Control your house



Foxtrot www.controlyourhouse.com



Foxtrot affordable home automation system without limitations



Foxtrot automates your house

Foxtrot controls your house – regulates the heating, air condition, lights, electrical devices depending upon preset program or various sensors for – sunshine, temperature, light, motion, wind, rain etc. Saves you money, time and offers you an unbelievable comfort of living.

Foxtrot is modular

You may enjoy the advantages Foxtrot brings to you in any simple configuration controlling the temperature, lights and light scenes, blinds. In the future you may simply extend Foxtrot program to control another technologies like air condition, various electrical devices, and home cinema audio/ video or garden irrigation.

Foxtrot thinks of the future

Foxtrot lets you connect the wireless elements, therefore, anytime in the future you are not limited by wires (for example you have a new swimming pool or garage and you do not have to lead cabels). Foxtrot grows with the growth of your needs! Foxtrot saves you money now and in the future, too. Control logic, functions and design can be changed in the future.



FOXTROT is home and building automation system, enabling you to control everything in your house by all available devices! Foxtrot brings you all technical features we require from smart home, intelligent installation, home automation and even remote access.

Foxtrot adapts to you

There are many ways how to control your house. Foxtrot brings them all to you. Wall switches and controllers of many various designs, mobile phone, internet, iPhone, iPad, television, tablet. Everything is possible.

With Foxtrot you may have any functions, control logic and design of control screens according to your needs.

Foxtrot is open

System Foxtrot may be at any time simply expanded by new control modules, functions and as well connect with multimedia systems (control of movies, music, images). So you may control all home technologies via tablet, phone, computer or TV screen.

Foxtrot is affordable

Foxtrot, due to its favourable price, becomes a standard solution of control in new houses and, simultaneously, provides you with the highest comfort of the control.



Foxtrot may control everything



- Switch on the lights when you wish and switch them off when you forget.
- Light scenes for various activities depending on your preset scenario, time, sun shine, your presence, even with sound.
- Switching, dimming, scenes, presence simulation, switched circuits, chromatic temperature, RGB control.
- Bulbs, LED lamps, compact fluorescent lamps, LED chips, stripes, DALI ballasts.

Heating, Air Condition, Ventilation, Recuperation

- Coordinated heating control, air-conditioning and controlled recuperation individually in each room.
- Dependence on time, outside temperature, wind, airless air in the room or opened window.
- Hot water warming, energy accumulation in boiler and heating up in low energy tariff.
- Bringing often up to 30% costs saving.
- Heating devices, desk radiators, floor water heating, ceiling water heating and cooling (capillary systems), electric floor heating, floor convectors, fan-coils, central heating boilers, air-conditioning units, solar water heating, circulation pumps, control fan revolution, recuperation units, heated eaves, gutters, pavements, entryways.

Blinds, Jalousies, Shutters

- Automated control according to several inputs time, sunshine, light scene, rain etc.
- Creation of the right light feeling (it lets the sun in in the morning, shuts down the blinds during your absence)

and increase of safety of your house.

- Automated shutting down or up during strong wind and rain strokes or due to sun or freeze.
- Asynchronous jalousie drives, synchronous blind drives.

Doors, garage doors, gates

- Control and monitor if opened, may warn you.
- Moving gates, locks with Assa Abloy (electronic locks).

Garden Watering

- Irrigates your garden in accordance with the preset program. Saves water if it is after rain or it's just raining. Measures humidity in the ground and irrigates when it's needed. Garden may be divided into the zones and irrigate according to plant needs.
- User control and setting of modes of watering for each garden zone.
- Valves for water control, two-stable valves for watering systems, solenoids for watering systems, ground humidity metering, flood monitoring and control.

Swimming Pool and Whirlpool

- Optimization of heating from more heat sources solar panels, heating pumps, boilers, etc.
- Pool cover control and pool lighting (including light mood control and scenes).
- Automated control (on/off, open/close cover) according to rain, wind, temperature and time program.
- PH, REDOX metering, automated dosage and water quality maintenance.

Security system, access control

 You may integrate all kinds of detectors – motion window and door contactors, broken window indicator, Home & Building automation system **FOXTROT** enables you to control everything in your house and building that can be controlled by electric energy and simultaneously automate this control in such a way that the comfort of your living will increase significantly.

smoke indicator, CO2.

