P.C.

TC 65
GSM Modem

OR

SIEMENS

Site Name: _____
Site Address: _____

Door 1
Location: _____ Lock Time: _____ Lock Type: _____

Door 2
Location: _____ Lock Time: _____ Lock Type: _____

Installation Company: _____
Installation Engineer: _____
Date of Installation: _____
On Call Engineer: _____

Controller

SOYAL AR-727HB-RAY

TYPE : AR-716E-RAY
2 Door Access Controller

RAYTEL SECURITY
SYSTEMS LTD.
Technical: 01268 749311
Southern Office
Sales: 01268 749310
Fax: 01268 749315
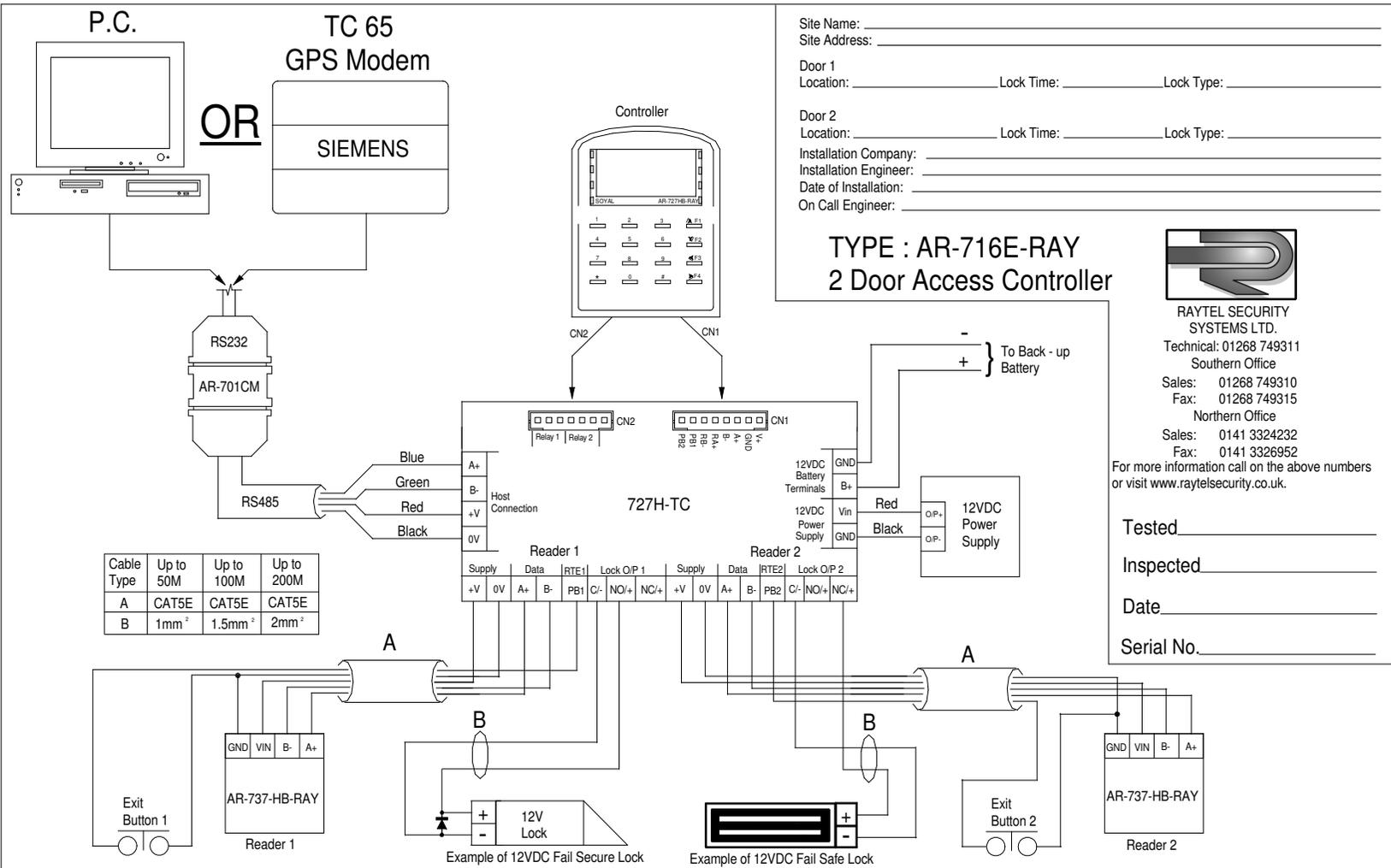Northern Office
Sales: 0141 3324232
Fax: 0141 3326952

