

***About this booklet***

This booklet describes the Beta release of RCom, the new, improved 3Link software which you should use instead of the MCLINK program supplied on the 3Link disk. **You are advised to use RCom in preference to MCLINK because RCom provides more functions and is easier to use.**

This booklet replaces the first two chapters of the 3Link manual; it tells you how to set up a link between a PC and remote computer using RCom. You should still refer to the 3Link manual for information about files and directories, file formats for file transfer, and the other applications supplied on the 3Link disk (the Comms application and the Script editor).

RCom supports computers in the Psion Series 3, MC and HC range. For the sake of convenience only the Series 3 is referred to in this booklet. (The Series 3a is referred to where instructions differ from those for the Series 3.)

**Instructions that you need to follow are indicated with numbers. Extra notes, which you may find useful, are indicated with a + symbol.**

## **What is 3Link?**

3Link allows you to transfer information to and from your Series 3, converting the expansion port on the left side of the Series 3 into an industry-standard RS-232 serial link. It is supplied with a disk of software that enables you to:

- access files directly on the PC from your Series 3, even from within the Word processor, Database etc.
- access the drives on your Series 3 from the PC as if they were drives on the PC.
- transfer files between your Series 3 and PC and control file transfer from either computer.
- back up the information stored on your Series 3 drives to the PC.
- print from your Series 3 to a printer that is attached to the PC.

- + The 3Link cable has both 9-pin and 25-pin connectors for connecting to different types of PCs. The PC half of the lead can be replaced by different leads for connecting to printers, modems, etc.

## **How 3Link works**

**3Link is more like a network connection than a file transfer program.** When you use RCom commands on the PC, the disk drives on the Series 3 are represented by substitute (virtual) drives on the PC. The PC's disk drives are shown as REM:: drives ("REM::" stands for "remote") when you control the link from the Series 3.

## **Connecting the 3Link lead**

1. Connect the two parts of the 3Link lead.
2. Connect either the 9-pin or 25-pin plug (whichever is the right size) on the 3Link lead to a serial port on the back of your PC. Use the one that is labelled COM1, if it is available, if not use COM2. Make a note of the serial port that you have used - you will need this information when you come to set up RCom.
  - + Modern PCs have 9-pin sockets on serial ports; older ones have 25-pin sockets. If you have just one serial port, its name is COM1; a second serial port would be called COM2, and so on.
3. With the Series 3 switched off, insert the small 6-pin plug on the 3Link cable into the expansion port (socket) on the left side of the Series 3.
4. Select the 'Remote link' option on the 'Special' menu and set 'Remote link' to 'On'. Make a note of the setting on the 'Baud rate' line - you will need this information when you come to set up RCom..

**Important:** Before you can use 3Link to transfer information between your Series 3 and PC, you must install the RCom software on the PC and set up RCom. Follow the appropriate instructions below, according to whether you use a Windows-based PC or a DOS-based PC.

## ***Users of Windows-based PCs***

### **To install the RCom software on the PC:**

1. Insert the RCom disk in your PC's disk drive and move to the Windows Program Manager or File Manager.
2. Select the 'Run' option from the 'File' menu.
3. Type A:\SETUP (or B:\SETUP if you have placed the RCom disk in the PC's B: drive) and press Enter to run the RCom installation program.
4. If you wish to install the RCom software in a directory other than C:\PSRCOM, type the drive and directory in which you wish to install it at the 'Install To' prompt. For example, to install it in a directory called RCOM on your C: drive you would type C:\RCOM
5. Press Enter to 'Continue' with the installation.

The installation program copies all the relevant files on the RCom disk into the specified directory. It then installs a new group called RCOM in the Program Manager which contains the following icons:

#### **Icon**

#### **Usage**

#### **RCom**

Running RCom.

#### **Setup**

Running the RCom Setup program. Setup allows you to change any of RCom's existing settings for file transfer, backups and printing.

- + The Setup icon actually runs the installation program SETUP.EXE without re-installing the RCom software.

#### **Backup**

Backing up the Series 3 drives that are specified with the RCom Setup program to the PC.

- + The Backup icon actually runs a batch file called RBACK.BAT which is copied to the PC as part of the installation process. This batch file utilises the RCom BACKUP command to backup files to the PC.

