



Fig. B.1.1 Start mode

B.1.2 Initial Start

When the controller is started in the initial start mode, all programs are deleted, and all the settings are reset to their standard values.

Once the initial start has been completed, a controlled start is performed automatically.



CAUTION

At an initial start, programs and all data including settings will be lost. The factory-set mastering data is also erased. The initial start should be made only when the main printed circuit board or software is replaced. Before performing an initial start, therefore, make a backup copy of the necessary programs and system files.

Procedure B-1 Initial start

Step

- 1 With the F1 key and the F5 key held down on the teach pendant, set the power breaker on the controller to ON.

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*** BOOT MONITOR ***
Base version V8.10P/01  [Release 3]
***** BMON MENU *****
 1. Configuration menu
 2. All software installation(MC:)
 3. INIT start
 4. Controller backup/restore
 5. Hardware diagnosis
 6. Maintenance
 7. All software installation(Ethernet)
 8. All software installation(USB)

Select :
  
```

- 2 Select 3, Init start.
- 3 Enter 1, (YES) to the confirmation message of initial start.

```

CAUTION:  INIT start is selected

Are you SURE ? [Y=1/N=else] :
  
```

An initial start is performed. Upon the completion of the initial start, a controlled start is performed automatically, and the controlled start menu will be displayed.

B.1.3 Controlled Start

When the controller is started in the controlled start mode, a controlled start menu, which is a simple system, starts up. The controlled start menu cannot be used to operate the robot. The controlled start menu can, however, be used to change a system variable which normally cannot be changed, to read a system file, and to set the robot.

Press [FCTN] key on the controlled start menu. A menu will be displayed. From that menu, select 1 START (COLD). A cold start is performed.

The following screens can be displayed from the menu displayed by pressing the MENU key on the controlled start menu:

Tool setup screens

The initial setup depending on the application can be made.

Software version Screen

The software edition is displayed.

System variables screen

System variables can be set. Even a system variable which cannot normally be changed (R0) can be changed.

File screen

A program or system file can be saved and read. The system file can be read only from the controlled start menu.

On the file screen of the controlled start menu, F4 is displayed as [RESTORE]. When the F4 key is pressed, all files are read automatically. To switch F4 to [BACKUP] as on other file screens, press [FCTN] key. A menu will be displayed. From that menu, select RESTORE/BACKUP.

Alarm history screen

The alarm history is displayed.

Port Init screen

A serial port is set.

Memory screen

The memory status is displayed.

MAINTENANCE

A robot setting can be changed. An additional axis can be set. A motion group can be added or deleted.

Max. number setting screen

The numbers of resistor, macro, and user alarm can be changed.

Password setting screen

In case that each setting is restricted according to password level, the restriction can be released by entering the password in this screen.

Host communication setting screen

Communication setting can be made in this screen. In order to load some files by communication at controlled start, set up communication in this screen.

Procedure B-2 Controlled start

Step

- 1 With [PREV] key and [NEXT] key held down on the teach pendant, set the power breaker on the controller to ON.

```

System version: V8.1035      2/10/2012

----- CONFIGURATION MENU -----

1. Hot start
2. Cold start
3. Controlled start
4. Maintenance

Select >

```

- 2 Select "3 Controlled start". The setting screen for the controlled start menu will be displayed .

Tool Setup		1/6
1 F Number		F00000
2 KAREL Prog in select menu		YES
3 Remote device:		UserPanel
4 Intrinsically safe TP:		NO

[TYPE]				HELP	
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CAUTION

Please verify the rest of FROM is more than 600KB when you need to do the controlled start. (You can verify the available FROM in memory status menu. [select menu →0.Next→4.status→memory])

If the rest of FROM is less than 600KB, please remove the unnecessary data from FR: or FRA: device to make room in FROM before you do the controlled start.

Also you cannot select controlled start in configuration menu if the rest of FROM is less than 600KB.

- 3 To operate the robot, a cold start must be performed. To do this, press [FCTN] key. A menu will be displayed. From that menu, select 1 START (COLD). A cold start is performed.

B.1.4 Cold Start

The cold start mode is used when normal power-up is performed while power failure recovery function is disabled.

Upon a cold start, the following is performed:

- Each output signal of digital I/O, analog I/O, robot I/O, and group I/O is turned off or set to 0.
- The program is aborted, and the beginning of the program becomes the current line.
- The feed rate override is reset to the initial value.
- The manual feed coordinate system enters the JOINT state.