DO NOT GIVE TO HOME OWNER FOR PROFESSIONAL USE ONLY



4G Multicom Lite GSM/Cellular Intercom System

Download Multicom Lite Nameplate template HERE <u>https://www.aesglobalonline.com/downloads</u>



LTE Ready

Note: For legal reasons, telephone technical support is for registered and qualified product installers only. Home owners and end-users should contact their installer for product technical support.

Contents

Really Important things (site survey)	Pg 3
Overview of outside of product	Pg 4
Overview of Inside	Pg 5
Cellular module in detail	Pg 6
Wiring relays	Pg 6
Keypad/Prox modules in detail	Pg 7
Connecting slave devices	Pg 7
Inserting the SIM card	Pg 8
Powering up & LEDs	Pg 8
Installing the programming APP	Pg 9
Program a NEW or Existing job site	Pg 10
Change engineer & manager pass codes	Pg 11
Programming	Pg 12
Step1: Check reception	Pg 12
Step2: Add a family	Pg 13
Step2b: Edit family details	Pg 14
Step3: Activate auto sync	Pg 15
Step4: Add visitor access	Pg 15
Keypad codes	Pg 16
Prox cards	Pg 17
CallerID	Pg 18
Do not disturb	Pg 19
Access control options	Pg 19
Auto opening	Pg 20
Enquire resident info	Pg 21
Concierge / assistance button	Pg 21
More settings screen	Pg 22
Volumes	Pg 22
Dialling times	Pg 23
Relay times	Pg 23
Information screen	Pg 24
Manager control of gate / door	Pg 25
Receiving a call from the intercom	Pg 26
Caller ID	Pg 26
Complete list of parameters	Pg 27
Warranty terms	Pg 31

Really Important things you Need to Know ..



Please read this entire manual before installing this product.



To be installed by certified and qualified personnel / gate automation dealer only. Not for DIY install!





Ensure there is good network signal at the gate/door of the install site **BEFORE** installing this product. (2G/3G/4G Europe, 3G/4G Australia & USA)

Set up on a bench in workshop **BEFORE** going to site. Program the unit in the comfort of your work bench and call technical support should you have questions.



This product requires a SIM. The SIM should be a voice and text plan. Do not use a DATA only SIM. Ensure your SIM has VOLTE if you only have 4G service (HD Voice calling service is enabled).





Manufacturer warranty does NOT cover lighting / storm damage. In lightning prone areas, you MUST fit external surge protection and lightning rod in order to maintain warranty on this product. Evidence of surge protection will be requested on generation of RGA numbers.

Fit proper power cable as per instructions! Do not use CAT5 to power this device as this will damage the product. Warranty will be VOID!

Now lets have a look around the product...











Powering Up & LEDs

Perform a final check of wiring and ensure the antenna is connected before switching on the power. Once the power is switched on, the power LED should illuminate.



CPU

Flashing = standby Constant ON/OFF = busy

SIGNAL STRENGTH

1 flash = poor (1 bar)

- 2 flashes = low (2 bars)
- 3 flashes = good (3 bars)
- 4 flashes = Strong (4 bars)

5 flashes = searching

POWER

MODEM

Flashing = standby Constant ON/OFF = searching



Installing the Programmer APP for the first time

Download the smartphone app to program this unit. Search for MULTICOM 4G and look for the icon below...







Now you are ready to begin programming!

Select or Create a new Job Site



App AND Intercom Update

Use to change either the manager or engineer programming codes on BOTH the intercom and the APP.

App ONLY update

Use to update the APP, typically when another user has changed the programming codes on the intercom <u>from ano</u>ther phone.

Note: This app sends SMS programming strings to the intercom as shown and it should reply with OK message. On iphones, due to restrictions by Apple, you must confirm the SMS as shown. Android devices will auto send the SMS in the background.



Programming

Now that you have either entered a new client, or selected an existing client from the client list, you are now ready to begin programming.



Note: SMS string= *20#

Step 1: Check Reception

Go to MORE>INFORMATION to reveal the screen shown. Press the reception check button. On Android the app will automatically send a SMS string (*20#) to the intercom. On iphone, users will be taken to their SMS screen to confirm before sending the string.

