408UL

User's Manual

Vol. 1

V4.0

031401

October 2000

To contact SERCEL

Nantes, France
Commercial; Customer Support;
Manufacturing & Repair;
B.P. 439, 16 rue du Bel Air
44474 Carquefou Cedex
Tel: +33 2 40 30 11 81, Fax: +33 2 40 30 19 68
Hot-Line: Land: +33 2 40 30 58 88
Marine: +33 2 40 30 59 59
E-mail: sales@sercel.fr
customer.support@sercel.fr
www.sercel.com

St Gaudens, France
Vibrator Customer Support;
Vibrator Manufacturing & Repair;
Streamer Manufacturing & Repair.
Tel: +33 5 61 89 90 80, **Fax:** +33 5 61 89 90 45
Hot Line: +33 5 61 89 90 91

Alfreton, U. K.
Streamer Manufacturing & Repair;
Customer Support.
Tel: +44 1 773 605 076, **Fax:** +44 1 773 541 778

Houston, USA
Commercial; Customer Support;
Manufacturing & Repair;
Streamer Manufacturing & Repair.
Tel: +1 281 492 66 88, Fax: +1 281 492 69 16
Hot-Line: +1 281 492 66 88
E-mail: sales.hou@sercelus.com
training.hou@sercelus.com
customer.support@sercelus.com

Ponca City, USA
Vibrator Customer Support;
Vibrator Manufacturing & Repair.
Tel: +1 580 763 00 06, **Fax:** +1 580 763 00 32

Moscow, Russia
Commercial; Customer Support.
Tel: +7 095 254 66 58, **Fax:** +7 095 254 66 60

Beijing, P. R. of China
Commercial; Customer Support.
Tel: +86 106 43 76 661, **Fax:** +86 106 43 76 307

Tanggu, P. R. of China
Manufacturing & Repair.
Tel:+86 222 58 23 226 , **Fax:**+86 222 58 23 242

Xian, P. R. of China
Manufacturing & Repair.
Tel: +86 297 85 25 05, **Fax:** +86 297 85 55 04

Singapore
Streamer Manufacturing & Repair;
Customer Support.
Tel:+65 545 0411, **Fax:**+65 545 1418

Dehradun, India
Customer Support.
Tel: +91 135 773 187, **Fax:** +91 135 773 133
E-mail: sercel@del.vsnl.net.in

Table of Contents

6 Noise Editing

7 Recorder

8 Plotter

9 Positioning

11 VE432

12 SPS

13 VQC

14 VE416

Chapter 1

408UL User's Manual

Volume 1

Introduction

See also the *Index*.

This chapter includes the following sections:

Overview

This manual provides operating instructions for the 408UL system's Graphic User Interface (referred to as HCI).

Before using this manual, you need to install the system by following the instructions given in the 408UL Installation Manual.

The User's Manual is automatically loaded from the 408UL CDROM to your workstation's disk as you load the 408UL software package. Then it is just one click away at all times, using the HELP button available in every main window, or it can be viewed using the menu that pops up when you press the mouse centre button. With a PC computer equipped with a PDF file reader (Adobe Acrobat Reader) you can view this manual direct from the 408UL CDROM's DOC directory.

This manual assumes you are familiar with window-driven systems and you know how to work with windows, including how to use a mouse and standard menus and commands, and to open, move, resize, shrink, restore and close a window. For help with any of these techniques, see the documentation that came with your workstation.

408UL documentation consists of the following manuals:

- **Installation Manual** (0311400): contains an introduction to the 408UL system, installation information, a few instructions for the operator to get started, and reference information that will help you select a 408UL configuration tailored to your needs.
- **User's Manual Volume 1** (0311401): this manual.
- **User's Manual Volume 2** (0311402): contains information on interfaces (description of Input/Output formats, including SEGD format).
- **User's Manual Volume 3** (0311403): contains reference information on the definition of parameters involved in the HCI or in the instrumentation.

- **Technical Manual** (0311404): contains maintenance information and associated procedures and diagrams, including LT408 and TMS408 documentation.

Terminology

You'll need to be familiar with a number of terms that are described below.

- Click

  To press and release a mouse button quickly (left-hand button, unless otherwise specified).

- Command button

  A button that carries out a command (Add, Change, Delete, Swap, Reverse) with the parameters specified in the text boxes.

- Dialog box

  A secondary window that provides or requests information within an environment's main window.

- Double-click

  To press and release the left-hand mouse button twice in rapid succession without moving the mouse.

- Drag

  To move an item on the screen by holding down the mouse button while moving the mouse. See *Drag And Drop (page 1-16)*.

- Icon

  A small graphical image used to represent a window. Windows can be turned into icons or minimized to save room or unclutter the workspace.

Working with REMs

After all REMs to be used are entered into the list box, click **Apply**, then choose the desired action from the option button at the foot of the REM Layout Setup window.

Alternately, you can use the menu that pops up when you press the right-hand button of the mouse in the graphic view, prompting one or more contextual shortcuts that let you perform actions on the selected REM. You cannot perform any action on a REM group until **all** the REMs in the group are ready (e. g. connected, supplied with power, etc.).

- Wake Up

When you click GO with this option selected, wakeup messages are continuously sent to all SU6-Rs controlled by the REM or REM group for 10 minutes. You can terminate the wakeup by clicking on ABORT.

A wakeup is normally performed at the beginning of each day.

To see the remaining time until SU6-Rs are woken up, choose the numeric view mode.

- Sleep

When you click GO with this option selected, a message is sent to all SU6-Rs telling them to go to sleep mode. The sleep mode allows the SU6-Rs to consume much less power when not actively being used. SU6-Rs are normally put to sleep at the end of each day in order to conserve battery power.

