ACFA Intellect

Paradox Integration Module Settings Guide

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1 Introduction into Paradox Integration Module Settings Guide

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1.1 Purpose of the document

This *Paradox Module Settings Guide* is a reference manual designed for *Paradox* Module configuration technicians and operators. This module functions as part of security- and fire alarm systems and access control systems, which have been built on the *ACFA Intellect* Software System.

This guide presents the following materials:

1. General information about the *Paradox* integration module;
2. Configuration of the *Paradox* integration module;
3. Working with the *Paradox* integration module.

1.2 General information about the *Paradox* integration module

The *Paradox* integration module is part of *SFA*/*ACS* systems built on the *ACFA Intellect* Software System. It is designed to perform the following functions:

1. Configuration of a *Digiplex EVO* SFA/ACS (manufactured by Paradox);
2. Interaction between a *Digiplex EVO* SFA/ACS and the *ACFA Intellect* Software System (monitoring, control).

Note:

The integration module only supports programming a subset of the Digiplex EVO system settings.

To program the unsupported settings, you must use the resources provided by the manufacturer: keypads and/or Baby Ware software. Detailed information about the Digiplex EVO SFA/ACS is presented in the official documentation for that system.

Attention!

Before studying this guide we recommend reviewing the documentation for the Digiplex EVO SFA/ACS.

The *Paradox* integration module supports communication with the following *Digiplex EVO SFA/ACS* devices:

1. EVO48 control panel;
2. EVO192 control panel;
3. K641R LCD keypad.

Before configuring the *Paradox* integration module, the following actions must be performed:

1. Install the *Digiplex EVO SFA/ACS* hardware on the object to be secured.
2. Program the LCD keypad.
3. Program the control panel using the LCD keypad or Baby Ware software, which is freely distributed by the manufacturer of the *Digiplex EVO SFA/ACS*.

2 List of Terms used in Paradox Integration Module Settings Guide

PIN code – the same thing as a user access code.

Access – the movement of people, vehicles, and other objects into (out of) facilities, buildings, zones, and areas.

Closed zone – a *Digiplex EVO* system security zone in which the alarm input (sensor) is in a normal (inactive) state. The normal state indicates there have been no events.

Water zone – a *Digiplex EVO* system zone designed to log events in the water infrastructure of a secured area, i.e. **Water leak**, **Tank level**, etc. (depending on the sensor used).

Gas zone – a *Digiplex EVO* system zone designed to log events in the gas infrastructure of a secured area, i.e. **Gas leak**, **Carbon monoxide detected**, etc. (depending on the gas sensor used).

Heating zone – a *Digiplex EVO* system zone designed to log **Heating** events in the heating infrastructure of a secured area, i.e. **Heat leak**, **High temperature**, etc. (depending on the temperature sensor used).

Cool zone – a *Digiplex EVO* system zone designed to log **Cooling** events in the heating infrastructure of a secured area, i.e. **Cooling**, **Low temperature**, etc. (depending on the temperature sensor used).

User ID – a user's name in the *Digiplex EVO* system.

Actuating devices – turnstiles, gates, boom barriers, or doors, which are equipped with electromagnetic or electromechanical locks.

User access card – a user's personal card for accessing secured areas and/or controlling the *Digiplex EVO* system.

K641R keypad – a keypad with an LCD that connects to an EVO control panel and is designed to configure and control that panel.

Administrator code – a code that grants access to all functions in a *Digiplex EVO* system; it also grants the ability to add, edit, and delete user access codes. The code is between 4 and 6 digits long.

User access code – a personal user code for accessing secured areas and/or controlling the *Digiplex EVO* system.

EVO control panel – a panel for monitoring and controlling a fire/security alarm system and access control devices. The *Intellect* Software System integrates the EVO48 and EVO192 panels.

Digiplex EVO configuration – the sum total of all of the *Digiplex EVO* hardware and access parameters.

Instant arming – arming of only selected *Digiplex EVO* system zones (i.e., windows and doors), allowing the user to freely occupy other zones (i.e. residential zones). When a "instantly armed" zone is opened, the entry-delay timer is not activated.

Normal arming – arming a section in which all zones are closed.

Open zone – a *Digiplex EVO* system security zone in which the alarm input (sensor) is in an active state. The active state means that events are logged (i.e. **Access granted**, **Fire alarm**, **Water leak**, **Gas detected**, etc.).

