# MDS

by **FERMAX**

# WORLDWIDE LUXURY PROJECTS

The ultimate high performance digital video entry system

**FERMAX**

# What is MDS?

## MDS (MULTIPLEXED DIGITAL SYSTEM)

MDS is the standard for high performance **digital audio and video** entry systems, installed in the world's most prestigious buildings *(see page 16)*.

Recommended in buildings and residential complexes with many users or for facilities where we need to integrate other services and functionalities.
An MDS system includes:

- **Digital audio and video door entry systems.**
- **Intercommunication between accesses, guard units and houses.**
- **Access Control**
- **Elevator control.**
- **Management of automatic devices in the building.**
- **Security and detection system management.**

A single cable **BUS** ❶ runs through the installation communicating all the elements: audio and video entry panels, guard units, homes, access control readers in communal areas, intercom panels and detection zones and automatic devices.

A **Central Unit** ❷ manages the MDS system.
Can control up to 9.999 homes and 32 accesses or guard units. It is possible to connect in series up to 63 UC, extending its capacity. Includes WINCOM+ software developed by FERMAX for programming and management of all the installation parameters.

*Roof*

*1st Block Panel*

*Bus*

*General Entrance Panel*

*2nd Block Panel*

| 3

*Stairs*  *Pool*  *Lifts*  *Gym*  *Tennis court*  *Garage*  *Roofs*

**MDS floor decoders** ❸ (one for audio and one distributor for video) connect the home telephones and monitors to the installation BUS. Communication between homes and accesses is private.

*Audio decoder*  *Video distributor*

**THE MOST RELIABLE AND STABLE SYSTEM ON THE MARKET**

The MDS system design guarantees its reliability in any project, no matter how large the distances and number of houses.

The structure and wiring allow us to isolate and make blocks and homes independent, so that a malfunction in one section does not affect the rest.

Integrated "No limits" solutions

## Communication

An MDS system enables audio/video/data communication between guard unit, residents and visitors at any point of the installation.

## Access control

To manage presence and access to restricted areas easily and efficiently by means of permits, restrictions, etc.

## Automation

Of common services: irrigation activation, lighting, doors, swimming pools ...

## Security

In common areas: rooftops, lifts, accesses.  Technical alarm alerts and sensor activations are received in the guard unit.

GENERAL ENTRANCE          COMMON ZONES          INTERIOR BLOCKS          HOUSES

An MDS **video entry panel** allows audio and video communication between the general entrance, the block entrance and the homes.

The outdoor panel lets you search for residents in the electronic directory by using the keys  ◀  ▶ , once found, press the  ▲  key to call the house.

If user's number known, dial it and press  ▲

With built-in code-operated door opening system.  Each user has their own entry code.

Other access control readers can also be integrated: finger, proximity ...

*MDS Digital Panel with fingerprint reader*

6 |

The **Guard Unit** acts as a call administration centre, or panic call receiver, receiving the alerts from the homes and the detection system installed. The Guard Unit can set up communication with any point of the installation.

It has a graphic screen that reports all incidents. There are three action modes: Day, Night and Mixed. Several Guard Units may run simultaneously in one installation ...

## SYSTEM PROGRAMMING AND ADMINISTRATION

The MDS system management is stored in the Central Unit's internal memory.

The system can be programmed manually from the outdoor panel or by means of a PC, using the WINCOM+ software developed by Fermax. The changes (user authorizations-cancellations, permits, automatic devices, etc) can be managed by PC located in the control or administration area.

Motorization and management can also be done by remote control via IP. IP decoder (ref.1307) is required.

An MDS system lets you manage user access to the different common areas of the complex or building: garages, rooftops, meter zones, swimming pool, tennis, gym, etc. To this end, **readers** are installed at the entrances of those areas, where the users must identify themselves.

Each Central Unit can manage **up to 32 accesses** (between outdoor panels, readers and up to 10 guard units) and **1.020 users** for access control. Scheduled restrictions such as permits by days of the week can be set up, as well as other more advanced functions like "anti-passback" and capacity control.  All the information on users (authorizations/cancellations/permits/ restrictions) and accesses (entrances/exits/holidays and vacation periods) is stored in the system/PC.

