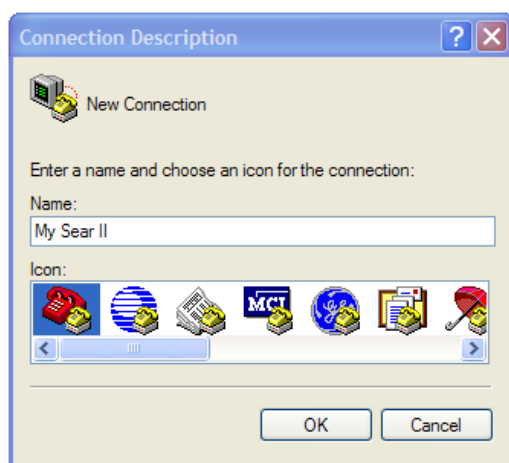# SIEMENS

QUICK REFERENCE GUIDE
SEAR II CONFIGURATION AND
HYPERTERMINAL SETUP
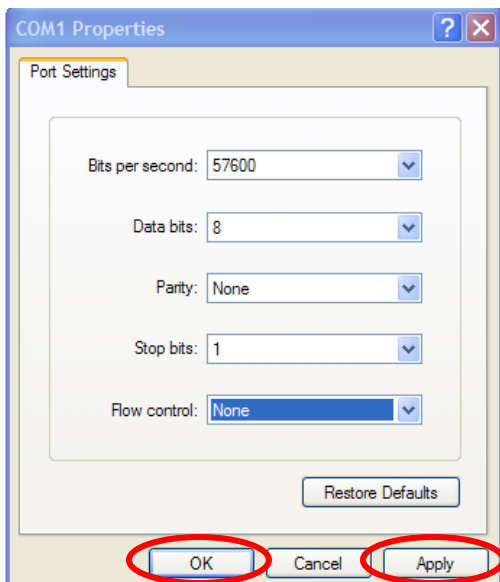**Document No. SIG-QG-08-04-001A.1**

SEAR II – HyperTerminal Setup

1) Connect serial cable from PC COM port 1 to SEAR II User port.
2) Go to: Start > All Programs > Accessories > Communications > HyperTerminal.

3) Enter name for connection – for example, 'My Sear II', click the **OK** button**.**
4) Connect using **COM1**, click the **OK** button**.**

5) Set up baud rate as shown below, click **Apply**, then click **OK** button**.**

6) Apply power to the SEAR II then type **Ctrl-L** to connect to the SEAR II unit.

SEAR II - Step 1 - Comm. Setup (New unit only)

1) On SEAR II front panel, press **COMM SETUP**.
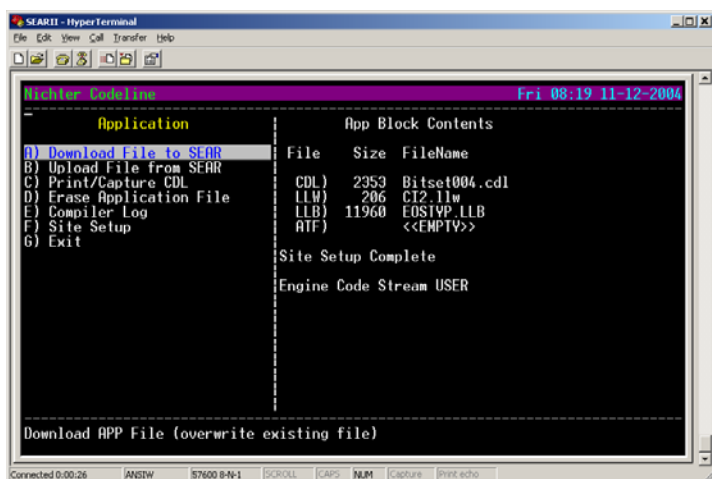2) Verify the following settings (press **ENTER** after each is displayed):

Parameter	Value
SITE TYPE	Collector
SITE (ATCS) ADDRESS (X's match GEO)	7.103.XXX.XXX.02.01
OFFICE (ATCS) ADDRESS (Not req. now)	2.XXX.XX.XXXX
POLL ID	1
MODE	Gen/ATCS
WAMS XID	DISABLED
OFFICE COMM. DEVICE	MCM (RS232)
MCM (RS232) PORT	AUX
FIELD DEVICE	None
USER PORT BAUD	57600
USER PORT DATA BITS	8
USER PORT PARITY	None
USER PORT STOP BITS	1
USER PORT FLOW CONTROL	None
AUX PORT BAUD	9600
AUX PORT DATA BITS	8
AUX PORT PARITY	None
AUX PORT STOP BITS	1
AUX PORT FLOW CONTROL	None
COMM PORT BAUD	9600
COMM PORT DATA BITS	8
COMM PORT PARITY	None
COMM PORT STOP BITS	1
COMM PORT FLOW CONTROL	None
SAVE CHANGES	YES

3) At **YES** prompt following 'SAVE CHANGES' press **ENTER**. SEAR II display should show 'Saving Config.' and connection with Hyper Terminal should now be possible.