Perimeter arming – arming of only selected *Digiplex EVO* system zones (i.e., windows and doors), allowing the user to freely occupy other zones (i.e. residential zones). When a "perimeter armed" zone is opened, the entry-delay timer is activated.

Digiplex EVO security zone – a logical element of a *Digiplex EVO* system, designed to log a specific type of events (i.e. only access control events). Events are logged based on changes to the state of the zone's alarm input (sensor). A security zone is assigned to a section of a *Digiplex EVO* system based on its location.

Digiplex EVO access parameters – the sum total of all user rights, access levels, time schedules, and holidays stored in EVO control panels.

Digiplex EVO hardware parameters – the *Digiplex EVO* system's hardware settings.

Under-duress arming – an option that makes it possible to quickly arm open zones.

Digiplex EVO system section – a *Digiplex EVO* system is divided into sections by location (office, warehouse, etc.). Each section is controlled separately by the user assigned to it, i.e. the user with the rights to execute the required control operations).

Intellect Server - a computer configured as an *Intellect* Software System **Server**.

Serial number – an 8-digit hexadecimal number assigned to each device in a *Digiplex EVO* system. It serves to identify the device in the system.

Access control system (ACS) – a system of hardware and software designed to monitor and control access.

Readers – electronic devices designed for entering an access code using a keypad and/or reading encoded data from an access card.

Entry-delay timer – an option that gives the user time to enter a secured area and enter a code to disarm the *Digiplex EVO* system before triggering the alarm.

Exit-delay timer – an option that gives the user time to leave an area before arming the *Digiplex EVO* system.

Access point – a place where access is controlled, i.e. a door in an *Digiplex EVO* system.

Time schedule - a set of any number of time intervals during a day (24 hours) defined for several days (1 to 366), and the time intervals during specific dates. Time schedule defines a schedule of access to the secured object.

3 Supported hardware and licensing of the Paradox integration module

Manufacturer	Paradox Security Systems Canada 780 Industrial BoulevardSt-Eustache, QuebecCanada, J7R 5V3 Tel: (450) 491-7444 Fax: (450) 491-2313
Integration type	Low-level protocol
Equipment connection	RS-232, USB

Supported equipment

Equipment	Function	Features
EVO48	Control Panel	48 zones maximum 8 on-board zones (16 ATZ) 4 partitions 96 user codes In-field firmware upgrade Access control (doors maximum) 32 Access levels/schedules 16 / 16 1024 events buffered PGMs 250 (2 on board) PGM (+/-) trigger 32 virtual zones 127 expansion modules
EVO192	Control Panel	192 zones maximum 8 on-board zones (16 ATZ) 8 partitions 999 user codes In-field firmware upgrade Access control (doors maximum) 32 Access levels/schedules 16 / 32 2048 events buffered PGMs 250 (5 on board) PGM (+/-) trigger 32 virtual zones 254 expansion modules
ACM12	Access controller	Allows access with Card and/or PIN when used with R915 Allows arming with Card and/or PIN when used with R915 Allows access control for one door (reader, REX device, a door contact and a locking device can be connected) Only 4 wires to connect R910 or R915 reader In-field firmware upgrade via CV4USB using WinLoad Automatic unlocking schedule Door Left Open and Door Forced Open options Door unlock and extended delay timers Unlock door manually with button or PGM event Unlock Door On Fire Alarm option Safe Mode option (during a communication loss, the access control door connected to the module can grant access to up to 4 specified cards or any valid access card) Built-in supervised 1.5A switching power supply Push button to activate or deactivate the Auxiliary output Supports 4-wire and 26-bit Wiegand card readers |

Protection

1 EVO48/192 control panel (ACM12 is supported by EVO).

4 Configuration of the Paradox integration module

4.1 Procedure for configuring the Paradox integration module

The *Paradox* integration module is installed as follows:

1. Configure the FAS/ACS Paradox in vendor software.
2. Configure interaction between the *Intellect* Server and the EVO control panel.
3. Configuration of matching Paradox zones and ACFA Intellect time zones.
4. Configuration of matching Paradox access levels and ACFA Intellect access levels.
5. Configuration of the EVO control panel.
6. Reading the Digiplex EVO system configuration from the EVO control panel.
7. Configuration of the Paradox access template.

4.2 Configuration of the connection between the Intellect Server and the EVO control panel

Attention!