RS232

AR-701CM

RS485

Red
Black
O/P+
O/P-
12VDC Power Supply

Black Red Green Blue

CN2   CN1

0V V+ B- A+   CN2 [Relay 1 Relay 2]   CN1 [V+ B- A+ GND PB1 PB2 RA+ RA- RB+ RB-]   Vin GND
Host Connection   12VDC Power Supply

C/C
727H-TC
12V
Door 1 Door 2

NOTE:-
If clean contact lock output is required, set switches up.
If 12v lock output is required, set switches down.

-
+ } To Back - up Battery

Tested _____
Inspected _____
Date _____
Serial No. _____

Cable Type	Up to 50M	Up to 100M	Up to 200M
A	CAT5E	CAT5E	CAT5E
B	1mm²	1.5mm²	2mm²

Reader 1
Supply | Data | RTE1 | Lock O/P 1
V+ 0V | A+ B- | PB1 | C/- NO/+ NC/+

Reader 2
Supply | Data | RTE2 | Lock O/P 2
V+ 0V | A+ B- | PB2 | C/- NO/+ NC/+

12VDC Battery Terminals
B+ GND

A   A
B   B

GND VIN B- A+
AR-737-HB-RAY
Reader 1

GND VIN B- A+
AR-737-HB-RAY
Reader 2

Exit Button 1

Exit Button 2

+ - 12V Lock
Example of 12VDC Fail Secure Lock

+ -
Example of 12VDC Fail Safe Lock

Drawing issue:5

PROGRAMMING INSTRUCTIONS

ENTER/EXIT PROGRAMMING

*123456#
or
*Master Code# if changed to enter.

Press * repeatedly until 6. Quit appears, then press # to exit.

Use F1/UP and F2/DOWN to Navigate the menu.
Press # to enter a menu section, or press * to return to previous.

RESET FACTORY SETTINGS

*123456# or *Master Code# if changed.
F1/F2 until 4. Parameters (2), press #.
F1/F2 until 5. Factory Reset, press #.
"Succeeded" will be briefly shown
Followed briefly by "Initial System."

SETTING UP THE READERS

Connect the first reader in reader 2 position.
Enter programming-*123456# or *Master code#.
F1/F2 until 3. Parameters, press #.
F1/F2 until 5. Setup Reader, press #.
"INPUT NEW NODE ID" should be displayed.
Press 2 followed by #.
"Tag in RF field: Beep on/off" should be displayed.
Press 1 for beeper on when tag present or 0 for off.
"The LED:Green" should now be displayed.
Press 1 for the green LED to illuminate when access is granted or 0 for the LED not to illuminate.
"The LED:Red" should now be displayed.
Press 1 for the red LED to illuminate when access is denied or press 0 for the LED not to illuminate.
"Succeeded" should now be displayed.
Now connect the second reader into reader 1 position.
The default reader number is 1 so there should be no need to reprogram the reader number.
If Unsure of reader numbers, please program both readers as 1 and 2 respectively, but only program with 1 reader connected at a time.

DELETING ALL TOKENS.

