

# **TITAN 12 Dual SIM Security & Management System**

## **Features.**

The TITAN is a 12 zone wireless security system with an additional 12 configurable wired inputs complete with Dual SIM GSM, SMS & GPRS for communications to control rooms and Users. All SMS / GPRS messages that the TITAN sends are fully programmable.

**Any mention of SMS means SMS or GPRS via our Servers.**

- Dual SIM in case of Network Failure can operate on Single SIM.
- 12 wireless Zones with Alarm, Tamper, Low Battery and Panic per Zone messages.
- The 12 Wireless Zones can accommodate up to 24 wireless detectors.
- All zones can be programmed to be on or off for each mode.
- 12 Wired Inputs with Open ( Hi ) and Closed ( Low ) messages.
- The wired Inputs can Arm and Disarm with the Wireless Zones or be permanently Armed.
- Six of the wired Inputs can be configured to be analogue inputs and 1 of these is especially configured for Fuel Tanks.
- Wired inputs 7 to 12 can be set to send Restore Failure if sensor fails or wires are cut.
- The Titan has 4 Modes of operation, Away, Stay, Chime and Off Mode.
- Up to 24 Key ring remote controls can operate the TITAN each with User Identification.
- Up to 12 User Id passwords can also operate the Titan 12 by SMS or a Keypad with User Identification.
- The TITAN can also operate independently with timers.
- Each Wireless zone or Wired input can be programmed to activate the Gas Output.
- The TITAN also has 4 outputs for connection to an Armed response Radio transmitter or they can be operated by SMS to control various devices. E.G. Pumps Gates ETC.
- 3 relay outputs operate Gas Discharge ( Manual or Automatic ) and Internal and External sirens.

## **OPERATION**

### **MODES OF OPERATION**

The Titan has 4 Modes of operation, Away, Night, Chime and Off Mode.

#### **Armed ( Away ) Mode:**

When Armed mode is activated the TITAN will respond with 1 beep on the internal siren, an Alarm Armed+SMS will be sent. An alarm armed telemetry signal will also be sent if connected to a standard alarm transmitter. ( Only if Outputs selected as Telemetry).

When Armed the TITAN will SMS the Armed message and In the SMS the person's name that armed the unit as well as the address where the unit is located, will also be displayed.

If By System Timer+is displayed, then the alarm was activated by a timer.

Any activation of an armed wireless zone or Input will result in the Siren sounding and an Alarm SMS being sent. Any further activation will reactivate the siren if it has stopped or lengthen its sounding time. An additional SMS will be sent with the zone identification. A Example of such an SMS is Alarm Garage at Paint shop 142 Botha ave Lyttelton+.

An Alarm Activated+Telemetry signal will also be sent to the Armed Response Company if connected.

The siren will continue sounding for a maximum of 4 minutes after the last activation.

Any wired Input that has been programmed to activate the siren will act like wireless zone activation. If the input has been programmed not to activate the siren it will then only send an SMS.

Gas will also be triggered if connected and programmed to be active on the specific zone. The GAS is always active on programmed zones unless disabled via SMS.

#### ***Activating Armed mode:***

Armed mode can be activated by a key ring remote control, the Keypad, a cellular phone or timer.

To activate the system by remote, the blue button must be pressed once.

To activate the system by cellular phone, #XXXXA must be sent to the TITAN via SMS. In this message, XXXX is a private, four digit, numeric pin code that can only be changed by the Master code via SMS Programming.

The timer will activate the alarm at a pre-programmed time, if enabled.

To activate by keypad: Type user password, press away button and press enter.

#### **Off Mode:**

The Off Mode Disarms the TITAN however certain or all wired inputs can be programmed to be armed, these are then on 24/7. No wireless zone is active when the TITAN is in Off Mode.

If the TITAN was in Armed Mode, it will respond by sounding twice on the internal siren, only if the system was not activated by a sensor while in Armed mode, and a system Off (Disarmed) SMS message will be sent. An Alarm disarmed+telemetry signal will also be sent.

If the TITAN was activated by a sensor while in Armed mode, the system will respond by sounding four times on the internal siren and a system Off (Disarmed) SMS message will be sent. This is an additional warning function to let the user know that the premises were entered.

If the TITAN was in panic mode with the siren sounding the siren will stop when Off mode is activated.

