

3. SYSTEM FUNCTIONS

3.1 Loading of MasterView 850/1

The loading and initialization of the system embrace loading of the program and MMC data base from diskettes and the initialization of the software. These tasks can be performed in two ways, either with the help of the processor board or with the MasterAid 200.

3.1.1 Loading from the processor board

The following figure should be studied in conjunction with the description given below:

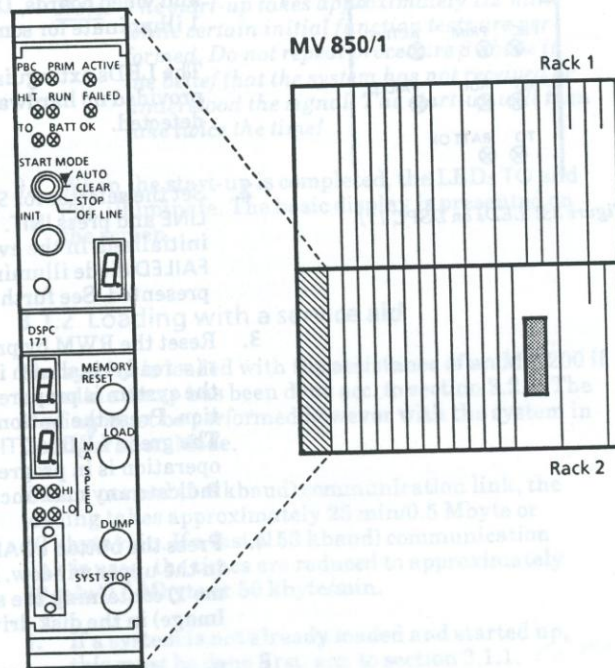


Figure 3:1 Processor board DSPC 171

1. Check that the power supply is connected. This is described in chapter 2. The electronics in rack 1 are activated automatically when the voltage is switched on.

The switch for START MODE on the processor board DSPC 155 in rack 1 is to be set in position C.

- A - manual re-start
- B - service
- C - automatic re-start

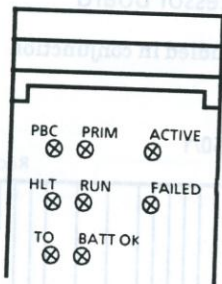


Figure 3:2 LEDs on DSPC 171

After the application of voltage, the indication FAILED on the processor board DSPC 171 in rack 2 and the ERROR indication on the display memory and video boards, DSMB 151 and DSAV 111 in rack 1 illuminate for some seconds.

The LEDs extinguish when the rack is started-up provided no hardware fault or addressing error is detected.

2. Set the selector for START MODE in the position OFF LINE and press INIT. The start-up program is now initialized. In the event of malfunction, the red FAILED diode illuminates and an error code is presented. See further section 6.3.1.
3. Reset the RWM by pressing the MEMORY RESET. (= ready) is shown in the window to indicate that the system is prepared to receive further information. Press the button again and the resetting begins. The green LED, ACTIVE is illuminated while the operation is in progress. An error code is presented to indicate any malfunction. See further section 6.3.2.
4. Press the button LOAD. The figure "1" is then shown in the upper window. Insert the first diskette (volume 1) containing the system software (Basic System Image) in the disk drive in the rack.
5. Press the button LOAD. The contents of the diskette are now entered into the system. The green ACTIVE LED remains illuminated while the loading is in progress.

6. When the loading of the diskette is complete, the figure "2" is presented in the window. Insert the diskette (volume 2). Repeat operations 5 and 6 for the remaining diskettes. When the final diskette is loaded, the window indication is enlightened.

If there is any malfunction during the reading of the diskettes, a red LED, FAILED illuminates and an error code is presented. See also section 6.3.3.

7. Set the selector for START MODE in the AUTO pos.
8. Press the INIT button. This action activates the system software. The LEDs PRIM, RUN and TO illuminate during the start-up.

Note! The start-up takes approximately 1/2 min while certain initial function tests are performed. Do not repeat procedure 8 above in the belief that the system has not received or understood the signal. The start-up will then take twice the time!

9. When the start-up is completed, the LEDs TO and PBC illuminate. The basic display is presented on the screen.

3.1.2 Loading with a service aid

The system is loaded with the assistance of an MA 200 if an online dump has been done acc. to section 3.2.2. The loading must be performed however with the system in Configuration Mode.