- Foxtrot watches over the house and alarm you or the Guard Agency in case of an alarm.
- Automated switch off in rooms with no one presence.
- Switched off the heating when the window is opened.
- Movement (PIR) sensors, broken glass sensors, fire sensors, sensors of open window/door, siren, connection of certified security systems, contactless identification, RDIF readers, security system readers, communication with user and security guarding agency, emergency lighting.

Cameras

- Shows you pictures on-line in your computer, cell phone or TV screen.
- In case of the alarm it saves pictures to the memory.
- Pictures may be sent in different ways to e.g. security guarding agency, your notebook, mobile phone etc.
- IP cameras.

Home Appliances, Sockets

- Automated electrical appliances control via controlled socket.
- Control of Smart Appliances by simulation of their Remote Controllers – Foxtrot sends commands depending on conditions you have preset.
- Direct control of home appliances Miele. Sockets switching.
- Advantageous for activities that we may postpone to the low cost tariffs periods.

Remote Access

• Control your house from anywhere in the world by the internet or your cell phone by SMS message.

In the case of any maintenance or service, there is no need of travelling for technicians, it may be diagnostic remotely, including programing or function extension or changing.

Smart Metering

- Temperature metering outside, inside, in the floor, in the air, in the pipeline, in ventilation pipeline, radiate heating.
- Energy consumption metering electric energy, water, gas, heat.
- Air quality metering.
- Dew metering, light intensity metering, weather station
- wind intensity and direction metering, outside temperature, sun shining.
- Water level metering.

Connection with Multimedia AV and other Systems

- Complete integration of building technologies and entertainment.
- The only one interface and access to all building technologies and multimedia (music, video, pictures, multi--room, data sharing).
- Interconnection with KNX standard.

Automation of Functions

- Easy setting of system functions will give you a lot of free time, because your house will work instead of you.
- Save your money for energy costs, because your house will optimize control of heating, air-conditioning, lights and electric devices.



Freedom of Control

Control device	Local control	Remote contro
Common wall switches	•	
Wall switches witch micro touch	•	
System wall switches on bus CIB or KNX	•	
Room Control Manager	•	
Thermostats	•	
Wall Touch Displays	•	
Tablets	•	•
iPad, iPhone, iPod	•	•
Smart Phones	•	•
Notebook, Computer	•	•
Smart TV	•	•
SMS Messages	•	•



Wall switches



Foxtrot does not limit you in your choice of wall switch designs. By few ways you may use to control your house any wall switch design. And even more, you may connect to Foxtrot all KNX wall switches and devices.

Wall Thermostats

Wall thermostats may be used from common manufacturer designs.





System Foxtrot offers a wide range of control devices and ways how to control everything in your house, when you are at home and also remotely via internet or SMS messages. You may have your house under your control at any time.

Wall Touch Displays



Wall touch displays may be delivered with frame in any color or made from wood or metal, so you may perfect harmonize them with other devices in interior.

Tablets and Smart Phones



Thanks to mobile devices like smart phones, tablets and notebooks you are getting full control of your house via internet from any place.



TV screen or notebook, these are the other control interfaces for access to house technologies.

Any Graphic Design and Functions



Design of your control screens, control logic and access to them may be standardized or customized according to your needs. Even each user of the same building may have different design and functions, what is useful for children and the elderly people.

Why should you chose *Foxtrot*

Exceptional System

Control system Tecomat Foxtrot is on the market exceptional by combination of centralised control system of international standard PLC (according to EN 61131), own proprietal two-wires installation bus CIB – Common Installation Bus®, integrated Ethernet port, serial ports and integrated high capacity memory up to 32GB for storing of high data and user control pages. Integrated web server and free programmable internal web pages directly connected with all measured and controlled values and variables and low energy consumption of central module (around 2 W) makes system Foxtrot a perfect system for smart home.