The messages are fully programmable, but the default message is %System OFF Mode+. In the SMS the name of the person who disarmed the unit as well as the address where the unit is located, will also be displayed.

If %By system Timer+is displayed, the system was deactivated by the timer.

**Activating Off Mode:**

Off Mode can be activated by key ring remote, the keypad a cellular phone or timer.

Press the yellow button on the key ring remote control once

Or send #XXXXO to the TITAN via SMS.

To disarm the system by keypad, enter user code and press enter.

PLEASE NOTE: The timer will ARM the Titan on a Saturday or Sunday but WILL NOT Disarm. The Timer will only arm and disarm on weekdays.

**Night mode: sometimes called stay mode**

(Normally activated when retiring for the night.)

When Night mode is activated by the keypad or Key Ring, the Titan will respond with 1 beep on the internal buzzer.

Any detection in any of the zones programmed to be active in Night mode will cause the buzzer to buzz for 1 minute and should the alarm not be switched off within this time, the siren will start to sound and the ALARM SMS messages will be sent and an AlarmqTelemetry signal will be sent to the Alarm Response Company if connected. At this time the alarm also switches to **Away mode**.

Any further activation will cause the siren to sound and an ALARM SMS to be sent and an AlarmqTelemetry signal will be sent to the Alarm Response Company if connected. The siren will sound for 4 minutes each time a sensor is activated.

When Night Mode is activated by SMS the Titan will respond with 1 beep on the internal buzzer and an Alarm Armed Night Mode SMS will be sent to the Cell Numbers programmed into the Titan the telemetry outputs will not be activated.

Any detection in any of the zones programmed to be active in Night mode will cause the buzzer to beep for 1 minute. Should the alarm not be switched off within this 1 minute buzzer time, the siren will start to sound and the ALARM SMS messages will be sent to the cell numbers. An Alarm ActivatedqTelemetry signal will also be sent to the Alarm Response Company if connected. At this time the alarm also switches to **Away mode**.

**NOTE:** If Send SMS in Night and Chime Modes is selected then an SMS will be sent immediately when the buzzer starts to sound. Send SMS in Night and Chime modes is activated by sending the following SMS to the Titan #XXXX< where XXXX is the user password.

**Activating Night mode:**

Night mode can be activated by a key ring remote, SMS, or a keypad.

To activate Night mode by remote, the Yellow and Blue buttons must be pressed simultaneously.

To activate Night mode by cellular phone, #XXXXS must be sent to the titan via SMS.

To activate by keypad: Type user password, press Night button and press enter.

### **Deactivating Night mode:**

Switch the Titan to Off Mode.

### **Chime Mode:**

Used to Chime activity in zones without alarm activation. Use full for outdoor Detectors.

Like all other modes, the active zones can be defined by the user.

If the Titan is switched to Chime mode by the Keypad or Key Ring then any activation of a sensor in one of the active zones will result in the buzzer sounding 6 times. The corresponding zone number on the keypad will light up.

If the Titan is switched to Chime mode by SMS and Send SMS in Night and Chime modes is selected then any activation of a sensor in one of the active zones will result in the buzzer sounding 6 times and an SMS will be sent to the cell numbers and the telemetry outputs will not activate.

If the Titan is switched to Chime mode by SMS The Titan will send a Chime mode activated SMS.

### ***Activating Chime Mode:***

Chime mode can be activated by SMS, key ring remote or keypad.

To activate by SMS, send **#XXXXM** to the Titan.

To activate by Key ring remote, press the blue and red button simultaneously.

To activate by keypad, enter user code, press the Chime button and press enter.

The Titan will respond with 3 beeps on the internal buzzer.

### ***Deactivating Chime Mode:***

Switch the Titan to Off Mode.

### **Silent Panic:**

Activated when in immediate danger.

When the TITAN receives a Silent Panic signal from a key ring remote control or Keypad a Silent Panic SMS will be sent. Also, a duress telemetry signal will be sent to the armed response company if connected. The name of the person who activated Silent Panic will be included in the SMS.

Example: %Silent Panic Mode activated By Jack at Paint shop 142 Botha ave Lyttelton+

### ***Activating Silent Panic:***

Silent panic is activated by the key ring remote control by pressing the RED button.

