VALLEY®

GSM CABLE GUARD
MONITOR

USER GUIDE

0997239_B

VALLEY®

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GENERAL INFORMATION

ABOUT THIS MANUAL

Information contained in this manual applies to the use of the GSM Cable Guard Monitor on a Valley irrigation machine equipped with either a Classic, ClassicPlus, Select2, PRO2 or AutoPilot control panel. Valmont Industries Inc. reserves the right to change specification or design without incurring obligation. Specifications are applicable to machines sold in the United States and may vary outside the United States.

Specifications, descriptions, and illustrative material contained herein were as accurate as known at the time this publication was approved for printing. Valmont Industries Inc. reserves the right to make changes at any time without notice and without incurring any obligation. Specifications are applicable to equipment sold within the United States and may vary outside of the United States.

FEATURES
- Built-in GSM Module
- 4 Alarm Inputs
- 4 Remote Control Outputs
- 4 Voice Messages (Maximum Length Of 10 Seconds For Each Input)
- Shortened Message (SMS) For Each Alarm Input
- Memory Stores Up To 10 Different Telephone Numbers
- Dialing Of Telephone Number Sequences Can Be Programmed
- Led Displays Enable Easy Monitoring
- Built-in Speaker And Microphone
- Already Activated Dialing Sequence Can Be Stopped By Means Of User's Telephone Unit
- Download Programming By SMS
- Input And Output Status Checking By SMS And DTMF Command
- Outputs Remote Control By SMS, Clip And DTMF Command
- System Activating And Deactivating By SMS, Clip And DTMF Command
- Phone Book Memory Clear By SMS Command
- Full Print Out Of Programming Parameters By SMS
- Print Out By Parameters Groups (12 Groups)
- Pre-pay Cards Credit And Value Checking
- Special Security Codes (Telephone Numbers) To Enter In Program
- Call Back Device Checking
- Manually Fix The GSM Network To One Provider (See GSM SETUP PARAMETERS in GSM CABLE GUARD MONITOR Installation Manual pn 0997827 (English))

DESCRIPTION

The GSM Cable Guard Monitor is a mobile voice and SMS dialing system. The phone memory in the form of a SIM card is used either to store telephone numbers or to program certain parameters.

It is possible to record four different messages and send them to 10 different telephone numbers.

The alarm inputs can be normally open (N.O.) and are triggered by a positive (+12V) or a negative pulse (GND); or they can be normally closed (N.C.) (+ 12V or GND lost).

Each alarm input can be enabled to send a pre-recorded voice message, an SMS or both.

There are four outputs giving the user the ability to control a certain system from a distance by DTMF, SMS or CLIP command.

PIVOT ALARM APPLICATION

The GSM Cable Guard Monitor is configured for use as an anti-theft alarm system for irrigation pivots. The alarm requires at least one dedicated wire that loops through all devices to be secured. This wire is grounded at the last tower box.

LED DISPLAY

LED1 - BLUE GSM network. See figure 5-1.
    • LED ON: Transmitting mode
    • LED Flashing: Within GSM signal strength.
      - Quality of the GSM network signal is shown
        by the number of flashes.
      1 flash - Inadequate
      2 flashes - Weak
      3 flashes - Acceptable
      4 flashes - Good
      5 flashes - Excellent

LED2 - GREEN System status. See figure 5-1.
    • LED ON - System ON; - All inputs are active
    • LED OFF - System OFF - All inputs are deac-
        tivated.
    • LED Flashing:
    - 1 flash- alarm on input 1
    - 2 flashes - alarm on input 2
    - 3 flashes - alarm on input 3
    - 4 flashes - alarm on input 4

LED3 - RED, Recording and listening to the voice
        message. See figure 5-1.
    • LED ON: Message recording
    • LED Flashing: Playing recorded message

⚠ DANGER

TO REDUCE THE POSSIBILITY OF ELECTRO-CUTION;

ALWAYS DISCONNECT POWER TO THE CONTROL PANEL AND GSM CABLE GUARD MONITOR BEFORE REMOVING TOWER BOX COVER.

ALWAYS FOLLOW THE MINIMAL LOCKOUT/ TAGOUT PROCEDURE LOCATED IN THE SAFETY SECTION OF THIS MANUAL AND DO THE FOLLOWING:

1. SHUT OFF AND LOCK THE PUBLIC POWER SERVICE DISCONNECT TO THE IRRIGATION MACHINE. FILL OUT THE BLUE (OSHA SAFETY COLOR CODE) TAG AND ATTACH TO THE DISCONNECT AFTER LOCKING.

