

Our Firm's Profile:

- ✦ **Planning, development, execution, installation, service and distribution in the field of wireless communications and control engineering**
- ✦ **Special communication solutions: sign- and data transmission, measuring technology, speech transfer with modern and individual solutions**
- ✦ **Execution of process control systems**
- ✦ **Technical arrangement of programmes, renting of transceiver equipment**

Individually Developed Systems: Control engineering (sign, data transfer) networks: data collection, transfer, analysis:

AF7011 wireless remote controlling system for elevators

The AF7011 operative status monitoring system for elevators (which was developed by our company) is capable of rapid and secure handling of possible breakdown problems.

The features of the system:

- ! One can easily initiate a talk connection with the dispatcher from the elevator box at any time. The dispatcher takes action immediately in order to start troubleshooting.
- ! Non-stop dispatcher service.
- ! The system remains operative even when a power failure occurs.
- ! With the help of the system the system operator can get detailed information about any of the elevators at all times.

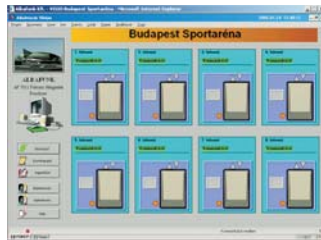
System parts:

- AF 7051 communications control unit (used in dispatcher centre)
- AF 7052 remote communications control unit
- AF 7071 lift operation mode observer



The remote communications control unit sends automatic queries continually to the operative status monitoring units. The latter units send indications to the dispatcher centre about the operative statuses of the undermentioned things:

- Up and down contractors
- Safety lock
- Operation of the brake magnet
- The status of the door line
- The status of the lift controller's micro-power supply
- End-state line's status
- Maintenance line's status
- The 230V AC network
- The input status of the alarm bell



We can say on the grounds of our multiyear experiences that the status of the elevators can be tracked easily. According to the opinion of people who got stocked in elevators, it is quite reassuring to know that it is possible to talk to someone while being in the lift.

AF7015 water and wastewater network monitoring system

The harmonized executing of the water consumption and the wastewater cleaning is managed by the water-basis supervising system.

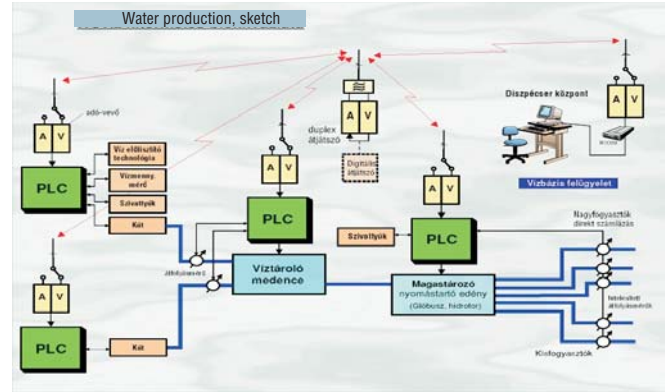
System's parts:

- software capable of full-screen graphical editing with log utilities
- PLCs
- Data transmission networks (VHF/UHF or ISM)



Process control for drinking water technologies:

System control: the processing of data arriving from the signal devices and the direct control of the devices is done by the PLCs. All data are forwarded to the dispatcher centre through the data transfer network, and this way one can have central control over the system. (Intervention into the system is also possible.)



Process control for wastewater cleaning:

Our PLC devices are also suitable for controlling wastewater handling technology and implementing its control engineering. Among our references are the establishments of wastewater handling networks for several small country regions.

AF - ISM data transmitting network

The ISM network can be used for wireless data transmitting within control engineering networks and computer networks, and it can also be used for creating base stations for wireless internet connections.

With the help of ISM devices (operating at 2,4 GHz and 5,7 GHz) we created a high-speed IP-based data transmitting network.

We increased the reliability of our systems by the use of carefully selected outdoor devices.