The panel will respond with a 10 second beep on the internal buzzer.

To activate by keypad, press the TRBL button followed by enter.

### **Panic: SIREN PANIC**

Activated when in immediate danger.

When the TITAN receives a Panic signal from a key ring remote control a Panic SMS will be sent. The siren will sound for 4 Minutes after the last Panic signal is received.

A panic telemetry signal will be sent to the armed response company if connected.

Each time the TITAN receives a panic signal; it will reset the siren timer and resend the Panic SMS.

The name of the person who activated Panic will be included in the SMS.  
The siren can be stopped before the 4 minutes is up by switching to Off Mode.  
The default panic message is %Panic+

#### **Activating Panic:**

Press the red and yellow button on the remote control together.

Panic can also be activated by keypad. Press the TRBL button, followed by 2<sup>nd</sup> function, followed by the enter button.

#### **Deactivating Panic:**

Panic can be deactivated by switching to Off Mode.

#### **Resetting the TITAN:**

This can only be done when the TITAN is in Off Mode. After resetting, the TITAN's sensor tamper detectors will switch off for 5 minutes. The Gas Low Indicator will also be reset.

Reset by key ring remote: Press all 3 buttons simultaneously.

Reset by key pad: Press the Memory button (Mem) followed by enter.

The TITAN will respond with 6 beeps on the internal buzzer.

#### **Keypad Duress**

A keypad duress signal can be sent if a user is forced to disarm the Alarm. It's a discreet way of letting the Armed Response Company and other users know of the situation.

This Duress signal is sent by entering the user password, but changing the last digit in the password to the next higher digit when disarming the alarm. E.G. 1234 changes to 1235 and 2469 to 2460 and 2680 to 2681

#### **Access Control and Security**

The TITAN can recognize 24 Key rings with user names and up to 36 Wireless Devices on the 12 Zones. Never use more than 2 devices per zone if possible.

Up to 12 User Passwords with ID can also be programmed for SMS and Keypad control.

User passwords should not run consecutively but have a factor of at least 10 between them. E.G. user 1 can be 5837, user 2 must not be 5838 but 5847 or any other number at least 10 up or down.

Advanced RF encrypting technology is used for key ring remote control and Sensor security.

#### **Other functions**

##### **Auto Arm / Disarm Time:**

The TITAN can be programmed to switch to ARMED Mode at a specific time of day every day. This is very useful for Commercial applications where the TITAN will arm at, for example, 18:00 every night. The TITAN also has a built in calendar, enabling the timer to take into account weekends. PLEASE NOTE: The timer will ARM the Titan on a Saturday or Sunday but WILL NOT Disarm. The Timer will only arm and disarm on weekdays.

When the TITAN Arms, it will respond with 1 beep on the internal siren, the Armed button will light up and a security system armed SMS will be sent. In the SMS By %System Timer+ is displayed when the TITAN is armed by this timer.

##### **GAS discharge activation option:**

Each Input or Zone can be programmed to either activate Gas or Not, If automatic Gas is Enabled. PLEASE NOTE the Default is AUTOMATIC GAS OFF.

The Inputs must be selected to sound the siren otherwise the Gas will not be activated on an Input.

The GAS discharge will be triggered every time the alarm is activated by a sensor / Input or by means of a remote control or cellular phone.

The activation of GAS is counted and timed and a low GAS warning will be sent when the GAS canister needs to be replaced. This normally occurs after 8 gas activations.

Once a Gas Low Signal has been received and the Gas Canister is Replaced Please Send the TITAN a #XXXXr or Press all 3 buttons on the Remote control together. ( Reset )

GAS can be triggered manually at any time by sending the TITAN the following SMS **#XXXXG9**.

When the gas is triggered, the TITAN will deliver a 4 sec spray, which will fill a room of 200 square meters practically instantaneously. A total of 8 bursts of this length can be delivered per canister.

After the doors and windows have been opened, it will take approximately two and a half hours for the gas to dissipate out of the house.

Warning: The gas is hazardous to any living creature. Don't enable the gas discharge option if pets are left in the premises.

**Power Supply Battery low warning function:**

A Battery low SMS message will be sent every time the power supply battery voltage drops below a 10.7V. When the battery is charged after the Battery low SMS was sent, a Battery OK SMS will be sent only when the battery voltage is above 12.5VDC.