Control system Foxtrot is a tool for project designers, installation companies, integrators or computer companies, which are able with Foxtrot to create home or building automation system tailor made to any customers needs, create any logic of control, graphic design of control pages and any design of control devices from wall switches to mobile phones or tablets. They are able to control any combination of heat sources, air-condition, photovoltaic panels, wind power plants etc. In this is a most significant difference from all other products on the home&building automation market, because each system is oriented to more or less technologies, but for control of all technologies, other systems have to be expanded by other systems and very often it is right Foxtrot, who is expanding the other systems. Lets mention for example systems Lutron, AMX, Control₄ or Cue. Some companies offer system Foxtrot as it is and some supply it to the market under their own brand.

System Tecomat Foxtrot has been developed so that it may be implemented by any company at any place in the world. System is made as a global product, it supports language versions, so there are references in many countries/languages and even in Hebrew.

Industrial roots, resistance and extremely long operation cycle

The core of the system Tecomat is industrial. System Foxtrot has been launched on the market for various fields of automation – industrial automation, process automation, technologies automation, machines automation, transport automation, home automation and building management systems, but always as reliable industrial PLC. It means that Foxtrot is extremely reliable and proven product with exceptional long life cycle, what is a great advantage in each field of control. For instance in home automation it is a great advantage. Foxtrot with its long operation cycle exceeds systems, which do not have industrial core and are developed as a consumption electronics.

Open system

System Tecomat Foxtrot is an open system. It is an unique advantage for let's say unlimited use for control of any technologies at any place in the world. Via integrated Ethernet port there are data available through many standardized data protocols, so Foxtrot may be use even like communication and data nod and connect or control buildings or technologies on distance of thousands kilometers. That's why Foxtrot may control small flat or house as well as large residential complex or hotel, big office building or connect building on distance of thousands kilometers to one controlled system. The technology, used in Foxtrot, for entrance via web pages is making Foxtrot timeless, because it is compatible with all platforms of personal computers, smartphones, tablets, smart TVs with web browsers etc. It works with browsers Internet Explorer, Firefox, Opera Safari, operated under operation systems Windows, Linux, iOS, Android, Bada and others. Thanks to mentioned features it enables exceptional flexibility in tailor made or standardized projects and solutions in home and building automation. A trend is to integrate all individual parts and technologies in the house to one structure with possibility of remote access, control and management. Remote management is one of the most important features: customer may be sure that he will not be alone with his system in the future and system may be easy updated, expanded or changed. System Tecomat Foxtrot is let's say building set adjustable and expandable as a tailor made system according to each project needs by number and type of sensors and actuators or inputs and outputs both dual-statuses or continuous. By its mechanical design it is modular system and it is compatible with standardized circuit breakers on DIN rail.

Free topology of system

Connection of Foxtrot central module with other modules - peripherals may be realized by centralized wires, when all inputs and outputs are wired to one or more switching boxes (cabinets). From here are connected all control wires to each wall switch, light, controlled socket etc. in star structure. But because system Foxtrot is a bus system, we may also realize it as a distributed system with sensors and actuators connected by 2 wires CIB bus with maximum distance up to 400 meters. The bus may be free branched and each branch need no termination. Both ways may be combined. An integral part of system are expanding modules in design for DIN rail, built-in modules to installation box or under other device cover, modules with IP-65 protection and interior modules, especially wall switches, temperature sensors, humidity and CO2 sensors, room managers, light sensors, IR sensors for air-condition and AV systems control.

Bus and wireless solution in one system

To central system Foxtrot we may connect both wire connected modules and wireless modules. With wireless mo-



dules we may create up to 4 wireless networks and each master of the network may be connected with up to 64 wireless modules. Wireless module may by key switch, temperature sensor, humidity and CO2 sensor, radiator valve etc. During programming or parametrizing the system we do not consider, how the module is connected (wire or wireless), we only work with their control logic and functions.

Control of the system

With Foxtrot, user is getting a wide range of control devices. Common wall switches, thermostats, intelligent bus wall switches, touch wall displays, tablets, smart phones, common cell phones, TV screen, computer or multimedia AV systems and its controllers.