#### **RPrint**

Printing from the Series 3 to the printer that is attached to the PC and set up with the RCom Setup program.

- + The RPrint icon actually runs a program called RPRINT.EXE which is copied to the PC as part of the installation process.

This booklet gives information about the above icons.

When the installation process is finished, the RCom Setup program is run automatically.

## ***Setting up RCom on Windows-based PCs***

**RCom Setup is used to configure the link between your Series 3 and PC for file transfer, backups and printing.** It is run automatically at the end of the RCom installation process. You can also run it from its icon in the Program Manager whenever you need to change any of RCom's existing settings.

### ***To reset to the initial (default) RCom settings***

1. Select the 'Defaults' button.

### **To change the remote computer, baud rate and PC port used**

1. Select the appropriate options for 'Computer', 'Baud' and 'Port'. (You should have noted down the settings for 'Port' and 'Baud' when you followed the instructions for 'Connecting the 3Link lead' above.) For example:

Computer:                Series3                Baud:        9600    Port:    COM2

- + The setting for 'Computer' can change the 'Baud' setting (and even change the range of available settings it can take). For a Series 3a you should set the 'Baud' to 19200, for all other computers you should set 9600.
- + Any port that is selected as a 'Printer port' (see below) will not be available in the 'Port' list.

### **To change the letters that represent your Series 3 drives**

1. Select the current setting that you wish to change from the 'Current drive map' list, for example I: Internal, and use the 'Remove' button.
2. Select the new letter that you wish to use from the 'Use drive letter' list, for example Q:, then select the Series 3 drive that you want it to represent from the 'For remote drive' list and use the 'Add' button.

### **Setting up backups**

1. Type the PC drive and directory in which you wish to keep the backups as the 'Backup path', for example C:\S3BAK
  2. Specify the Series 3 drives that you wish to include in the backup by selecting the appropriate check boxes from the 'Drives to backup' list. (When a check box is selected, it contains an X. To de-select a check box you simply select it again.) For example, to backup just the Series 3 Internal drive you would de-select the check boxes for both the Series 3 SSD drives.
- + The 'Drives to backup' list includes only the letters that are set up to represent Series 3 drives in the 'Current drive maps' list.

### **Setting up printing**

1. Select the PC port to which the printer is connected from the 'Printer port' list. (The PC port which you have specified as the 'Port' connected to the Series 3 will not be available in the list.)
2. If your printer requires it, type the appropriate number of seconds for the 'Activity timeout'.
  - + The 'Activity timeout' setting specifies the amount of time that the PC can remain connected to the printer without printing before the connection is automatically broken.It is normally only required for printers that are attached to the PC via a Local Area Network (LAN) which requires the connection to the printer to be opened and closed between print jobs.

**For more information about changing RCom' ssettings:** use the Help button on the RCom Setup screen.

### **Other software on the RCom disk**

The final RCom disk will also contain the following pieces of software:

#### **Software**

#### **Usage**

RTF (Rich Text Format) Drivers

Enabling the Series 3 Word processor to handle RTF files. Once the drivers are copied onto the

Series 3 you can interchange RTF files between the Series 3 Word processor and other word processors that can save and load RTF files. For more information .....

Printer Drivers

Enabling the Series 3 to print to a larger range of printers. For more information.....

## ***Users of DOS-based PCs***

### **To install the RCom software on the PC:**

1. Type `A: DOSSETUP` at the DOS prompt followed by the drive and directory in which you wish to install RCom software, then the name of the remote computer that you are connecting to your PC: `series3`, `series3a`, `hc`, or `mc` (in this format). For example:

```
A: DOSSETUP C:\TOOLS\S3A\ SERIES3A
```

```
A: DOSSETUP C:\RCom\ HC
```

**Important:** Don't forget to type a space before the name of the remote computer.

- + If you have a hard disk, you may wish to create a specific subdirectory for the RCom files. You can then use the DOS command `PATH` to set up a path to the RCom directory and use `PATH` in your `AUTOEXEC.BAT` to allow you to run RCom from any directory on your PC. See your DOS manual for more details of how to do this.
- + If you don't specify the machine that you wish to connect to the PC, the default RCom setup, for the Series 3a, will be installed. This runs at 19200 baud.