**Supervision function:**

All sensors are supervised by the TITAN and should a sensor fail to report to the TITAN, a supervision failure SMS will be sent.

**Sensor / Key ring Low Battery warning function:**

Although the batteries in the sensors can last up to 5 years for low power sensors and 3 years for Hi power sensors, the TITAN will detect if a sensor has a battery that has only limited life left and will send a Sensor Low battery SMS. On the Key ring only 4 beeps on the buzzer will be heard indicating a low battery.

**24-Hour Test Signal:**

The TITAN will send a 24 hour test SMS at a specified time each day to indicate that the system is still in operation. This 24 hour test SMS can be disabled if necessary. The time of day when the SMS is sent can be specified by the user. This 24 hr test signal is in the form of a status report. NOTE The Titan Also sends itself an SMS to set the Internal clock.

**Signal Strength:**

Network signal strength can be requested by sending **#XXXXT** to the TITAN. The TITAN will reply with a number out of 31, where 31 is perfect signal strength. Anything below 8 / 31 is not acceptable.

**Mains Failed/Restored**

The TITAN will send a mains failed SMS to all programmed numbers every time mains power is disconnected from the panel. A mains restored SMS will be sent only when mains power was restored and stable for 5 minutes.

**Entry and Exit delay**

Zone 1 is programmed to have entry and exit delays. When arming the alarm, this zone will not trigger for 60 seconds (Default), allowing time to leave the premises. The Exit Entry delay is programmable.

When zone 1 is triggered, after the alarm has been armed and the first 60 seconds expired, the panel will buzz for 60 seconds (Default) before activating the siren, allowing occupants to disarm the alarm.

Warning 60 seconds is sometimes enough time to disable the alarm system by force, set this delay to the minimum time it needs to enter and disarm with the keypad or set to 0 and use the keyring remote.

## Outputs

4 Outputs are available. These can be used to send telemetry signals (Alarm on/off, Panic, Mains on/off, etc) via an alarm transmitter to a control room or operate any other electric equipment (Lights, electric locks etc) via SMS. The TITAN can be set to use these outputs as telemetry outputs, meaning that a signal will be sent automatically every time the alarm is switched on/off, triggered etc. To set the outputs as telemetry outputs, send **#XXXX** to the panel via SMS, where **XXXX** is a four digit numeric pin code. The outputs can also be controlled by SMS to switch on/off lights, open/close gates etc. See table 3 for SMS commands. In the table, the pulse command will switch the outputs on and off with a 1 sec pulse. These commands will not function if the TITAN is configured to use the outputs as telemetry outputs. To set the outputs as SMS outputs, send **#XXXX** to the panel, where **XXXX** is a four digit numeric pin code.

## Wired inputs

The TITAN has 12 wired inputs available which can be programmed to function as below.

### Inputs ganged with alarm

Selecting this function will enable the input to cause alarm conditions every time a state change occurs while the alarm is Armed. The alarm and buzzer will only sound if the input siren enable function is also selected. If the siren enable function is not selected, only notification SMS will be sent.

### Inputs Enabled but not ganged

When this function is selected for an input, an SMS will be sent every time the input changes state, informing the users of the event.

### Inputs Siren Enable

This function will cause the siren to sound every time the input changes state even if the TITAN alarm is off.

### Inputs Automatic Gas.

When programmed the Inputs will also activate the Gas Output but this will only occur if the Inputs siren activation is also selected.

### Inputs Delay Retrigger

After the input changed state, it can only be retrIGGERED after a 3 minute period. Any state change before the 3 minute delay expired will be ignored.

### Restore Failure.

Inputs 7 to 12 have a restore failure timer which will send an SMS if any of the inputs fail to restore after a programmable time, E.G. If the wires to a passive etc are cut the Titan will send the alarm message and then after the set time also the Fail to restore message. This feature can be activated or deactivated by an SMS command.

## ANALOGUE INPUTS.

The Titan can have 6 Analogue Inputs that can measure a DC voltage from 0 to 10 VDC. This range 0 to 10 VDC can be changed by the Factory on Order to up to 0 to 60 VDC.