Communication

Very important features are Foxtrots communication abilities on level of serial ports and Ethernet/internet port. These communications are important for connection with other smart devices in the house like security systems (DSC, Tecnoalarm, Galaxy, Paradox), camera systems (IP cameras), access systems (door intercom, RFID readers, electronic locks Assa Abloy). For communication with heating pumps (for instance Nukleon, PZP, AC Heating, ACOND, Regulus, Neota), with gas boilers (OpenTherm), ventilation and recuperation systems, air-conditioning units (for instance LG, Samsung, CoolMaster), with light and jalousie systems (LUTRON) and also communication with home appliances (Miele). Audio/video multimedia systems to be often connected with system Foxtrot to create united control of smart houses (Control₄, AMX, Bang&Olufsen). System Foxtrot is open enough even to connect with other systems in home automation. Let's mention KNX system, which may be connected with Foxtrot and by this connection KNX system is getting all advantageous

of central control, free functions and communication to external world.

Smart metering

System Foxtrot contains also counters for reading pulses from heat consumption meters, it has internal convertors for reading smart energy meters via M-Bus, and system will be able to read even wireless meters via Wireless M--bus protocol soon. So the user has with Foxtrot a perfect tools for effective control of energy consumption and energy savings.

Central module of system Foxtrot has integrated function of free programmable data logger, what records data of any measured values and internal statuses into internal memory. It may record even pictures from cameras and text messages (SMS). It may record event and status database. Data may be automatically recorded to external database servers.

In huge applications of Foxtrot systems we may connect each Foxtrot central modules with others by serial channels or by Ethernet. By this way we may automate buildings of any size like hotels, office buildings, residential complexes etc. Central modules in this case exchange data each other, so the whole system works as one unit, controlled from a central control room via SCADA software, for instance SCADA RELIANCE.

Free programming and parametrization

The whole system Foxtrot may be free programmed according to world standard IEC 61131 (also in EN). It is a big advantage for both programmers and customers – users, because the user is not dependent on one implementation company, which implemented him the system,

but any time in the future the system may be re-programmed or expanded with new functions by any programmer with knowledge of PLC programming. And there is a lot of such kind of programmers in each country. Foxtrot may be also programmed remotely (there is no need to travel to place of installation) and even during operation of the system, so the user has full continuous control.

Programming tool Mosaic (own product of company Teco) is a top product in its category, which do not have competitor on domestic market and on world markets is compared with system CODESYS, used by companies like WAGO, ABB, Beckhof, EATON and others. With Mosaic may programmers work even without training, what confirms customers in many countries, who never meet any training for Mosaic programming.

For field of simple standard applications in home automation we do not have to program the system, but only simply parametrize it by parametrization tool FoxTool. With FoxTool we may easy set all typical functions we need for home automation and by this way the smart homes may be implemented by common installation companies without programming knowledge.

Programming and diagnostic may be realized remotely via internet connection. This saves costs for travelling of maintenance stuff.

Affordability

Thanks to its price level, system Foxtrot has become a standard in home and building automation systems with above-standard possibilities of control and living!

Foxtrot Advantages

Foxtrot brings you an exceptional

Automation of many functions gives you a lot of time for your free-time activities so you do not have to watch what is on or off

Controllers and switches in your house may be set so, that only one button press will activate many functions. For instance, pressing the button at your door may set the house to the offline mode. It means that it switches the lights off, decreases the temperature, switches on the alarm. And also, the other way round, you may wake up your house again.

Interesting possibility is switch on various scenes by pressing the button. One push may shut the blinds, Foxtrot takes care of your set the pleasure lights and switch the TV on.

Touch panels let you watch and control all functions in your house comfortably from one place. You may see the state of any device, temperature in every room, watch the visitor in front of your gate or what is happening in the children's room. All that you can not only to see but also control by one touch on the panel. You may use more than one panel in your house. They are elegant and you can see and control thanks to them all you need.



COMFORT

Your house on the first channel

Use your TV for watching your whole house and also for controlling it. Your TV is another control panel with perfect view of all informations. Switch your TV remote control to Foxtrot channel and enjoy your new controlling and vision center of your house.

Would you like to see what is happening in your house or control your house from anywhere in the world? Foxtrot enables you to do that. You can view and control your house from anywhere via internet from your laptop, iPad, iPhone or computer in the internet caffe while traveling around the world.

Your security and safety is for us important

security and safety. Foxtrot watches over your house with many sensors. In case

of an alarm Foxtrot may send alarm SMS to your cell phone, send a message to the Guard Agency and switch on the camera recording. It may also switch on all lights and sound alarm.

SAFETY

When you are away, Foxtrot switch off all appliances and save your costs for electricity and protect your devices.

