

=====  
READ ME Before Installing TAMS BASIC for Linux  
=====

Installation  
-----

Note that you must install the SICL I/O library from the companion T82091 CD-ROM before installing BASIC for Linux.

To install BASIC for Linux follow these steps:

- \* Insert the BASIC for Linux CD in your CD-ROM drive.
- \* If the CD is not automounted, use the "mount" command to mount it. For the directions below, we are using /mnt/cdrom as the mount point.
- \* Execute:

```
ls /mnt/cdrom/rmb*.rpm
```

and make a note of the file name that ls reports.

- \* Then use that file name as the argument to rpm -U (you may need to modify the file name in the example below to use the version and release numbers which are actually on your BASIC for Linux CD). Execute:

```
rpm -U /mnt/cdrom/rmb-12.2-2.i386.rpm
```

The installation procedure for BASIC for Linux is also explained in the "Installing and Using BASIC for Linux" section of the "TAMS Documentation for BASIC" CD. Be sure to read that manual for additional information about customizing BASIC to your Linux environment.

System Requirements  
-----

- \* TAMS BASIC for Linux 12.22 runs on single processor PC's which are running any of the following operating systems:

```
Red Hat Linux 9
(kernels 2.4.20-6, 2.4.20-6smp, 2.4.20-8, 2.4.20-8smp)
Red Hat Enterprise Linux 3
(kernels 2.4.21-4.EL, 2.4.21-4.ELsmp)
Red Hat Enterprise Linux 3 Update 3
(kernels 2.4.21-20.EL, 2.4.21-20.ELsmp)
Red Hat Enterprise Linux 3 Update 5
(kernels 2.4.21-32.EL, 2.4.21-32.ELsmp)
Red Hat Enterprise Linux 4 Update 3
(kernels 2.6.9-34.EL, 2.6.9-34.ELsmp)
```

BASIC for Linux 12.22 is not supported, and probably will not run, on previous Linux releases. Contact TAMS for information about compatibility with later Linux releases.

- \* BASIC for Linux is not supported on multi-processor machines. It will run only on x86 based systems.

On-line Information  
-----

See the TAMS web site at <http://www.tamsinc.com/support> for the latest information about BASIC for Linux.

=====  
Revision Summary  
=====

- \* Version 12.2-2

This version includes the following defect fixes and enhancements:

- The [ScrollLock] keystroke correctly performs the CLEAR I/O function
- Selecting [X] to destroy a BASIC window no longer removes main window
- Keyboard input to BPLUS dialogs is limited to one-byte mode (no Kanji)
- The signals interface was updated to use sigprocmask(2)

\* Version 12.2-1

This version fixes the problem of the BASIC Plus Japanese Fonts (FTJ\*) causing an error while loading them into memory. It also adds /opt/rmb/lib to the configuration file for the dynamic loader.

\* Version 12.2

This version fixes a problem caused by trying to lock the keyboard process in memory without the proper privileges. It also improves the BASIC configuration by adding the execution directory to the search path (Note that logging out and logging back in is required for that feature to take effect).

\* Version 12.1-2

A new revision of version 12.1 fixes a serious defect in BASIC for Linux. The defect, which was in the support for extended character sets (two-byte mode), could have affected programs in unknown ways, possibly resulting in system errors.

The new revision of the BASIC RPM package is 12.1-2 and supersedes 12.1-1.

\* Version 12.1-1

This version provides limited support for the Japanese environment. In particular, it supports the "ja\_JP.SJIS" locale. Please read the file README.JAPAN file for more details.

In addition, this version includes the following defects fixes:

1. The SPOLL and PPOLL functions returned incorrect results in 12.0. The incorrect results were 256 times the correct result due to a byte ordering problem.
2. There was a defect in the LOAD/STORE statements which could cause corrupt PROG files on STORE, or could corrupt the program on LOAD or LOADSUB. This would only happen with programs which had already been RUN before being STORE'd. The most common case occurred when there were subprograms which contained COM statements of the form:

```
COM /X/ A(*),B$(*)
```

There were also some other unusual conditions which could trigger this defect.

Version 2.1 also adds the following enhancement:

An enhancement has been added which allows BASIC to change which SICL/LAN device it is connected to at run-time. If the .rmbrc file contains a statement such as:

```
interface 7="lan[abc]:hpib"
```

and you want to switch to a SICL/LAN device with the host name "def", then you can perform the following steps in your BASIC program:

```
LOADSUB Alter_interface FROM "/opt/rmb/utills/ALTER_INTERFACE"
CONTROL 7,256;0          ! disconnect from the current SICL/LAN device
CALL Alter_interface(7,"def","hpib")
CONTROL 7,256;1          ! connect to the new SICL/LAN device at "def"
```

Notes regarding the enhancement:

1. A new pseudo-register, 256, has been added for SICL/LAN devices.

Using CONTROL to write a 0 to this register will disconnect from the current SICL/LAN device. All @names which have been ASSIGN'ed to this device should be closed first. Also, do not disconnect the current device from the network, or turn it off, until a 0 has been written to register 256; otherwise, rmb may take a long time to execute the CONTROL statement, depending on how LAN timeouts have been configured.

Using CONTROL to write a 1 to this register will connect to a new SICL/LAN device (after using the CSUB Alter\_interface to specify the new SICL/LAN device to connect to). The new SICL/LAN device must already be turned on and initialized before writing a 1 to register 256 (powerup initialization may take 30 seconds or longer for some devices).

You can also use the STATUS statement on register 256 to find out the current state of the connection to a SICL/LAN device. If STATUS returns 0, then there is no connection. If STATUS returns 1, then there is a current connection.

2. A new CSUB Alter\_interface has been added to specify which SICL/LAN device to connect to. The CSUB is in "/opt/rmb/utills/ALTER\_INTERFACE". The shared library that it uses is in "/opt/rmb/utills/alter\_interface.so".

The CSUB declaration is as follows:

```
CSUB Alter_interface(INTEGER Vsc, Host$, OPTIONAL Remote_name$)
```

The Vsc parameter is an integer select code, which must match one of the SICL/LAN select codes specified with an interface statement in the .rmbrc file.

The Host\$ parameter is a string containing either a host name for the new SICL/LAN device, or its IP address in the standard . notation (such as "1.2.3.4").

The optional Remote\_name\$ parameter specifies the remote symname used by the SICL/LAN device, such as "hpib" or "gpib0". If the new SICL/LAN device has the same remote symname as the current device, then this parameter can be left out of the CALL to Alter\_interface.

\* Version 12.0

This version adds Compiled Subprograms (CSUBS) support. For more details on this feature, please read the file README.CSUBS in this directory.

[<>]