It is advisable in a new system to clear the memory.
*123456# or Master Code if changed.
F1/F2 until 1. Add/Delete, press #.
F1/F2 until 5. Delete->Address, press #.
Input Start Address, type 0 then #.
Input End Address, type 1023, then #.
Succeeded! will be briefly shown.

DELETING A SINGLE TOKEN.

*123456# or Master Code if changed.
F1/F2 until 1. Add/Delete, press #.
F1/F2 until 5. Delete->Address, press #.
Input Start Address should be displayed, type start address then #.
i.e to delete user 7 enter 00007.
Input End Address should be displayed, type end address, then #.
i.e for user 7 enter 00007.
Succeeded! will be briefly shown.

ADDING A SINGLE TOKEN.

PLEASE CHECK AVAILABLE MEMORY LOCATIONS BEFORE PROCEEDING AS EXISTING TAGS MAY BE LOST
*123456# or Master Code if changed.
F1/F2 until 5. Tools, press #.
F1/F2 until 5. Informations, press #.
current users quantity will be shown.
Press * until 6. Quit.
F1/F2 until 1. Add/Delete, press #.
F1/F2 until 2. Add->RF Learn, press #.
"User Address" should now be shown.
Input 5 digit user address (for new systems start from 0, for existing systems start from current user quantity+1).
"Tag Units (pcs)" will now be shown
Input 1, then #.
"Close Tag into RF area" should now be shown.
Present the Tag to the Built in reader.
The user address will briefly be shown.
Succeeded! will be briefly shown.
KEEP A RECORD FOR FUTURE ADMINISTRATION!

ADDING A BATCH OF TOKENS.

PLEASE CHECK AVAILABLE MEMORY LOCATIONS BEFORE PROCEEDING AS EXISTING TAGS MAY BE LOST
*123456# or Master Code if changed.
F1/F2 until 5. Tools, press #.
F1/F2 until 5. Informations, press #.
current users quantity will be shown.
Press * until 6. Quit.
F1/F2 until 1. Add/Delete, press #.
F1/F2 until 2. Add->RF Learn, press #.
"User Address" should now be shown.
Input 5 digit user address (for new systems start from 0, for existing systems start from current user quantity+1).
"Tag Units (pcs)" will now be shown.
Input required quantity of Tags, then #.
"Close Tag into RF area" should now be shown.
Present LOWEST Numbered Tag to the Built in reader.
The user address will briefly be shown.
Succeeded! will be briefly shown.
KEEP A RECORD FOR FUTURE ADMINISTRATION!

ADJUSTING LOCK TIME.

*123456# or Master Code if changed.
F1/F2 until 3.Parameters(1), press#
F1/F2 until 3. Door Relay TM, press#.
Input:(0-600), relay 0, Current Data 002, should now be displayed.
Enter the Required Lock 1 time in seconds.
Input:(0-600), relay 1, Current Data 002, should now be displayed.
Enter the Required Lock 2 time in seconds.
Succeeded!

SETTING NODE ID (Networking)

Each Controller must be given a unique Node ID to enable door naming in the Software.
*123456# or Master Code if changed.
F1/F2 until 3. Parameters (1), press #.
F1/F2 until 1. Node ID, press #.
Enter New Node ID.

P.C.

TC 65
GPS Modem

OR

SIEMENS

Controller

SOYAL   AR-727H-RAY

CN2   CN1

RS232

AR-701CM

RS485

Blue — A+
Green — B-   Host
Red — +V   Connection
Black — 0V

727H-TC

Cable Type	Up to 50M	Up to 100M	Up to 200M
A	CAT5E	CAT5E	CAT5E
B	1mm²	1.5mm²	2mm²