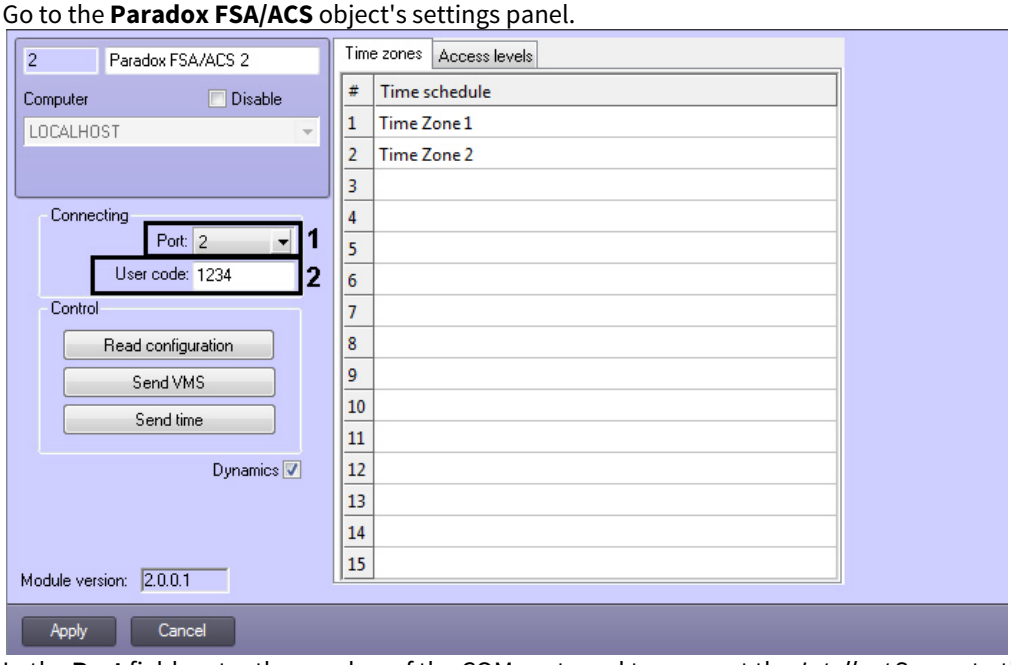
The EVO control panel is connected to the *Intellect* Server using connection adapter (converter). Operation with the following converters is guaranteed: PARADOX 307USB and PARADOX IP150. Other converters have not been tested and their correct operation in the *Intellect* is not guaranteed.

Note:

Detailed information about connecting an EVO control panel to a computer is presented in the panel's official documentation.

To configure the connection between the *Intellect* Server and the EVO control panel, do the following:

1. Go to the **Paradox FSA/ACS** object's settings panel.



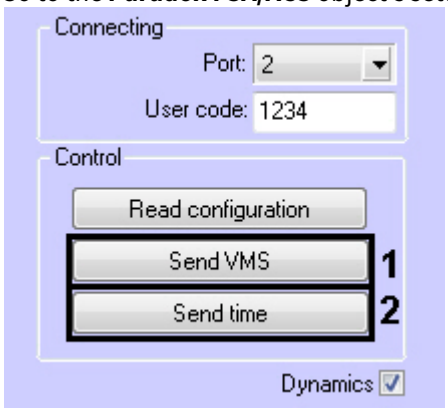
2. In the **Port** field, enter the number of the COM port used to connect the *Intellect* Server to the EVO control panel (**1**).
3. In the **User code** field, enter the administrator code for the EVO control panel (**2**).
4. Click the **Apply** button (**3**).

Connection between the *Intellect* Server and the EVO control panel is configured.

4.3 Configuration of the EVO control panel

To configure the EVO control panel, do the following:

1. Go to the **Paradox FSA/ACS** object's settings panel.



2. To send data of the *Visitor Management System* module (users, access levels, time zones, etc.) to the EVO control panel click the **Send VMS** button (**1**).

> **Note.**
>
> For dynamic sending changes of user parameters set the **Dynamics** checkbox and click the **Apply** button.

3. To synchronize the time on the *Intellect* Server and the EVO control panel click the **Send time** button (**2**). As a result the current time of the *Intellect* Server will be set in the EVO control panel.