SEAR II - Step 2 - Uploading Application (LLW, LLB, CDL)

Uploading the Ladder Logic to the SEAR II

1) On the SEAR II terminal interface Main menu display, select **D) Application**. The following Application menu will appear.
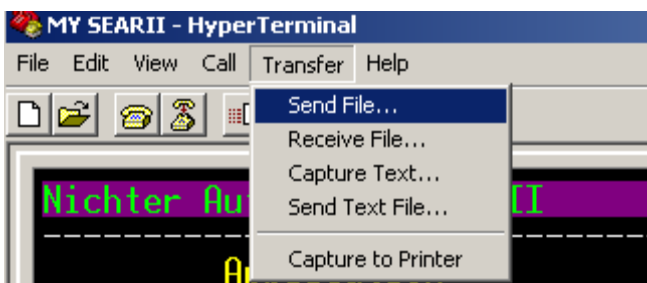

2) Select **A) Download file to SEAR**.
3) Use the arrow keys to select LLW, LLB or CDL, then press **ENTER**.

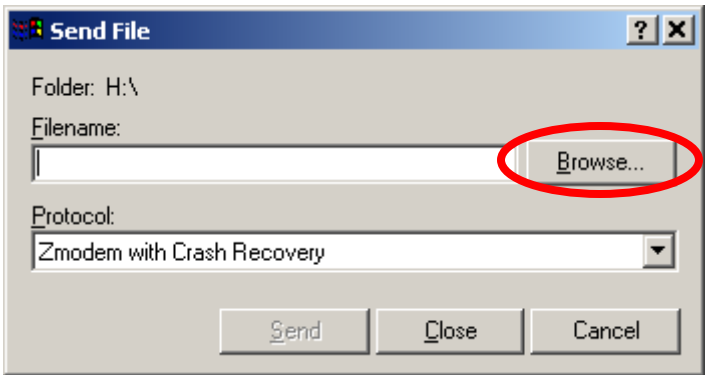   **Note:** Download LLW and LLB first then the CDL last, as it requires a System Setup.

4) Press **ENTER** on the SEAR II keypad when prompted. If LLW is selected the following message is displayed: 'Waiting for LLW download'. Proceed to the next step (5).

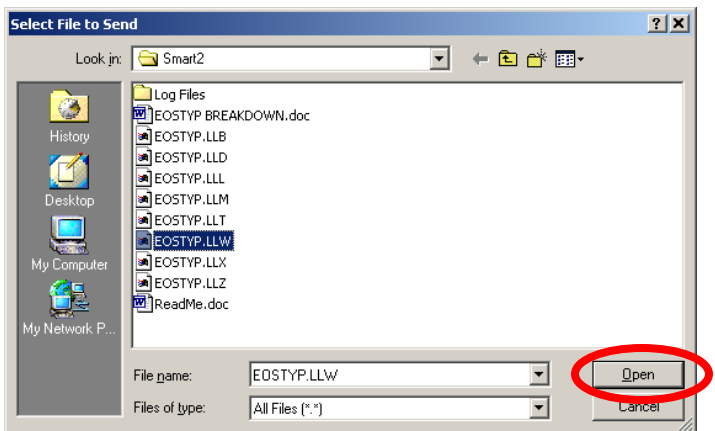5) On HyperTerminal **Transfer** menu, select **Send File…**

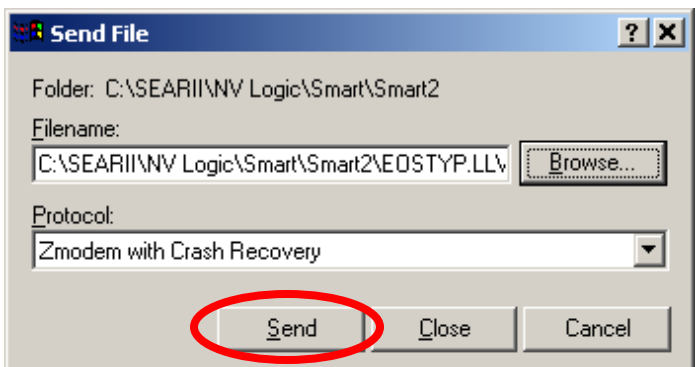6) On **Send File** message box, click the **Browse...** button.