There are 5 different identification technologies for access control:
- **Proximity.** The identifier is a proximity card or key ring.
- **Keypad.** Users have to enter their code via the keypad.
- **Fingerprint.** You have to slide your finger through the sensor.
- **Bluetooth.** Users have to put their mobile near the panel.
- **Radiofrequency.** A remote control opens the access door.
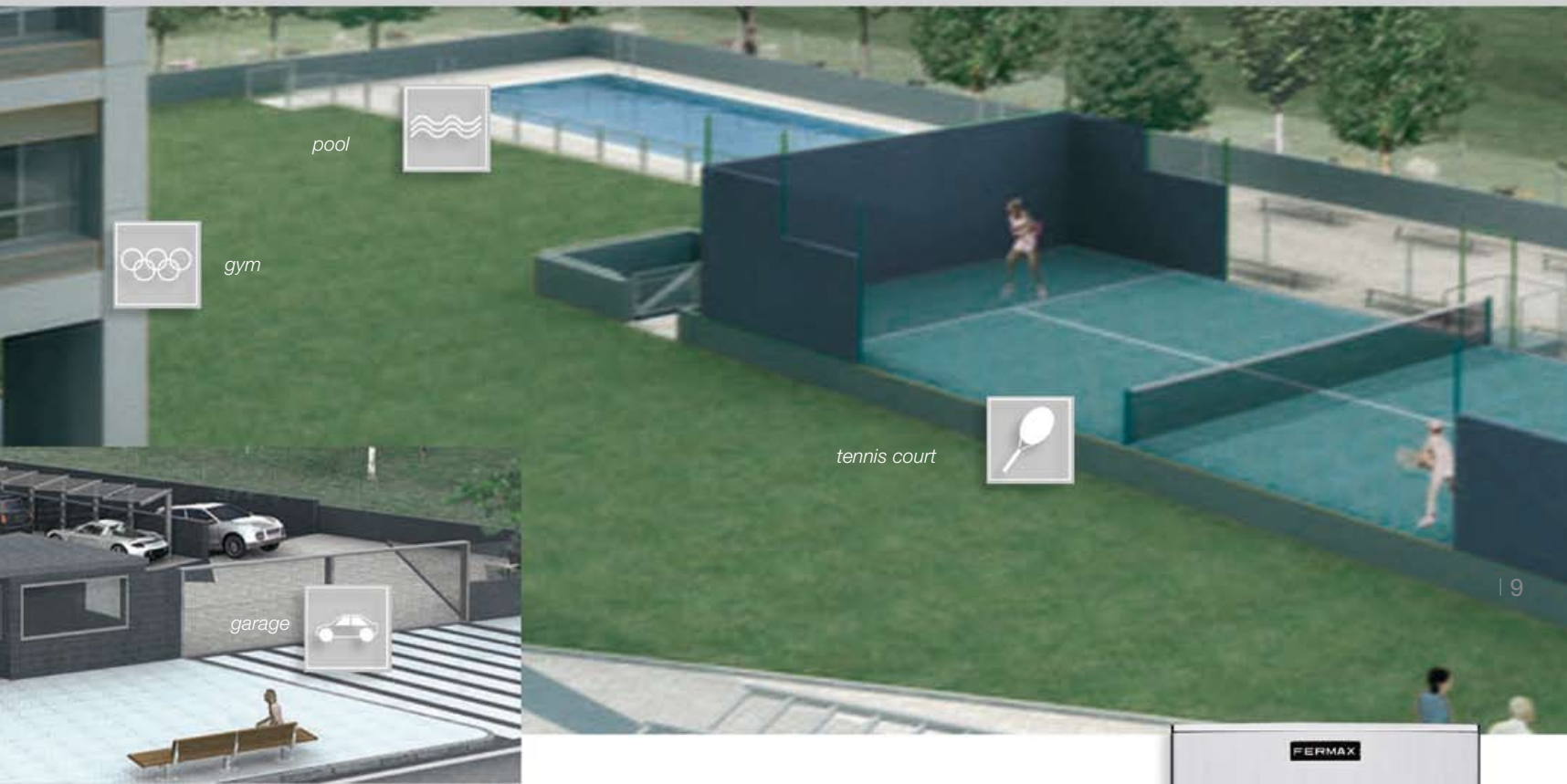 Different technologies can be combined in the same reader or installation.

*guard unit*

Proximity

Keypad

Fingerprint

**FERMAX**

pool

gym

tennis court

garage

Bluetooth

Radiofrequency

Proximity+Fingerprint

Keypad+Fingerprint

## PROXIMITY

Approaching the proximity card (ref.23361) or a proximity key (ref.44501) to the reader activates the door release. The cards must be authorized in the system and have the permits active. Capacity: 1.020 users.

## FINGERPRINT

To activate the electric lock, the user must slide the finger over the thermal sensor. The display shows the user number and the green LED comes on.  Capacity: 950/630 users (1/2 prints per users).

10 |

## MAXIMUM SECURITY

To ensure a more reliable and safe access control system, dual technology readers can be installed, for example in lifts, control zone, etc.

