

# QUICK REFERENCE GUIDE INSTALLING MCF FILES IN SSCC IIIA, III+ AND IV Document No. SIG-QG-08-23-001A.1

### NOTE

This document provides the complete procedure for updating SSCC MCF files. If you have just completed MEF and SEF updates and the SSCC is still in the "Install Software" mode, proceed directly to the MCF INSTALL instructions.

### SETUP PROCEDURE

Tools required:

- Laptop PC with CD drive and running latest version of Siemens DT software.
- Standard RS-232 serial cable.
- Software Update disc (provided by Siemens).
- SSCC History Card
- List of MCFs and related CRCs (see list at end of this guide or instructions from RR office)

### <u>NOTE</u>

The following procedure applies to all MCF configuration software versions.

### WARNING

DURING UPGRADE OF THE SSCC SOFTWARE, THE SSCC WILL NOT BE CONTROLLING THE CROSSING PROTECTION. ALTERNATE MEANS OF PROTECTING THE CROSSING (E.G., TRACK TIME, FLAGGING THE CROSSING, ETC.) MUST BE USED UNTIL THE UPDATE IS COMPLETE AND THE SSCC IS RETURNED TO NORMAL OPERATION.

- 1) Verify that power is applied to the SSCC.
- 2) IMPORTANT! Review the Program menu, Configure menu and lamp voltage settings and then compare the <u>current</u> system operating parameters with those recorded on the History Card retained with the SSCC. <u>If necessary,</u> <u>update the History Card to the current</u> <u>programmed settings</u>.
- Copy the contents of the Software Update disc to a folder on the PC hard drive (e.g., C:\Siemens).

- 4) Connect serial cable from PC COM port 1 to the SSCC front panel **DIAGNOSTIC** port.
- With the SSCC already powered up, start the DT software.
- If the DT software does not connect to the SSCC automatically, select the COMM button or COMM drop down menu, then select DT Port Setup. Otherwise, go to step 10.



7) If **Discovery Protocol** is checked, deselect the check box.



- Select COM1: in the Serial Port Selection box and select 9600 baud rate.
- 9) Select the **COMM** button or **COMM** drop down menu, then select **Connect.**



GEO D <sup>-</sup> Comm Vie	T [SIN = 7 ew Program	7 <b>0000000</b> 0 1 <u>H</u> istory	00000] Diag <u>H</u> elp		_ 🗆 X
COMM VIEW PROG HIST DIAG HELP					
SSCC	SSCCXING	SSCCIP	<empty></empty>	<empty></empty>	<empty></empty>
Battery           Battery           10.20 V           Internal           4.90 V           Module           40A           Outputs           A+8	<ul> <li>Flash</li> <li>Flash</li> <li>Flash</li> <li>Flash</li> <li>Lown</li> <li>∠ Cown</li> <li>√ Ring</li> <li>√ Ring</li> <li>√ Ring</li> </ul>				
	F	Ready			

10) The DT main display appears.

11) Select the **COMM** button or **COMM** drop down menu, then select **Install Software.** 

🚔 GEO DT [SIN = 70000000000]					
Comm View Program	History	Diag Help			
Connect ?					
Module Connect					
Connect to HD	SSCCIP	<empty></empty>	<empty></empty>	<empty></empty>	
Disconnect	► Off				
Reset Module	▶□ Off				
Install Software	► Off				
DT Port Setup	▶□ Off				
DT ATCS Address	▶□ Off				
✓ Auto Connect	▶□ Off				
Exit	▶□ Off				
	Ready				

12) A prompt appears regarding module reset. Select **Yes**.



13) The SSCC reboots. A text terminal screen appears identifying boot code version, application version and application CRC. A progress bar at the bottom of this screen shows the download progress of the SSCC program set to the PC. The "Y" response to the "Change module setup" prompt is automatic.



14) Following download of the program set, a screen appears allowing selection of software type to be installed.



## MCF INSTALL

1) Select the **MORE** button in the upper left corner of the screen.



2) Press the PC keyboard F3 function button or select the CFG DATA F3 button at the top of the Text Terminal screen to change configuration software. A screen appears listing each MCF file currently installed, their MCF number, version and their CRC. Use the scroll bars at the right side of the screen and at the bottom of the screen to view all data as necessary. Make note of the MCF Number assigned to each MCF to be changed.

