

SIRIUS II



User guide V 2.0

Features:

- Car position (GPS locating) with memory of last position (GPS signal failure)
- During driving automatical position record every minute into memory includes date and time (time is adjustable) –In memory is saved last 4000 positions (cca 66 hours of driving (1 record per minute))
- Detection of position whenever you want by SMS
- During Alarm is generating a call up to 8 phone numbers
- During Alarm or power supply disconnection is sending SMS includes status and position
- 3 Alarm inputs (alarm): activated by connection to +, activated by connection to ground, activated by current floating („bypass“)
- Output for remote blocking of engine by SMS
- Remote blocking of device by SMS
- Activation/deactivation by Dallas chip, RFID etc..
- Sound signalling
- Remote setting of all parametres by SMS from authorised numbers only
- Remote measurement of Back up Battery voltage

Technical parametres:

- Power supply range: 8 - 28V DC
- Stand by consumption: cca 10 mA (Back up ACU charged)
- Max current consumption: 1,5 A (peak – call + charging Back up ACU)
- Input ALARM-: alarm activation by short circuit to ground for time 0.1-9.9sec (default 0.3sec)
- Input ALARM+: alarm activation by connection to + of power supply for time 0.1-9.9sec (default 0.3sec)
- Input BYPASS: alarm activation by current floating > cca 100mA for time 0.1-9.9sec (default 3sec)
- Output beeper – output for connection of bell, beeper etc...: max. current cca 500mA
- Blocking output – output for relay connection to disconnect ignition: max. current cca 1000mA
- GSM: EGSM 900 (class 4 – 2 W)
GSM 1800 (class 1 – 1 W)
Antenna connector FME
- SIM card: 3/1,8 V
- GPS: Leadtek (SIRFIII)
Antenna connector SMA
- Back up ACU: 4 V/2.6 Ah
- Operation time without power supply : cca 24 to 100 hours up unit load
- Protection against power supply polarity change
- Automatical fuse and overvoltage protection
- Operational temperature –20 až +50 °C
- Dimension: 80 x 50 x 35 mm
- SMS „position“ includes: latitude and longitude,date , GM time from detected position, movement speed

Red LED Alarm
 It lights up when some alarm input is activated. After fulfilment of inquiries (SMS, calls) lights off.

Green LED GPS
 lighting – GPS is ON, position valid
 flashing – GPS is ON, position invalid
 not lighting – GPS is OFF

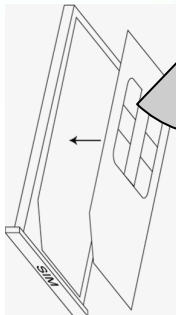
Green LED GSM
 Lighting of flashing – GSM modul operation

Green LED power supply
 lighting – unit is ON, feeding is > 8V
 flashing – unit is ON, feeding is < 8V
 not lighting – unit is OFF

