Human Detector® *Flex*

Models: HDF-BUZZER
HDF-SPEECH

RADIO CONTROL CENTRES FOR ALARM NOTIFICATIONS
Commercial datasheet

SECURITY TECHNOLOGY FOR MUSEUMS AND EXHIBITIONS

DESCRIPTION

Modern security concepts in museums and exhibitions require intelligent systems that can be quickly adapted to changing requirements. The **HDF-SPEECH** and **HDF-BUZZER** radio control units issue freely adjustable alarm notifications. Alarm modules can therefore be mapped to the individual alarm centres. The possibilities can range from a local alarm at the exhibit to an alarm for a room or building. Smaller museums, for example, can activate a short acoustic alarm at the checkout counter. Supporting different operating modes enables the use in large houses. The organisational and exhibition structures used in these venues can be mapped like for like with the **Human Detector** *Flex* security technology. Activation and deactivation of alarm groups - but also confirmation of alarms - can be actioned directly at the **HDF-SPEECH** and **HDF-BUZZER** unit. The wide radio range and the central layout of the radio control centres reduce costs in comparison with decentralised security systems. Supervising staff on duty is substantially supported and relieved.

The HDF-SPEECH and HDF-BUZZER radio control units offer a high degree of convenience and flexibility. They are wirelessly connected to the various alarm and sensor modules in an simple and secure manner. A wide variety of types of alarms can easily be displayed, due to the different operating modes.

- High volume alarm
- Voice alarm (**HDF-SPEECH** only)
- 3 floating outputs
- Freely programmable

Human® Detector

Human Detector® - SECURITY MADE EASY
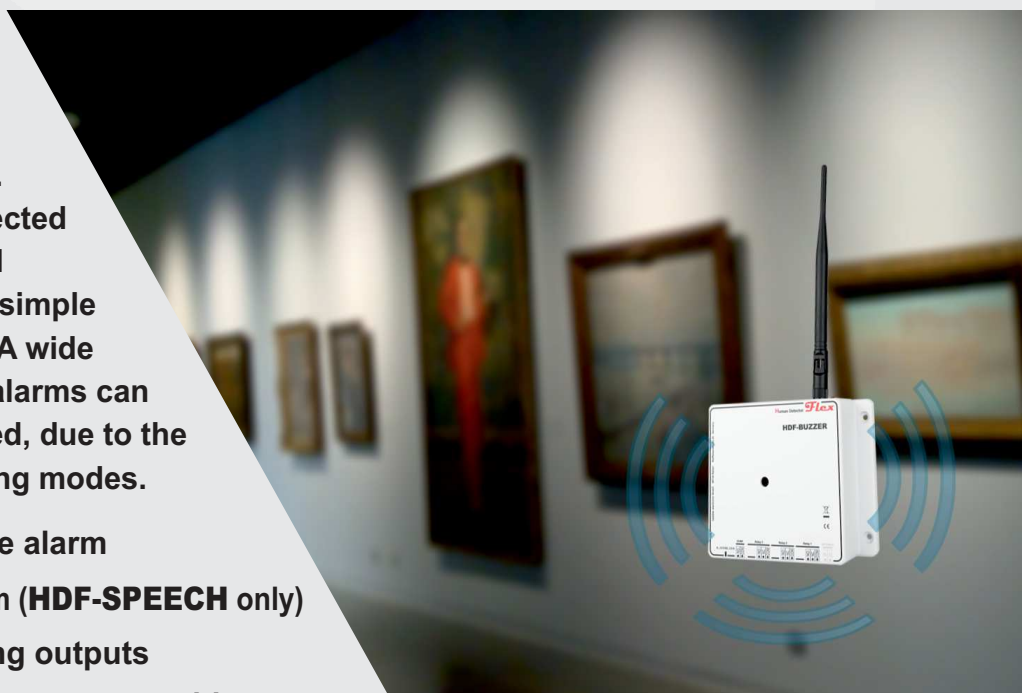
EVOLUTION THROUGH EXPERIENCE

The **Human Detector** technology is the result of a process that has taken more than 30 years. Different generations of sensors and alarm systems have emerged over time. The respective state of the art has set the limits. We deliberately do not speak of a development, but of an evolution. In a development, technicians and business people define goals. The specifications are normally set according to the requirements of the manufacturer. In an evolution, on the other hand, a product emerges through market or customer requirements. This process cannot be planned on the drawing board but requires time and experience. The **Human Detector *Flex*** systems put this aspiration into practice. This is also reflected in the two radio control centres **HDF-SPEECH** and **HDF-BUZZER**.