The Analogue Inputs of the TITAN 12 B need two sample points for calibration. A high value (maximum value if possible) and a low value (minimum value if possible). They can be calibrated to any measured value, voltage DC, mm, Meters, cm, temperature, 0-100%, 0-xxxx Liters etc.

All analogue inputs have a programmable High and Low Alarm Messages and trigger values. In addition the main fuel level analog input can be set to report a change of minimum 5%. E.G. In addition to the High and Low Values the titan will also report changes of 5% or whatever set = 5% to 50%. This should only be used on GPRS not SMS.

The Main Analogue input for fuel tanks can be set to measure volume in a round container horizontally positioned, or a square container.

See Appendix A+

**SMS Commands that can be sent to the titan to request Information or to change a parameter.**

<b>Command Description Only use User Password</b>	<b>Command</b>
Away Mode - user code only	#passA
Off Mode - user code only	#passO
Silent Panic - user code only	#passH
Panic - user code only	#passP
Stay Mode	#passS
Monitor Mode	#passM
Status Report - user code or programmer password	#passL
Reset Titan 12 - user code only	#passr
Enable GAS - user code only	#passG1
Disable GAS - user code only	#passG0
Activate GAS - user code only	#passG9
Request Base and SMSC numbers - user code or programmer password	#passI
Request Cell Numbers User or Prog Pass	#passJ
Request Status time, Auto arm, disarm, exit delay - user code or prog pass	#pass*
Request Zone Setup - user code or prog pass	#passS
Output 1 ON - user code only	#passB1
Output 1 OFF - user code only	#passB0
Output 1 Pulse - user code only	#passB9
Output 2 ON - user code only	#passC1
Output 2 OFF - user code only	#passC0
Output 2 Pulse - user code only	#passC9
Output 3 ON - user code only	#passD1
Output 3 OFF - user code only	#passD0
Output 3 Pulse - user code only	#passD9
Output 4 ON - user code only	#passE1
Output 4 OFF - user code only	#passE0
Output 4 Pulse - user code only	#passE9
Reset All Keypad Addresses - user code or prog pass	#pass%
Request Date and Time - user code or prog pass	#passt
Request Inputs 1 to 6 Status	#passa
Request Inputs 7 to 12 Status	#passb
Request Analog Readings	#passz
Signal Strength - user code or programmer password	#passT
Software Version - user code or programmer password	#passv
AirTime Request Only For SIM 1	#passZ

<b>Command Description Only use Programmer Password</b>	<b>Command</b>
Test All Outputs - programmer password only	#pass1
Request Program Pass, Master Pass and Own Number - prog pass	#passK
Request User Codes - programmer password only	#passu
Use Outputs as SMS outputs - prog pass only	#pass(
Use Outputs as Telemetry outputs - prog pass only	#pass)
Enable 24H Message - programmer pass only	#passW
Disable 24H Message - programmer pass only	#passV
Enable GPRS - programmer password only	#pass#G1
Disable GPRS - programmer password only	#pass#G0
Send SMS in Stay and Mon Modes Prog Pass	#pass<
No Sending of SMS in Stay and Mon Mode Prog Pass	#pass>
Enable Inputs Restore Warning prog pass	#passR1
Disable Inputs Restore Warning prog pass	#passR0
Select 1st SIM card	#passN1
Select second SIM card	#passN2
<b>pass is the password programmed into the Titan.</b>	

## **Reading Wireless Detectors and Key rings into the TITAN Panel.**

Refer to drawings below.

Start by clearing the memory of the Titan, Press and Hold the learn button until the LED goes out +- 20 seconds.

### **Key ring Remote controls**

**It is advisable to number the key rings beforehand so as to identify the key ring number with a user name. Start with Key Ring 1 etc.**

1. Insert the link into position 1 on the Titan as indicated.
2. Press and release the learn button.
3. The Learn LED should switch on.
4. Press and release the yellow button on the key ring.
5. The Learn LED should now flash, when it stops.
6. Key ring 1 has been read in.
7. Continue from 2 above and read all key rings into the TITAN.

Once all Key rings have been read in remove the link from position 1

### **Wireless Passives and other detection devices.**

**It is advisable to set the DIP switches to the correct zone beforehand so as to identify the device with a zone. See DIP switch settings below.**

#### **Passives**

1. Insert the link on the Titan into position 2.
2. Press and release the learn button.
3. The Learn LED on the Titan should switch on.
4. Press and release the Transmit button inside the passive.
5. The Learn LED on the titan should now flash, when it stops Wireless passive is now read in.
6. Continue from 2 above for the rest of the Passives Devices.