Fire sensors may switch on the fire alarm and switch off all electrical devices. And, of course, they will alarm you. CO2 sensors may switch on the ventilation or recuperation so you have fresh air all day long. Camera allows you to watch your sleeping children while visiting your friends.

Foxtrot brings entertainment to you

Enjoy your songs library in your house anywhere you place speakers. Choosing your favourite song is matter of one button press. Cho-



ENTERTAINMENT

osing the movie for tonight is a fun. No rush and search for lost DVD's . Control all your photo libraries and look at them everywhere.

Music and movies in every room

Enjoy your songs library in your house anywhere you place speakers. Choosing your favourite song is matter of one button press. Choosing the movie for tonight is a fun. No rush and search for lost DVD's. Control all your photo libraries and look at them everywhere.

comfort



Live healthly with Foxtrot

Foxtrot may through the CO2 sensors watch quality of the air in rooms and control ventilation in the house. So you breath fresh and healthy air all day long. Even fire place in living room doesn't take your fresh air away.

Forget being tired, forget your headache – these may come to you if you staya longer in rooms without fresh air. Foxtrot lets you live healthy all your life.



HEALTH

Energy savings

Foxtrot enables you to save up to 30% of costs for energy by optimal regulation of heating, air conditi on, ventilation, electrical devices and lights.

Foxtrot lets you set for every single room a specific temperature within optional time programs. The system may react to signals from weather station – e.g. strong wind makes your house colder thus the system can set the heating accordingly. In summertime, Foxtrot perfectly controls the air conditioning

Foxtrot may control also the heat pump together with recuperation unit and ventilation. You have

both - temperature comfort and fresh air. Foxtrot can switch on or control devices depending on low cost tariffs, so you consume the electricity in the period when it is cheapest.

While you are out of the house. Foxtrot sets the hou-

se to off-line mode so, that electrical devices have no consumption of electricity. Forget thinking of you switched off everything you have to.





References System Foxtrot controls thousands of buildings i various countries



Luxury family house – Brno Czech Republic



Stylish bungalow – Tvrdosovce Slovak Republic



Sun House Project – Csömör Hungary



Family house – Jaworzno Poland



Family house – Moscow Russia



Family house – Almaty Kazakhstan



Family house – Kiev Ukraine



Chateau Pacov Czech republic





Administrative building PAZ-2 – Tel Aviv, Israel



Cyprian Theater Museum – Limasol Cyprus



Truck for precious horses transport Netherland



Luxury flat in complex Tri Veze, Bratislava, Slovak Republic



Family house – Berlin Germany



Technology Park – Cluj Romania



Family houses Ecomodula France



Classic Hotel – Nicosia Cyprus

Solution

System Foxtrot brings a complex solution of building automation, centralized control and remote access for developers / architects / real estate owners / hotels & restaurants

For developers

Developer companies want to build with low costs, but on the other side they want to offer customers more than a standard solution. A house, building or flat, which offer its residents a high comfort of living, security, saving of energy and operation costs, healthy living and entertainment, it is definitely more easy to sell. And more and more developers see it.

Your developer projects you may equipped with project by various ways:

Demo flat/house fully equipped with system Foxtrot – show your potential customers in reality how they may live in your flat/house equipped with home automation system Foxtrot and offer it as a standard equipment.

Standardized solution tailor made to developer project needs – thanks to standardized solution you may get better price and offer home automation to all your customers.

Home automation ready – prepare your project for home automation system Foxtrot (install the wires) and offer to your customers Foxtrot as an additional equipment for a comfortable and energy saving living.

Use system **Foxtrot as Building Management System** of the whole developer complex. You will reach effective control of centralized air-condition and ventilation, heating system, energy management for all flats/residences and including central control room, so you may use Foxtrot as a complex Facility Management System.

For investors

By using control system Tecomat Foxtrot you are getting for **comfort**, **safety&security**, **savings**, **health and entertainment** the best solution regarding functions, possibilities of installation and maintenance and expandability. Investment into Foxtrot is an investment to a long life cycle and time-proven system, because Foxtrot has an industrial origin, that's why it has extremely long operation cycle and reliability. Thanks to this features you will be able to connect to Foxtrot even new technologies in the future.