The **Human Detector *Flex*** radio control units are used to create a wide variety of alarm circuits. In the simplest case this means the protection of an exhibit is allocated to a centre. In the next step, for example, a pedestal with several protected exhibits or an exhibition area is assigned to a radio control centre. The exhibition hall or the building can be combined into one alarm circuit as well. This approach will suit both small and large exhibitions. It reduces costs and enables the ideal mapping of the exhibition's layout in terms of safety technology. The user selects one of two possible operating modes - **EASY-Mode** or **MULTI-Mode**. The **HDF-SPEECH** and **HDF-BUZZER** wireless alarm control panels support both modes.

EASY-MODE

EASY Mode is suitable for small to medium installations. A maximum of 30 sensor or alarm modules can be connected wirelessly to one radio control unit. All modules show the same alarm characteristics. No additional hardware or software is required. The modules are connected to the radio control centre by pressing a button. The operation is intuitive and simple. The **EASY-Mode** deliberately dispenses with the use of additional software. This enables even first-time users and technically inexperienced users to quickly familiarise themselves with the system. The **EASY-Mode** offers possibilities that are otherwise only known from more expensive systems.
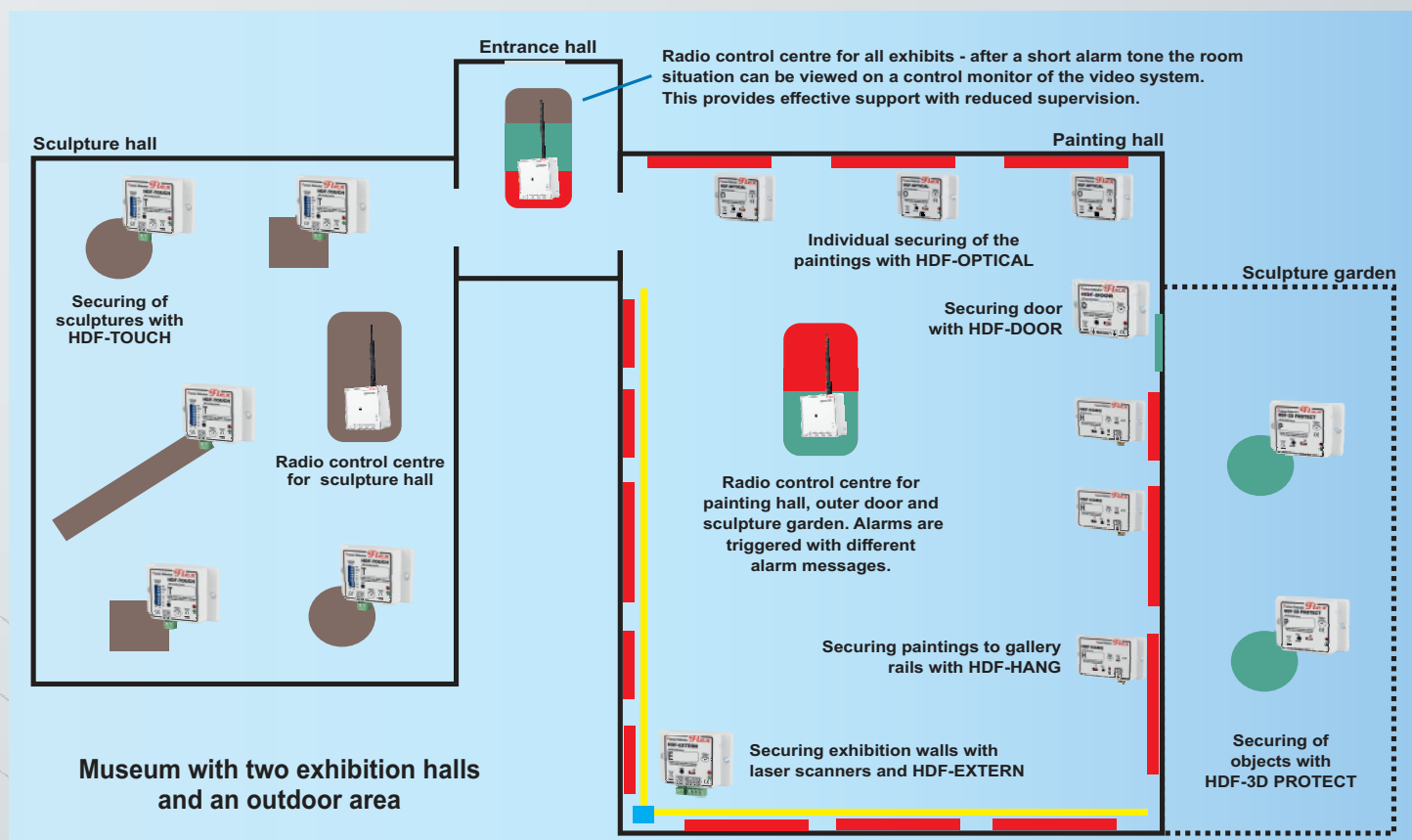