2. SHUT OFF THE CONTROL PANEL MAIN POWER DISCONNECT.
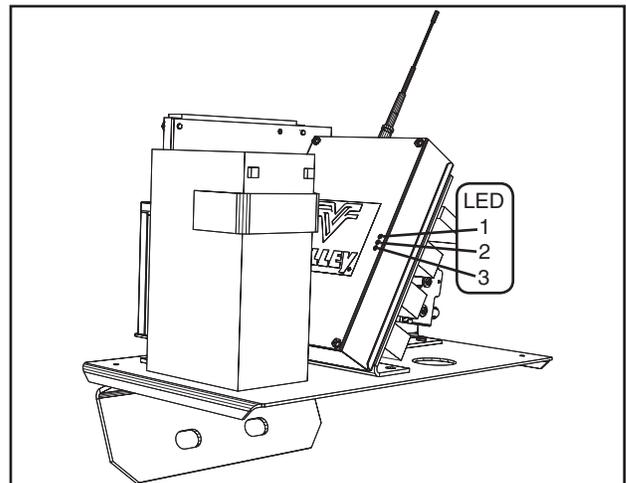

Figure 5-1

GENERAL INFORMATION

RECOGNIZE SAFETY INFORMATION

This irrigation equipment may be powered by high voltage which can be extremely dangerous if used improperly. For maximum safety and optimum performance of the machine, all owner's operator's and maintenance personnel must read and understand the owner/operator manual(s), all safety messages in this manual and safety signs/decals on the machine before operating this equipment.

Anyone assembling, operating, servicing or maintaining this machine must read and understand all operation, maintenance, troubleshooting, testing, installation, assembly instructions and all safety messages in this manual before operating the machine or beginning any maintenance, troubleshooting, testing, installation or assembly of components.

These instructions alert you to certain things you should do carefully; if you don't, you could hurt yourself or others, hurt the next person who operates the equipment, or damage the equipment.

SAFETY MESSAGES

Safety messages in this manual are preceded by the hazard symbol and one of three words, danger, warning or caution. These messages alert you to potential hazards that could hurt you or others and or cause property damage.

⚠ This HAZARD SYMBOL is used to alert you to information about unsafe actions or situations, and may be followed by the word danger, warning, or caution.

⚠ DANGER
The HAZARD SYMBOL used with the word DANGER, will describe immediate hazards that may result in severe personal injury or death.

⚠ WARNING
The HAZARD SYMBOL used with the word WARNING, will describe unsafe actions or situations that may cause severe injury, death and/or major equipment or property damage.

⚠ CAUTION
The HAZARD SYMBOL used with the word CAUTION, will describe unsafe actions or situations that may cause injury, and/or minor equipment or property damage.

INFORMATION MESSAGES

Important information messages in this manual are preceded by the word NOTE.

NOTE
The word NOTE is used to alert you to information that describes procedures or tips to help you install, operate or maintain your equipment properly.

SAFETY

USE OF PERSONAL PROTECTIVE EQUIPMENT

• People working in areas where there are potential electrical hazards must use, personal protective equipment that is appropriate for the specific parts of the body to be protected and for the work to be performed. Refer to U.S. Occupational Safety & Health Administration (OSHA) Regulations (Standards - 29 CFR) Safeguards for personnel protection. - 1910.335, or applicable national, state or local regulations, for additional information.

• Personal protective equipment must be maintained in a safe, reliable condition and periodically inspected or tested.

• Protective shields, protective barriers, or insulating materials must be used to protect each person from shock, burns, or other electrically related injuries while that person is working near exposed energized parts which might be accidentally contacted or where dangerous electric heating or arcing might occur. When normally enclosed live parts are exposed for maintenance or repair, they must be guarded to protect unqualified persons from contact with the live parts.

• Safety signs and tags. Safety signs, safety symbols, or accident prevention tags must be used where necessary to warn people about electrical hazards which may endanger them.

CONDUCTIVE MATERIALS AND EQUIPMENT

Materials and equipment that may conduct electricity must be handled in a way that will prevent them from contacting energized power lines, exposed conductors or circuit parts.

