountain, allowing appropriate decisions such as lowering jets or shutting down depending on the speed.
- **AUTOMATIC FILLING:** System that measures the height of the water in the fountain glass to make decisions such as adding water, turning off submerged pumps, turning off spotlights, etc.

TYPE OF PANEL:
- **STANDARD ELECTRICAL PANNEL:** Immediate availability for delivery.
- **CUSTOMIZED PANNEL:** Designed and assembled specifically for the needs of a particular foutnain The delivery time depends on the complexity of the project.

# STATIC FOUNTAINS

These are the ones we find on our daily walks, bringing life to our parks and squares.

These are simple architectural fountains in which we can include an **easy-to-use intelligent control system.**

## ESSENTIAL CONTROL PANEL

These types of architectural fountains are ideal for use with our **ESSENTIAL CONTROL PANEL**, which offers all the necessary features for optimal and simple operation, both for switching the fountains on and off and for controlling the lighting system.

This panel comes ready to **“plug and play”**, following guidelines agreed upon with the customer. It allows us to program a weekly operating schedule. It does not allow for subsequent modifications to the factory settings.

Our Essential control panel **includes a water pump without a variable frequency drive (VFD)** in its standard format and can also be customised. The standard version **is ideal for installation in floating fountains** that do not require excessive operational control.





# DYNAMIC FOUNTAINS

These are fountains that allow us to create movement in the water and synchronise it with the lighting. They also offer us the possibility of including a third element: music.

Dynamic fountains, also known as dancing fountains, are specially designed to add spectacle to your water show.

Through our intelligent control systems, we achieve **perfect synchronisation of movement between water, light and sound** that will leave no visitor indifferent.

Movement and music on demand.

This will turn the spaces where they are installed into small works of art scattered throughout our cities.



For installations that require a simple and preset solution, we offer **the ESSENTIAL PLUS control panel**, the most basic option within our dynamic fountain systems. For clients seeking more advanced solutions in the management of dynamic fountains, our intelligent control system is born:

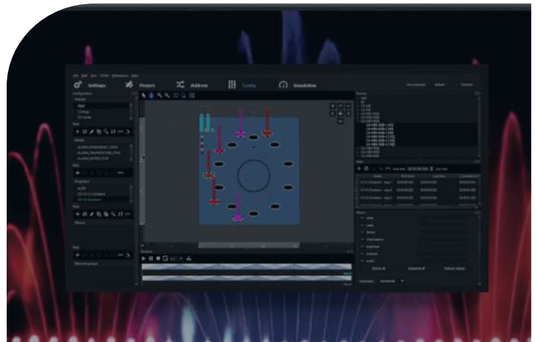
## SMART FOUNTAIN MANAGER (SFM)

With this system, we have created a **comprehensive, customised solution for controlling architectural fountains.** For this type of fountain and water show, **we offer the following intelligent control systems** within the SMART FOUNTAIN MANAGER (SMF) range:

- PRO
- PROMAX
- PROMAX MUSIC

The choice of one model or another will depend on the features we want to equip our architectural fountain with.



# PANEL ESSENTIAL PLUS

**Our ESSENTIAL PLUS intelligent control system is designed to program and control dynamic fountains with factory default settings.**

It offers the possibility of installing up to three pumps with three frequency converters, thus controlling the height of the jets.

It has an on/off switch for the lighting system, weekly programming and a ready-to-use water feature.

If you wish to complete this custom-made panel, we offer the option of including a wind control system and a water level control system.





# SMART FOUNTAIN MANAGER

The Smart Fountain Manager is the master key to exploiting all the possibilities offered by an architectural fountain or water show.

Its software allows us **to manage the water features**, the wide variety of **lighting, the music, the synchronisation between the two** and the interaction with any external elements.

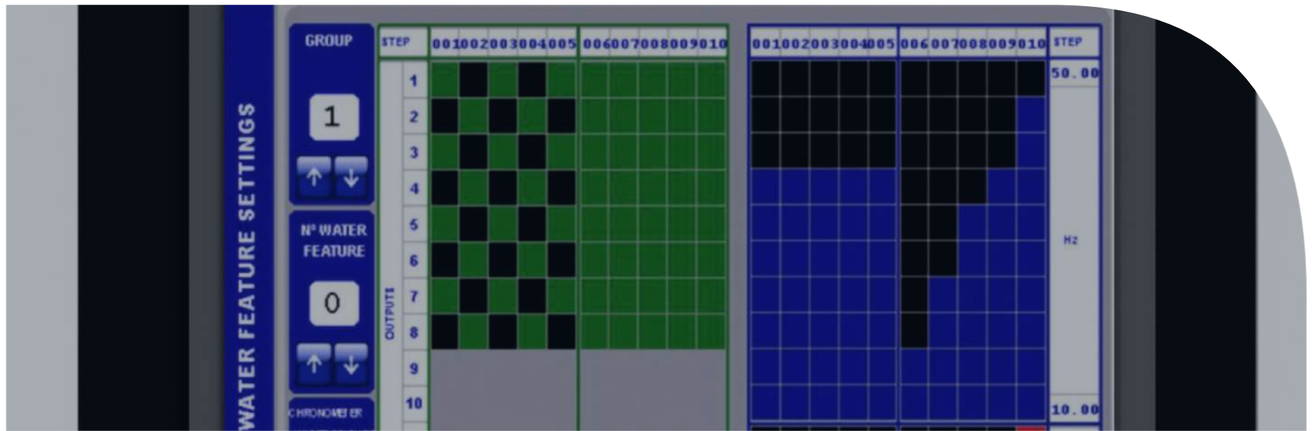
Our intelligent control system solutions are designed **to facilitate the programming of a dynamic or musical fountain.**

We offer three versions of our SMART FOUNTAIN MANAGER (SFM) depending on customer requirements.

