Tytan® DS700 is an immobiliser with optional anti-hijack function. The device is equipped with Bluetooth module and can work with GPS/GSM localization devices.
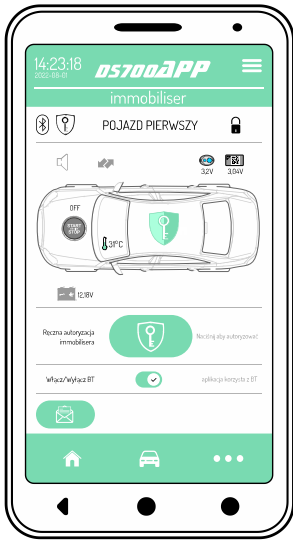
1.1 AUTHORISATION - automatic/autonomous
Automatic authorisation takes place via Bluetooth when the vehicle user is in the proximity of the vehicle. To use this function, the user must have a JokerBT authorization token (fig. 1)

Fig. 1 JokerBT token

or an Android or iOS phone with the DS700BT app installed (fig. 2). In both cases, the authorisation command is sent automatically.

Fig. 2 DS700APP

Android

1.2 AUTHORISATION – manual

MANUAL AUTHORISATION must be performed by the user
a) IMMOBILISER – prior to any vehicle start attempt. Without AUTHORISATION it is not possible to start the vehicle;
b) ANTI-HIJACK – each time the door is opened (see 3.2a) while the engine is running (ignition on).

To AUTHORISE the user must do one of the following:
- use the hidden DS TOUCH proximity button (Fig. 3) by touching it for more than 1 sec. (the location of the button should be indicated by the DS700 installer),
- or use a phone (Android or iOS) with the DS700APP app installed by pushing the manual authorisation button (Fig. 4),
- or use the remoteBT (Fig. 5) by pressing any of the buttons.

NOTE: The operation of the DS TOUCH button can be configured so that a 4-digit PIN code must be entered for authentication.
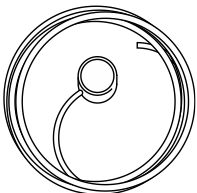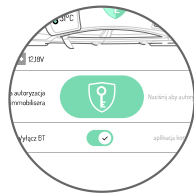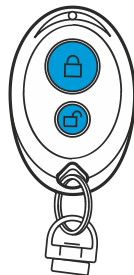
Fig. 3
DS TOUCH button

Fig. 4

Fig. 5
L type remoteBT

2.1 IMMOBILISER
Tytan® DS700 immobiliser is an anti-hijack device which does not allow the vehicle to be started. The immobiliser activates 30 seconds after the ignition is switched off. When the immobiliser is active, starting the vehicle is not possible without prior AUTHORISATION by the user. This function can be deactivated by the installer.

2.2 IMMOBILISER - alarming
If the device is not AUTHORISED, it may alarm when attempting to start the vehicle. The alarming may occur:
- within 30 seconds of the ignition being switched on and there is no AUTHORISATION
- or within 30 seconds of opening the vehicle door and there is no AUTHORISATION

NOTE: the ALARM function must be enabled by the installer
The alarm function due to the lack of AUTORYISATION of the immobiliser protects the vehicle against hijack by:
- counterfeiting the factory remote control
- or retransmission of the vehicle's factory remote control signal, i.e. the popular "**suitcase**" or "**GameBoy**" method.

2.3 IMMOBILISER LED signalisation
See table at the end of the manual para. 5.1 "Signalling of operating states"

3.1 ANTI-HIJACK
Tytan® DS700 can operate as anti-hijack device, i.e. to prevent the hijack of a running vehicle. This function protects the vehicle if the user is forced to leave the vehicle while the engine is running. The anti-hijack procedure is triggered when the door is opened while the engine is running.

3.2 ANIT-HIJACK – procedure for stopping the vehicle
If the authorising device (jokerBT or telephone with DS700 app - see 1.1) is within range of the Tytan® DS700, the ANTI-HICJAK procedure is not triggered.

