11 Internet remote access

The web site **www.GSMLink.cz** enables GSM pager remote control (to users) and setting (to installers). The following features are enabled:

To get internet access to an installed and powered GSM pager you will first be asked to register your GSM pager on the first page. You will find a unique registration code for your GSM pager on the warranty card.

11.1 Reset GSM

If you need to disconnect and then reconnect the GSM module to the GSM network, then use the command "MASTER RESET GSM".
This does not affect any settings and is typically used for GPRS activation or charging up credit. This command always requires the Master code.

12 Central monitoring station communication

The GSM pager allows central monitoring via GPRS data protocol. The central monitoring station (CMS) gets arming, disarming and alarm information. It also regularly checks the communication link to the car after it is armed. So if anyone tries to tamper with GSM pager communications, it will indicate an alarm at the CMS.

13 Additional features

13.1 Car battery low voltage reporting

The GSM pager checks the voltage of the car battery. If the voltage is too low (10V) it will notify users via an SMS message. This avoids complete discharging of the car battery if you forget to turn off your lights etc.

13.2 Back-up battery

The GSM pager can be backed up by a BB-01 battery. Thus, the GSM pager can keep sending information. Back up time is provided for several hours. The manufacturer recommends regular BB-01 checking once a year. The battery should be replaced every two years. Low voltage of the back up battery (below 4V) is reported to the user via SMS (change the battery in this case).

13.3 Car location

If your GSM provider offers a location service, you have to activate the LOCATOR command after installation by the following SMS sequence:

MASTER LOCATOR xx…x

where: **MASTER** is the installers code
xx...x is the provider's sequence to obtain the position of the GSM pager SIM card (check with your GSM provider for details)

After this sequence has been sent successfully once, the GSM pager memorizes the parameters and from this moment on you can obtain the location of the car by just sending the instruction LOCATOR.

Note: GSM location service may not be available in some countries.

13.4 Pre-paid SIM card balance

It is recommended not to use prepaid cards in the GSM pager. If you have no other choice than prepaid cards, you can enable the CREDIT instruction by following sequence:

MASTER CREDIT uuu..u xx yyy zz

where: **uuu…u** is the provider's code to obtain the balance
xx is the time period (in days) for regular checking
yyy is the threshold level below which the balance is reported to the user (TEL1)
zz is the position of the first digit of the balance in the reply SMS from the provider

- After this sequence has been sent once, the GSM pager will check the balance automatically every xx days and if the balance is lower than yyy the user will be notified (TEL1)
- If the CREDIT instruction is enabled in the above way, the user can also obtain the current balance by the instruction CREDIT
- To disable the automatic balance checking set the time period "xx" to 00.

13.5 Roaming

If you travel abroad and your SIM card supports roaming, the GSM pager will work there too.

13.6 Siren activation

If you are searching for a stolen car, you can operate the siren remotely by the following SMS instructions:

MASTER SIREN turns the siren on for 10 minutes
MASTER SIREN ON siren on permanently
MASTER SIREN OFF siren off

To avoid misuse of this option, only an installer can switch the siren on.

13.7 LED indicator signals

LED state	Meaning
OFF	Disarmed
permanently ON	connecting to a GSM network or a phone call
Regular slow flashing	Armed
Regular fast flashing	Alarm memory
Interrupted light	Car was stopped (immobilization)
Flashing after ignition off	GSM network is not available
Flashes after ignition on	Number of enrolled remote controls

14 Specification

Power supply	12V DC (8-16V)
Stand-by consumption	max. 10 mA
Max. consumption (during GSM communication)	1 A
GSM band	900 / 1800 MHz dual band system, power class 4
Transmitted power	2 W /GSM900, 1 W /GSM1800
VF frequency	433,92MHz
Working temperature	-20°C to +70°C
Output SIR	+12V, max. load 1,3A
Immobilization	8A permanently, 12A for 30 seconds
Central locking outputs	max. 200mA, to GND pulses 0,3s, 4s or 60s (optional)
Complies with	ECE Rugulation No. 97.00, 10