• When handling long conductive objects (such as but not limited to truss rods, pipes, angles and ladders) in areas with energized power lines, exposed conductors or circuit parts, work practices (such as the use of insulation, guarding, and material handling techniques) must be used to minimize the hazard.

• Portable ladders must have non-conductive side rails.

• Do not wear conductive articles of jewelry and clothing (such as but not limited to watch bands, bracelets, rings, key chains, necklaces, metalized aprons, cloth with conductive thread, or metal headgear) that could come in contact with energized power lines, exposed conductors or circuit parts.

FALL PROTECTION

Identify potential fall hazards and determine if fall protection equipment is appropriate for the task, before beginning the work. Pay attention to hazards associated with routine and non-routine tasks. Inspect fall protection equipment (harnesses, lanyards) and devices (guardrails, tie-off points) before each use. Use fall protection equipment if required for the job. Be sure the fall protection equipment is right for the task, fits properly, and is in good condition. Refer to U.S. Occupational Safety & Health Administration (OSHA) Regulations Standards - 29 CFR 1926.500, 1926.501 and 1926.502, or applicable national, state or local regulations for more information.

• When using scaffolds, make sure there is proper access, full planking, stable footing, and guard railing.

• When using a boom lift, keep feet firmly on the platform of a boom lift, use fall protection equipment tied-off at all times to the guardrail or tie-off point.

• When using a ladder, make sure the ladder is non-conductive and the correct size for the task. Read the ladder user instructions and be sure the ladder is in good condition. Make sure ladder is set on stable footing and at the correct angle.

MINIMUM WORKING CLEARANCE

To reduce the risk of injury, all persons require adequate working clearance around the electrical panel or other electrical equipment. The table below identifies the minimum working clearance needed. Refer to U.S. Occupational Safety & Health Administration (OSHA) Regulations (Standards - 29 CFR) Safeguards for personnel protection. -1910.303(g)(1)(i), or any other applicable national, state or local regulations, for additional information.

MINIMUM WORKING CLEARANCE 0-600 VOLTS			
WIDTH OF WORKING CLEARANCE AREA	HEIGHT OF WORKING CLEARANCE AREA	★MINIMUM WORKING CLEARANCE IN FRONT OF ELECTRICAL PANEL/EQUIPMENT		
		EXPOSED LIVE PARTS ON ONE SIDE OF WORK SPACE AND NO LIVE GROUNDED PARTS ON THE OTHER SIDE.	EXPOSED LIVE PARTS ON ONE SIDE OF WORK SPACE AND LIVE GROUNDED PARTS ON THE OTHER SIDE.	EXPOSED LIVE PARTS ON ONE SIDE OF WORK SPACE AND EXPOSED LIVE PARTS ON THE OTHER SIDE.
30in.(760mm) MINIMUM OR WIDTH OF ENCLOSURE, WHICH EVER IS GREATER	78in.(1980mm) MINIMUM OR HEIGHT OF ENCLOSURE, WHICH EVER IS GREATER	36in.(915mm) MINIMUM	42in.(1065mm) MINIMUM	48in.(1220mm) MINIMUM

★Concrete, brick or tile walls shall be considered as grounded.

QUALIFIED PERSON

A Qualified person is one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his/her ability to solve or resolve problems related to the subject matter, the work, or the project.

Only qualified persons may work on electric circuit parts or equipment that have not been de-energized.

Refer to U.S. Occupational Safety & Health Administration (OSHA) Regulations Standards - 29 CFR 1926.32(m) and 1910.333, or applicable national, state or local regulations for additional information.

SAFETY

OVERHEAD POWER LINES

Assembling, towing or transporting irrigation machine components such as but not limited to the pivot point, linear cart, span/drive unit assemblies, overhangs and/or corner assemblies underneath or near power lines is extremely dangerous because of the risk of electrocution.

Operating equipment that elevates irrigation machine components, such as but not limited to an aerial lift or crane, near power lines is extremely dangerous because of the risk of electrocution. Only qualified personnel should operate this type of equipment. Before operating the equipment, qualified personnel must read the equipment manufacturers' operating and safety instructions.

Refer to U.S. Occupational Safety & Health Administration (OSHA) Regulations (Standards - 29 CFR) Cranes and derricks. - 1926.550, or any other applicable national, state or local regulations for additional information.

• Always presume that any overhead power line is an energized line unless and until the person(s) owning the line and/or the electrical utility authorities indicate that it is not an energized line and it has been visibly grounded.