7) Select the LLW, LLB or CDL file to be uploaded, then click the **Open** button.
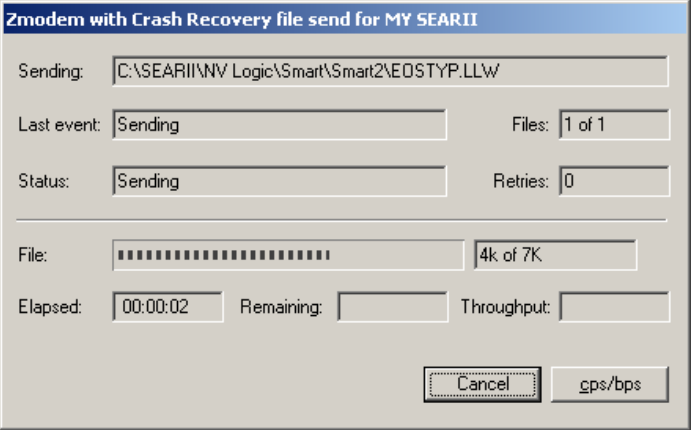
Note: The file selection screen does not filter the file extensions by type; therefore, care must be taken so the proper type of file is selected based on the option entered at the prompt (LLW, LLB, or CDL).

8) On the **Send File** message box, select the **Zmodem with Crash Recovery** protocol, then click the **Send** button.

9) The selected file is transferred to the SEAR II.

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Zmodem with Crash Recovery file send for MY SEARII

Sending:	C:\SEARII\NV Logic\Smart\Smart2\EOSTYP.LLW
Last event:	Sending
Files:	1 of 1
Status:	Sending
Retries:	0
File:	▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮	4k of 7K
Elapsed:	00:00:02	Remaining:		Throughput:	

Cancel   cps/bps

10) When transfer is complete, the following message is displayed.


```
Segment to download: LLW
Waiting for LLW download...done.
        File Name: EOSTYP.LLW
        File Size: 6620
LLW CRC : C249
Updating application block...done.
Download successful.
```

11) Repeat steps 2 to 10 for LLB or CDL.

> **Note:** If a CDL file is uploaded to the SEAR II, the next step (Site Setup) needs to be performed to have the unit operational again.

SEAR II - Step 3 - Site Setup

1) On the SEAR II front panel, press the **SITE SETUP** button.
2) Verify the following settings per the location plan (press **ENTER** after each is displayed):

Parameter	Value
DATE/TIME	MM-DD-YYYY HH:MM:SS
AUTOMATIC DTS ADJUSTMENT	YES
TIME ZONE?	EASTERN
SITE NAME?	"LOCATION"
MILEPOST	123.45
DOT #?	12345A
TESTER TYPE?	WAYSIDE
DATE FORMAT?	mm-dd-yyyy
TEMP. FORMAT?	Celsius
INDICATE HOLD	0
SITE TYPE?	Collector
SITE (ATCS) ADDRESS	7.103.XXX.XXX.02.01 **(See Plan)**
OFFICE (ATCS) ADDRESS	2.103.000.000 **(default)**
POLL ID	1
MODE	Gen/ATCS
WAMS XID	DISABLED
OFFICE COMM. DEVICE	MCM (RS232)
MCM (RS232) PORT	AUX
RADIO ATCS ADDR?	7.103.XXX.XXX.01.01 **(See Plan)**

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FIELD COMM. DEVICE?	None
USER PORT BAUD	57600
USER PORT DATA BITS	8
USER PORT PARITY	None
USER PORT STOP BITS	1
USER PORT FLOW CONTROL	None
AUX PORT BAUD	9600
AUX PORT DATA BITS	8
AUX PORT PARITY	None
AUX PORT STOP BITS	1
AUX PORT FLOW CONTROL	None
COMM PORT BAUD	9600
COMM PORT DATA BITS	8
COMM PORT PARITY	None
COMM PORT STOP BITS	1
COMM PORT FLOW CONTROL	None
Please wait Compiling…Note (On error see next section)	
RESET NAMES/MODULES?	YES
Please wait Compiling…Note (On error see next section	
EDIT DIGITAL INPUTS?	NO
EDIT BATTERIES?	NO
EDIT RELAYS?	NO
EDIT INDICATOR LEDS?	NO
EDIT TEST LEDS?	NO
GEO_BOX_1 ATCS ADDR?	LEAVE AT THE DEFAULT
GEO_BOX_1 CTL OFFSET?	LEAVE AT THE DEFAULT
GEO_BOX_1 CTL SIZE?	LEAVE AT THE DEFAULT
GEO_BOX_1 IND OFFSET?	LEAVE AT THE DEFAULT
GEO_BOX_1 IND SIZE?	LEAVE AT THE DEFAULT
Note: You will be prompted for the previous 5 lines for each GEO boxes installed	
ULCP SWT OFFSET?	LEAVE AT THE DEFAULT
ULCP LED OFFSET?	**LEAVE AT THE DEFAULT**
Saving Configuration... Please Wait Compiling...**Note:(On error see next section)**	

The values listed here are for demonstration only. Actual values may vary depending on CDL and location type.