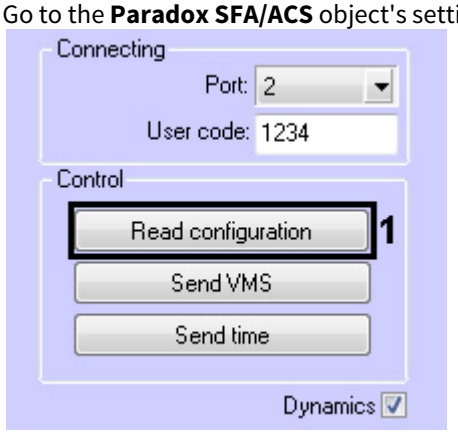
> **Note.**
>
> The settings for the connection between the Intellect Server and the EVO control panel must be provided (see the Configuration of the connection between the Intellect Server and the EVO control panel section).

Configuring the EVO control panel is configured.

4.4 Reading the Digiplex EVO system configuration from the EVO control panel

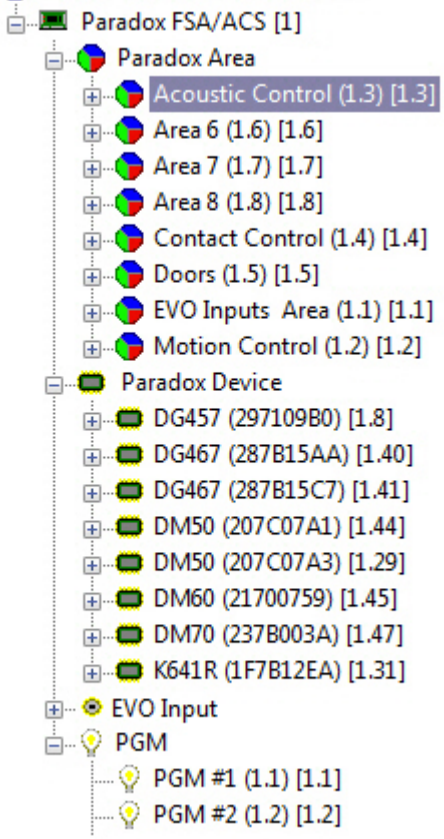
To read the *Digiplex EVO* system configuration from the EVO control panel, do the following in the *ACFA Intellect* Software System:

1. Go to the **Paradox SFA/ACS** object's settings panel.



> **Attention!**
>
> The settings for the connection between the *Intellect* Server and the EVO control panel must be provided (see Configuration of the connection between the Intellect Server and the EVO control panel section).

2. Click **Read configuration** button (**1**).
3. The operation will update the following components:
   a. *Paradox* module's object tree;
   b. access parameters stored in the *ACFA Intellect* Software System (e.g. users and time schedules).



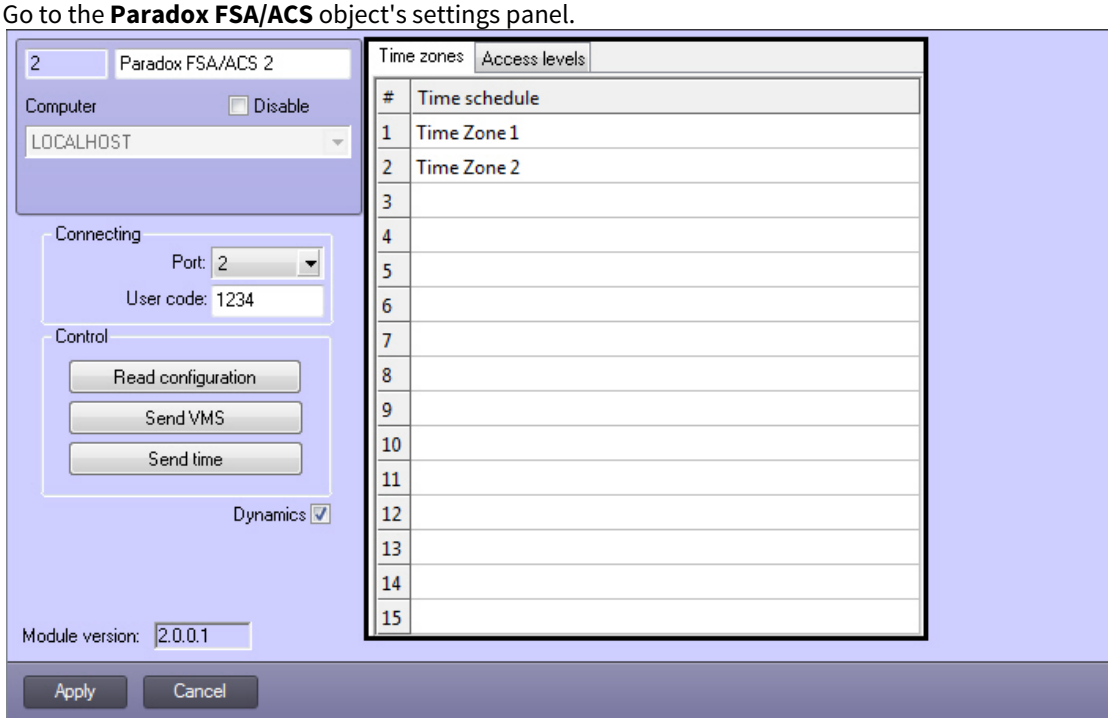
Components are updated in accordance with the parameters written on the EVO control panel.