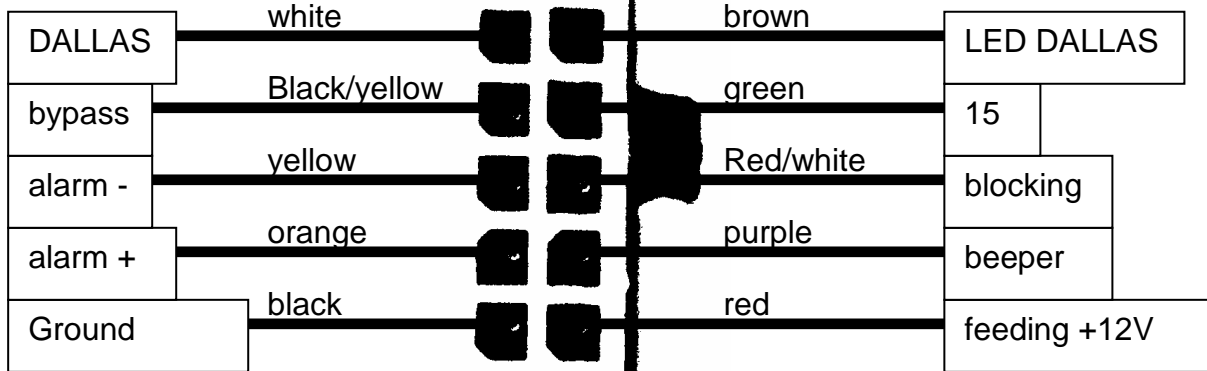


GSM antenna

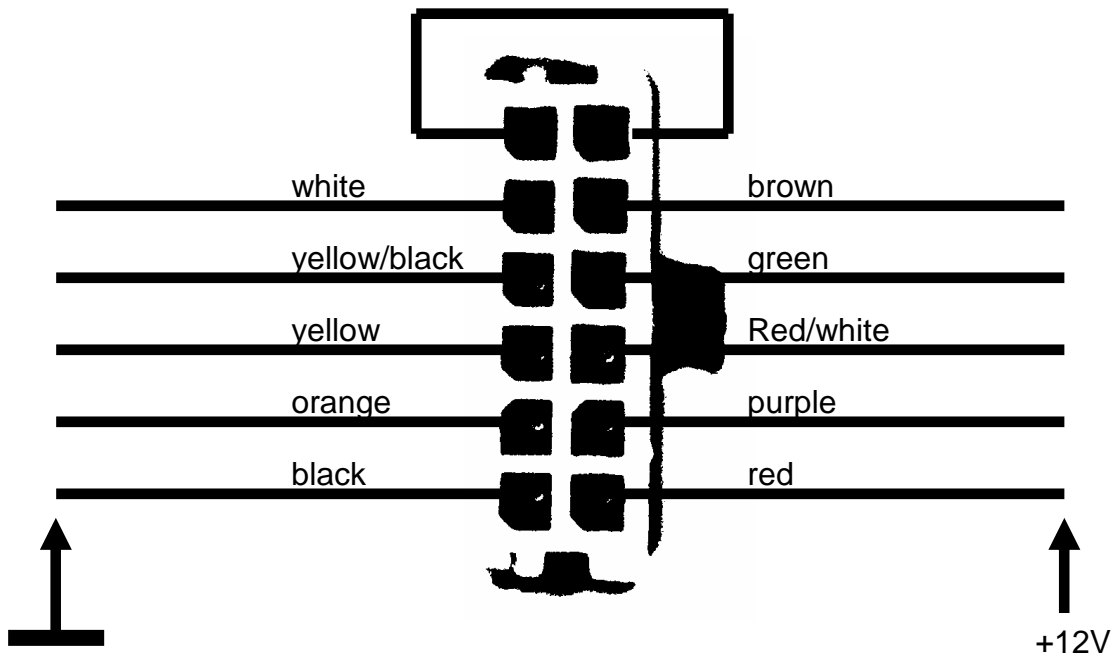
GPS antenna



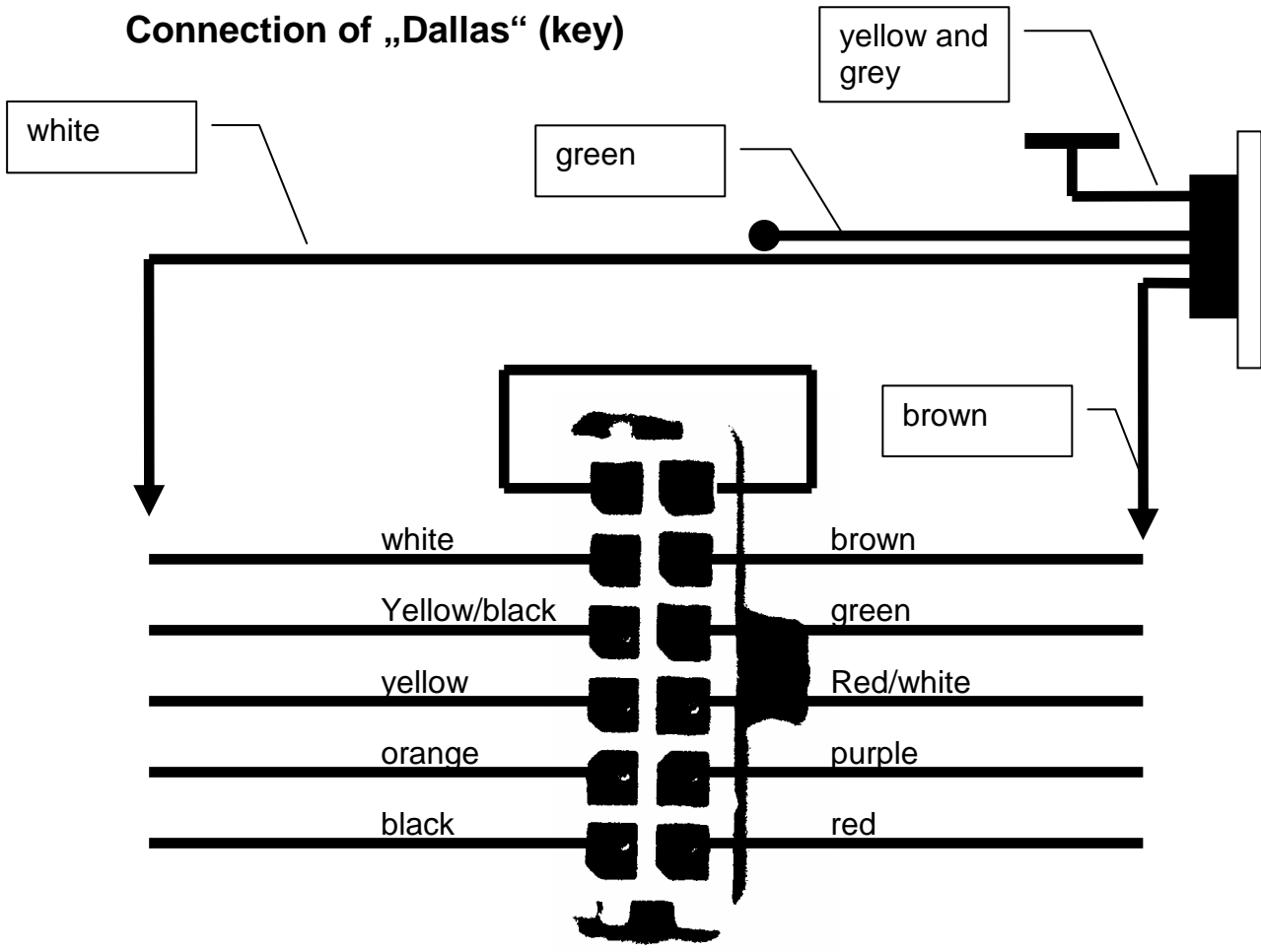