The intercom should reply with a signal level between 1 & 31.

۲ 1-12	 13-20	/ 21-31
Poor	Medium	Good

For good performance, signal level should be at least 13 or better on 3G or 4G and 14 or better on 2G.

TIP: If signal is lower than recommended, then take IMMEDIATE action. Change network if possible, or use an optional high gain antenna. Check power cable is within recommended specification. (Poor power cable can lower reception).



Step2: Add a Family(s)

Add up to 3 numbers for a family or resident, one code, and up to 3 proximity cards (Note: cards have serial numbers printed on them which can be added to the fields as shown).



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Edit The Resident Info	rmation
Not Programming	
FAMILY NAME	
CODE FOR KEYPAD	,
A C V. STALLED NUMBERS	5
Change or Correct the Name of a Resident PROX CARD	
346 Buckingham Rd	
Apartment\House Number23	
Family Name Goldman	
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	SMS S
Save	Chang 9999#
• = • •	Edit o 9999#
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Talifa an and a familia Dava a Carda	
Edit or add family Prox Card 1 0999#16#apartmentnumber#serialnumber#	Edit o 9999#
Edit or add family Prox Card 2	Edit o

Step2b: Edit family **Details if needed**

Edit just the name, phone numbers, prox cards or keypad code individually for any family with the following buttons...

Strings

e Family Name 11#apartmentnumber#newname#

r add first Phone Number 12#apartmentnumber#phonenumber#

r add second Phone Number 13#apartmentnumber#phonenumber#

r add third Phone Number 14#apartmentnumber#phonenumber#

Edit or Add Family Door Code 9999#15#apartmentnumber#doorcode#

Delete a Family & all details

9999#25#apartmentnumber#

E

E

9999#17#apartmentnumber#serialnumber#

Edit or add family Prox Card 3

9999#18#apartmentnumber#serialnumber#





Step3: Activate Auto Sync

If you are using time sensitive features, such as time restricted access control, or auto opening and closing of gates at pre-set times of the day and week, then it is important to activate the auto sync.

This intercom reads the current date and time from an incoming SMS message and re-calibrates its time from that.

Activating this button sends the intercom its OWN SIM card phone number. The intercom will then send ITSELF an SMS after a power loss to re-establish correct time.

Use this feature to have the intercom send itself a SMS on a schedule. This is useful to maintain proper time for summer daylight saving for example. NOTE: Network charges may apply for SMS messages. Check with your provider.

SMS Strings

Store Intercom OWN phone number for time sync after reboot 9999#54#SIMphonenumber#

Activate Scheduled SMS

9999#55#days# (00=no SMS, 01=daily, 02=every 2 days etc)

Step4: Add visitor access

You can add visitor keypad codes, or visitor caller ID access, and proximity cards for any visitors who are non-residents.

CallerID (enter by calling intercom and CLIP caller recognition)

Proximity card access for visitors

Keypad code access for visitors



SMS Strings

Store permanent code

9999#81#Y#code#time# (Y= 1 or 2 for relay 1 or 2, code = 4 digit keypad code, time = relay time in secs from 1-99. 0 = latch code)

Store temporary code

9999#82#hours#code# (hours = number of hours a code is active for, from 1 – 999 hours)

Store time restricted code

9999#83#day,day,day#time1,time2# code# (day=mon,tue,wed,thu,fri etc. Time1=start time, Time2= end time. Code = 4 digit keypad code)

Delete Code

9999#84#code# (delete a known code) or 9999#84#*# (delete all stored codes)



SMS Strings

Store permanent card

9999#61#Y#serial# (Y= 1 or 2 for relay 1 or 2, serial = 10 digit prox card number)

Store temporary card

9999#62#hours#serial# (hours = number of hours a code is active for, from 1 – 999 hours)

Store time restricted card

9999#63#day,day,day#time1,time2# serial# (day=mon,tue,wed,thu,fri etc. Time1=start time, Time2= end time, serial = 10 digit prox card number)

Delete Card

9999#64#serial# (delete a known code) or 9999#64#*# (delete all stored codes)