INSTALL ULCP, WAITING FOR SERVICE MSG

Using a small tool, press the ULCP service button .

INSTALLED should appear on the SEAR display.

DISABLE AC POWER, THEN HIT ENTER.

Note: For a GEO setup you don't need to disable the AC power, just press ENTER and then press EXIT instead of waiting for 180 seconds.

SETTLING...(for 180 seconds)

BANK_1 (Hit Enter if correct)

> Battery input will indicate 0.0, just press enter

BANK_2 (Hit Enter if correct)

> Battery input will indicate 0.0, just press enter

BANK_3 (Hit Enter if correct)

> Battery input will indicate 0.0, just press enter
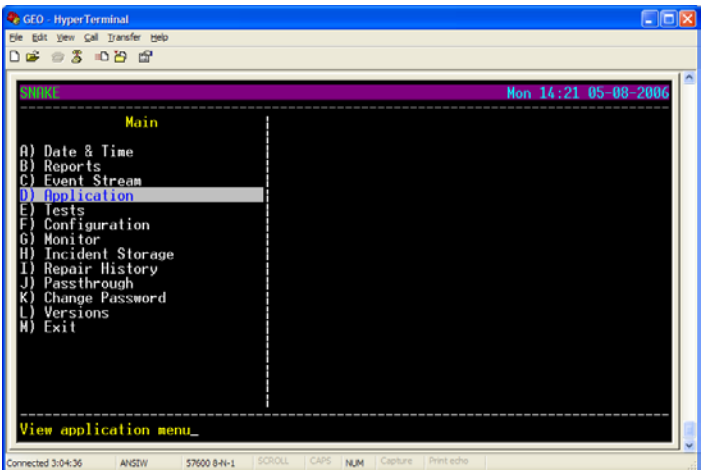
TURN AC POWER ON, THEN HIT ENTER.

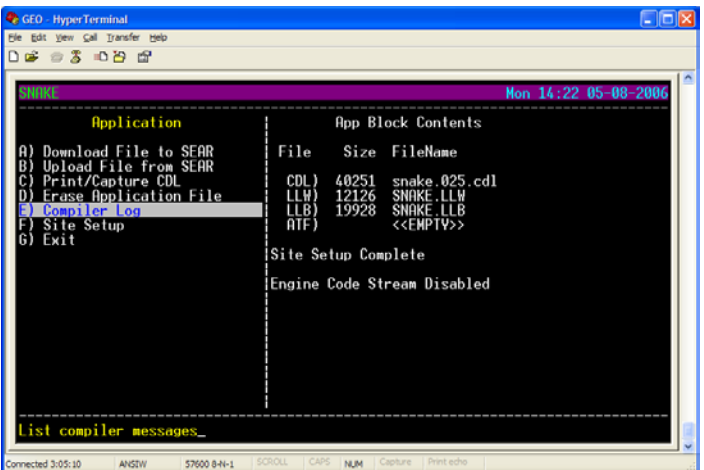> Just press Enter.

NO MONITORED LAMPS

SEAR II is now ready!

SEAR II - Compiling Error

1) If, while doing a Site Setup the message 'Compiling Error' is displayed, look at the Compiler logs to gather more information on what caused the error. To access the logs select **D) Application** from the Main menu.

2) Then select **E) Compiler Log** from the Application menu.

3) If the message 'COULD NOT COMPILE - NO FREE RAM' is displayed, the SEAR II should be powered OFF and ON by temporary removing **J1** (Power/Echelon) connector to clear the RAM. The Site Setup should be attempted again.

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```
Compiler Log - compiled from Site Setup

Compile time: Mon 05-08-2006 08:35:32

Compiling Site Setup
Compiled Section(s) Successfully!
Compiling Definitions
Compiled Section(s) Successfully!
COULD NOT COMPILE - NO FREE RAM

Hit any key to continue
```

Note: The following message will confirm that compiling was successful.

```
Compiler Log - compiled from start-up

Compile time: Mon 05-08-2006 12:46:56

Compiling Site Setup
Compiling Definitions
Compiling Logic
Compiled Section(s) Successfully!

Hit any key to continue
```

SEAR II – Loading Executive

1) To load new executive software into the SEAR unit, connect using HyperTerminal (see SEAR II – HyperTerminal Setup)
2) Restart the SEAR and get ready to select **1** while the SEAR is booting:

3) Follow the on-screen directions – from the HyperTerminal **Transfer** menu select **Send File** and then restart the SEAR once the transfer is complete.
4) Always re-run site setup after loading a new executive. Ensure 'Indicate Refresh' is set to 60 seconds under site setup.

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