Wire jumper of backup ACU



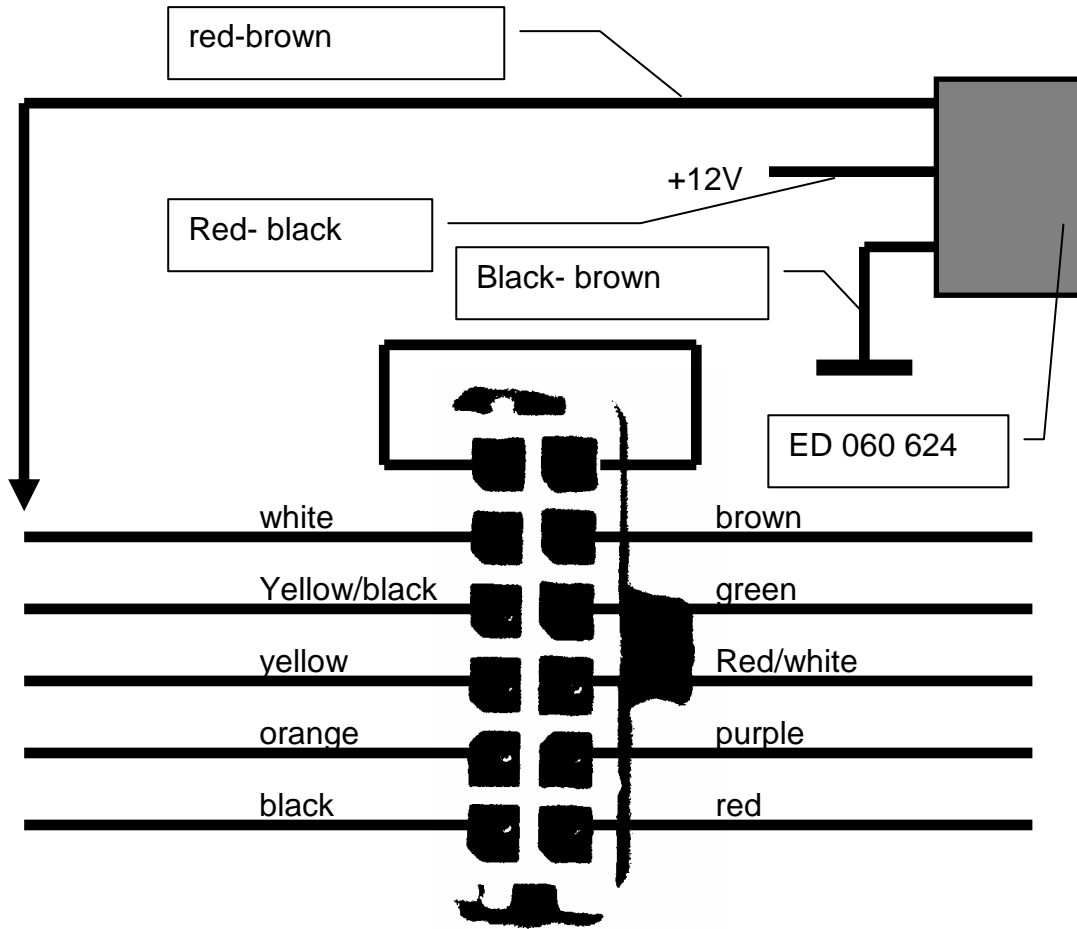
BASIC CONNECTION SCHEMATIC - MUST BE ALWAYS USED !
 might be supplemented by other combination of connection