Reading the *Digiplex EVO* system configuration from the EVO control panel to the *ACFA Intellect* software is completed.

4.5 Configuration of matching Paradox zones and ACFA Intellect time zones

Configuration of matching *Paradox* zones and *ACFA Intellect* time zones is performed as follows:

1. Go to the **Paradox FSA/ACS** object's settings panel.

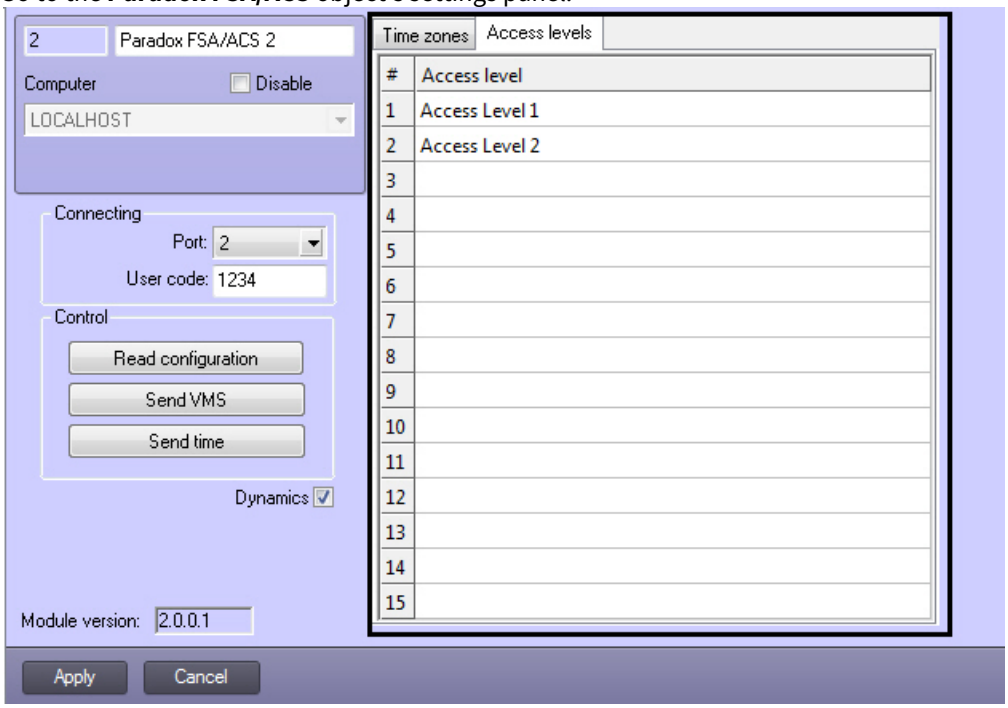


2. Numbers of *Paradox* zones are displayed in the table.
3. Specify the **Time zone** object of the *ACFA Intellect* opposite to the corresponding number of the *Paradox* zone.
4. Click **Apply** to save changes.