Our team of engineers is responsible for studying each project in detail.

This means that the design and manufacture of each control panel is ad hoc.

This is **SafeRain's highest-end range of intelligent control systems.** It is a product developed and manufactured to suit your project.






# SMART FOUNTAIN MANAGER

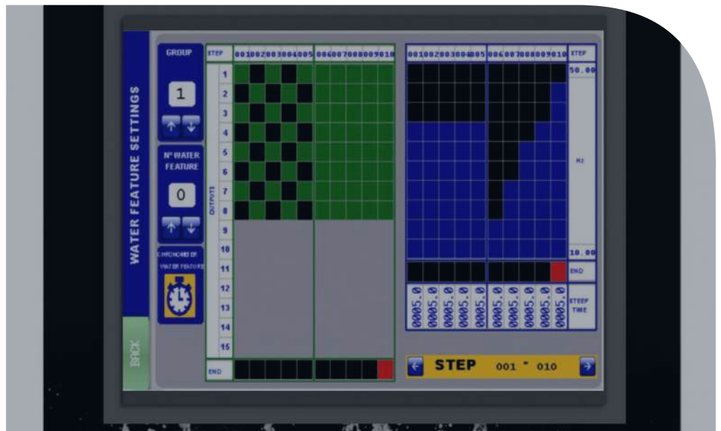
## 01. PRO

Take it one step further with our PRO smart control system.

**Designed to control dynamic architectural fountains without music and where it is not necessary to synchronize the movements of water and light.**

With software developed by SafeRain that facilitates the programming of the architectural fountain and can be used with up to **six (6) pumps and six (6) frequency converters** with up to 15 outputs.

It features a lighting system on/off mode, weekly hourly programming, a ready-to-use water set, wind control module and water level control module.




## 02. PROMAX

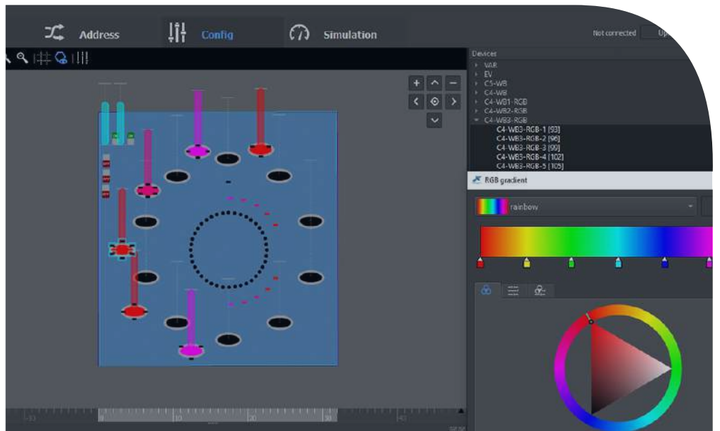
In addition to all the features of the PRO version, we have added DMX protocol, which allows us to synchronize **lighting and water features.**

This system provides **total control of the lights,** colour by colour. It includes astronomical programming, allowing us to distinguish special dates and define scenarios that can be modified in the future.

Ideal for **larger dynamic fountains.**

We can have up to **64 pumps and 64 frequency converters.**

**Remote control** option.




## 03. PROMAX MUSIC

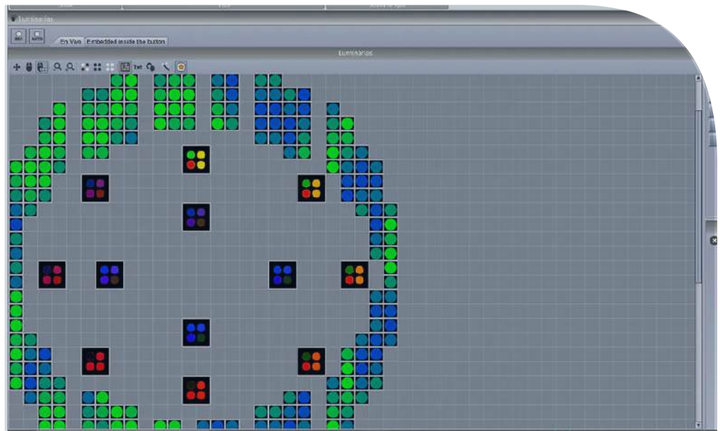
In this intelligent control system, **music is the star element.**

Using its more complex **DMX protocol**, we can include the music function, thus synchronizing all the elements of the musical fountain: hydraulic, musical and lighting.