Advantages of the ISM network are the following:

- o free of any frequency fees
- o standard TCP/IP ethernet interface
- o WEP encryption
- o point-to-point and point-to-multipoint connections
- o remote controlling



AF 8050 Wireless Text Message Sender

Main features of the system::

Written communication, transmission of controlling and status information, determining location with the help of a transceiver network. The **AF8050** information forwarding system was created in order to substitute traditional speech-based communications and to display signals, information and messages going to the centers with fixed installation. During the designing and constructing processes of the system we found it very important to build a system that can include some parts of the previous system versions. Features of the system are flexible and extendable protocols, and software which is well adaptable and controls the communications data flow.



Main parts of the system:

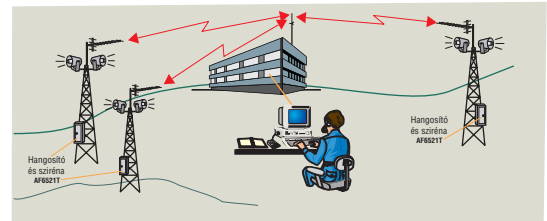
- Software controlling the data- and speech flow
- AF-8051 type controlling unit with display and keyboard
- Transceiver providing the wireless connection

Possible ways of utilisation

- At taxi companies
- License plate controlling system for the police
- GPS localization system

AF8070 Alarm and Informative System

The AF8070 is a wirelessly controlled information forwarding system that includes a fixed/mobile centre and substations. The substations receive the information and control signs through their transceivers and the information is transmitted in its zone by high power audio amplifier and loudspeakers. The control signs can be for example, turning on/off alarming signals. The substations forward signals of own or external operative statuses to the centre, which can be queried at will from the centre. (Own signals can be for example power supply error, forcing the station open, etc.



The **AF8070** system consists of a centre station and substations, which can be called selectively. The center has 3 basic operating modes:

- ♦ control mode
- ♦ alarm mode
- ♦ voice transmitting mode

In control mode the centre displays the operative statuses of the substations.

In alarm mode the centre sends control signs to one or more substations, which execute the command.

In voice transmitting mode the control signs of the centre switch on the amplifiers and loudspeakers of the substations. The switching on mode is timed.

Remote Controlling Solutions of Transceivers

AF6060 Remote Controlling System

The **AF 6060 series** is intended to make remote controlling of radios possible for users by "lengthening" the distance between the transceiver and its controlling equipment.

The **AF 6060 local controller** was built into a desktop microphone case into which a 4x4 character keyboard, a 2 character LED display and a status indicator LED were integrated.

Main features:

- Changing channels of the remote controlled transceiver
- DTMF code system operation
- Sequential (SEL5) signalling system operation
- Connection to the remote controlled radio through a four wired or a wireless connection
- master-slave mode for two operators



Options:

- Fixed split point voice scrambler (codes can be changed by software)
- Head set · Foot switch (PTT)
- Recorder output for voice recording purposes

AF6062 Remote Operator

AF 6062 Remote Controlling System

The AF 6062 controlling unit was made for remote operation of Yaesu transceivers and repeaters. The controller unit can be positioned in distances ranging from 100 metres to several kilometres.

Features:

- Desktop microphone case
- LEDs that signal transmission or reception
- Volume regulating knob
- Built-in loudspeaker
- 1 watt of audio-frequency capacity
- Massive PTT button
- Operates from a DC 6..V power supply
- Wire length 0 ..5 km



AF8001 Dispatcher System

It ensures remote controlling of the radio stations (irrespectively of the distance and at several workplaces simultaneously) which are far away from the controllers.

Main parts of the system::

The brand of remote controlled radios can be: Yaesu and Motorola.