CN2
Relay 1 Relay 2

CN1
PB2 RB- A- GND RA+
PB1 RB+ A+ V+

- / + To Back - up Battery

12VDC Battery Terminals GND / B+
12VDC Power Supply Vin / GND

Red — O/P+
Black — O/P-

12VDC Power Supply

Reader 1
Supply +V 0V   Data A+ B-   RTE1 PB1   Lock O/P 1 C/- NO/+ NC/+

Reader 2
Supply +V 0V   Data A+ B-   RTE2 PB2   Lock O/P 2 C/- NO/+ NC/+

A

B

A

B

GND VIN B- A+
AR-737-HB-RAY
Reader 1

Exit Button 1

+ / - 12V Lock
Example of 12VDC Fail Secure Lock

+ / -
Example of 12VDC Fail Safe Lock

Exit Button 2

GND VIN B- A+
AR-737-HB-RAY
Reader 2

Site Name: _____
Site Address: _____

Door 1
Location: _____ Lock Time: _____ Lock Type: _____

Door 2
Location: _____ Lock Time: _____ Lock Type: _____

Installation Company: _____
Installation Engineer: _____
Date of Installation: _____
On Call Engineer: _____

TYPE : AR-716E-RAY
2 Door Access Controller

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Technical: 01268 749311
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Northern Office
Sales: 0141 3324232
Fax: 0141 3326952
For more information call on the above numbers or visit www.raytelsecurity.co.uk.

Tested _____
Inspected _____
Date _____
Serial No. _____

PROGRAMMING INSTRUCTIONS

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or
*Master Code# if changed to enter.

Press * repeatedly until 6. Quit appears, then press # to exit.

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Press 1 for the red LED to illuminate when access is denied or press 0 for the LED not to illuminate.
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Input Start Address, type 0 then #.
Input End Address, type 1023, then #.
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F1/F2 until 5. Delete->Address, press #.
Input Start Address should be displayed, type start address then #.
i.e to delete user 7 enter 00007.
Input End Address should be displayed, type end address, then #.
i.e for user 7 enter 00007.
Succeeded! will be briefly shown.

ADDING A SINGLE TOKEN.

PLEASE CHECK AVAILABLE MEMORY LOCATIONS BEFORE PROCEEDING AS EXISTING TAGS MAY BE LOST.
*123456# or Master Code if changed.
F1/F2 until 5. Tools, press #.
F1/F2 until 5. Informations, press #.
current users quantity will be shown.
Press * until 6. Quit.
F1/F2 until 1. Add/Delete, press #.
F1/F2 until 2. Add->RF Learn, press #.
"User Address" should now be shown.
Input 5 digit user address (for new systems start from 0, for existing systems start from current user quantity+1).
"Tag Units (pcs)" will be shown
Input 1, then #.
"Close Tag into RF area" should now be shown.
Present the Tag to the Built in reader.
The user address will briefly be shown.
Succeeded! will be briefly shown.
KEEP A RECORD FOR FUTURE ADMINISTRATION!

ADDING A BATCH OF TOKENS.

PLEASE CHECK AVAILABLE MEMORY LOCATIONS BEFORE PROCEEDING AS EXISTING TAGS MAY BE LOST.
*123456# or Master Code if changed.
F1/F2 until 5. Tools, press #.
F1/F2 until 5. Informations, press #.
current users quantity will be shown.
Press * until 6. Quit.
F1/F2 until 1. Add/Delete, press #.
F1/F2 until 2. Add->RF Learn, press #.
"User Address" should now be shown.
Input 5 digit user address (for new systems start from 0, for existing systems start from current user quantity+1).
"Tag Units (pcs)" will now be shown.
Input required quantity of Tags, then #.
"Close Tag into RF area" should now be shown.
Present LOWEST Numbered Tag to the Built in reader.
The user address will briefly be shown.
Succeeded! will be briefly shown.
KEEP A RECORD FOR FUTURE ADMINISTRATION!

ADJUSTING LOCK TIME.

*123456# or Master Code if changed.
F1/F2 until 3.Parameters(1), press#.
F1/F2 until 3. Door Relay TM, press#.
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Enter the Required Lock 2 time in seconds.
Succeeded!

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F1/F2 until 1. Node ID, press #.
Enter New Node ID.