One radio control unit supports up to 30 alarm modules

MULTI-MODE

"Small" can be turned into "Big" at any time. All components used so far can still be used in **MULTI-Mode**. The **Configurator software** offers various additional functions. It can be used free of charge in the version valid at that time. The use of **MULTI-Mode** requires some training for the **Configurator software**. Training and technical support is on offer through us and our various partners. The **Configurator software** allows you to plan the security of your exhibition down to the smallest detail. All required backup products and desired behaviour of the products are first entered into the **Configurator software**. If you wish to proceed with the installation, enter the serial numbers of the **Human Detector *Flex*** units you have purchased. The programme automatically generates the control files for the radio control centres. These can now be transferred to the central units and saved as a project. The encryption and password protection used for data transfer offer a high level of security.
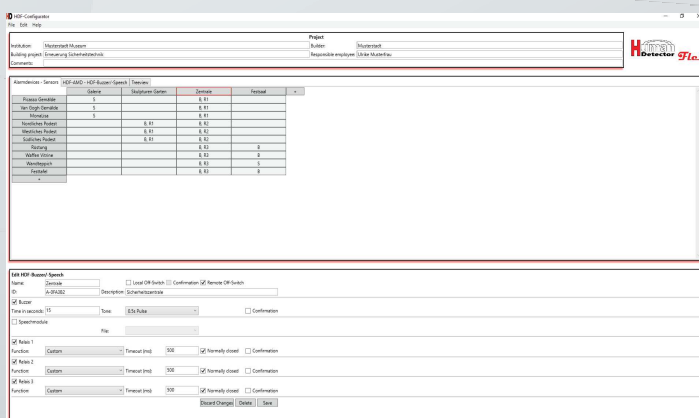
In **MULTI-Mode**, you adapt the mode of operation of the safety technology used exactly to your needs. Each sensor or alarm module operates with specific behaviour, if required. Connection to burglar alarm systems or paging systems is possible via the control unit of the three floating relay outputs. Individual sensors can be assigned to different radio control centres. This enables the easy forwarding of alarm messages to security personnel or authorities. This leads to a significant reduction in the workload of your supervising staff. A short alarm, for example, can be generated in the showroom. This warns the misbehaving visitor without disturbing other visitors. The room supervisor, who is responsible for several exhibition areas, receives a discreet message at a central location. Depending on the type and duration of the sound staff will know in which part of the exhibition the alarm was triggered. The supervisor can now assess the situation and intervene as required. This ensures safety within the exhibition. At the same time the ambience and tranquillity is increased.

Entrance hall

Radio control centre for all exhibits - after a short alarm tone the room situation can be viewed on a control monitor of the video system. This provides effective support with reduced supervision.

Sculpture hall

Painting hall

Securing of sculptures with HDF-TOUCH

Individual securing of the paintings with HDF-OPTICAL

Sculpture garden

Securing door with HDF-DOOR

Radio control centre for sculpture hall

Radio control centre for painting hall, outer door and sculpture garden. Alarms are triggered with different alarm messages.

Securing paintings to gallery rails with HDF-HANG

Securing exhibition walls with laser scanners and HDF-EXTERN

Securing of objects with HDF-3D PROTECT

Museum with two exhibition halls and an outdoor area

In addition to the choice of alert channels, functions such as activating/deactivating the radio control unit and acknowledgement of individual alarms are available.

The **Configurator software** provides a clear overview even with more complex installations. The implementation can be planned in advance down to the last detail. Subsequent changes are possible at any time and are automatically documented. The days where one lost track due to constant changes and adjustments are over.