Can be operated according to ERC/DEC98(20,21)

Health and safety	ČSN EN 60950
EMC	ČSN ETSI EN 301489-1, ČSN ETS 300683
radio interferences	ČSN ETSI EN 301419-1, EN 301511, ČSN ETSI EN 300220

CE E8 97 RA-01 3780

Hereby, Jablotron Ltd., declares that this CA-1202 is in compliance with the essential requirements and other relevant provisions of Directive 1989/336/EC and 1999/5/EC.

Original of the conformity assessment can be found at the web page www.jablotron.com, section Technical support

Note: Although this product does not contain any harmful materials we suggest you to return the product to the dealer or directly to the producer after usage.

CA-1202 "Athos" installation manual

MODE 3 – GSM pager for cars with an installed car alarm

Main features for this mode:

- Sending of alarm SMS messages to up to 4 phones.
- Dialing and acoustic alarm warning to up to 4 phones.
- Location tracking of the car (using the triangulation feature of the GSM provider)
- Central monitoring of the car when armed (fully supervised GPRS protocol)
- Remote immobilization of the car via SMS instructions.
- Remote control of the alarm system and the central locking via SMS instructions.
- Optional – Hands-free calling (receiving of any incoming call and dialing up to four pre-programmed phone numbers)
- Remote internet alarm access (user and installer levels) via www.GSMLink.cz

1 Before installation

The CA-1202 should only be installed by a professional installer. The manufacturer assumes no liability for damages caused by incorrect installation or use of this product.

The Athos GSM pager is suitable for cars with 12 V and negative grounding. The main unit is designed for installation in the passenger cabin.

Disconnect the car battery before starting installation; **study the car owner manual first.** Avoid drilling into the metal parts of the car body.

Note: Use only proper crimping tools and parts to make connections. Cut all unused wires and insulate them properly.

The thin wire which leads directly out of the central unit is the remote control and wireless detector antenna. The location of this wire affects the communication range. Place the antenna on a suitable plastic surface so that the other wires do not screen it.

2 Wiring

- **YELLOW** – siren output (+12V / max. 1,3A).
- **Gray – instant activation input** reacts to connection or disconnection from the ground (automatically recognizes logic).
- **WHITE – INP1 input** - reacts to connection or disconnection from the ground (automatically recognizes logic). Reaction delay is 3 seconds
- **BLUE — ignition key** input (+12V). Be sure, that there is +12V while the key is on and while starting.
- **GREEN – LED indicator** – install it in a visible spot on the dashboard. Connect the other end of this lead to the GND.
- **BLACK – GND** – connect to the original grounding in the car.
- **RED – power supply +12V -** connect directly to the battery. Check that the installation is properly finished and that the GSM antenna is connected before powering up!!
- **ORANGE – back-up battery** – connect a BB-01 optional battery (Jablotron) if desired. If the BB-01 is not connected, then ground the wire.
- **2x BROWN** – immobilization circuit (8A permanently, max. 12A / 3minutes).
- **Pink** – not used

3 SIM card insertion

1. Make sure, that the **PIN password on the SIM is disabled**. You can do this using a mobile phone (e.g. for NOKIA: MENU, SETTINGS, SECURITY SETTINGS, PIN CODE REQUEST, OFF). If your SIM card does not allow switching the PIN off, change the PIN to 0000.

2. Activate the SIM card if necessary (see provider's instructions), **ensure that it works** (by a mobile phone) and **record its phone number**.

3. Using a thin pointed tool, press the colored button to release the SIM cardholder. **Insert the SIM card into the holder** with the gold contacts facing up and then reinsert the holder.

4 GSM antenna installation

DO NOT switch the power on before the GSM antenna is connected. The provided antenna is adhesive and should be attached to the car window. The antenna should not be obstructed by any metal parts. It is recommend to install the antenna in a place where it is not easily visible (a tinted part of the window, behind the mirror etc.). If the car has an original GSM antenna installed, it can be used (if the connector is different, use an appropriate adapter).