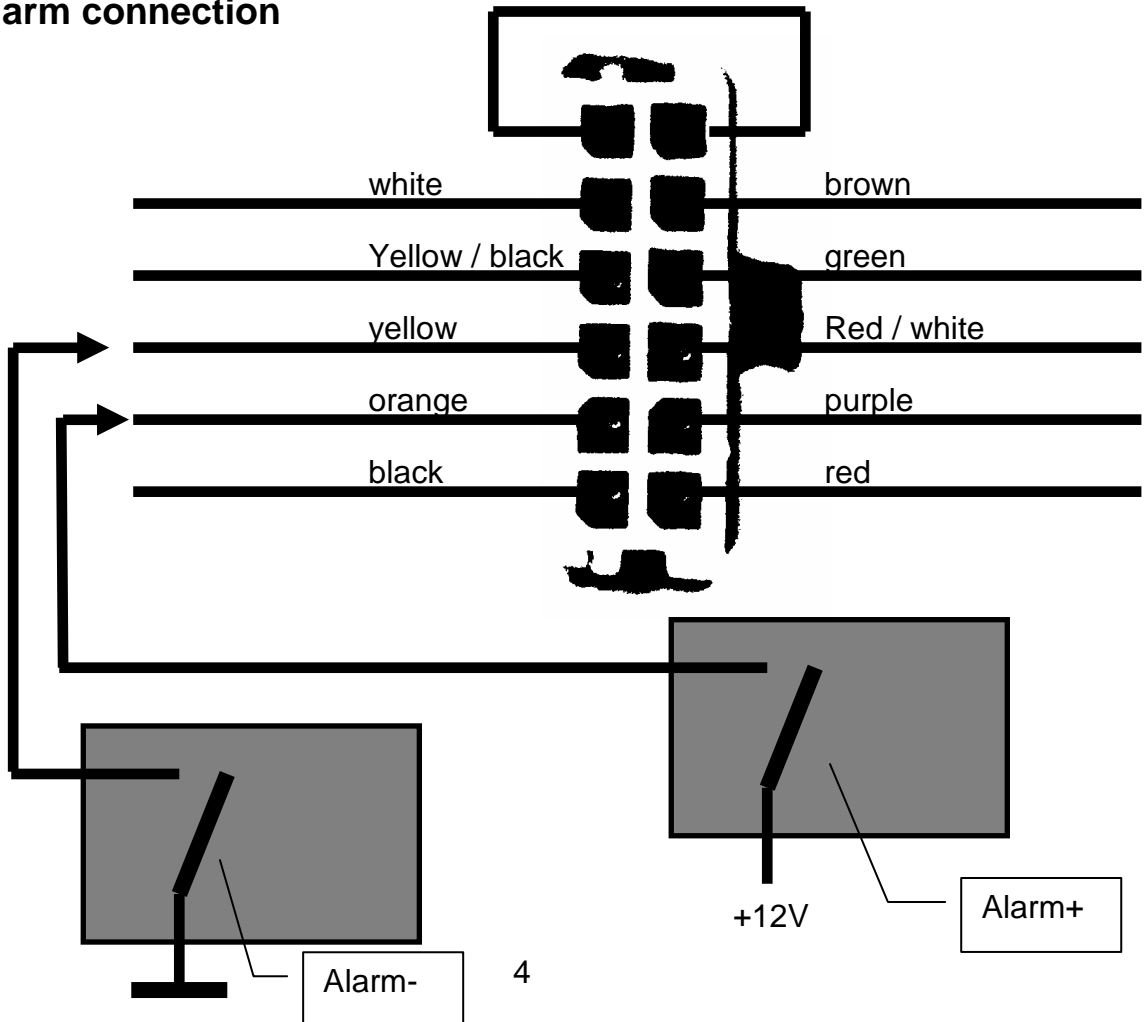
Connection of „Dallas“ (key)