For architects

System Foxtrot gives to architects hands a perfect tool for creation of the most courageous solutions at **home & building automation with no limits**. With Foxtrot the architect does not need to think, if Foxtrot may meet needs of the customer, because Foxtrot may control all. Important feature for architects is independence on interior controllers and wall switches design – they may be from any manufacturer. They also appreciate wall touch displays, which may have frames in any color and even in wood, metal etc. So the interior may be harmonized with no compromize.

Another important feature for architects is **control**, **monitoring and visualization of energy consumptions** – **facility management**. In houses of flats and residential complexes Foxtrot may work also as a data concentrator which reads data of energy consumption of each flat and use it for an invoicing of energy consumption for each residents etc.

For hotels and restaurants

System Foxtrot is often used as a complex system of **lights/scenes control in restaurants or hotels**. The owners are getting possibility to easy create any light scene, switching, dimming and creation of color scenes thanks to RGB control of Foxtrot.

Let your guests have a comfort of control via Foxtrot.

And you'll get a perfect overview of your hotel. Data from each rooms you may transfer to a central control and visualization in hotel reception. Of course, do not forget to connect access cards readers and control technologies automatically according to a presence or absence of your guests. In some countries, because of security reasons, Foxtrot let you get out of the hotel lift only in the floor with your room.

Thanks to using system Foxtrot as a building management system for control of heating system, air-conditioning and ventilation you will get **reduction of operating costs and very short return of your investment**.



Foxtrot Structure



How to get system Foxtrot

About us

Tailor made solution

Tailor made solution of home/building automation with Foxtrot is the way to meet all your needs without compromise. Discuss your dreams and needs with implementation companies . Let yourself inspire in showrooms or references presented at our website. In discussion with implementation companies you will create a concept, what and how you would like to control. Implementation company will prepare the project, quotation of costs, implement the system and will be ready to change/update or expand the system for you in the future. Because with Foxtrot you are getting flexible system responding to your needs which are changing during your life.

When getting the Foxtrot system, you may implement all at once or gradually according to your budget or building possibilities. If you decide to have system Foxtrot, you are free to expand it in the future, add new technologies in the system, add or change functions etc. So at any time, Foxtrot may adapt to your needs.

Even if you plan to have the home automation system Foxtrot in the future and not to invest right now, it is smart to realize some preparation for it during construction or remodelling of your house. It means to prepare the wires, what costs less, but in the future you will save a lot. Even in this situation it is smart to discuss your future needs with implementation companies and be prepared and avoid future useless expences.

Standardized solution

Thanks to its openness, modularity, flexibility and wide range of Foxtrot products there has been created standardized solutions of home automation, to be supplied on the market under various brand names. Thanks to standardization of modules and control and visualization of the system the price level of this solution became affordable for a mass market.

Bus/Wire solution

System Foxtrot contains from a central module and peripheral modules – actuators and sensors. Those may be connected to central module by wires (2 wires installation bus CIB – Common Installation Bus® with free topology or wireless. Bus solution is perfect solution in case of new construction of houses or remodelling, when we have possibility to install the wires where we need. Bus solution is more robust than wireless version, so if we may choose, it's better to have bus solution.

Wireless solution

Wireless solution of Foxtrot system is an advantage in the case when it's not possible or expensive to install the wires. It is usually in the case of already finished buildings or when the user of the building/house/flat is not an owner of it – rental living. In the case of moving, it is very easy to take the Foxtrot system with you and implement it in your new living. We are company Teco – leading Czech manufacturer of industrial control systems and control systems for building & home automation. Our tradition has begun in 1919 and our systems have been working in more than 50 countries worldwide.

Control systems which we are developing and manufacturing, are successfully working in heavy conditions of industry – from machines, mining, food, oil and others. They control large water dams in deserts as well as multinational brewery production. Our systems control the building of the Czech national heritage Karlstejn Castle but also tens of thousands applications in home & building automation: from ordinary family houses up to a large administrative and commercial buildings. Thanks to its exceptional reliability, features, functions and affordable price, our systems are simply famous.

System Foxtrot has been awarded by some prestigeous awards and we manufacture it even for some companies who supply it on the market under their own brands.

Buy Foxtrot and get all benefits of Foxtrot to your life!



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www.controlyourhouse.com