• Before operating any equipment near any power line make sure the line has been de-energized and visibly grounded at the point of work.

• Electrocution can occur without touching an electrical power line. Electricity, depending on the magnitude, can jump or become induced into equipment or conductive materials that come in close proximity to, but do not touch a power line. High wind, lightening, wet ground and other environmental conditions will increase the possibility of electrocution and require additional consideration.

• Transmitter towers can induce the equipment or materials being handled with an electrical charge. Before working or operating equipment near transmitter towers make sure the transmitter is de-energized.

• Select the location where the span/drive unit will be assembled to ensure that neither the irrigation machine, or the equipment used during the assembly process, will violate the minimum clearance guidelines.

• Never operate equipment or allow the load, ropes or tag lines within 10ft.(3.05m) of any power line rated 50 kV or lower whether it is energized or not. For lines rated over 50 kV, the minimum clearance shall be 10 ft. plus 0.4 inch (1.1 cm) for each kV over 50 kVs. .

• Never assemble, tow, transport or allow irrigation machine components underneath or within 10ft.(3.05m) of any power line rated 50 kV or lower whether it is energized or not. For lines rated over 50 kV, the minimum clearance shall be 10 ft. plus 0.4 inch (1.1 cm) for each kV over 50 kVs. Overhang support angles, cables and spinner drive components regularly extend 10ft. to 12ft.(3.1m to 3.7m) above the irrigation pipeline (span).

• Use barricades to identify areas where interference with overhead power lines could occur. Keep the assembly, towing or transporting of irrigation machine components and the operation of equipment including load, ropes or tag lines away from any power line, in the distances described above, whether the line is energized or not.

• Always designate a person to observe clearance between the power line and all equipment being operated or moved in order to give timely warning for all operations to STOP if the minimum clearance is violated.

MINIMAL LOCKOUT / TAGOUT PROCEDURE

The following procedure establishes the minimum requirements for the lockout of energy isolating devices whenever maintenance or servicing is done on machines or equipment. It is used to ensure that the machine or equipment is stopped, isolated from all potentially hazardous energy sources and locked out before personnel perform any servicing or maintenance where the unexpectedly energized or start-up of the machine or equipment or release of stored energy could cause injury. All personnel, upon observing a machine or piece of equipment which is locked out to perform servicing or maintenance shall not attempt to start, energize, or use that machine or equipment.

When the energy isolating devices are not lockable, tagout should be used and affected personnel must wear full personal protection.

Refer to U.S. Occupational Safety & Health Administration (OSHA) Regulations (Standards - 29 CFR) Typical minimal lockout procedures - 1910.147 App A, or applicable national, state or local regulations, for additional information.

SEQUENCE OF LOCKOUT

1. Notify all affected personnel that servicing or maintenance is required on a machine or equipment and that the machine or equipment must be shut down and locked out to perform the servicing or maintenance.

2. The authorized personnel shall identify the type and magnitude of the energy that the machine or equipment utilizes, shall understand the hazards of the energy, and shall know the methods to control the energy.

3. If the machine or equipment is operating, shut it down by the normal stopping procedure (depress the stop button, open switch, close valve, etc.).

4. Deactivate the energy isolating device(s) so that the machine or equipment is isolated from the energy source(s).

5. Lock out the energy isolating device(s) with assigned individual lock(s).

6. Stored or residual energy (such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, etc.) must be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc.

7. Ensure that the equipment is disconnected from the energy source(s) by first checking that no personnel are exposed, then verify the isolation of the equipment by operating the push button or other normal operating control(s) or by testing to make certain the equipment will not operate. CAUTION: Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.

8. The machine or equipment is now locked out.

⚠ **DANGER** WHEN PERSONNEL WILL BE EXPOSED TO CIRCUIT ELEMENTS AND ELECTRICAL PARTS, A QUALIFIED PERSON MUST USE TEST EQUIPMENT TO VERIFY THAT THE CIRCUIT ELEMENTS AND EQUIPMENT PARTS OF THE EQUIPMENT ARE DE-ENERGIZED.

RESTORING EQUIPMENT TO SERVICE

When the servicing or maintenance is completed and the machine or equipment is ready to return to normal operating condition, the following steps shall be taken.

