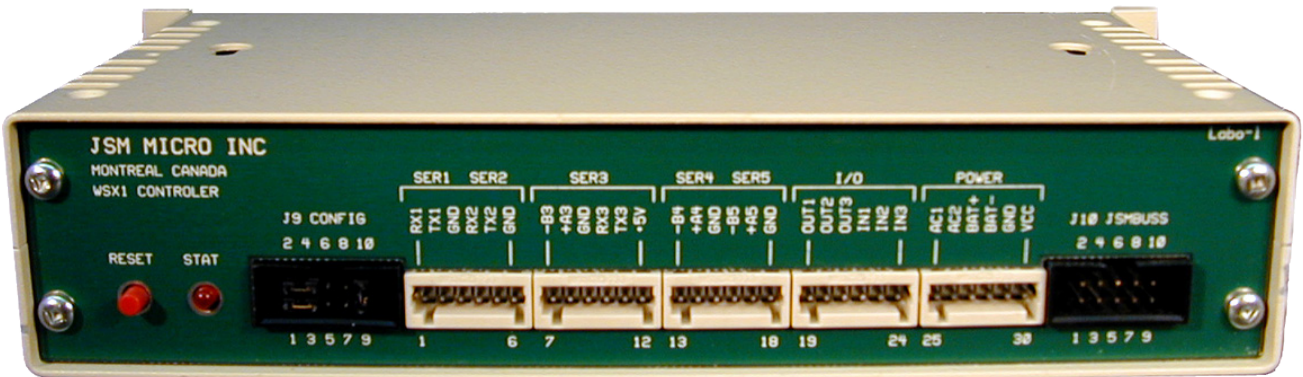


# SpLink 2.0 Programming Manual

rev 0



Will receive incoming messages using the Jsm proprietary protocol and dispatch them to SpectraLink OAI.

Use in conjunction with Jsm Config and the SpLink 2.0 template

Prepared by Julien Gascon-Samson

© Jsm Micro inc. 2008-2009

# Contents

<b>1 Overview</b>	<b>3</b>
<b>2 User comments, passwords and pin codes</b>	<b>4</b>
<b>3 Users</b>	<b>4</b>
<b>4 Teams</b>	<b>4</b>
<b>5 Message transmission</b>	<b>5</b>
5.1 Message transmission . . . . .	5
5.2 SpLink calling convention . . . . .	5

# 1 Overview

To program the WSX1 CPU running the SpLink software you must use JSM Micro inc Jsm Config configuration program. Jsm Config is a universal template based programming tool developed to assist in all JSM Micro inc products programming.

Once opened, the main screen looks like this:

## JsmConfig Software Overview (example shown using the SCP Messenger 3.0 template)

The screenshot shows the JsmConfig software interface for SCP Messenger 3.0. The interface includes a menu bar, a toolbar, and several main sections: 'Nurse stations', 'Message', 'Team scheduling', and 'Quick Help'. The 'Nurse stations' section has fields for 'Network address', 'Associated name', and 'Alpha mode'. The 'Message' section has fields for 'Message --> Team' and 'Team'. The 'Team scheduling' section has a 'Sch 0' dropdown and a 'WEEK' button. The 'Quick Help' section provides information about the current configuration item.

Callout boxes provide the following information:

- Top Left:** Select template to load. New (JsmConfig) and old ones (WSXConfig) are supported.
- Top Center:** Currently opened configuration file name
- Top Right:** Select COM port and unit type (for old templates only), and auto-reset (recommended)
- Far Right:** Used to install new software, bios, set time and date, show software version, serial number
- Left Side (Nurse stations):** New, open, save, save as functions
- Left Side (Message):** Download configuration from or upload configuration to unit
- Right Side (Quick Help):** Browse configuration pages. Click on a page title to open that page to edit its items. You can also open pages from the navigation pane.
- Right Side (Quick Help):** When you select a configuration item, this pane will display some quick help and advice on the possible values and the default value for that item.
- Right Side (Quick Help):** If your template file includes built-in manual documentation (such as SCP Messenger 3.0 and CTD 3.0), it will automatically display in this pane and jump to the correct section when a configuration item is selected. If the documentation manual is not built-in, this pane will not appear.
- Right Side (Quick Help):** Template title, version and program registration information.
- Right Side (Quick Help):** Navigation pane used to browse configuration sections. Click on a section to open that section to edit its items or use one of the shortcut F-keys. You can also use the left and right buttons below.
- Center (Message):** View the overview document, view the welcome page and view program information (change license information).
- Center (Message):** Important : spaces are used internally by our configuration files. Therefore, all spaces are replaced by underscore characters (unless a few exceptions), but they will appear as spaces when used by Jsm products.
- Bottom Left (Configuration zone):** Click or press TAB to select fields to edit or select values from listboxes if an arrow appears. MIDDLE-CLICK on a field to restore default value. PageUP/PageDOWN on a field to change index if a counter appears (E 3).  
Background Colors :  
White : Field has default value (unmodified)  
Green : Field has a modified value (not default)  
Yellow : Field is currently active for editing and text is not selected – you can type or select a value.  
Blue : Field is currently active for editing and text is selected – you can type or select a value.
- Bottom Center:** Quick search feature to search a string and jump to the appropriate index where the it appears. Activated for some fields. When search becomes possible for a given field, simply enter the string to search (or click on the magnifying glass icon or type the Ctrl+F shortcut) and click the next (Ctrl+N) or previous (Ctrl+P) button.

