Geo Phone Interface

## Message Flow 1: Device to User (Based on MAC configuration List on server):

Device-t 🡪 SERVER Application 🡪 User-t1, User-t2, …. Based on MAC list configured for USER

This is message forwarding from Device to User at server

## Message Flow 2: User to Device (Based on MAC configuration List on server and Admin)

User-t 🡪 SERVER Application 🡪 Device-m …. Based on MAC list configured for USER and Admin

This is message forwarding from User to Device at server.

## Message Flow 3: User to Server (Admin/User)

User-t 🡪 SERVER Application 🡪 User-t …. Command and Response

## Message Flow 4: Device to Server (No command defined)

Device-t 🡪 SERVER Application 🡪 Device-t …. Command and Response

# DEVICE SERVER Interface

## General Frame (DEVICE 🡨🡪 SERVER):

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| LENGTH | TYPE | DEVICE MAC-ID | DATAn | CRC16 |
| 2 Bytes | 1 Byte | 6 Bytes | N Bytes | 2 Bytes |
| Little endian | Little endian | Little endian | as per TYPE | Little endian |

Note: All data in Frame are in little endian.

## LENGTH:

In length, length is also included

## TYPE:

Type defines DATAn format

## DEVICE MAC-ID:

This parameter is used as device identifier.

## DATAn:

This parameter are defined as per TYPE.

## CRC16:

CRC of complete frame except CRC16 field.

# Device Info Frame (DEVICE 🡪 SERVER):

TYPE = 0x09

DATAn =

Total length =

# Device Sample Data Frame (DEVICE 🡪 SERVER):

TYPE = 0x08

DATAn =

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Device Time in Sec** | **Sample0** | **Sample1** | **…** | **Sample1023** |
| **4 Bytes** | **2 Bytes** | **2 Bytes** | **…** | **2 bytes** |
| **Little endian** | **Little endian** | **Little endian** |  | **Little endian** |

# USER SERVER Interface

## General Frame (USER 🡨🡪 SERVER):

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| LENGTH | TYPE | USER ID | DATAn | CRC16 |
| 2 Bytes | 1 Byte | 2 Bytes | N Bytes | 2 Bytes |
| Little endian | Little endian | Little endian | as per TYPE | Little endian |

Note: All data in Frame are in little endian.

## LENGTH:

In length, length is also included

## TYPE:

Type defines DATAn format

## USER ID:

This parameter is used as device identifier.

## DATAn:

This parameter are defined as per TYPE.

## CRC16:

CRC of complete frame except CRC16 field.

Note: USER offset valid range is 0x0000 to 0xFFFE.

# User Keep Alive Frame (USER 🡪 SERVER):

TYPE = 0x01

DATAn = None

# User Auth Frame (USER 🡪SERVER):

TYPE = 0x02

DATAn =

|  |  |
| --- | --- |
| **User Server LoginId** | **User Server Password** |
| **n Bytes(\0)** | **N Bytes(\0)** |
| **Big endian** | **Big endian** |

# Save Changed Configuration On Server Frame (USER 🡪SERVER):

TYPE = 0x03

DATAn = None

This is last command to server to save modified configuration on server.

# Set User, Device connection Timeout On Server Frame (USER 🡪SERVER):

TYPE = 0x04

DATAn =

|  |  |
| --- | --- |
| **User Timeout** | **Device Timeout** |
| **2 Bytes** | **2 Bytes** |
| **Little endian** | **Little endian** |

Timeout in seconds. Range: 0x0000 to 0xFFF.

# Set User ID Frame (USER 🡪SERVER):

TYPE = 0x08

DATAn =

|  |  |
| --- | --- |
| **USER offset** | **USER ID** |
| **2 Bytes** | **2 Bytes** |
| **Little endian** | **Little endian** |

USER ID valid range is 0x0001 to 0xFFFF.

# Set User Login Name Frame (USER 🡪SERVER):

TYPE = 0x09

DATAn =

|  |  |
| --- | --- |
| **USER offset** | **USER Login Name** |
| **2 Bytes** | **N Bytes** |
| **Little endian** | **Big endian** |

USER Name is ASCII string.

# Set User Login Password Frame (USER 🡪SERVER):

TYPE = 0x0A

DATAn =

|  |  |
| --- | --- |
| **USER offset** | **USER Login Password** |
| **2 Bytes** | **N Bytes** |
| **Little endian** | **Big endian** |

USER Password is ASCII string.

# Set User Type Frame (USER 🡪SERVER):

TYPE = 0x0B

DATAn =

|  |  |
| --- | --- |
| **USER offset** | **USER Type** |
| **2 Bytes** | **N Bytes** |
| **Little endian** | **Big endian** |

USER Type is ASCII string. (admin, user)

# Set User Device Allowed MACID List Frame (USER 🡪SERVER):

TYPE = 0x0C

DATAn =

|  |  |
| --- | --- |
| **USER offset** | **DEVICE MACID** |
| **2 Bytes** | **6 Bytes** |
| **Little endian** | **Little endian** |

Send this command for complete list of device mac. Six devices are allowed to USER than send six times this command with different six mac.

# Send Frame from User to Device (USER 🡪 SERVER):

TYPE = 120

DATAn = Complete Device Server Frame (Refer Device Server Frames)

# User Keep Alive Response (SERVER 🡪 USER):

TYPE = 0x01 + 0x80

DATAn = None

# User Auth Response (SERVER 🡪 USER):

TYPE = 0x02 + 0x80

DATAn = None

# Save Changed Configuration On Server Response (SERVER 🡪 USER):

TYPE = 0x03 + 0x80

DATAn = None

# Device Frame Forwarded to User (SERVER 🡪 USER):

TYPE = 120 + 0x80

DATAn = Complete Device Frame received by server. (Refer Device Server Frames)