5 Initial powering-up of the GSM pager

Make sure, that the GSM antenna is connected, the SIM card inserted and the wire harness installed properly. Then connect the power (car battery). The LED indicator will turn on and the siren will make a short chirp. Wait until the LED turns off (up to 1 minute).

If the LED starts to flash, no GSM network was found. In such a case turn the power off, remove the SIM card and try to use it in a mobile phone (at the place where the GSM antenna is). Check also if the PIN protection is OFF (or set to 0000). If the SIM card logs into a network successfully, reinsert it in to the pager and repeat powering-up.

After the GSM pager is powered up, you have to:

a) **Select Mode 3** by the command **RESET EN 3**
b) **Enroll remote controls** (if used)
c) **Set the programmable features** (phone numbers, DIP, SET, etc.).

These can be done by:

- ***SMS instructions*** – see table 6.1. *For example sending an SMS: **MASTER RESET EN 1** to the GSM pager will select Mode 1.*
- ***Internet page:*** ***www.GSMlink.cz*** is the most convenient way. To register there you need to know the registration code (printed on the warranty card) and the master code (factory default is MASTER).
- ***SIM Card phone directory editing*** (see table 6.1 for list of features which can be programmed this way). After the initial powering-up a list of parameters is created in the SIM card phone directory. If you then insert the SIM card in to a mobile phone, you can set particular features (by entering numbers into the created list). The entry for Mode setting is not automatically created, but it is possible to make a new entry with the name: RESET EN and the number: 1. Data entered this way are read by the GSM pager after the SIM card is reinserted. For security reasons it is erased after reading.

6 Enrollment of remote controls

Up to 4 RC-4x remote controllers and can be enrolled to the GSM pager (after Mode 3 is selected by the RESET EN 3 instruction).

Remote control enrollment:

1. Switch the **ignition on**
2. Send the SMS instruction: **MASTER LEARN RC**
   - If the siren is connected to the GSM pager it will chirp 3x and the LED will start flashing.
3. Press and **hold buttons** and together for 3 sec on the remote control.
   - A siren chirp confirms the enrollment.
   - By enrolling the first remote control all other remote controls previously enrolled will be erased (all the remote controls you want to use must be enrolled during the same enrollment session).
4. **Exit** enrollment by **turning the ignition off**.