Very important : please note that spaces are used internally by our configuration files. Therefore, all spaces are replaced by underscore characters (unless a few exceptions), but they will appear as spaces when used by Jsm products. In JsmConfig, if you type a space on your keyboard, it automatically gets replaced by an underscore character.

## 2 User comments, passwords and pin codes

User comments are for your own usage. You can edit the date and have three lines of comments to store information like your customer's name, your name or other information. These information's will be saved to the WSX1.

The Passwords section allow you to enter up to three passwords for future use. Presently the SpLink 2.0 software do not look at these passwords.

The Pin codes section allows you to enter a serial number to use your SpLink 2.0 software. The serial number must match the serial number programmed in the WSX1 unit, otherwise SpLink will not work. The various pin codes allows you to enable some features of the software. Depending on your configuration, Jsm Micro inc. will tell you your serial number and which pin codes to enter here. Please note that pin codes are not used for this software.

## 3 Users

The users section allows you to configure the SpectraLink handsets that are registered and their associated port number.

**Handset number:** Enter here the directory number as programmed in the PBX for each registered user.

**Port:** Enter here the SpectraLink port number corresponding to the handset number. **Four digits are needed for the port number!**

## 4 Teams

In this section, you can define teams of handsets. You will then be able to perform calls on multiple SpectraLink handsets *simultaneously*. In each team, enter the user numbers you need. You can have up to ten teams. Each team may contain up to 32 users. **Too many usage of teams with several members will affect system performance because each handset is called one by one. This may cause latency problems! We do not recommend using teams with more than four members.** Quick tip : you can use arrow keys and tab for faster data entry.

For all teams you need (maximum 10), select from the lists the desired members. You have to select user numbers, and for your convenience, programmed handset numbers are also displayed.

## 5 Message transmission

The SpLink 2.0 software will receive messages to transmit to SpectraLink handsets from another WSX1 unit or manually via test messages for diagnosis purposes.

### 5.1 Message transmission

The WSX1 will accept messages received from another WSX1 on the ser5 RS485 port. The WSX1 will also accept manual test messages sent on the ser1 RS232 port (9600-N-8-1 in Hyper Terminal or other tool) using the following syntax :

- **MP\_par\_Unnn\_cbn\_message** : specify a user number using U(000-127)
- **MP\_par\_nnnn\_cbn\_message** : specify a SpectraLink port number (0000-9999)

The parameters are the following :

Parameter	Definition
underscore	space
p	Priority (0-1)
a	Alert type (0=page, 1=with callback)
r	Ring type (1-9)
cbn	Callback number
message	Message to send (32 chrs max)

Please refer to the next section for more information about SpectraLink parameters.

### 5.2 SpLink calling convention

In many WSX1 softwares such as CTD 3.0 and SCP Messenger 3.0, you can place SpectraLink contacts in

teams. To do so, you have to use one of the following conventions :

- **S-par-Unnn** : specify a user number using U(000-127)
- **S-par-directoryNumber** : specify a SpectraLink port number (0000-9999)

The parameters are the following :

Parameter	Definition
underscore	space
p	Priority (0-1)
a	Alert type (0=page, 1=with callback)
r	Ring type (1-9)

Please note that only alerts 0 and 1 are used. Alert 0 is for a page type call, and alert 1 is for a page with a callback number. User must acknowledge.

The following are parameter definitions for the ring type (**r**) :

r	Ring type	Burst	Cycles
0	Silent	1 long	1
1	Pager sound	1 short	1
2	Pager sound	1 long	1
3	Soft sound	1 short	2 (5 if alert type=1)
4	Soft sound	1 long	1 (5 if alert type=1)
5	Vibrate	1 short	2 (5 if alert type=1)
6	Vibrate	1 long	1 (5 if alert type=1)
7	Aux1	1 short	2 (5 if alert type=1)
8	Aux1	1 long	1 (5 if alert type=1)
9	Aux2	1 short	2 (5 if alert type=1)

Please note that aux1 and aux2 are user defined.

Examples :

S-001-U001	Page, pager type sound, user1
S-005-224	Page, vibrate, ext 224