

# Agritech Computers

## Low Power GSM Alarm System – Programming Instructions

The following is a suggested programming sequence for the Low Power GSM Alarm System.

1. Ensure that the unit is in the powered down mode i.e. the status indicator is extinguished.
2. Make a note of the mobile number associated with the SIM that is to be used and if it is a Pre-Pay SIM that there is sufficient credit for at least 20 text messages. Make note of the amount of credit on the SIM.
3. Press the yellow button to the right side of the SIM slot to release the SIM carrier. Insert the SIM into the carrier ensuring that the SIM is properly seated. Do not force the SIM carrier into the system. Insert the SIM carrier containing the SIM back into the system. The carrier should slide in easily and then click into place.
4. Connect the Security Key Reader to the socket marked ID Key.
5. Connect any inputs that are going to be used with the system.
6. Connect the 12 volt dc Power to the connector marked "DC Power" making sure that the 0 volts is closest to the ID Key and the +12 volts is on the side closest to the Input connector.
7. Wake the system up by applying a Security Key to the Security Key Reader. A rapid series of beeps should be heard from the Security key Reader indicating that the system has not recognised the identity of the key. This is normal. The status lamp will start a slow flash indicating it is searching for a mobile network. After a few seconds the status indicator should change to a blink indicating it has registered on the mobile network. Do not continue if the status indicator is not blinking. It means there is either a problem with coverage or the SIM has not been inserted correctly.
8. Program the mobile number of the phone you are going to use for programming the system by sending a text message to the system in the form: .M01+44xxxxxxxxx Where "xxxxxxxxx" is the mobile number minus the leading zero. It is assumed the unit will be operating in the UK. After each programming command the system should respond within a few seconds with a text message confirming that the system has accepted the program command. If no response is received after a few minutes following sending the mobile number it is possible you may have entered the incorrect mobile number and effectively locked yourself out of the system. If this is the case you will need to contact End2End Software who will be able to reset the system for you.
9. Next set the system to Automatic Power mode by sending the text message: .N0 This will ensure that system remains in the permanently on mode so long as the external +12 volt dc is applied.
10. If you are using a Pre-Pay SIM you should now program the system with the number of text message credits. The number of credits is the amount of credit on SIM divided by the cost for each text message. If the credit on the SIM was £10.00 and the cost of sending a text message is 10p, then you can send 100 text messages for the amount of credit. The system has already used two text messages so you should subtract 2 from the total number of credits that you have calculated. To update the Credit Counter send a text message in the form: .Cxxx Where xxx is the amount of credits you have calculated minus the 2 you have already used. Note the maximum number for the counter is 999. From now on all messages received from the system will show the amount of credits remaining at the beginning of the message.
11. Program the Location name for the system by sending the message: .L<location Name> Do not include "<" or ">".
12. Program the label to sent with the daily message: .G<label>

13. Make a note of the identity of the Security Keys to be used with the system. The identity is engraved on the face of the Security Key. The number is a 12 digit hexadecimal number. All figures must be entered including any leading zeros. Ensure any letters are in capitals.
14. Program the first Security Key into the system: .B01yyyyyyyyyyy Where "yyyyyyyyyyy" is the Security Key identity. Program any additional Security Keys using the .B02, .B03, B04 etc.
15. You now need to decide on the various time delays that you want to use together with times for the Daily Message, Automatic Arming etc. The following times are used:
  - .T1ss Sets the "Entry" delay in seconds. This is the time you have to apply the Security Key before the system will transmit alarm messages and operate the Sounder if fitted. The default time is 15 seconds.
  - .T2ss Sets the "Exit" delay in seconds. This is the time you have to exit the building before the system becomes armed following application of the Security Key to the Reader. During this time the system will give a slow beep. The default time is 30 seconds.
  - .T3hhmm Sets the time at which the system will send the daily "health" message. For shipping this value is set to 99:99, which means that the daily message is disabled. We strongly advise using the daily message as it provides confirmation that the system is . The default is 99:99, which means that it is disabled.
  - .T71s This sets the amount of time in seconds that an input 1 must see activity before the system considers the activity as a genuine alarm. If an Optex EX-35R PIR is used this must be set to zero. The default is zero.
  - .T72s As .T71s but for Input 2. Default is zero.
  - .T73s As .T71s but for Input 3. Default is zero.
  - .T74s As .T71s but for Input 4. Default is zero.
  - .T8m Sets the time in minutes that the system will remain powered up when in operating the low power mode following a Daily Message. The default is 5. Decide which "T" commands need to be changed from the default settings and program them accordingly.
16. You now should program the inputs. Each input can be programmed to one of five conditions:

- C = Normally Closed contact - Normal operation.
- P = Normally Closed contact - Priority operation.
- O= Normally Open contact - Normal operation.
- Q = Normally Open contact - Priority operation.
- D = Input is Disabled.

To program an input send a text message in the form: .I1C<text> This programs Input 1 with a normally closed contact with the associated text. .I1P<text> This programs Input 1 with a normally closed contact for priority operation with the associated text. Note. With Priority operation the system will always transmit a message irrespective whether the system is armed or disabled. If you don't have the correct input condition the system will transmit an alarm message as soon as the input has been programmed if the input is set to priority. Program each of the inputs as required.

To disable an input use the command: .I3D This will disable an input. To re-enable an input that you have previously disabled with its original text send the command: .I3C You can change the sense and operation of an input just by sending the required input number and condition. For example to change Input 3 from a normally closed contact to a normally open contact just send ".I3O". Program each of the inputs as required. Upon delivery each of the Inputs is disabled.

17. You should now program any additional mobile numbers into the system using the command: .Mxx<mobile no.> Where "xx" is the memory location number and the mobile number is in international format. Do not include the "<" or ">". Memory location .M11 has a special purpose and in addition to any alarm text messages it will also receive the identity of Security Keys as and when they use the system, together with the date, time and the action performed. This feature is for demonstration purposes only. Note .M11 does not receive the daily message.
18. If the system is to be operated with a Solar Panel it should be set back to the Low Power mode with the command: .N1 If the system is to be operated with no external power input or with a suitable external power source other than a Solar Panel it can be left in the Automatic Power mode.
19. The system is now ready for operation.