ANTI-HIJACK vehicle stop procedure:

a) The start of the ANTI-HIJACK procedure occurs when the vehicle door is opened while the engine running (ignition on). Depending on the configuration of the device, the procedure is started by opening the driver's door or the front passenger's door or any door of the vehicle.
b) after 30 sec. from door opening the LED signalisation is activated (continuously lit) and the alarm siren sounds twice in short bursts (this lasts for 30 sec.)
c) after an additional 30 sec. the LED lights up continuously, the siren sounds, the turn signals are activated and the engine blockade is activated.

Depending on the settings on the device, the vehicle can be blocked as follows:
- blocking of the engine 30 seconds after the start of the signal; immobilisation of the vehicle occurs immediately (option not permitted in the EU)
- blocking of the engine after 30 seconds if the vehicle is stationary or the ignition has been switched off; immobilisation of the vehicle takes place if the speed of the vehicle as read from the CAN bus is 0 km/h (vehicle has stopped) or an ignition switch-off is detected
- locking of the engine 30 seconds after turning the ignition off (EU mode).

NOTE: The anti-hijack function other than the "EU mode" can only be activated in countries where UN Regulation 97EKG does not apply.

3.3 ANTI-HIJACK – stopping procedure
ANTI-HIJACK procedure can be stopped at any time by AUTHORISATION.
When using automatic AUTHORISATION (see 1.1), ANTI-HIJACK procedure should not activate.
When using manual AUTHORISATION, use one of the methods described in 1.2.

3.4 ANTI-HIJACK – installation requirements
If the ANTI-HIJACK function is to be used, it is necessary to:
a) unlocking and configuration of the ANTI-HIJACK procedure on the device
b) correct connection of the vehicle locking circuit
c) connecting the ignition signal or reading the ignition signal through the CAN bus
d) connecting the door signal or reading the door signal through the CAN bus
e) connecting the optical signaling circuits - control of the turn indicators
f) connecting an alarm siren or connecting an output controlling a sound signal relay.
g) use of one of the AUTHORISATION methods (see 1.1 and/or 1.2)

3.5 ANTI-HIJACK – LED signlisation
See table at the end of the manual paragraph. 5.1 "Signaling of operating states"

3.6 ANTI-HIJACK – important notice
1. If the IMMOBILISER function has been blocked by the installer, the ANTI-HIJACK procedure does not prevent unauthorised starting of the vehicle! After the vehicle has been entered, it is possible to start the vehicle despite the lack of AUTHORISATION.
2. If the IMMOBILISER function has been disabled by the installer in the absence of AUTORISATION, opening the door does not start the ANTI-HIJACK procedure, only switching on the ignition (starting the vehicle) starts the ANTI-HIJACK procedure (see 3.2).

4.1 SERVICE mode
During the operation of the Tytan® DS700, there may be times when all protective functions should be disabled, e.g. when returning a vehicle to service.
In SERVICE mode, the Tytan® DS700 has the IMMOBILISER and ANTI-HIJACK functions permanently disabled. The system is not active and does not protect the vehicle.
Putting the Tytan® DS700 into SERVICE mode is possible in two ways:

a) using the DS700APP application,
b) using the hidden PA button or the DS TOUCH proximity button after prior setting of the SERVICE PIN by the installer.

4.2 SERVICE mode using the DS700APP application

In order to enter/exit service mode:

a) DS700APP file must be installed on the phone, paired and assigned to the device,
b) IMMOBILISER and ANTI-HIJACK functions cannot be active, signal LED does not flash (see 1.1 or 1.2),
c) run the DS700APP application on your phone,
d) in the bottom right corner of the application window, press the 'MORE' button.
e) when the tools screen appears, press the 'SERVICE' button, press and hold the 'SERVICE ON' button or the 'SERVICE OFF' button.

Confirmation of entering or exiting the SERVICE mode is provided by 5 short beeps with the siren.

4.3 SERVICE mode using the PA or DS-TOUCH button

4.3.1 Setting of SERVICE PIN

SERVICE PIN code is set in the DS700 PC programming software (button 'Change SERVICE PIN'). The default PIN code is '0000'. If the installer changes the code from '0000' to any other code, it will be possible to enter the device into the SERVICE mode using the DS TOUCH button.