#### **Door guards.**

**It is advisable to set the DIP switches to the correct zone beforehand so as to identify the device with a zone. See DIP switch settings below.**

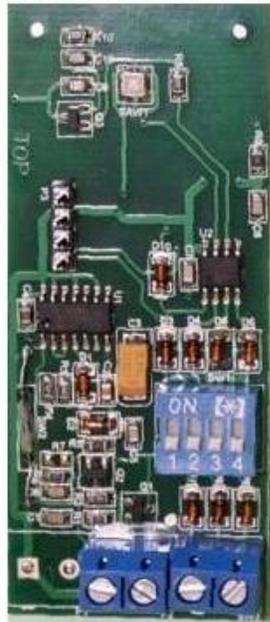
1. Insert the link on the Titan into position 2.
2. Connect a short piece of wire to the N/C connectors on the door guard.  
The N/C connectors are the 2 next to the where the battery connects.  
Once this wire is connected wait 1 minute then continue with 3.
3. Press and release the learn button on the Titan
4. The Learn LED on the Titan should switch on.
5. Remove the wire link on the door guard and check that the door guard LED comes on.
6. The Learn LED on the Titan should now flash, when it stops door guard is now read in.
7. Continue from 2 above for the rest of the door guard Devices.

**DIP SWITCH SETTINGS.**

<b>Zone</b>	<b>DIP 1</b>	<b>Dip 2</b>	<b>Dip 3</b>	<b>Dip 4</b>	<b>BIN</b>
<b>Zone 1</b>	<b>Off</b>	<b>Off</b>	<b>Off</b>	<b>On</b>	<b>1</b>
<b>Zone 2</b>	<b>Off</b>	<b>Off</b>	<b>On</b>	<b>Off</b>	<b>2</b>
<b>Zone 3</b>	<b>Off</b>	<b>Off</b>	<b>On</b>	<b>On</b>	<b>3</b>
<b>Zone 4</b>	<b>Off</b>	<b>On</b>	<b>Off</b>	<b>Off</b>	<b>4</b>
<b>Zone 5</b>	<b>Off</b>	<b>On</b>	<b>Off</b>	<b>On</b>	<b>5</b>
<b>Zone 6</b>	<b>Off</b>	<b>On</b>	<b>On</b>	<b>Off</b>	<b>6</b>
<b>Zone 7</b>	<b>Off</b>	<b>On</b>	<b>On</b>	<b>On</b>	<b>7</b>
<b>Zone 8</b>	<b>On</b>	<b>Off</b>	<b>Off</b>	<b>On</b>	<b>9</b>
<b>Zone 9</b>	<b>On</b>	<b>Off</b>	<b>On</b>	<b>Off</b>	<b>10</b>
<b>Zone 10</b>	<b>On</b>	<b>Off</b>	<b>On</b>	<b>On</b>	<b>11</b>
<b>Zone 11</b>	<b>On</b>	<b>On</b>	<b>Off</b>	<b>Off</b>	<b>12</b>
<b>Zone 12</b>	<b>On</b>	<b>On</b>	<b>On</b>	<b>Off</b>	<b>14</b>
<b>Spare</b>	<b>On</b>	<b>On</b>	<b>On</b>	<b>On</b>	<b>15</b>
<b>Panic</b>	<b>On</b>	<b>Off</b>	<b>Off</b>	<b>Off</b>	<b>8</b>
<b>Tamper</b>	<b>On</b>	<b>On</b>	<b>Off</b>	<b>On</b>	<b>13</b>



**Door guard Low Power**



**SW2 SW3**

**Door guard High Power**



**SW2 is the normally Closed input for a magnetic Switch.  
SW3 is the Normally Open input and will activate Tamper.**

The Door guard, DG, is actually a universal transmitter with integral panic button and connections for a magnetic contact switch or similar device. The DG will send a signal to the control panel when the magnet moves away from the magnetic switch, for example, when a door or window is opened (N/C connector). The normally Open Input is for Tamper.