With a normal (9.6 kbaud) communication link, the loading takes approximately 25 min/0.5 Mbyte or 20 kbyte/min. If a fast (153 kbaud) communication link is used, the times are reduced to approximately 10 min/0.5 Mbyte or 50 kbyte/min.

1. If a system is not already loaded and started up, this must be done first, acc. to section 3.1.1. (P1 452)
2. Connect the MA 200 to the MV 850/1. Start-up in accordance with the instructions on the MA 200 display screen. Select the activity "MV 800 Backup of MasterView system".

*Basic System!
OBS! Reth version.*

ABB Process Automation

OK to shutdown target system? *Y*

23
Restart System

→ P2.10 get

*F. Review small Wisse
under C:\Prot (Master) Target 4) SRCE*

OK to startup target system? *Y*

23

Restart Auto

* Our dump & target can obtain with post
Kör

LOAP Dumpname; U

*! OBS! ~~from benefit~~
store/sum 64/2/2/er; name*

3. Select the configuration mode by entering ECONFIG [CR].
4. Insert the first diskette with the dump in MA 200.
5. Start the loading with the command *

LOAP < dump name > [CR]
e.g LOAP MINDUMP [CR]

The aid then requests the name of the first diskette. Write the name of the diskette, for example, RWM1 [CR]. The loading begins.

6. Insert the next diskette and press [CR].
7. Continue until the complete dump is loaded.

8. DICONFIG

3.2 Dumping of system software

If the contents of the system are to be dumped, either an OFF LINE or an ON LINE dump can be performed. If an ON LINE dump is to be performed, the system need not be stopped but the MA 200 must be used and the dumping takes a relatively long time. See section 3.1. If an OFF LINE dump is to be performed, the system must be stopped but the aid is not required.

3.2.1 Dumping without a service aid

Dumping of the system OFF LINE is performed in the following way:

1. Set the switch for START MODE in the OFF LINE position.
2. Press SYST STOP, the system then stopping in a controlled predetermined sequence.

3. Press the **DUMP** button. The number 1 will then appear in the upper window. Insert a diskette in the diskette drive in rack 2.
4. Press the **DUMP** button again. The **LED ACTIVE** illuminates. The diskette will now be formatted and the dumping will begin. If the diskette is already formatted, the dumping is begun directly. When the dumping is completed, the data is confirmed as dumped. If a malfunction occurs, a status code is presented on the display. See chapter 6. The **LED ACTIVE** is extinguished when the dump is approved. Remove the diskette and assign it a sequential number. The diskettes must be loaded in the order in which they were dumped.
5. Repeat from step 3 until all of the data is dumped.

3.2.2 Dumping with a service aid

The **ON LINE** dumping of a system is performed in the following way:

1. Connect MA 200 to the MV 850/1. Start-up in accordance with the instructions given on the MA 200 display screen. Select the activity "MV 800 Backup of MasterView system".
2. Insert an empty diskette in MA 200. Initiate this and assign it a name (**VOLUME NAME**) such as RWM1.
3. Repeat point 2 until all diskettes are initiated and named RWM2, RWM3 etc.

4. Insert the first diskette RWM1 in the MA200. Start the dumping with the command

DUAP < segment id > ; D [CR]

e g **DUAP SEG1; D [CR]**

D indicates that any segment already on the diskette with the name **SEG1** will be written over.

5. MA 200 calculates the memory requirement and requests the name of the diskette .

Write, for example, **RWM1 [CR]**

DUMP DESCRIPTION ?

A line is available for the user to enter a description of the dump.

Finish with **[CR]**.

MESSAGE TO LOADER ?

Write a dump message or press directly on **[CR]**.

6. When the diskette is full, the MA 200 requests the next diskette. Continue until the entire memory is dumped.

3.3 Connection to MasterBus

MasterBus 200 and 300 are self-configuring which means that the user is not to describe the network topology. New stations (nodes) are included automatically in the system when they are connected and started-up.

3.3.1 MasterBus 200

MV 850/1 can have 4 MasterBus 200 connections. These ports are described with respect to configuration parameters in the data base element with call names CAB 1.1, 1.2, 2.1 och 2.2.

Connect MA 200 to MV 850/1 and start-up in accordance with the instructions on the MA 200 display screen.