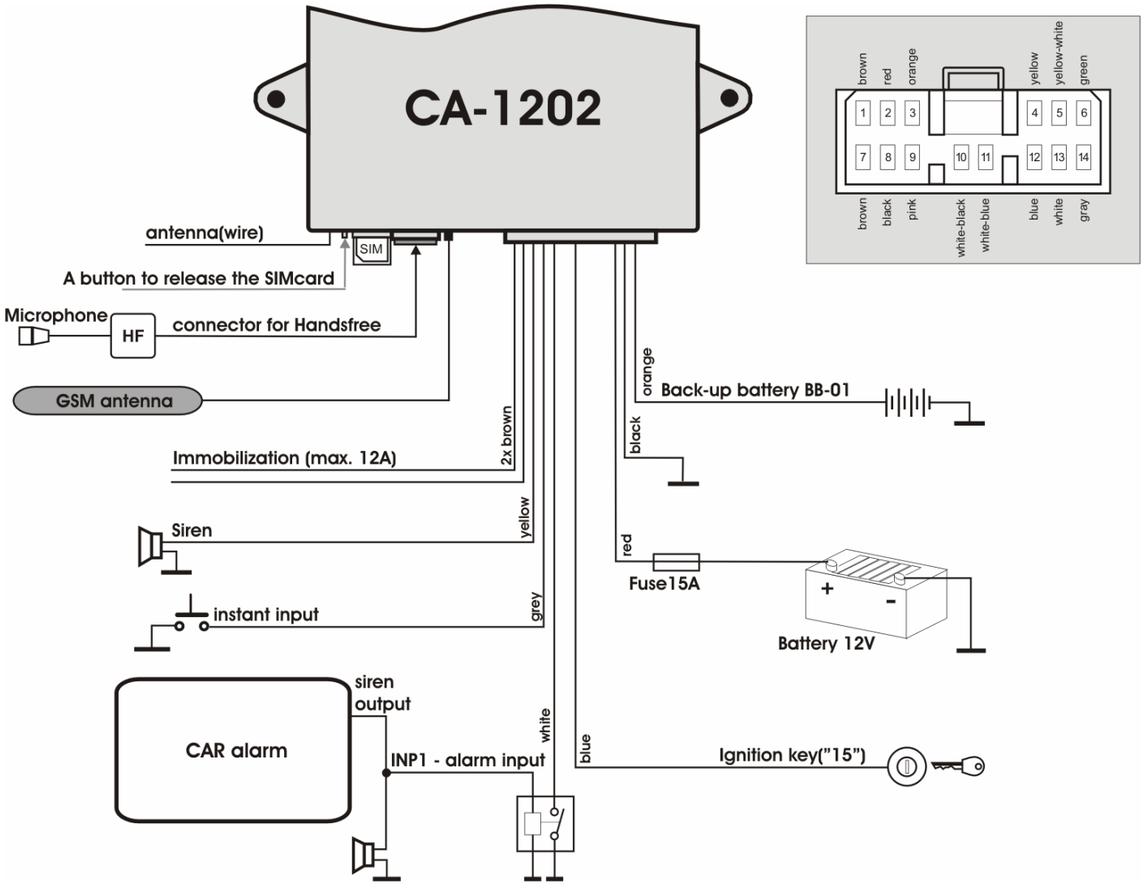

Figure 1: **installation of the GSM pager in Mode 3**

6.1 Programming sequences

Enter the prescribed spaces in SMS texts as shown in the table below. MASTER is a factory default master code, which should be changed to your own password. All SMS texts are case insensitive.

SIM entry*	Text of SMS instruction	Description
RESET EN 3	**MASTER RESET EN 3**	**Mode setting.** Factory default is 0 – no function (immobilization relay copies ignition). *Note: By performing the RESET EN x instruction, all settings, remote controllers and enrolled wireless detectors will be erased!* RESET is indicated by four siren chirps.
Not possible	**MASTER UC uuuu**	**User Code setting** – the code (password) allows you to operate the alarm remotely via SMS from unauthorized phones. uuuu is a new user code, up to 8 characters (A –Z & 0 – 9). Factory default user code is USER
Not possible	**MASTER MC xxxx**	**Master Code setting,** xxxx is a new master code, up to 8 characters (A –Z & 0 – 9). The code allows you to change settings of the GSM pager. Factory default master code is MASTER
TEL1 xx...x	**MASTER TEL1 xx...x**	**Setting of phone numbers to report alarms** (these phones will also be authorized to control the GSM pager via SMS without a user password) *E.g.: MASTER TEL2 +420602123456 will enter the phone number into the TEL2 memory MASTER TEL3 0 will erase the TEL3 memory.*
TEL2 xx...x	**MASTER TEL2 xx...x**	
TEL3 xx...x	**MASTER TEL3 xx...x**	
TEL4 xx...x	**MASTER TEL4 xx...x**	
DIAL1 xx...x	**MASTER DIAL1 xx...x**	**Setting of phone numbers to dial using Hands free.** *E.g.: MASTER DIAL2 +420602123456 will enter the number into the DIAL2 memory (which is dialed after you press button ○ on the remote control) MASTER DIAL2 0 will erase the memory DIAL2.*
DIAL2 xx...x	**MASTER DIAL2 xx...x**	
DIALA xx...x	**MASTER DIALA xx...x**	
DIALB xx...x	**MASTER DIALB xx...x**	
DIP abcdefghij	**MASTER DIP abcdefghij**	**DIP parameter entry** – see part 7
SET abcdefghi	**MASTER SET abcdefghi**	**SET parameter entry** – see part 8
Not possible	**MASTER LEARN RC**	**Remote Control enrollment -** up to 4 controllers can be enrolled, turn the ignition key on before sending the instruction. To enroll a remote control press and hold buttons 🔓 and 🔒 together for 3 seconds. After you enroll all remote controls, turn the ignition key off.
Not possible	**MASTER TXT 01,text**	**Editing of SMS texts** (reports and instructions), see part 10
TELU xx...x	**MASTER TELU xx...x**	**Sustain call setting** (for pre-paid cards) 1 x a month the xx..x number is called, call duration 10 s.