This allows us to create **unique water shows**, in which water, light and music merge.

It allows us **to manage an unlimited number of elements.** ideal for large dancing fountains.

Optionally, we can include automatic filling and wind control module functions.



# PRO

**SFM PRO offers intelligent control for essential dynamic Fountains.**

SFM PRO is designed to manage **dynamic architectural fountains without musical synchronization and with partial lighting control**, where it is not necessary to coordinate water and light movements with music. There are two options:

## OPCIÓN 1 – NO PITCH MODULATION

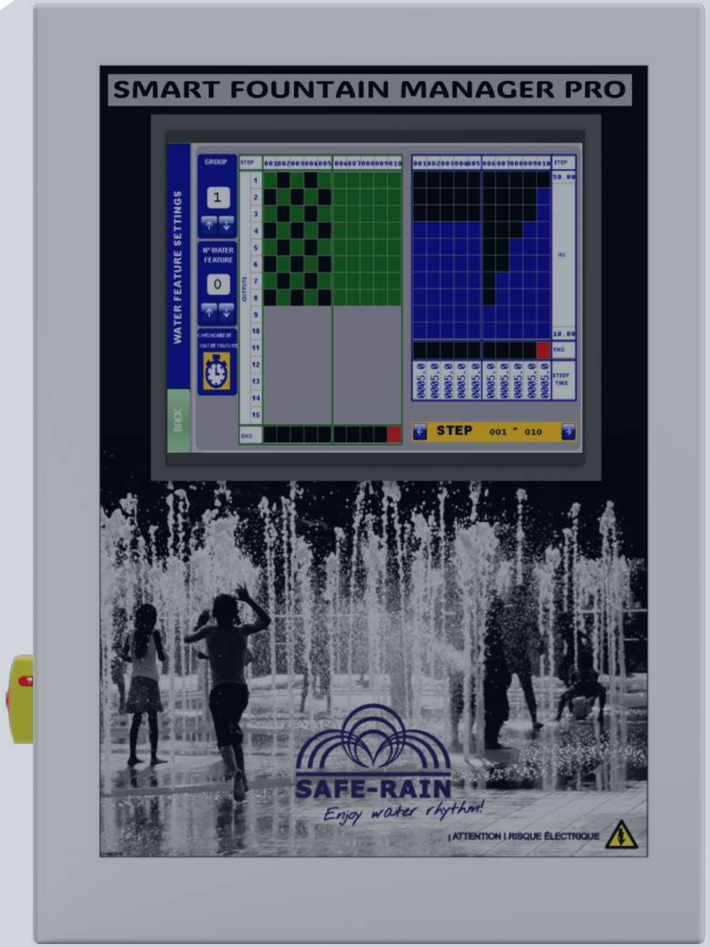
Allows you to control up to **90 water pumps through on/off programming**, generating dynamism by switching all installed pumps on and off.

## OPCIÓN 2 – WITH HEIGHT MODULATION

The control system supports up to **6 water pumps with frequency converters, each with up to 15 controlled water outlets**, allowing precise modulation of the water height.

Both options are easily managed via a **common timeline**, simplifying show programming.

- Partial lighting control
- Remote Control: Optional
- Weekly scheduling
- Switching on and off depending on wind speed
- Water level control in the fountain basin
- Traditional scheduling
- Astronomical clock included



# PRO MAX

**Full control for advanced dynamic fountains (uses DMX protocol).**

This version includes all the features of the standard PRO version, incorporating the **DMX protocol**. This allows for **precise synchronization between lighting and water features, colour by colour.** Designed to achieve more impressive and coordinated shows.

Allows **control of up to 64 pumps with frequency converters**, with no limit on the number of controlled water outlets. Ideal for large-scale fountains.

Includes **astronomical programming**, capable of distinguishing special dates and defining scenarios that can be modified in the future.

**Wind control and automatic filling.** Option to include **remote control.**

This option is easily managed via a timeline, simplifying show programming and offering a fully integrated visual experience.

- DMX control
- Full lighting control
- Remote control
- Weekly scheduling
- Astronomical clock included
- Switching on and off depending on wind speed
- Water level control in the fountain basin



# PRO MAX MUSIC

**Fully synchronizes water, light and sound shows.**

This version makes music the central focus of the show. Thanks to the **DMX protocol**, it allows **Precise synchronization** between all elements of the musical fountain: **water, lighting (colour to colour) and sound**, creating an experience in which all components of the show are seamlessly integrated.

This system supports an unlimited number of frequency-controlled pumps, with no restrictions on controlled water outlets. In addition to the features of SFM PROMAX (wind control, programming astronomical, remote control, automatic filling or specific software for architectural fountains), **PROMAX MUSIC** includes a **music analyzer** through which the water dances to the beat of the chosen melody.

The control panel is easily managed using a timeline, which simplifies the programming of the show for the user.

* Special configurations not included in the standard must be evaluated by the technical department.

- MX control
- Programming and control of musical choreography
- Total lighting control
- Remote control
- Weekly schedule programming
- Astronomical clock included
- Switching on and off depending on wind speed
- Water level control in the fountain basin