SMS Strings

Store permanent callerID phone numbers

9999#71#Y#phonenumber# (Y=1 or 2 for relay 1 or 2)

Store temporary phone number

9999#72#hours#phonenumber# (hours = 1-999 hours then this number is auto deleted again)

Store time restricted phone number

9999#73#day,day,day,day#time1,time2# phonenumber# (day=mon,tue,wed,thu,fri etc. Time1=start time, Time2= end time)

Delete Phone number

9999#74#phonenumber# (delete a known code) or 9999#74#*# (delete all stored visitor



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Do Not Disturb

On this screen you can prevent residents receiving calls from visitors after a set time at night. This can be useful if there are antisocial callers or residents do not want disturbed at weekends.

Enter time in 24hr format, no colon. Eg 8.20am = 0820. 11.40pm = 2340.

Visitors can receive calls BETWEEN the START and FINISH times only on the days selected.

SMS Strings

Add Do Not Disturb Time 9999#90#day,day,day,day#time1,time2# (day=mon,tue,wed,thu,fri etc. Time1=start time, Time2= end time)

Delete all Do Not Disturb Times 9999#90#*#*#

Access Control

If residents are to be able to use callerID to open the gate or door, then enable here. Take care, as residents can miss-dial the intercom in error!

Enable if residents should be able to latch or hold open gates or door. This is not recommended on larger installs as frequently a gate can be latched in error and result in a service call.

Quick delete a resident and all details.

SMS Strings

Enable callerID for residents 9999#35#X# (X=0 to disable. X=1 to enable)

Enable latching ability on received calls by residents 9999#36#X# (X=0 to disable. X=1 to enable)

Quick Delete a resident to prevent access 9999#25#apartment#



Add Auto opening / closing times





More Settings Screen



Check status of relays, signal strength, stored codes and much more.



Volumes

If residents experience significant echo, reduce the microphone and speaker levels as low as possible. Default setting = 5. Range = 1-9.

SMS Strings

Set Speaker Volume 9999#**30**#X# (X = 1-9, default = 5)

Set Microphone Volume 9999#31#X# (X = 1-9, default = 5)

Set ring tone Volume (not used yet) 9999#32#XX (X = 1-9, default = 5)



Dialling Times

Use these to adjust the ringing time the intercom will call a number before it will stop and call the next. This is useful to avoid voicemail from picking up a call.

Default dialling time is 20 seconds (from button press)

SMS Strings

Set first ringing time 9999#21#XX# (Default = 20. Range = 1-99)

Set second ringing time 9999#22#XX# (Default = 20. Range = 1-99)

Set third ringing time 9999#23#XX# (Default = 20. Range = 1-99)

Relay Times

Adjust relay times to suit perhaps a magnetic lock that requires a 7-10 second unlock time to allow pedestrians time to press the door and open.

Default relay time is 1 second.

SMS Strings

Set Relay 1 time: 9999#50#XXXX# (XXXX = time in secs from 1-9999)

Set Relay 2 time: 9999#51#XXX# (XXXX = time in secs from 1-9999)

Information Screen



This screen allows the engineer or manager to be able to check multiple things on the intercom. Please note the following points..

-5555 is the default managers code shown.

-Stored callerID numbers, keypad codes and prox users are VISITOR credentials only. These do not list RESIDENT credentials. To do that, enquire on each resident individually in the appropriate screen.

In the activity log screen, each event is stored under a code. For example if a visitor uses caller ID to open the gate, it will be shown as date – time – number – CID. If a keypad code is used, it will be shown on the next line as date – time – pin number – CODE.

Manager Controls of Gate / Door

This screen allows the installer or manager to manually trigger the gate.



Receiving A Call and Opening Gates / Door

Visitors can press the call button, which will initiate a call from your intercom to the designated phone numbers which will have been programmed by your installer.



Output 1

This is usually main gate/door.

Press 1 to open

Press 2 to hold open Press 3 to un-hold (Note: Hold open features are only available if enabled by manager / engineer)



Output 2

This can be pedestrian gate, driveway lights or other. Press 4 to open/activate Press 5 to hold open/on Press 6 to un-hold/off (Note: Hold open features are only available if enabled by manager / engineer)

Access Control by Calling the intercom (CallerID)



All residents can call the intercom to gain access at no call charge using CallerID (CLIP) display. However, this feature is only available to residents if enabled by the engineer or manager.