***** See part 5 for details.

7 DIP parameters

By SMS: **MASTER DIP ABCDEFGHIJ** you can change 10 features:

DIP	Description	
	0	**1**
A	no function in Mode 3 (set to 0)	
B	Silent alarm	**Audible alarm** (30 sec.)
C	SMS alarm report only	**SMS alarm report + siren sound phone call**
D	SMS remote control not confirmed by SMS reply	**SMS remote control instructions confirmed by SMS reply**
E	no function in Mode 3 (set to 0)	
F	no function in Mode 3 (set to 0)	
G	**User can not change SMS texts**	User can change SMS texts by TXT sequence
H	no function in Mode 3 (set to 0)	
I	**0 = Immobilization by arming and by SMS instruction** 1 = Immobilization by arming and automatically 5 minutes after ignition is turned off and also by SMS instruction 2 = Immobilization only by SMS instruction	
J	**Self-location disabled**	The car´s location will be sent by SMS to numbers TEL1 to TEL4 if there is an alarm or if the car stops after the immobilization SMS instruction (See 13.6.)

Factory default setting is DIP 1111000000 (bold letters in the text). If you want to change only particular parameters, enter x for the others (i.e. MASTER DIP x0xxxxxxx).

8 SET parameters

By SMS: **MASTER SET ABCDEFGHI** you can change 9 features:

SET	Description	
	0	**1**
A	no function in Mode 3 (set to 0)	
B	no function in Mode 3 (set to 0)	
C	no function in Mode 3 (set to 0)	
D	Instant activation input logic: **0 = automatic** 1 = activated by falling edge (grounding) 2 = activated by rising edge (disconnecting from GND)	
E	INP1 logic: **0 = automatic** 1 = activated by falling edge (grounding) 2 = activated by rising edge (disconnecting from GND)	
F	no function in Mode 3 (set to 0)	
G	no function in Mode 3 (set to 0)	
H	no function in Mode 3 (set to 0)	
I	**Do not switch off the GSM module**	Switch off the GSM module after 30 minutes of idle

Factory default setting SET 100000010 (bold letters in the text).

If you want to change only particular parameters, enter x for the others (i.e. MASTER SET xxx0xxxxx).

9 User instructions

9.1 Remote control by SMS instructions

SMS instructions sent from an authorized phone (TEL1 to TEL4) can operate the GSM pager remotely. Factory default instruction texts are shown in the following table. The instruction texts can be changed by SMS text editing, see part 10.

If an SMS is sent from an unauthorized phone (other than TEL1 to TEL4), a valid user code must be entered before the instruction (e.g. USER IMO).