1. Check the machine or equipment and the immediate area around the machine to ensure that nonessential items have been removed and that the machine or equipment components are operationally intact.
2. Check the work area to ensure that all personnel have been safely positioned or removed from the area.
3. Verify that the controls are in neutral.
4. Remove the lockout devices and reenergize the machine or equipment.
5. Notify affected personnel that the servicing or maintenance is completed and the machine or equipment is ready to be used.

SAFETY

PLAYING, RECORDING AND ERASING ALARM VOICE MESSAGES

The memory of each alarm input enables you to record your own voice message in the total length of 10 seconds. The device is equipped with a microphone and a speaker, giving you the option to listen to what you have recorded. The speaker can be switched off by removing the jumper JP1. See figure 13-1.

PLAY/REC Keys   1 = CABLE ALARM
2 = POWER ALARM
3 = SAFETY ALARM
4 = TAMPER ALARM

Before removing the GSM Cable Guard Monitor tower box cover, disconnect power to the control panel and GSM Cable Guard Monitor.

Play Messages

1. Press and release PLAY/REC key (1-4) quickly to listen to the message.

Record Messages

1. Press and hold PLAY/REC key (1-4) while speaking for up to 10 seconds or as long as the LED3 display is lit.

2. Release key - when message recording is finished or when LED3 goes off.

3. Check recorded message by quickly pressing the (1-4) key.

Erase Messages

1. Press PLAY/REC key (1-4) and hold it as long as the LED3 display is lit, then stop recording. The message is erased. Follow the same procedure for all four messages.

LED Display

LED3 - red, Recording and listening to the voice message. See figure 13-1.
- LED ON: Message recording
- LED Flashing: Playing recorded message

⚠ DANGER

TO REDUCE THE POSSIBILITY OF ELECTRO-CUTION;

ALWAYS DISCONNECT POWER TO THE CONTROL PANEL AND GSM CABLE GUARD MONITOR BEFORE REMOVING TOWER BOX COVER.

ALWAYS FOLLOW THE MINIMAL LOCKOUT/TAGOUT PROCEDURE LOCATED IN THE SAFETY SECTION OF THIS MANUAL AND DO THE FOLLOWING:

1. **SHUT OFF AND LOCK THE PUBLIC POWER SERVICE DISCONNECT TO THE IRRIGATION MACHINE. FILL OUT THE BLUE (OSHA SAFETY COLOR CODE) TAG AND ATTACH TO THE DISCONNECT AFTER LOCKING.**

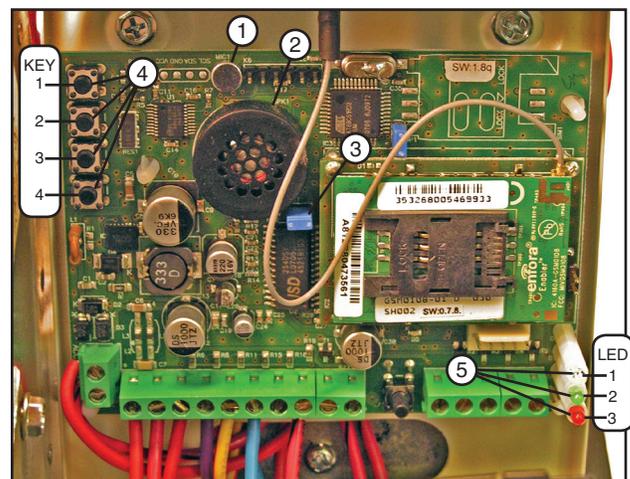2. **SHUT OFF THE CONTROL PANEL MAIN POWER DISCONNECT.**

Figure 13-1

1. Microphone
2. Speaker
3. Jumper JP1
4. Play/Record Key
5. LED

COMMANDS

DTMF REMOTE COMMANDS

The GSM Cable Guard Monitor can be called from any phone but answers the call only if the calling number is in the phone book from TKO to TK9. This is made with a short beep.

NOTE
After TKO - TK9 phone numbers are programmed, only those phone numbers can enter into the remote control and programming mode!