- Transceiver adapter, remote controller interface unit - **AF 8001T (TIF)**
- Network distribution unit - **AF 8001E (EIF)**
- Local dispatcher controlling units - **AF 8001H**



Features:

- Built-in SPEAKER-PHONE
- Selective call function
- Caller identification on each channel
- Audio signals with programmable melody tones and volume control on each channel
- It can work with a maximum of 3 transceivers (channels)
- It can contain a detached and controlled output for voice recording
- External call indicator and PTT-connection
- When taking an incoming call it sends an acknowledgement message to the caller



AF6071 radio remote control unit for fire-trucks

With the help of the AF6071 unit Yaesu, Motorola, Icom and Kenwood radios can be remotely controlled from the back of the firetruck ⇔

- ♦ It is resistant to dropping water
- ♦ The unit's maximum volume level can be satisfactory in all environments



Equipment Developed by Our Company:

Conventional appliances

www.albafunk.hu

AF6003 Repeater Station

The AF 6003 repeater station can be used mainly for industrial purposes.

Main parts, features:

- ◆ Motorola GM-340 transceivers
- ◆ Band filters in the transmitter and receiver line
- ◆ Duplexer
- ◆ Lightning surge protector
- ◆ Uninterruptable power supply
- ◆ Lockable industrial metal box
- ◆ Protection according to the EN 60 529/10.91: IP 55
- ◆ Declaration of conformity



AFY 4512 Yagi Antenna

Structure:

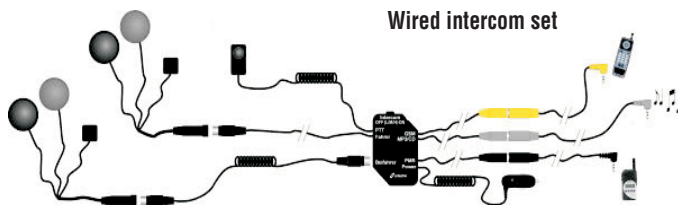
Composed by solid elements installed on a square tube aluminium boom (one radiator, nine directors, four reflectors). Sharp radiation angle and small back radiation because of the structure. It can be ordered with heating options.



Technical data:

Frequency band:	430-470MHz	Average gain:	12dB
Impedance:	50 ohm	Connection:	"N" male
Polarisation:	optional	SWR:	max.:1.5
Max. RF power:	100W	Total weight:	4.5kg

AF9091 wired communications equipment for motorcycles



The basic function of this equipment is to provide communications solutions between the driver and the passenger. This set can be connected to PMR radios, mobile phones and MP3-players. Besides its talking function the system makes listening to music, communicating with drivers of other motorcycles and taking mobile phone calls possible while on the move.

AF9092 wireless communications equipment for motorcycles

Wireless intercom set

Its basic function is securing the internal communication between the driver and the passenger.

It makes possible the connection between the headset built onto the helmet and the microphone, this way providing complete freedom of movement compared to the wired solution-while maintaining the system's functions!



Equipment Developed by Our Company:

Data transmitting and supervising appliances

www.albafunk.hu

AF088II PLC Programmable Logical Controller Series



- ◆ The AF 088II series is a modular structured PLC with the size of the compact PLCs. In its capacity, memory capacity, communication ability it represents the most modern technology.
- ◆ The modular layout without motherboard makes possible a flexible system build-up. Locally, it operates more than 360 I/O points.
- ◆ For the heavy-duty RISC processor, flexible user software can be written. On the built-in LCD display of the processor module, the processes, the states can be displayed. On the keyboard, parameters can be given.