Text	t Termina			
EXI	MORE	Esc Enter F2 F3		
MCF	Number	MCF Name	MCF Version	MCI 🔺
	01	basic.mcf	F	1D:
	02	basicpls.mcf	E	B3F
	03	3trklwrp.mcf	С	E42
	04	2trk2wrp.mcf	С	704
	05	2trkdstk.mcf	D	861
	06	supisl.mcf	С	4B2
	07	3trk2trn.mcf	С	8AI
	08	2trk2trn.mcf	С	050
	09			FFI
	10			FFI
	11	aue4quad.mcf	A	76i 👻

3) MCF change options are listed at the bottom of the screen.



4) Press PC keyboard F2 function key or select the MCF F2 button at the top of the screen to change an MCF. A keypad is displayed. Enter the number of the MCF to be changed and then select the OK button.

MCF Nun	nber			×
Enter the	MCF num	ber to ch	ange:	
	1	2	3	
	4	5	6	
	7	8	9	
	Back	0	Space	
	OK		Cancel	]

5) Select the MCF file to be installed from the folder created on the PC hard drive (e.g., **C:\Siemens**), then select the **Open** button.

Upload MCF File					
Look jn:	9V610-A002.H	H (Basicpls.mcf)	• +	• 🗈 💣 🎟	•
My Recent Documents	■basicpls.m	lcf			
Desktop My Documents					
My Computer					
My Network	File <u>n</u> ame:	basicpls.mcf		— • <b>(</b>	<u>O</u> pen
Flaces	Files of type:	MCF File (*.MCF)		-	Cancer

6) The selected file is downloaded. Download progress is indicated at bottom of screen.

Text Terminal	
D Select Configuration Item To Change: F2-Change MCF F3-Change MCF CRC F4-Erase Row F5-Erase All F7-Erase CCF F8-Exit	•
Enter the MCF Number to change (1 to 15, ESC to cancel): 2 Downloading the MCF (ESC to cancel)*.MCF	•

7) Wait for the download to complete before proceeding. Screen will indicate **Burning the MCF**. Wait for the list of MCFs to appear after this statement before proceeding. See the following example screen.

EXI	MORE	Esc Eater F2 F3	
Inte	er the MC	CF Number to change (1 to 15, ESC to cancel): 1	-
-	HUBBING	MCF (ESC to cancel)*.MCF	
Bui	rning the	e MCF	
_			
CF	Number	MCF Name MCF Version	MCF
CF	Number 01	MCF Name MCF Version basic.mcf F	MCF 1D2
CF	Number 01 02	MCF Name MCF Version basic.mcf F basicpls.mcf H	MCF 1D2 731.
CF	Number 01 02 03	MCF Name         MCF Version           basic.mcf         F           basicpls.mcf         H           Strklwp.mcf         E	MCF 1D2 731. F71
CF	Number 01 02 03 04	MCF Name         MCF Version           basic.mcf         F           basicpls.mcf         H           3trklwrp.mcf         E           2trk2wrp.mcf         E	MCF 1D2 731. F71 7A9
CF	Number 01 02 03 04 05	MCF Name         MCF Version           basic.mcf         F           basicpls.mcf         H           3trklwrp.mcf         E           2trk2wrp.mcf         E           2trkdst.mcf         F	MCF 1D2 731. F71 7A9 A97
CF	Number 01 02 03 04 05 06	MCF Name         MCF Version           basic.mcf         F           basicpls.mcf         H           Strklwrp.mcf         E           2trk2wrp.mcf         E           2trkdstk.mcf         F           supil.mcf         E	MCF 1D2 731. F71 7A9 A97 2E0
CF	Number 01 02 03 04 05 06	MCF Name MCF Version basic.mcf F basicpls.mcf H Strklwrp.mcf E 2trk2wrp.mcf E 2trkdstk.mcf F supisl.mcf E	MCF 1D2 731. F71 7A9 A97 2E0

- 8) Following MCF download, press PC keyboard F3 function key or select MCF CRC F3 button to change the CRC for the MCF just changed. A keypad is displayed. Enter channel number (same MCF number as in step 3) for MCF just changed, then select OK.
- A second keypad is displayed. Enter MCF CRC supplied with software update disc for MCF just changed, then select **OK**.

NOTE: The CRC values and MCF versions are also listed for each MCF at the end of this guide.



MCFCRC				×
Enter MC	FCRC (8 ( 26	digits):		
	1	2	3	
	4	5	6	
	7	8	9	
	0	A	в	
	С	D	E	
	F	Back	Space	
	ОК		Cancel	]

10) Following CRC entry, verify that selected MCF was installed and that the CRC and version are correct.