DTMF REMOTE COMMAND TABLE

REMOTE COMMAND	ACTION DESCRIPTION
00	All outputs OFF
01	Play message 1
02	Play message 2
03	Play message 3
04	Play message 4
10	Output 1 OFF (bi-stable)
11	Output 1 ON (bi-stable) or ON for mono-stable
12	Check the output 1 state (1 beep=ON, 3 beeps=OFF)
20	Output 2 OFF (bi-stable)
21	Output 2 ON (bi-stable) or ON for mono-stable
22	Check the output 2 state (1 beep=ON, 3 beeps=OFF)
30	Output 3 OFF (bi-stable)
31	Output 3 ON (bi-stable)
32	Check the output3 state (1 beep=ON, 3 beeps=OFF)
40	Output 4 OFF (bi-stable) or ON for mono-stable
41	Output 4 ON (bi-stable)
42	Check the output4 state (1 beep=ON, 3 beeps=OFF)
51	Input 1 status checking (1 beep=alarm, 3 beeps=normal)
52	Input 2 status checking (1 beep=alarm, 3 beeps=normal)
53	Input 3 status checking (1 beep=alarm, 3 beeps=normal)
54	Input 4 status checking (1 beep=alarm, 3 beeps=normal)
60	System OFF (3 beeps)
61	System ON (1 beep)
62	System status verification (1 beep=ON, 3 beeps=OFF)
90	Valid SIM counter set to RFL value (after SIM refill)
99	Listen-in ON
*	Don't call this phone number again (phone no. from TLO - TL9)
#	Cancel the dialing procedure (only phone no. from TLO - TL4)

SMS REMOTE COMMANDS

NOTE
When using the SMS command, you must use a semicolon ";" at the beginning and on the end of the SMS command. Use CAPITAL letters for the SMS command.

PRINT-OUT OF THE PARAMETERS

Receive all parameters (PRALL)

Command ;PRALL;
Send this command to receive the SMS with all 12 parameters that are currently programmed on the SIM.

Receive telephone numbers (PRTL)

Command ;PRTL;
Send this command to receive the SMS with all currently programmed telephone numbers (TLO - TL9).

Receive links (PRLK)

Command ;PRLK;
Send this command to receive the SMS with all currently programmed links (LKO -LKS).

Receive input parameters (PRIP)

Command ;PRIP;
Send this command to receive the SMS with all currently programmed Input parameters (IPO - IPS).

Receive input filter value (PRIF)

Command ;PRIF;
Send this command to receive the SMS with all currently programmed Input filters (IFO - IPS).

Receive clip identification telephone numbers (PRTO)

Command ;PRTO;
Send this command to receive the SMS with all currently programmed telephone numbers which are use for CLIP identification (TOO - T09).

Receive access telephone numbers (PRTK)

Command ;PRTK;
Send this command to receive the SMS with all currently programmed telephone numbers which are use to enter into programming and remote control mode (TKO - TK9).

COMMANDS

Receive output parameters (PROP)

Command ;PROP;
Send this command to receive the SMS with all currently programmed Outputs parameters (OPI - OP4).

Receive link for local alarm output (PROA)

Command ;PROA;
Send this command to receive the SMS with all currently programmed Output Alarm links (OAI - OA4).

Receive delay before dial (PRDL)

Command ;PRDL;
Send this command to receive the SMS with all currently programmed Delays before dial (DLI - DL4).

Receive all programmed SMS messages (PR#)

Command ;PR#;
Send this command to receive the SMS with all currently programmed Alarm SMS (#0 - #9)

Receive set up parameters value (PRP)

Command ;PRP;
Send this command to receive the SMS with all currently programmed Set-up parameters (RFL, RFT, PTM, RED, CLP, NET, and MIC).

State of the credit for the PRE-PAY CARD

• PRVI
Command ;PRV1;
Send this command to receive the SMS with Credit amount on your Pre-pay SIM card (for Simobil, Mobitel and Vega GSM provider).

• PRV2
Command ;PRV2;
Send this command to receive the SMS with Credit amount on your Pre-pay SIM card (for TIM GSM Italian provider).

• PRV3
Command ;PRV3;
Send this command to receive the SMS with Credit amount on your Pre-pay SIM card (for Omnitel Vodafone GSM Italian provider).

NOTE
Use the V1, V2 and V3 examples above to see if you can use the same command with your local GSM provider. If these commands are not compatable with your local GSM provider, call your local Valley Dealer.

COMMANDS

CHECKING AND STATUS (ON/OFF) CHANGING THE SYSTEM CHECKING SYSTEM STATUS BY SMS COMMAND

Command ;SYS;
Send this command to receive the SMS with state of the system.