**Battery Saving Feature. N. B.**

The door guards have a battery saving feature whereby the door has to be closed for at least 30 seconds then when opened the door guard will transmit to the panel. If the door is opened and closed continuously the door guard will not transmit to the panel until the door is closed for at least 30 seconds.

<b>High Power door Guard</b>	<b>Low Power door Guard</b>
Battery saving feature.	Battery saving feature.
DIP Switch Zone Selection.	DIP Switch Zone Selection.
Tamper and Battery supervision.	Tamper and Battery supervision.
External Magnetic or Mercury switches can be connected.	External Magnetic or Mercury switches can be connected.
Power Source = C123 Lithium 6 Volt Battery.	Power Source = CR2477 Lithium 6 Volt Battery.
Current consumption on Idle = Less than 10 uA.	Current consumption on Idle = Less than 10 uA.
Current when transmitting with LED = 24 mA.	Current when transmitting with LED = 12 mA.
Transmitter Range = 80 to 250 Meters indoors.	Transmitter Range = 30 to 50 Meters indoors.
Battery Life = Greater than 2 Years	Battery Life = Greater than 3 Years.



## **Hi Power Wireless Passive.**

The Sensor detects the movement of heat in the infrared spectrum of light. In other words a source of heat such as a human moving past the Sensor field of view will cause the Sensor to detect and a signal will be sent to the Control Panel Control panel. The Sensor will detect movement up to 8-12 meters Away from the device and up to 100 degrees wide.

### **Battery Saving Feature. N. B.**

The Passives have a battery saving feature whereby they will only transmit to the panel if they have not seen any movement for 2 minutes, then if there is movement they will transmit to the panel. This means that in a busy room with people walking around they will stay in a saving mode until no movement is detected, then if any person enters the room they will transmit to the panel.

- **Battery saving feature.**
- **DIP Switch Zone Selection.**
- **Tamper and Battery supervision.**
- **Up to 10 Kg Pet Immunity standard**
- **Up to 20 Kg Pet Immunity by Covering bottom lens Array.**
- **Power Source = C123 Lithium 6 Volt Battery.**
- **Current consumption on Idle = Less than 10 uA.**
- **Current when transmitting with LED = 18 mA.**
- **Transmitter Range = 50 to 150 Meters indoors.**
- **Battery Life = Greater than 3 Years.**
- **Detection = 12 Meters 100degrees**

## **Connecting the Keypad. Optional Extra**

**NOTE:** To connect a Keypad to the Titan The link on the **Titan** P14 near the keypad connections must be inserted.

If one keypad is used a link must be inserted on the **keypad** into LK2 next to the keypad connections.

If multiple keypads are used then the keypad furthest from the Titan must have a link in LK2 and no others.

## **USING THE KEYPAD TO PROGRAM ACTIVE ZONES.**

### **Programming Active Zones**

The keypad can be used to program active zones for all the different modes.

#### **Programming active zones for Away Mode:**

Switch the Titan to Off Mode.

Enter the 6 digit master code, The Default is 123456 press the PR/2NF button followed by enter. The PR/2NF button will light up, showing that the Titan is ready to be programmed.

To program zones, press the Away button, followed by enter. The Away button will light up and all the active zones will light up. If no zone buttons light up, no zones are active in Away Mode.

To program a zone to be active in Away Mode, press the corresponding zone number button on the keypad. The button will light up, indicating that the zone will be active in Away Mode.

To deactivate a zone, press the corresponding zone number button on the keypad. The button light will switch off, indicating that the zone will not be active in Away Mode.

When all the zones have been programmed, simply press enter to return to program mode.

#### **Programming active zones for Night Mode**

Switch the Titan to Off Mode.

Enter the 6 digit master code, press the PR/2NF button followed by enter. The PR/2NF button will light up, showing that the Titan is ready to be programmed.

To program zones, press the Night button, followed by enter. The Night button will light up and all the active zones will light up. If no zone buttons light up, no zones are active in Night Mode.

To program a zone to be active in Night Mode, press the corresponding zone number button on the keypad. The button will light up, indicating that the zone will be active in Night Mode.

To deactivate a zone, press the corresponding zone number button on the keypad. The button light will switch off, indicating that the zone will not be active in Night Mode.

When all the zones have been programmed, simply press enter to return to program mode.