Text Terminal				
	Esc Enter F2 F3			
MCF Number	MCF Name	MCF Version	MC1 🔺	
01	basic.mcf	F	1D:	
02	basicpls.mcf	н	B3F	
03	Strklwrp.mcf	С	E42	
04	2trk2wrp.mcf	с	704	
05	2trkdstk.mcf	D	861	
06	supisl.mcf	С	4B2	
07	3trk2trn.mcf	с	SAI	
08	2trk2trn.mcf	С	05:	
09			FFI	
10			FF1	
11	aue4quad.mcf	A	76i 🗸	
•				

11) Repeat steps 3 through 8 for each MCF to be loaded in the SSCC.

Text Terminal
EXT MORE Yes No F1 F2
F8-Exit
Fl-Change Application Code F2-Change Boot Code F3-Change Configuration Data F8-Exit Setup
F1-Change Application Code F2-Change Boot Code F3-Change Configuration Data F8-Exit Setup

- 12) After all MCFs are loaded and the CRC values entered and verified, press the PC keyboard F8 function key to exit the change mode.
- 13) Press F8 again to exit Setup and start application.
- 14) Press the **EXIT** button in the upper left corner of the screen to close the Text Terminal screen.
- 15) Proceed to the **RETURN TO SERVICE** section.

# **RETURN TO SERVICE**

This table contains the unique MCF ID numbers that <u>must</u> <u>be entered</u> in the Configuration menu after an MCF is changed. Failure to enter the proper Unique ID number when prompted on the front panel display will cause the SSCC to reboot every 2 minutes. Proceed to MCF Change Instructions below.

MCF NAME	UNIQUE ID NO.	SSCC Where Used			
BASIC	130	IIIA, III+, IV			
BASICPLS	087	III+, IV			
3TRK1WRP	682	III+, IV			
2TRK2WRP	606	III+, IV			
2TRKDSTK	320	III+, IV			
SUPISL	285	III+, IV			
3TRK2TRN	962	III+, IV			
2TRK2TRN	065	III+, IV			
DAXPRMT	413	III+ (40-Amp only), IV (40-Amp only)			
ENT4QUAD	460	IV			
EXT4QUAD	021	IV			
AUE4QUAD	534	IV			
AUX4QUAD	197	IV			
GCP4ENT	808	IV			
4QUADLIT	729	IV			

#### MCF Unique ID Numbers

MCF Change Instructions

- Select SSCC CONFIGURATION menu using front panel switches, scroll to current MCF and then press ENTER.
- 2) Scroll to new MCF, press ENTER.
- 3) Verify correct CRC, change N to Y, press ENTER.
- 4) Enter Unique ID Number, press ENTER.
- 5) SSCC will reboot.
- 6) Set SSCC to default configuration.
- 7) Set configuration parameters according to RR plan.

Before returning the SSCC to service, the following <u>must</u> be performed:

- 1) Select the SSCC **PROGRAM** menu using front panel switches.
- 2) Scroll to SET TO DEFAULT, press ENTER.
- Reprogram the SSCC. Verify that all system application parameters, configuration settings and lamp voltages are as previously recorded on the History Card.
- 4) Run system verification tests from the **TEST** menu.

- 5) Perform any additional operational tests required by the railroad.
- 6) Return the system to service.

The following table provides the CRC values for the latest revisions of each MCF used in the SSCC, plus earlier MCFs that are compatible with current MEF/SEF releases.

MCF Name / Version	CRC
BASIC.MCF	
F	1D240612
E	8F638122
BASICPLS.MCF	
Н	731AF326
F	72ADEE59
E	B3B8592E
3TRK1WRP.MCF	
E	F71FB717
D	1DA21069
С	E4237E2F
2TRK2WRP.MCF	
E	7A946518
 D	137F504A
C	7C4D8659
2TRKDSTK MCF	
F	A9776265
E	C8E74111
D	86E6FB77
	0020.2
F	2E0E7907
 D	7B52400D
C	4B2DFA28
3TRK2TRN MCF	IBEBI / EG
F	05488764
 D	D691CE34
C	8AD37401
2TRK2TRN MCF	0/12/01/101
F	716DE247
 D	5F1F7B13
C	05331932
F	670AE50E
 F	7B0CE142
 D	8E53E816
ENT4QUAD.MCF	0.0010.0
B	EB027435
2	04896812
EXT4QUAD MCE	01000012
Δ	9346AF17
	0010/11/
	76451167
	10/10/10/
Δ	60800428
	00000A20
	50064830
	510808050
	51000000
A	EF//9954