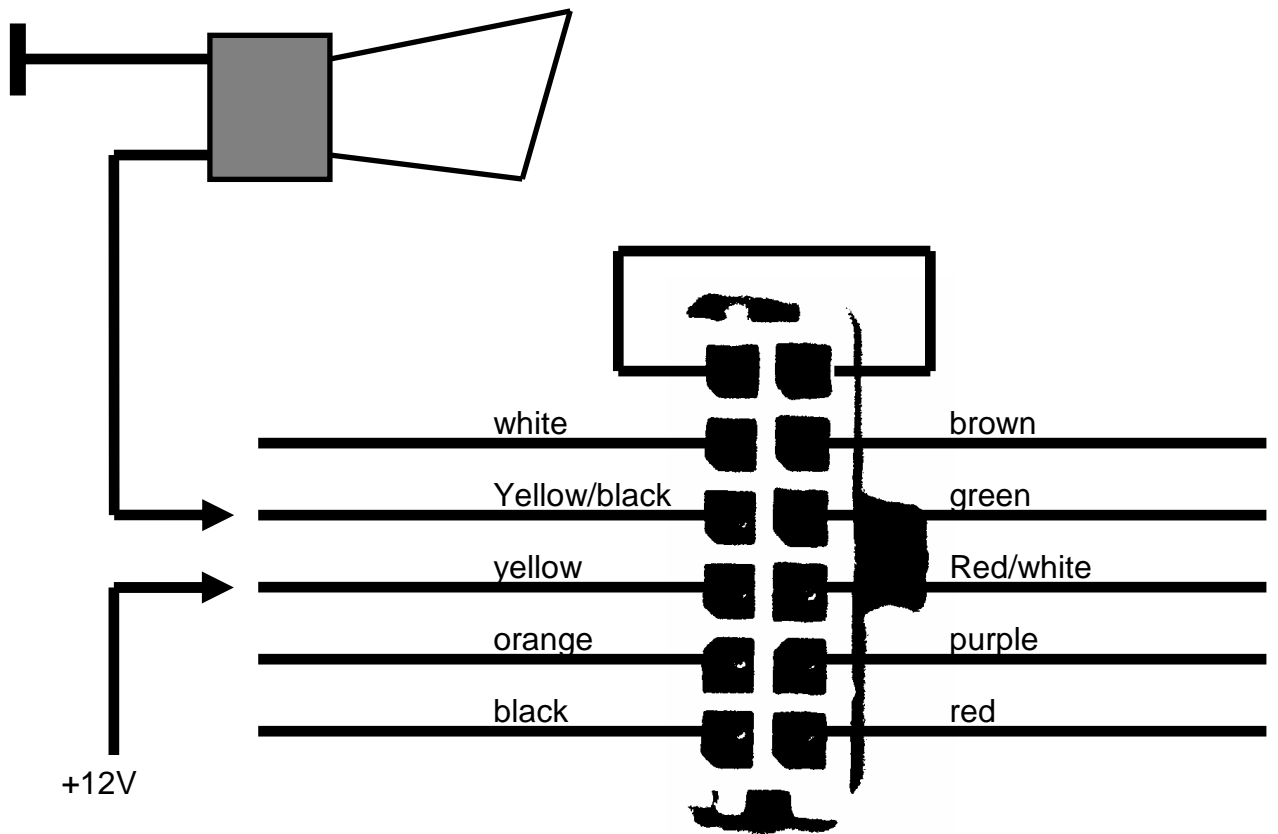
Connection of wireless card receiver ED 060 624