To open, simply call the intercom phone number from a stored number and the relay will trigger as per programmed.

Complete list of parameters

The table below show the complete list of features. *Programming messages below must begin with 9999# (assuming 9999 is still the programming passcode)...*

Edit a family name 9999#11#12345#Jones#

Edit or add family number

9999#12#12345#number# (edit first dialled number) 9999#13#12345#number# (edit second dialled number) 9999#14#12345#number# (edit third dialled number)

Edit a family door code

9999#15#12345#code#

Edit or add a family card

9999#16#12345#serial# 9999#17#12345#serial# 9999#18#12345#serial#

Set ringing time to call first number 9999#21#XX#

Set ringing time to call second number 9999#22#XX#

Set ringing time to call third number 9999#23#XX#

Delete a family and all details 9999#25#12345#

Enquire details on a family

9999#26#12345# (This will reply with all the details stored about this apartment).

Set Speaker Volume 9999#30#X# (X=1-9)

Set Mic Volume 9999#31#X# (X=1-9)

Enable / Disable caller ID for residents 9999#35#1# (1=ON, 0=OFF. Default=0)

Enable / Disable latching ability by residents 9999#36#1# (1=Enabled, 0=Disabled. Default=0)

Change Engineers programming code 9999#40#XXXX# (Default 9999)

Change managers user code 9999#41#XXXX# (Default 5555)

Change Relay 1 trigger time 9999#50#XXXX# Change relay 2 trigger time 9999#51#XXXX#

Store intercom own phone number for AUTO self SMS sending on reboot. 9999#54#XXXXXXXXXXX#

Activate auto SMS sending (to re-calibrate time every day) 9999#55#XX# (0=off, 1=SMS every day, 2=SMS every 2 days etc) Store phone number for manager / concierge / assistance call button to call when pressed 9999#56#1#XXXXXXXX#

Delete manager phone number 9999#56#1#*#

Store ringing time for manager / concierge / assistance phone number 9999#57#XX#

SMS control messages

Either engineer or of manager can control the relays by SMS but users cannot. 9999#/# - Trigger relay 1 9999#/# - Latch relay 1 9999#/# - Unlatch relay 2 9999#5# - Latch relay 2 9999#6# - Unlatch relay 2 Same commands can be carried out with 5555 passcode.

To store a visitor code (50 max) 9999#81#Y#code#time# (Y= 1 or 2 for relay 1 or 2, time=relay trigger time, 1-99 seconds)

To store a temporary visitor code (20 max): 9999#82#hours#code# (hours is number of hours code is active for, max 999 hours)

To store a time restricted visitor code (20 max): 9999#83#day,day,day,day,day,day,day#time1,time2#code#

To delete a visitor code: 9999#84#code#

To delete all visitor codes: 9999#84#*#

To store visitor caller ID number (50 max) 9999#71#Y#telephone# (Y = 1 or 2 for relay 1 or 2)

To store visitor temporary called ID number (20 max) 9999#72#hours# telephone # (hours is qty of hours the caller ID number can work for 999 max)

To delete a visitor caller ID number: 9999#74#number#

To delete all visitor caller ID numbers: 9999#74#*#

To store prox card (50 max) 9999#61#Y#serial# (Y = 1 or 2 for relay 1 or 2)

To store temporary visitor Prox card (20 max) 9999#62#hours#serial# (hours can be up to 999 max)

To store time restricted prox card (20 max) 9999#63#day,day,day,day,day#time1,time2#serial#

To delete a prox card: 9999#64#serial#

To delete All prox card: 9999#64#*#

SMS Checking messages

*20# (check reception, version and date etc) 5555*21# (Check stored visitor caller ID numbers only. Do not check stored family numbers). 5555*22# (Check gate status) 5555*23# (shows last 20 events) 5555*24# (Check stored visitor keypad codes) 5555*25# (Check stored visitor prox cards)

To Add an automatic relay event

5555#1#day,day,day#time#

To delete all auto relay events.. 5555#*#

To set Do Not Disturb Times 9999#90#day,day,day#time1,time2#

To delete all Do Not Disturb Times 9999#90#*#*#

Complete restore defaults on unit 9999#99#

Troubleshooting guide

Q. The unit will not power up. No LEDs on.

A. Check power supply voltage at intercom is 23.4v DC or more. Cable length from PSU to intercom should be less than 25 feet and in 14 gauge for longer distances. See guide. Check the fuse.