The reply SMS can be:

•   SYS= ON - System is ON (active inputs)
•   SYS= OFF - System is OFF (inputs are not active)

CHECKING SYSTEM STATUS BY DTMF COMMAND

If you want to check the system status (system ON/OFF) with DTMF command, call the GSM Cable Guard Monitor and after beep press command "62". You will hear one of the following responses:

•   1 Beep - system Is On (All Alarm Inputs Are Enabled)
•   3 Beeps - system Is Off (All Alarm Inputs Are Disabled)

CHANGING SYSTEM STATUS OFF TO ON (SYSTEM ON)

Command ;SYS=ON;
Send this command to switch the system ON.

If you want to get a confirmation SMS back then write "+" before SMS command: Command ;+SYS=ON;

CHANGING SYSTEM STATUS ON TO OFF (SYSTEM OFF)

Command ;SYS=OFF;
Send this command to switch the system OFF.

If you want to get a confirmation SMS back then write "+" before SMS command: Command ;+SYS=OFF;

COMMANDS

CHECKING THE INPUT STATUS

You can get information about an inputs status in two different ways:

• Call The GSM Cable Guard Monitor And Use DTMF Commands
• Send The SMS Command To Receive The SMS With Inputs Status

CHECKING THE INPUT STATUS BY DTMF

After the short beep press the DTMF command listed below for the input of interest. A response with 1 beep means that the input is in alarm state and a response with 3 beeps, means that the input is in normal (stand-by) state.

51	Input 1 status checking (1 beep=alarm, 3 beeps=normal)
52	Input 2 status checking (1 beep=alarm, 3 beeps=normal)
53	Input 3 status checking (1 beep=alarm, 3 beeps=normal)
54	Input 4 status checking (1 beep=alarm, 3 beeps=normal)

CHECKING THE INPUT STATUS BY SMS (INP)

Command ;INP;

Send this command to receive the SMS with all Inputs status. The reply can be:
•   INP(1-4)=(OPEN-ON) - alarm loop is open and the input is in the alarm state
•   INP(1-4)=(OPEN-OFF) - alarm loop is open and the alarm input is in the idle state
•   INP(1-4)=(LOW-ON) - alarm loop is close on GND and the input is in the alarm state
•   INP(1-4)=(LOW-OFF) - alarm loop is close on the GND and the alarm input is in the idle state
•   INP(1-4)=(HGH-ON) - alarm loop is close on +12VDC and the input is in the alarm state
•   INP(1-4)=(HIGH -OFF) - alarm loop is close on the + 12V and the alarm input is in the idle state
•   SYS= ON;
•   SYS= ON;

OUTPUTS REMOTE CONTROL

You can use outputs remote control in two different ways:

- Call the GSM Cable Guard Monitor And Use DTMF Commands
- Send The SMS Command To Receive The SMS With Inputs Status

OUTPUTS REMOTE CONTROL BY SMS COMMAND

Command ;OUTX=1;
Send this command to switch the output X to ON. X = output 1-4

Command ;OUTX=0;
Send this command to switch the output X to OFF. X = output 1-4

When you want to get the return message with the Output status you must press + before the command.

For example:
Command ;+OUTX=1;
The return message will be: OUTX=(ON)

OUTPUTS REMOTE CONTROL BY DTMF COMMAND

After the short beep press the DTMF command listed below for the output of interest. A response with 1 beep means that the output is active (ON) and a response with 3 beeps, means that the output is not active (OFF) mode.

11	Output 1 ON (bi-stable) or ON for mono-stable
12	Check the output 1 state (1 beep=ON, 3 beeps=OFF)
20	Output 2 OFF (bi-stable) or ON for mono-stable
21	Output 2 ON (bi-stable)
22	Check the output 2 state (1 beep=ON, 3 beeps=OFF)
30	Output 3 OFF (bi-stable) or ON for mono-stable
31	Output 3 ON (bi-stable)
32	Check the output3 state (1 beep=ON, 3 beeps=OFF)
40	Output 4 OFF (bi-stable) or ON for mono-stable
41	Output 4 ON (bi-stable)
42	Check the output4 state (1 beep=ON, 3 beeps=OFF)

Use the 12, 22, 32 and 42 DTMF commands to verify the output state. With DTMF command "00" you can switch all outputs to OFF at the same time.

COMMANDS

CLEAR ALL PROGRAMMED DATA FROM SIM CARD

Command ;SIMCLR;
Send this SMS to clear all existing programming parameters and phone numbers. This is recommended when the SIM being used is not new and already has some data stored in the phone book memory.

NOTE
Sending this command will erase all programmed data!