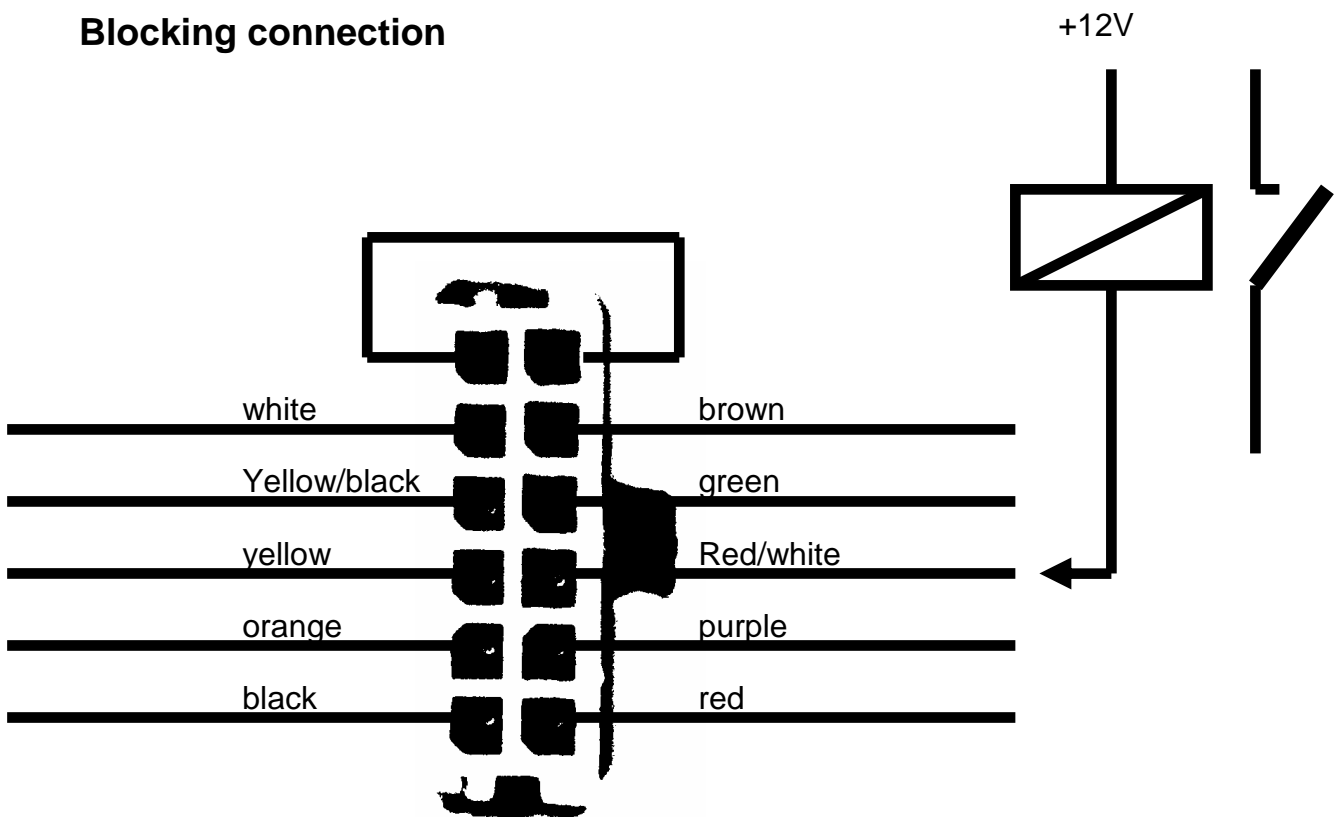
Alarm connection



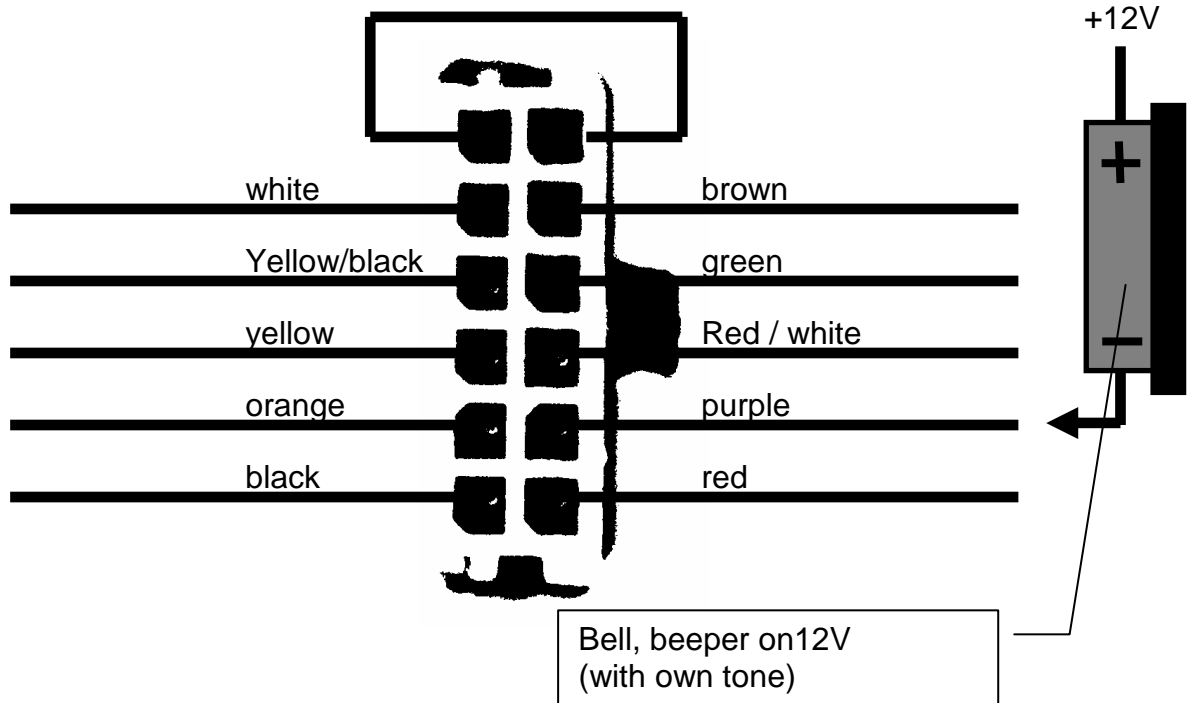
Alarm connection „bypass”



Blocking connection




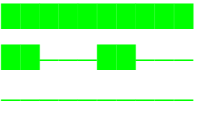

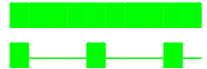

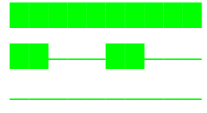








Connection of sound signalling for Key



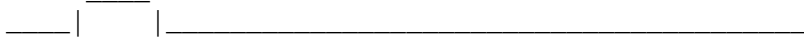
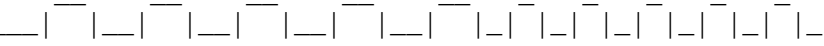
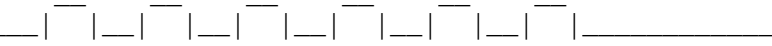
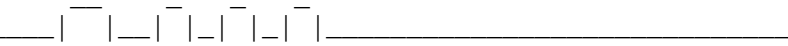
Unit operation start

1. Connect cables from connector up selected connection schematics
Do not connect the connector into the unit!
2. Insert SIM card.
3. Connect attached antenna GSM and GPS.
4. Double check correct polarity of power supply in connector as same as correct cables connection (not short circuit, etc...)
5. Connect the connector into the unit – Green LED lights up with symbol battery.
6. Wait for registration of the unit into GSM network (LED GSM is flashing).
7. The unit is ready for operation.

LED Signalling

symbol	Light of LED	functionality
		Connection of feeding from car - battery > 8V Connection of feeding from car - battery < 8V The unit is switched OFF (back up ACU is discharged)
		GSM operation (registration, SMS etc.) Stand by
		GPS is ON, position valid GPS is ON, position invalid GPS is OFF
		Activation of some services (power supply disconnection, ALARM etc.)
LED DALLAS		Start of unit (cca 1 minute)
LED DALLAS		Activated – feeding from car - battery
LED DALLAS		Activated – feeding from Back up
LED DALLAS		(5s light) – code reception from key
LED DALLAS		Ignition is ON (correct start)
LED DALLAS		Ignition is OFF (correct start)

Sound signalling

- reading of attached key 
- record of key to SIM 
- incorrect start 
- ignition switch off 