The projects saved by the **Configurator software** provide comprehensive documentation. This documentation can still be used many years later. This is a powerful tool for building technicians in museums, designers of building services and installers of alarm systems. Inexperienced clients can be effectively supported in their work by using the project files.
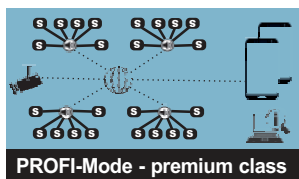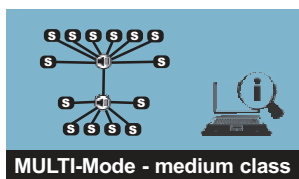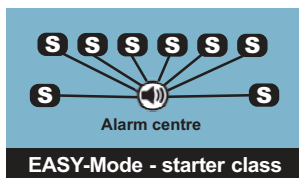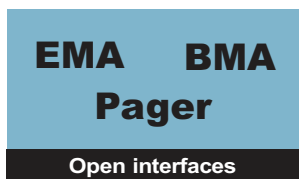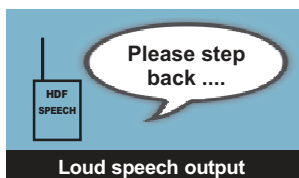

Improved coverage in historic buildings

THE STRONG BACKBONE

The functions available in **MULTI-Mode** require a stable and secure radio connection. Backbone is the common term for a network that connects different components.

The **Human Detector 𝓕𝓵𝓮𝔁** technology is one of the few alarm systems to use spread spectrum modulation. This enables ranges of up to 1.5 km in open field. Unlike **WiFi** and **Bluetooth**, the radio signal of the **Human Detector 𝓕𝓵𝓮𝔁** systems also penetrates thicker brick walls and concrete floors. To ensure this, the signal strength is checked during each transmission.

Despite the long range, the sensor and alarm modules only work with a commercially available button cell (starting price € 0.60). With few exceptions, the modules have battery lifetimes of several years. The stable operation, the few battery changes and the possibility of remote support (**Configurator software**) reduce the follow-up costs after purchase to a minimum.

High range in buildings

External antenna connection

Please step back ....

HDF SPEECH

Loud speech output

Integrated piezo siren

EMA   BMA
Pager

Open interfaces

S S S S S S
S   S
Alarm centre

EASY-Mode - starter class

MULTI-Mode - medium class

PROFI-Mode - premium class

TECHNICAL SPECIFICATIONS

Technology	Wireless alarm centre with USB interface for programming by user
Receive frequency	869,5 MHz
Receive sensitivity	-121 dBm
Acoustic alarm	Piezo buzzer, 107 dBA @ 10cm, type and duration of sound programmable
Voice alarm (only HDF-SPEECH)	4 voice notifications in MP3 format (free alarm assignment via programming, 4 MB internal memory, max. audio output 10 W at optional 8 Ohm loudspeaker)
Connectors, control outputs	3 relays with floating outputs NC/NO (individually programmable, max. switching voltage 250 V AC, 30 V DC, max. switching current 1 A AC / 3 A DC) **HDF-SPEECH** with connection for mono loudspeaker All connections via screw-on plug-in contacts (PHOENIX CONTACT)
Programming interface	Mini-USB Type B connector, internal ***1**
LED	5 mm red LED indicating radio operation, 2 x 5 mm green and yellow LED for programming functions
Antenna	Whip antenna with 90° bend, SMA connector (male)
Other functions	Freely programmable NC output for EMA connection Freely programmable connection for external siren External switch connection for activation/deactivation Connection for external switch for alarm confirmation Wall installation via lateral retaining lugs Monitoring strength of receive signal Support for all operating modes In **EASY-Mode** supporting up to 30 alarm modules per radio control unit In **MULTI-Mode** supporting up to 200 alarm modules per radio control unit
Supply voltage	230 V AC, 50 Hz (mains adapter included)***2**
Dimensions	129 mm (L) x 155,6 mm (W) x 45 mm (H) , with antenna max. 332 mm (L) ***3**
Weight	**HDF-SPEECH** 500 g, **HDF-BUZZER** 485 g (all weights incl. plug-in power supply)
Material of casing	Impact-resistant plastic ABS UL94V-1
Protection class	IP20 (EN 60529)
Temperature range	-10° C to +60° C if powered
Humidity	0-95%, non-condensing
Content of delivery	Radio control unit (**HDF-SPEECH** or **HDF-BUZZER**), power supply, antenna and USB cable ***1**
Conformity	EN 61000-6-2; EN 61000-6-3; EN 62368-1; EN 63311 ETSI EN 301489-1, ETSI EN 301489-3, ETSI EN 300220-2; EN 63000 (RoHS)

Specifications are subject to change without prior notice. All measurements were performed under specific conditions.

*1 The current **HDF-CONFIGURATOR** software is available for download or can be sent digitally on request.

*2 On request, the radio control units can also be operated without a plug-in power supply unit; the operating voltage is 10-13.2 V DC, 2 A.

*3 The supplied antenna can be replaced by an external antenna or can be bent. Dimensions change therefore accordingly.