#### **Programming active zones for Chime Mode**

Switch the Titan to Off Mode.

Enter the 6 digit master code, press the PR/2NF button followed by enter. The PR/2NF button will light up, showing that the Titan is ready to be programmed.

To program zones, press the Chime button, followed by enter. The Chime button will light up and all the active zones will light up. If no zone buttons light up, no zones are active in Chime Mode.

To program a zone to be active in Chime Mode, press the corresponding zone number button on the keypad. The button will light up, indicating that the zone will be active in Chime Mode.

To deactivate a zone, press the corresponding zone number button on the keypad. The button light will switch off, indicating that the zone will not be active in Chime Mode.

When all the zones have been programmed, simply press enter to return to program mode.

### **Programming Passwords**

The keypad can be used to program user passwords (Default: 1234) and the Master password (Default: 123456):

#### **Programming User Passwords:**

1. Switch the Titan to Off Mode.
2. Enter the 6 digit master code, press the PR/2NF button followed by enter. The PR/2NF button will light up, showing that the Titan is ready to be programmed.
3. Press the MEM button followed by the user number (1-12). Pressing 2, for example, will mean that user password 2 must be programmed in. The selected number button will start to flash.
4. Enter the **4** digit numeric password and press enter.
5. To program the next password start from step 3 above. All 12 user passwords are programmed in the same way.

#### **Programming the Master Password:**

1. Switch the Titan to Off Mode.
2. Enter the 6 digit master code, press the PR/2NF button followed by enter. The PR/2NF button will light up, showing that the Titan is ready to be programmed.
3. Press the MEM button followed, by PR/2NF button, followed by enter. The MEM button will start to flash.
4. Enter the **6** digit numeric password and press enter.
5. Press enter a second time to exit program mode.

## Appendix "A"

WARNING TRAINING IS NEEDED TO OPERATE AND PROGRAM THE ANALOG INPUTS.

Before using the Analogue inputs the amount of analogue inputs must be programmed 1 to 6 in the programmer. Analog inputs start at input 1 and go to Input 6, Input 1 is for fuel tanks.

The Reading of Analogue input 1 can be added to the Arm Disarm message if wanted, see programmer.

The Analogue Inputs of the Titan 12B need two sample points for calibration. A high value (maximum value if possible) and a low value (minimum value if possible). It can be calibrated to any measured value, mm, Meters, cm, temperature, 0-100%, 0-xxxx Liters etc.

Follow these steps on every analogue channel to calibrate it.

Step 1 – Apply a known high value to the input. E.G. 5000L.

Step 2 – Send an SMS with #XXXX#AcHvvvvv where XXXX is the programmer Password, c is the input number 1-6 and vvvvv is the value. E.G. #1111#A1H05000.

This will set the current applied value on input 1 to a measured value of 5000.  
The Titan will beep twice when the message has been received.

Step 3 – Apply a known low value to the input. E.G. 0L.

Step 4 - Send an SMS with #XXXX#AcLvvvvv where XXXX is the programmer Password, c is the input number 1-6 and vvvvv is the value. E.G. #1111#A1L00000.

This will set the current applied value on input 1 to a measured value of 0.

The Titan will beep twice when the message has been received.

Step 5 – The units of measurement must be programmed. This is done by sending the following SMS.  
#XXXX#AcUu or #XXXX#AcUuu or #XXXX#AcUuuuu where XXXX is the programmer Password, c is the input number 1-6 and uuuuuu is the Unit.

E.G. #1111#A1U% or #1111#A1UL Liters or #1111#A1UV or #1111#A1Umm etc.

Repeat the above steps 1-5 for every analogue input used.

All analogue inputs have a programmable High and Low Alarm Messages and trigger values.

Size en Shape (rectangular or Round) is programmable.

This step only works on Input 1. If input 1 is used to measure volume in a round container horizontally positioned, then send the following SMS to the unit.

#XXXX#A1TR where XXXX is the programmer password.  
This is needed because the volume in such a tank is not linear to the measured level.  
To change this setting back to normal linear mode send #XXXX#A1TL

Fuel Level Reporting Interval can be programmed in %. (Ex. Every 5% of fuel used it will send a message to the base station via GPRS. This % value is adjustable. 5% - 100%)