SMS text	Description
IMO	STOP (immobilize) the car (after turning the ignition key off)
UNIMO	Unblock (mobilize) the car
STATUS	The GSM pager will reply with status information, e.g. *"car reports: Time: 27.01.04 13:04, Status: Armed, Unblocked, Ignition off".*
HELP	The GSM pager will reply with a brief list of SMS instructions.
UC uuuu	To change the user code. ***uuuu*** is the new user code, up to 8 characters (A –Z & 0 – 9). Factory default user code is USER
CREDIT	To obtain the balance of a prepaid SIM card if used. See 13.5 for details
HF abcdef	Hands-free set adjustment: a – enable calls (**0= disabled**, 1=enabled) b – auto answer incoming calls (**0= disabled**, 1=enabled) c – microphone sensitivity 0 to 9, **(5)** d – speaker volume 0 to 9, **(5)** e - ringing tone volume 0=mute to 9=max., **(5)** f – ringing sound 0 to 9, **(5)**
LOCATOR	To obtain the car location from the GSM provider. See 13.4

- The parameters in bold are factory defaults.
- The instruction must contain spaces as shown in the table
- Only basic ASCII can be used in the SMS instruction texts
- If the SMS text contains the % sign, then the following text will be ignored.

9.2 Phone calls by an installed hands free set

If the optional HF-03 hands free set is installed, it is possible to receive and make phone calls via the GSM pager. When the **ignition key is on**, the remote control (RC-4x) allows you to operate the hands free set.

Incoming calls – to answer them, press any button on the RC-4x remote control. By pressing any button again, the call will be terminated.

When armed, all incoming calls are automatically rejected. If the car is blocked (by IMO instruction) all calls are automatically answered (it is possible to listen and to speak to the car remotely). Automatic call answering while you are driving can also be enabled by the HF instruction (see 9.1).

To make a call – you can call up to 4 preprogrammed numbers while you are driving. By pressing button 🔓, 🔒, ● or ○ on the remote control you will dial the corresponding number (pre-programmed by DIALA to DIAL2, see 6.1)

9.3 Alarm

When an alarm is triggered, the siren will sound for 30 sec., warning SMS messages will be sent to all phones (TEL1 to TEL4) and these phones will also be called with the siren sound.

10 SMS text editing

The SMS texts (alarm information and instructions) are factory preprogrammed. However, it is possible to change these texts by a mobile phone or via internet access using www.GSMlink.cz

To change a text by mobile phone, send the SMS:

MASTER TXT zz,text,zz,text,…

where: **zz** is the text index (see the following table)
text is your new text – up to 30 characters, full stop (dot) or comma cannot be used in the text, spaces are allowed

Example: MASTER TXT 01,LOCK PLEASE

By changing text numbers 01 to 16, you will modify the control SMS instructions. This allows you to customize the remote control of the car. You can also make your own password part of the instruction to increase the security of the mobile phone remote access.

10.1 SMS text table

zz	*Factory default text*	*zz*	*Factory default text*
SMS commands:		34	Wireless detector
01	AM	35	Current detector
02	DM	36	Telephone 1
03	IMO	37	Telephone 2
04	UNIMO	38	Telephone 3
05	STATUS	39	Telephone 4
06	HELP	40	Telephone - UC
07	CREDIT	41	Telephone - MC
08	DIAL	42	Remote controller
09	HF	**Status information:**	
10	LOCATOR	50	Car alarm reports:
11	MC	51	Status:
12	UC	52	Armed
13	DIP	53	Disarmed
14	TEL	54	Ignition key ON
15	LEARN RC	55	Ignition key OFF
16	LEARN JA	56	Engine is blocked
17	SIREN	57	Engine is unblocked
18	SET	58	No alarm
Events:		59	Alarm timeout
20	Alarm	60	Low accumulator voltage
21	Alarm canceled by a user	61	Power failure
22	Fire alarm	62	Power recovery
23	Tamper alarm	63	Time:
24	Disarming	64	Low battery voltage
25	Arming	**Confirmation SMS:**	
26	Low battery voltage	70	Command accepted
27	Engine is blocked	71	Command syntax error
28	Engine is unblocked	72	New MC code:
Source:		73	New UC code:
30	Ignition key	74	Reset
31	Door contact	75	Registered phone number:
32	INP1 activation	76	Credit:
33	INP2 activation	77	LEARN mode, enrolled

The gray texts are not available in mode 3.