AF 088II/P Processor Module

- ✦ ATMEL ATmega 128 processor
- ✦ 2 pcs multifunctional serial interface
- ✦ RS232 or RS485 or RS422 or 1200/2400 bps transceiver modem
- ✦ 2x16 character LCD display
- ✦ 16 key keyboard



AF 088II DIO 16/8 Digital Module

- ✦ 16 point galvanically isolated 24V DC input
- ✦ 8 point relay output
- ✦ internal 24V DC voltage



AF 088II AN4



- ◆ 4 channel analogue input
- ◆ 4-20 mA active or passive
- ◆ 0-10V voltage

AF 088II AN8



- ◆ 8 channel analogue input
- ◆ 4-20 mA active or passive
- ◆ 0-10V voltage

Analogue Modules:

AF 088II AN EXP4



- ◆ 4 channel analogue expansion output
- ◆ 4-20 mA active or passive
- ◆ 0-10V voltage

AF 088II ANOUT2



- ◆ 2 channel analogue output 4-20 mA
- ◆ 10 bit resolution

AF-GP320 Data Adapter



The AF-GP320 Data Adapter is an ideal choice for most data-transmitting tasks. We recommend it to system integrators, for process controlling tasks and for several industrial areas. The appliance is prepared with a surface that matches most producers' modems in a form previously agreed with the customer. The appliance can be well fit into SCADA systems and to point-to-point and point-multipoint applications. The appliance is based on Motorola GP320 transceiver, which complies with ETS 300.113 standard.

Features:

- ◆ 1 channel
- ◆ 12.5 KHz/20KHz/25 KHz programmable channel spacing
- ◆ PL and DPL signalling
- ◆ Programmable transmitting time-out time
- ◆ Transmit RF power level change High-Low (with side button)
- ◆ Power supply: DC +8V or +12V (specified by the user)
- ◆ Analogue connection: 9 pins D-SUB male connector
- ◆ Can be fixed to TS 35, 35mm mounting rail according to DIN EN 50022

AF6059 ISM band signal transmission device

The AF6059 series remote control devices are suitable to short distance wireless remote control and remote supervision. Range: ~800m.



Main technical data:

- 3pcs. 2 state inputs, which can be controllable with or without voltage (12..24V)
- 1pc. analogue input (4..20mA detached)
- 2 state outputs: 2pcs. voltage-free C-type relay contact, 1pc. voltage-free A-type relay contact
- 1pc. analogue output with internal/external power supply selection
- extendable on RS485 bus

The system's functioning:

The central controller keeps a continuous wireless contact with the member stations belonging to it and directs according to the stored micro-program.

Recommended field of application: water and wastewater technology networks and other process controls in case of the cabling is executed difficulty

Data Radios:

The MDS devices - operating at the UHF band - are digital transceivers, which were developed for point-to-point and point-to-multipoint data transfer applications. It is a highly reliable device, which is complemented with microprocessor controlling, developed on DSP technological basis, with fast transmission-reception switching time. It can be conveniently used for industrial control and measuring-data collection, but it makes possible any half-duplex data-transmitting functioning that is connected to it with a connection that fits its parameters.

Motorola GM Databox



The GM Databox - operating at the UHF band - is an analogue transceiver which was developed for point-to-point and point-to-multipoint data transfer applications. It can be used with our below modems.

MDS 4710E



Power output: max.5W

MDS EL705



Power output: max.2W

AF6054-x-ISM



It can be used for small and medium speed data transfer with RS232 and RS485 interfaces.

Data transmission speed: 1200...38400 Baud
Power supply: 8...12V

AF-GP320 Transceiver Modem



Radio: Motorola GP320
Speed: 1200 Baud
FSK according to V23 standard

Modems:

The modems can be used to transmit wirelessly signals, measuring data, control signals and information about any condition.

AF6056-2



Data interface: RS-485
RS Interface's speed: 1200..19200 Baud
Data transmission's speed: 1200/2400 bps
Voltage requirements: 8...12V

AF6055-2



Data interface: RS-232
RS Interface's speed: 1200..19200 Baud
Data transmission's speed: 1200/2400 bps
Power supply: 8...12V

AF6053-232/485 EXT



Double data interface: RS-232/RS-485
Speed of data transmission: 1200/2400bps
Voltage requirements : 8..12V

Supplementing units according to the data transmitting standards that can be connected to analogue transceivers and can be fixed to TS 35, 35mm mounting rail according to DIN EN 50022

Our Suppliers