4.3.2 Entering SERVICE mode

IMMOBILISER and ANTI-HIJACK functions can not be active; signal LED does not flash (see 1.1 and/or 1.2)
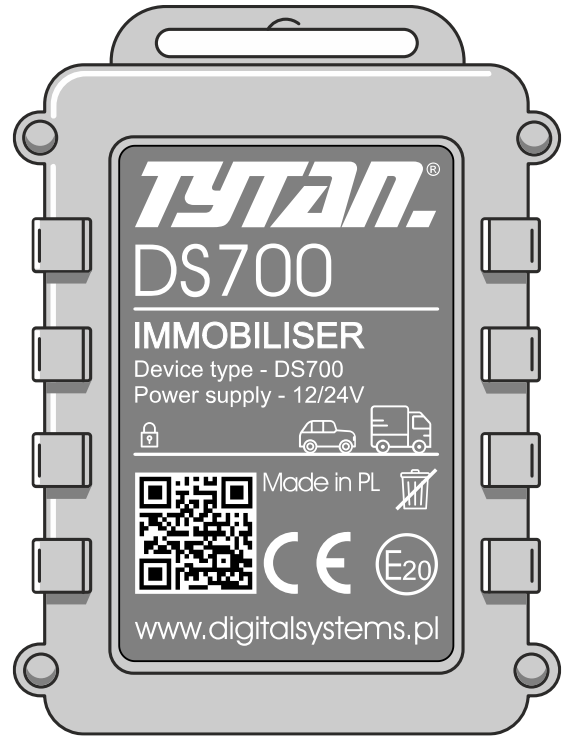
a) press and hold the PA or DS-TOUCH button for approx. 6 sec,
b) the LED starts blinking rapidly,
c) release the PA or DS-TOUCH button,
d) after a while the LED lights up permanently,
e) press the button as many times as many times as the first digit of the PIN code WARSZTAT (after each press the LED flashes confirming that the button has been pressed),
f) when the first digit has been entered, the LED goes out and after a while the LED is switched on permanently waiting for the next digit of the code,
g) similarly enter the 2nd, 3rd and 4th digit of the code,
h) if the code entered is correct, the LED flashes quickly and goes out,
i) confirmation of correctly entered code will be 5 short beeps with siren,
j) if the code was incorrect, the device returns to the state before the attempt to enter the code,

IMPORTANT: 3 consecutive unsuccessful attempts to enter the authorisation code result in blocking the entry for 5,10 and 30 minutes respectively.
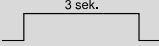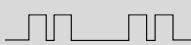
4.3.3 Leaving SERVICE mode

Repeat the procedure in section 4.3.2 'Entering SERVICE mode'.

5.1 Signaling of operating states

SIGNALISATION	MEANING	VEHICLE IMMOBILISED
GENERAL		
LED is off	IMMOBILISER is authorised, ANTI-HIJACK is unactive	NO
LED blinks 1x for 3 sec.	IMMOBILISER/ANTI-HIJACK - AUTHORISATION confirmed	NO
LED blinks rapidly for 3 sec.	IMMOBILISER/ANTI-HIJACK - AUTHORISATION confirmed, weak battery in jokerBT authorization token	NO
LED blinks 2x every 2 sec.	Tytan® DS700 in SERVICE mode IMMOBILISER and ANTI-HIJACK functions are disabled	NO
IMMOBILISER		
LED blinks 3x every 2 sec.	IMMOBILISER is active. Vehicle can not be started. AUTHORISATION is required to start the vehicle	YES
LED blinks 4x every 2 sec.	IMMOBILISER is active and the countdown of 30 sec. to the alarm signal has started. The vehicle cannot be started. If the IMMOBILISER is not authorised, within 30 sec. the alarm signal will start.	YES
LED blinks 4 x every 2 sec. Blinkers and siren signalisation	IMMOBILISER is active. Alarm signalling is in progress. AUTHORISATION is required to start the vehicle and end the alarm signalling.	YES
ANTI-HIJACK		
LED lights continuously Siren signalisation 2 x every 4 sec.	ANTI-HIJACK procedure has been initiated, the countdown to vehicle immobilisation is underway.	NO
LED lights continuously Blinkers and sirens signalisation	ANTI-HIJACK procedure is underway, vehicle is immobilised or will be immobilised soon .	NO/YES

Tytan DS700 IMMOBILISER