Q. The unit powers up but is not showing network reception or will not respond to SMS.

A. This means the unit is not able to detect the network for some reason.

-Power off the unit, remove the SIM and check it in a mobile phone to verify it can make a call and has calling credit.

-Disable any PIN code request if active on the SIM card.

-Check the SIM is a standard voice capable SIM. If you are unsure, contact your SIM card provider to verify. Compatible networks are At&T and T-Mobile.

-Check the reception is medium or good. Poor reception is not sufficient.

-Power off, remove the SIM, use fine sand paper to lightly sand the SIM pads and contacts on the GSM unit, lightly bend the contacts upwards so that they make better contact with the SIM and try again.

Q. The unit calls the first number, but there is not enough time to answer before it diverts to the next number.

A. Increase the no answer time as per programming instructions.

Q. The unit calls the first number but voicemail comes on before it can ring the second number.

A. Decrease the no answer time as per programming instructions.

Q. The caller ID part does not work.

A. Residents have Caller ID disabled by default. Ensure this is activated if you want residents to use caller ID. If your number is a private or number withheld, then it will not work.

-Ensure the number is entered as you would normally dial it from another phone.

-For US customers, ensure the numbers have been entered with a leading 1. If this does not work, try again without the leading 1.

Q. There is no audio from the gate, but the person at the gate can hear ok.

A. This can be due to low reception or excessively long power cables.

-Check reception level by *20#.

-Change SIM card if necessary to another network which may have better coverage.

-Purchase a high gain antenna.

This may also be caused by a defective microphone, water on a microphone from a sprinkler for example, or dirt/insects blocking the microphone hole. If reception is optimum and the problem persists, contact your supplier or installer.

Q. The audio quality that can be heard on the remote telephone is poor or humming (buzzing).

A. A small amount of GSM buzz can be considered normal on GSM intercoms, but not so much that causes inability to hear the person speaking. This is a symptom of poor reception. Try above steps on checking and improving reception. Consider fitting an external high gain antenna. Move the antenna further away. Remove any short bends in the antenna. Ensure the spare antenna cable is not rolled up inside the call station.

Q. The trigger keys do not work when the intercom calls a phone.

A. Check if you can hear the relay clicking at the gate when the keys are pressed during a call. If it can be heard, then the system is working, check wiring between the relay and the lock or gate panel. If the relays do not make a clicking sound, then check this feature on a different mobile cell phone or landline. If it works on a different phone, check the settings on the phone in question under DTMF tones.

Failure of DTMF tones to operate correctly is also a symptom of low reception or insufficient power cabling. Check steps above on improving reception or addressing the power problem. -Also check that the relays are not already latched with the *22# command. If they are latched, they need unlatched before the trigger keys will work.

-Sometimes excessively long power cables or thin power cables can cause this problem. Prove it by connecting a temporary extension lead and the power supply directly to the unit.

Q. The system was operating the gates fine, but now it will not trigger the gates.

99% of the time, this is cause by the user accidentally latching the relay. This latches the output relay permanently on. Send the intercom the following SMS *22#. The intercom should reply with a message detailing the relay status.. If it has been latched, then the message will state "the relay is ON". In this case refer to the user guide to read how to unlatch it again.

Q. The unit no longer calls out to phones but I can make a call to it from my phone.

A - Check there is balance on the SIM card.

A – Switch off the power, remove the SIM, put it into a phone, and check that a call can be made from a phone. This will verify if the SIM is still working and in service.

Q. The Android App shows an error message "Command Failed" when I try to use a function.

A – Go to phone settings/application manager/cellbox prime/permissions, and ensure all permissions are turned ON. Also ensure the app settings screen has a valid phone number stored.