4.6 Configuration of matching Paradox access levels and ACFA Intellect access levels

Configuration of matching *Paradox* access levels and *ACFA Intellect* access levels is performed as follows:

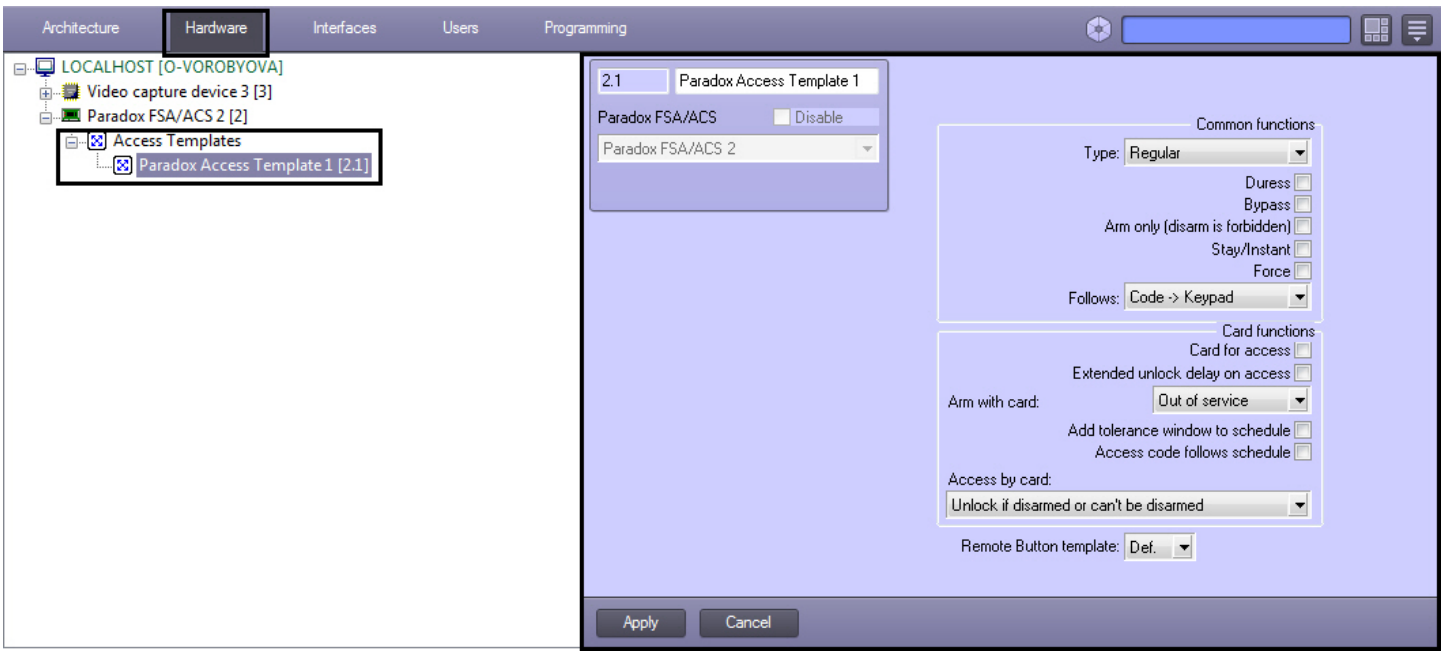
1. Go to the **Paradox FSA/ACS** object's settings panel.



2. Numbers of *Paradox* access levels are displayed in the table.
3. Specify the **Access level** object of the *ACFA Intellect* opposite to the corresponding number of the *Paradox* zone.
4. Click **Apply** to save changes.