Telephone numbers saved on the SIM card

Name	Example of number	function
ADMIN	+420123456789	Highest priority. It can SMS „CAR,ON“ and „CAR,OF“ deactivate and activate unit. It can sends also further SMS.
ALARMS	+420987654321	To this number is sends SMS 'ALARM(AKU) + Credit' + position after activation signal Alarm or feeding interruption (Aku), To this number is send SMS 'Incorrect start !' (start without key deactivation) To this number are also sends messages from operator (credit status) It can sends SMS except CAR
ALARMx (x = 1..8)	+420123000001 (ALARM1) +420123000032 (ALARM2) +420123000111 (ALARM3) +420012300012 (ALARM5) +420123004567 (ALARM6)	It is dialling progresively after activation alarm signal until interruption of line (1,2,3,5), Progressive dialling is also ended by pick up at called part (in handset you hear interruption tone). From those numbers can be sends system SMS
OPER	4603 (T-Mobile)	number, from which are received SMS of operator (credit status)
CRED	*101# (T-Mobile) *104*# (Eurotel)	Code to identify credit status
ALTIM	05*10*02*35	Remote settings unit parametres: Number is in format 'tt*bb*pp*uu', when: 'tt'.. 01 - 99 [decimal sec.] – pulse duration time at input for alarm sensor (default 03 = 300 msec) 'bb'.. 01 - 99 [decimal sec.] – current duration time for byppas alarm activation (default 30 = 3 sec) 'pp'.. 01 - 99 [min] – time between position reading (default 01 min) 'uu'.. 35 - 39 [decimal volt] - min. voltage value of back up ACU (default 36 = 3,6 V) – when voltage is lower the unit is automatically switch OFF
KEY	1	'1' ... registration of attached keys„DALLAS“ (until ignition start – by this is automatically rewritten to 0) '0'...unlocking by attach of registrated key „DALLAS“

Table of SMS commands

identif.	par.	command body	example	description	SMS reply	Note
ALARM	1 to 8	, phone number) ¹	ALARM1,+42060212311	adding or change of phone number at positioni par.	"OK"	
ALARM	1 to 8	,	ALARM2,	erasing phone number on position par	"OK"	
ADMIN		phone number) ¹	ADMIN,+42060212311	adding or change of phone number ADMIN	"OK"	
ADMIN				erasing phone number ADMIN	"OK"	
#1111#POLOHA			#1111#POLOHA	request for identification of position	position	
PERMIT,DDMM,ddm	, DDMM,ddmm		PERMIT,3105,0206	permission for data access for 1 hour to memory of recorded position . For transmission will be selected period between dates DDMM and ddm	"OK"	
CAR	, OF		CAR,OF	deactivation of unit (unit react then for SMS "STAT" and "CAR,ON" only from ADMIN number	"OK"	ADMIN only
CAR	, ON		CAR,ON	unit activation	"OK"	ADMIN only
BLOCK	, ON		BLOCK,ON	closing of output for blocking (switch off ignition) for closing must be valid position reading and speed under 15 km/h	"OK"	
BLOCK	, OF		BLOCK,OF	unblocking	"OK"	
RST			RST	unit restart	"OK"	
STAT			STAT	identification of unit status	programm version ABCDE Backup=x.xxV Battery=yy.yV Mode act Block on (Block of) credit	A=blok (1 ON) B=key (1 ad.) C=alarm (1 on) D=GPS (0 -off) E=ignition
ALTIM	, **bb*pp*uu		05*10*02*35	Remote setting of unit parametres	"OK"	parametres in previous table
CAL	, ATD603123456;		CAL,ATD603123456;	unit generate a call to set number immediatelly after receiving) ²	"OK" - call established "NO CARRIER" - unreachable "BUSY" - busy	
CAL	, ATH		CAL,ATH	zařizení ukončí probíhající hovor		
CAL	, AT+CPAS		CAL,AT+CPAS	identification of unit status	" +CPAS: 0" - stand by "+CPAS: 3" - incoming call "+CPAS: 4" - current beying call	
CAL	, AT+CSQ		CAL,AT+CSQ	identification of signal strength	" +CSQ: 17,99" - first number before comma is signal strength(max 32), min. value for calling is cca 17	
CAL	, AT+CPBR=par.		CAL,AT+CPBR=1	identification of phone number on the SIM at certain position par.	+CPBR: 1,"+42060212311",145,"ALARM1"	
CAL	, AT+CCLK=?		CAL,AT+CCLK=?	clock status in unit	+CCLK:"00/01/01,01:17:36") ³ because clocks are set to 0 when unit is switch off , running since 1.1.00. It always shows operation time since last switch off (short fails are not registered)	

ALPHATECH TECHNOLOGIES s.r.o.

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Company is registered in the Commercial Register administered by the Municipal
Court in Prague, Section C, Record 116886

Banking details:

Komerční banka, account No. 43-7671450207/0100
IBAN: CZ0801000000437671450207
SWIFT: KOMBCZPPXXX