Fingerprint

**Keypad**



**Bluetooth**

## KEYPAD

Each user has their own
PIN code, which they enter
via the keypad (4, 5 or 6 digits).
Capacity: 1.020 users.

## BLUETOOTH

The door is opened automatically
when it detects the authorized mobile
within range.  For greater security, it
can be programmed to ask the mobile
to enter an opening code.
Capacity: 1.020 users.

## RADIOFREQUENCY

The RF receiver intercepts
the signals from the RF
security controls
(ref.24651) to open the door.
Capacity: 1.020 users.

## LOFT READERS

Their small size and surface assembly
allow location in interiors on any
support, even in aluminium profiles.

## MARINE READERS

The Marine Reader line is
manufactured in stainless steel
for outdoors.

Each MDS Central Unit can manage up to 1.000 sensor inputs and 1.000 relay outputs that can be programmed by PC with the WINCOM+ software depending on each application.

An MDS system lets you:

Switch on the **entrance lighting or the stair lights** on a daily basis by arming/disarming sensors/relays according to schedules/days, manually, etc.

Activate the **intruder detection** system in roofs and restricted areas, unblock emergency doors, technical smoke detector alarms, damp probes, etc.

Limit access to the **meter closet** by interior access control readers.

Restrict use of the **elevators** to users who may only access the authorized floor.

The home owner can call the lift from the video entry monitor.

Lifts can be fitted with communication panels to alert the guard unit in case of emergency.

Interior LOFT readers

Light / irrigation controls

Technical and detection alarms

Lifts

Loft Monitor

Loft Compact Monitor

B/W, Colour and Memory

Hands-free operating

14 |

# Monitors & telephones

The video entry system **design and features** vary depending
on the model chosen and the installation setup.

iLoft Monitor

Hands-free operating

Decorative frame
made of beveled crystal

The **video entry system monitors** installed in the homes enable:

- Audio/video communication with outdoor panels and guard units.

- Opening the door and general entrance of the building.

- Panic/emergency calls to the guard unit.

- Recording images of visits received ("Memory" model).

- Calling the lift.

- Activation of devices: stair lighting, arming alarms, etc.

Palm Jumeirah - 1.800 individual houses
Dubai - EAU



Eureka Tower - 560 apartments
Melbourne - AUSTRALIA



Mashattan project - 1.600 apartments
Istambul - TURKEY

Capital Group - 600 apartments
Moscow - RUSSIA



Rue de la République - 2.000 apartments
Marseille - FRANCE



Rong Ke Zhi Di - 1.420 apartments
Wuhan - CHINA

The Orion building - 442 apartments
Birmingham - UNITED KINGDOM

Millenium Tower - 177 access control
Wien - AUSTRIA

Marval - 420 apartments
Cartagena - COLOMBIA

Uniworld City - 240 apartments
New Delhi - INDIA

The Peak - 462 apartments
Jakarta - INDONESIA

# MDS Projects in the world

More in www.fermax.com

## MDS Digital

**Features**

Digital audio and video door entry system with unlimited management /user capacity.  Integration of a multitude of additional services and functions.
A Central Unit is required.

**Outdoor panel**

**WITH KEYPAD AND ELECTRONIC DIRECTORY.**
The panel has a **numeric keypad** to call the homes:
press DOOR CODE + △ .

Includes a **DISPLAY** that lets you search for residents.