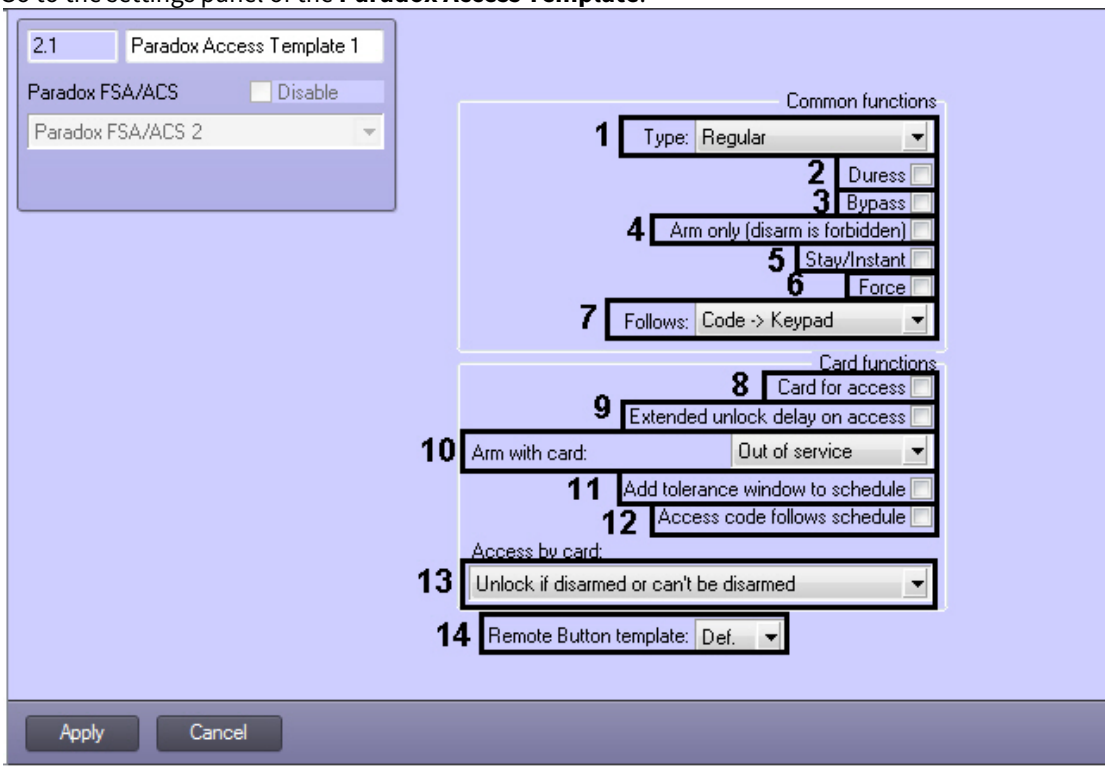
4.7 Configuration of the Paradox access template

The *Paradox* access template is configured in the settings panel of the **Paradox access template** object. This object is created on the basis of the **Paradox FSA/ACS** object on the **Hardware** tab of the **System settings** dialog window.



To configure the *Paradox* access template, do the following:

1. Go to the settings panel of the **Paradox Access Template**.



2. From the **Type:** drop-down list select the type of the card (**1**).
3. Set the **Duress** checkbox for duress disarming (**2**).
4. Set the **Bypass** checkbox for bypass of determined areas during arming (**3**).
5. Set the **Arm only (disarm is forbidden)** checkbox if user has rights only for arming (**4**).
6. Set the **Stay/Instant** checkbox for partial arming of perimeter or for instant arming (**5**).
7. Set the **Force** checkbox to arm opened areas. If areas will be closed after arming, then they will be armed (**6**).

8. From the **Follows:** drop-down list select sequence of input code and keypad (**7**).
9. Set the **Card for access** checkbox is the corresponding card is used for access (**8**).
10. To use extended unlock delay on access set the corresponding checkbox (**9**).
11. From the **Arm with card:** drop-down list select the way of arming by card (**10**).
12. To add tolerance window to schedule set the corresponding checkbox (**11**).
13. Set the **Access code follows schedule** checkbox if access code can be only entered within schedule (**12**).
14. From the **Access by card:** drop-down list select action performing by card presenting (**13**).
15. From the **Remote Button template:** drop-down list select number of remote button (**14**).
16. Click **Apply** to save changes.

Configuration of the *Paradox* access template is completed.

5 Working with the Paradox integration module

5.1 General Information on working with the Paradox integration module

The following interface objects are used to work with the *Paradox* integration module:

1. **Map**;
2. **Event Log**.

Information on configuring the **Map** and **Event Log** interface objects is given in Intellect Software Package: Administrator's Guide.

How to work with these interface objects is described in detail in Intellect Software Package: Operator's Guide.

5.2 Controlling a DG-85 sensor

Controlling a *DG-85* sensor is performed in the **Map** interactive dialog box using the feature menu of the corresponding object. Description of feature menu of the **DG-85** object is given in the table.

Menu command	Functionality
Bypass	Enables sensor bypass
Clear alarm memory	Clears alarm memory
Clear bypass	Clears sensor bypass

5.3 Controlling a Paradox area

Controlling a *Paradox* area is performed in the **Map** interactive dialog box using the feature menu of the corresponding object. Description of feature menu of the **Contact control** object is given in the table.

Menu command	Functionality
Instant Arm	Enables instant arming of area
Force Arm	Enables force arming of area
Stay Arm	Enables perimeter arming of area
Regular Arm	Arms area
Disarm	Disarms area