Change History

Key:

P = Panel version H = Hardware PCB version S = Software version

Version		Version Reason for change		Date
Р	Н	S		
1	1	2.6		

Warranty Terms

Please note, by installing this product, you are accepting the following warranty terms:

1. The manufacturer's warranty is a "return to base" 2 year warranty from date of manufacture. This means that any suspected defective components or items are returned to the manufacturer's agent for investigation and diagnosis, and returned at the cost of the customer.

2. The warranty does not cover, nor is the manufacturer or agent responsible for any of the following whatsoever: Storm damage, lightning or surge damage, flooding, accidental damage, vandalism or deliberate damage, un-explained corrosion or unusually harsh environments, failure of telephone networks, future uninteroperability between the product and network providers which cause mal-function due to changes implemented by the phone providers after manufacture of the product, or that which is outside of control of the manufacturer (e.g. 2G, 3G switch off, removal or inability to obtain VOLTE service), and damage due to not proper installation.

3. The manufacture in no way accepts liability for any of the following incurred due to a product defect: Cost of attending site, inconveniences, labour rates, time lost, loss to or damage to property, security breaches, late payment clauses or breaches of any contracts between the installer and the client.

4. This is a profession install product only. The product is a component of an overall system. Therefore, it is the responsibility of the installer to certify the safety and compliance of the overall finished system. As soon as this product is fixed to another item, or connected to another third-party device, then the product has been modified, and compliance with local regulations in the country of install is strictly the responsibility of the installer.

5. Re-stocking fees may apply to items returned that are found to be non-defective. Complete units will also attract a re-stocking fee if returned for credit, regardless if a defect is discovered or not. Re-stocking fees may vary depending on the condition of the item being returned, and whether it can be determined as in brand new condition. The warranty terms do not entitle customers to an automatic full refund. For more details on returns procedures and re-stocking fees, contact the agent.

6. Items with physical signs of surge damage are not covered by warranty. Items without visible signs of surge damage will only be covered by warranty provided photographic evidence is provided from site showing surge protection has been installed as per instructions in this manual.

EU-RED Declaration of Conformity

Manufacturer: Advanced Electronic Solutions Global Ltd Address: Unit 4C, Kilcronagh Business Park, Cookstown, Co Tyrone, BT809HJ, United Kingdom

We/I declare, that the following equipment (GSM Cellular Intercom System), part numbers: Multiple Model kit part numbers: PRIME6-MULTI-LT-4GE.

Complies with the following essential requirements for 2014/53/EU:

ETSI draft EN 301 489-1 V2.1.1 (2017-02) (Electromagnetic compatibility) ETSI draft EN 301 489-52 (2016-11) (Electromagnetic compatibility, specific to cellular) (2G bands 900/1800, 3G band 1,8 LTE bands 1, 3, 7, 8, 20). Test report number LCS181101028AEA

ETSI EN 301 511 V12.5.1 (2017-03) (3.2 of directive 2014/53/EU) ETSI TS 151 010-1 V12.8.0 (2016-05) (Digital cellular telecoms compliance) Test report number LCS181101028AEB

ETSI EN 301 908-1 V11.1.1 (2016-07) (IMT Cellular networks, 3.2 of directive 2014/53/EU) ETSI EN 301 908-2 V11.1.2 (2016-07) (CDMA spread / UTRA FDD) Test report number LCS181101028AEC

ETSI EN 301 908-13 V11.1.2 (2017-07) (E-UTRA and UE standards) Test report number LCS181101028AED

EN 62311 :2008 (Electromagnetic safety and human exposure) Test report number: LCS181101028AEE

EN 60950-1, (A1, A11, A12, A2) EN 62311

IEC 60950 (IT equipment safety) Test report number: LCS181101029AS

The notified body is: Micom Labs (CAB number 2280). This declaration is issued under the sole responsibility of the manufacturer. Signed by:

CE

FCC ID: 2ALPX-PE-4GA Main Model No: PRIME6-PROX-IMPK-PE-4GA

Caution: This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Paul Creighton, Managing Director. Date: 4th Dec 2018

Note: For legal reasons, telephone technical support is for registered and qualified product dealers only. Home owners and end users should contact their local dealer for product technical support.