The keypad has an access control function.
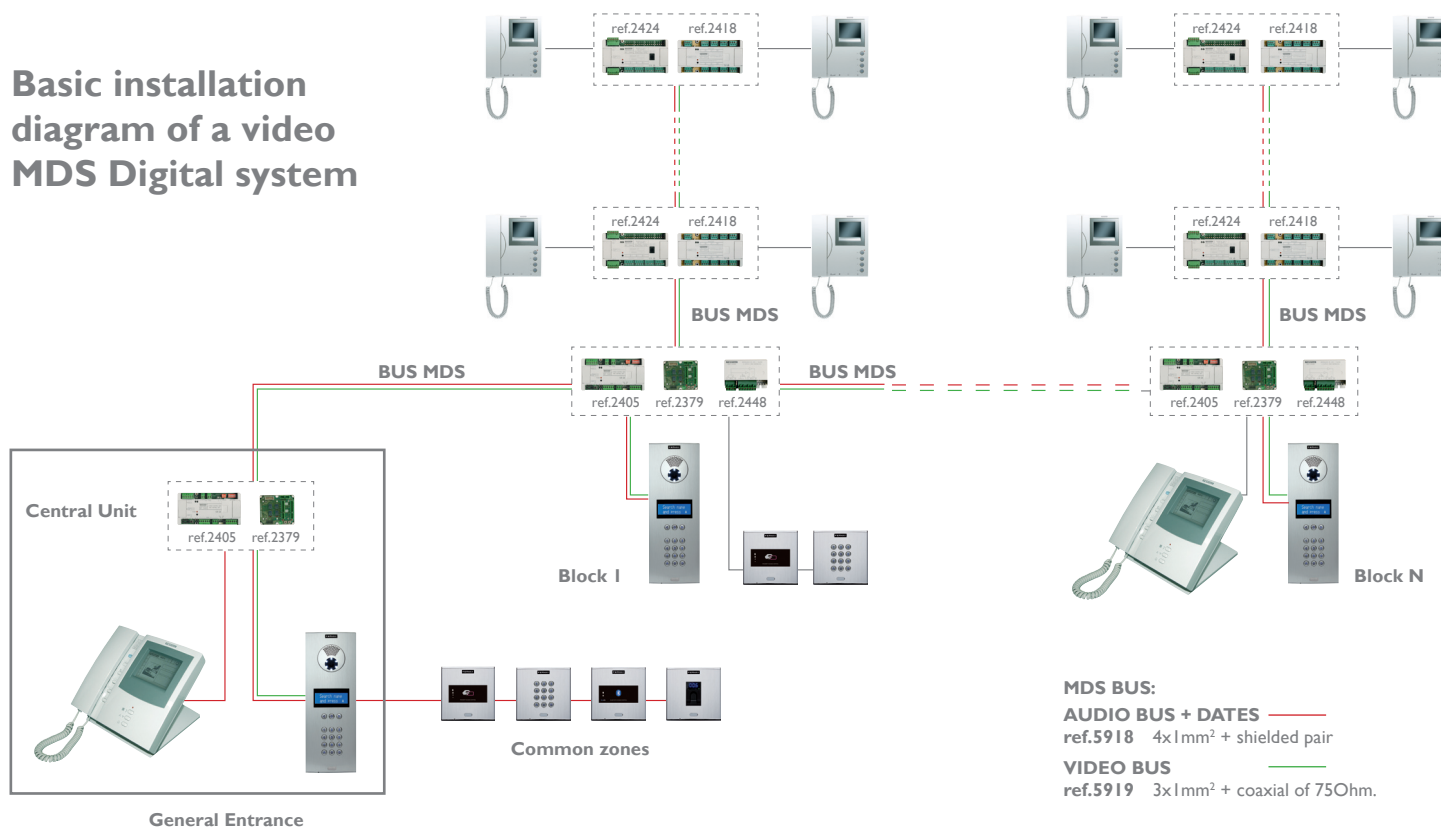
MDS Central Unit ref.2405 required.

**Capacity**

• In residential complexes, the capacity is limitless.  You can connect up to 63 Central Units
• Average sized buildings and large residential areas.
• In individual buildings: up to 9.999 homes; several central guard units and up to 32 accesses (audio, video, access control readers and a maximum of 10 guard units).

**Functions**

• Several guard units (up to 10).
• Access control and management (1020 users) including time restrictions.
• Security and automatic devices (handles 1.000 sensor inputs and 1.000 relay outputs).
• Elevator control.
• Programming and control by PC.
• Incidents record for capacity control.

## Basic installation diagram of a video MDS Digital system



ref.2424    ref.2418

ref.2424    ref.2418

ref.2424    ref.2418

ref.2424    ref.2418

**BUS MDS**

**BUS MDS**

**BUS MDS**

**BUS MDS**

**BUS MDS**

ref.2405  ref.2379  ref.2448

ref.2405  ref.2379  ref.2448

**Central Unit**

ref.2405  ref.2379

**Block 1**

**Block N**

**Common zones**

**MDS BUS:**

**AUDIO BUS + DATES** ———

**ref.5918**    4x1mm² + shielded pair

**VIDEO BUS** ———

**ref.5919**    3x1mm² + coaxial of 75Ohm.

**General Entrance**

## Combination with other systems: VDS / BUS2



An MDS digital system can be combined in the general entrances to the complex with simplified installation systems (VDS/BUS2) in the accesses to inner blocks or detached housing.  An MDS/VDS decoder or MDS/BUS2 decoder is needed to function as interface between the 2 systems.

DIGITAL, DIRECT or PUSHBUTTON PANELS.

In residential areas, these can be used in interior blocks (managing up to 199 homes) or villas (detached family homes).

**Digital**        **Direct**        **Pushbuttons**

your projects on line

# gl(O)bal
### assistance
w w w . f e r m a x . c o m

Calling...0007

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Audio and Video Door Entry Systems

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