WARNING

Once the SU6-Rs are put to sleep, they must be woken up (this takes 10 minutes) before being used.

- Receive Freq

  When you click GO with this option selected, the system subsequently uses the following selections when retrieving data: "Nb of Retries", "Retrieve SuspendDelay" time, ...

- Xmit Freq (REM)

  When you click GO with this option selected, the system immediately sets the transmit frequency in the RF unit as specified in the "Transmit" frequency text field.

- Xmit Freq (REM & SU6-R)

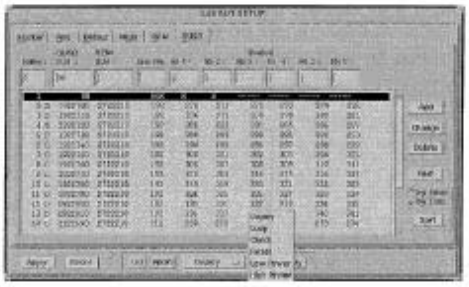
  When you click GO with this option selected, the system uses the previous transmit frequency to send the new REM transmit/SU6-R receive frequency to the SU6-Rs. Then it sets the new REM transmit frequency in the RF unit.

WARNING

This procedure should be done with caution because if an SU6-R misses the command, it will still be receiving on the old transmit frequency.

Radio section management

You open this window by selecting **Layout** from the **Setup** menu and clicking on the SU6-R tab. It is used to describe Radio-type receiver sections by assigning the desired receiver positions to the channels of the SU6-Rs to be deployed.



Parameters

- Index

  (Allowable range: 1 to 1200). Sequential number in the list of SU6-R units.

- SU6-R S. N.

  (Allowable range: 0 to 9999999). SU6-R serial number.

- REM S. N.

  (Allowable range: 0 to 9999999). Serial number of the REM controlling the specified SU6-R. See also *Radio or Dual telemetry (page 4-48)*.

- Line Nb

  (Allowable range: 0 to 99999). Used to specify the acquisition Line on which to deploy the specified SU6-R.

- Station Nb 1 to 6

  (Allowable range: 0 to 99999). Six text boxes used to specify the Receiver position assigned to each channel in the specified SU6-R.

Working with SU6-Rs

The list box to the left of the ADD button shows the list of described SU6-Rs.

To describe a new SU6-R, enter the desired Number and description into the appropriate text boxes, then click ADD.

To make changes to any existing SU6-R, double-click the desired row in the list box. The corresponding description appears in the text boxes.

Make the desired changes and click CHANGE.

NOTES:

- If the selected SU6-R is deployed, then only the Frequency can be changed right away. To change the other fields, you must click UNDEPLOY first.
- If you wish to assign a deployed SU6-R to another REM, simply change the serial number of the REM (REM SN) for that SU6-R in the list box.

To jump to a particular SU6-R in the list, enter its identification number into the SU6-R S. N. text box and click **FIND**.

To re-arrange the described Lines by REM numbers or Line number, choose the desired option (By REM/By Line) and click **SORT**.

To remove SU6-Rs from the list, specify the desired SU6-R numbers in the Index text box and click **DELETE**.

To save the list of SU6-Rs, click **APPLY**.

TIP: To select several rows in the list box, click and:

- **Shift**-click for adjacent rows,
- **Control**-click for separate rows.

TIP: You can press the <c> key repeatedly to arrange the SU6-Rs by deploy status code in the list box:

- 1st time selects the 1st SU6-R not deployed
- 2nd time selects the 1st SU6-R deployed as RF radio link (R)
- 3rd time selects the 1st SU6-R deployed as MASTER (M)
- 4th time selects the 1st SU6-R deployed as SLAVE (S)
- 5th time selects the 1st SU6-R deployed as MUTE (T)

You can view the status of each SU6-R identified in this window in the numeric view or, using the mouse **right button** and selecting **Properties**, in the graphic view.

Use the option button at the foot of the SU6-R Layout Setup window to deploy/undeploy, check the SU6-Rs as required and control their power level. First you must select the desired SU6-Rs (by clicking in the list box).

Alternately, you can use the menu that pops up when you press the right-hand button of the mouse in the graphic view, prompting one or more contextual shortcuts that let you perform actions on the selected SU6-R (e. g. Deploy, etc.).

- Deploy

  With this option selected, clicking GO assigns the channels of the selected SU6-Rs to physical Lines and Receivers. (This function is equivalent to the Form Line function in wireline-type units, performed prior to Look or Check Line or test functions).

  In a REM group, you can deploy all SU6-Rs concurrently.

- Undeploy

  With this option selected, clicking GO cancels the assignment of the selected SU6-R channels.

- Loop

  With this option selected, clicking GO causes the system to cycle on the command to get the status from the selected SU6-Rs. If you fail to get the status from any SU6-R because of radio-communication problems, you can use this function and adjust the orientation of the SU6-R's antenna until you get the status. To quit the loop, click ABORT.

- Check (deployed SU6-Rs)

  With this option selected, clicking GO will collect the status from the selected deployed SU6-Rs, including continuity and battery voltage.

- Reset (deployed SU6-Rs)

  With this option selected, clicking GO generates a hardware reset command to the SU6-Rs and re-deploys the specified SU6-Rs.

- Low Power (deployed SU6-Rs)

  With this option selected, clicking GO tells the selected SU6-Rs to use the Low Power mode (25 W) to transmit back information to the REM.

- High Power (deployed SU6-Rs)

  With this option selected, clicking GO tells the selected SU6-Rs to use the High Power mode (40 W) to transmit back information to the REM.