The installation program copies all the relevant files on the RCom disk into the specified directory.

## **Running RCom on DOS-based PCs**

Type `R.COMD`

**Important:** If the directory containing the RCom software is not in your PATH, change to this directory before typing the command to run R.COMD

**When you use RCom you need to set up the link between the remote computer and the PC.** This means telling RCom which of the PC's serial ports the 3Link lead is plugged into, what 'Baud rate' the Series 3 is using and which letters you wish to represent your Series3 drives. (You should have noted down the settings that you are using for 'Port' and 'Baud' when you followed the instructions for 'Connecting the 3Link lead' earlier in this booklet.)

The settings are initially as follows:

### **Baud**

19200 or 9600 (according to the type of remote computer that you specified when you installed the RCom software).

### **Port**

COM1

### **Drive letters**

<b>Remote computer</b>	<b>PC</b>
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M: (Internal)	I:
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A:	L:
----	----

B:	R:
----	----

You can change some of the above settings by using a switch on the command line when you run RCom:

### **Setting**

#### **How to change it**

#### **Baud**

Use the switch /B - eg `R.COMD /B9600`

#### **Port**

Use the switch /P - eg `R.COMD /PCOM2`

#### **Drive letters**

Use the SUBST command when RCom is running. Type `help SUBST` for more details.

Alternatively, you can edit the `AUTOR.COM.BAT` file from which RCom takes its SUBST settings to include the letters that you wish to represent the drives on your Series 3.

## **When RCom is running**

RCom displays a prompt similar to DOS. However, the prompt **always** has a right-pointing chevron character to remind you that you are not using DOS itself. If you are using RCom with Windows, the RCom prompt appears in a DOS-type window.

If RCom does not run as described above, refer to the Troubleshooting section later in this booklet.

**Important:** Make sure that the 'Remote link' option on the Series 3 is turned 'On' before attempting to transfer any information.

### **What you can do**

You can now use RCom commands to transfer information between the PC and Series 3 (see later), or use the Series 3 menu options to control the link from the Series 3.

**Important:** If you open either of the SSD drive doors, 3Link cannot communicate until you close it again. Although you should not lose any information if the link is controlled by handshaking or a file transfer protocol, **it is safest not to open either of the SSD drive doors when 3Link is in use.**

- + 3Link is powered by the Series 3 when in use. If your Series 3 is powered by batteries, using 3Link will reduce the battery life to some degree. When battery power is too low to use 3Link, the Series 3 may suddenly turn off.

## **When you have finished with 3Link**

1. Type `QUIT` at the RCom command prompt to exit RCom.
2. Select the 'Remote link' option on the Series 3's 'Special' menu and set the 'Remote link' line to 'Off'. It is important to do this otherwise:
  - You will have less internal memory available on your Series 3.
  - You will waste battery power. When 'Remote link' is 'On' and the 3Link cable attached, the Series 3 uses several times more power than normal. Even when the cable is removed, if 'Remote link' is 'On' the Series 3 uses slightly more power than normal.

## **About RCom**

You can run RCom at any time, you do not need to exit any applications or reboot, and do not need to have any memory resident programs loaded. RCom multi-tasks properly under Windows, and runs in the background.

You do not need to close down any open files before using any of RCom's file copying commands, e.g. `BACKUP`. (Copying files or backing up only fails when a file cannot be closed down, e.g. because it is busy.)

You can start and stop applications on the Series 3 from RCom. RCom even handles automatic closing of applications on the Series 3.

RCom can run *batch files* of commands. These will usually look just like DOS batch files - they may even be DOS batch files as RCom's commands are so similar to DOS commands.

### **RCom commands**

RCom has a number of DOS commands which perform similarly to their DOS counterparts, for example `COPY`, `DEL`, `FIND`, `PATH` and `XCOPY`. For a full list of available commands, type `help` at the RCom prompt. For details about a specific command, type `help` and then the command name,

for example type `help REPLACE` for help on the REPLACE command.

- + RCom has XDEL functionality as part of its DEL command. To use it, type the /S switch at the end of the DEL command line. For example type `DEL L:\WRD\*.* /S` to delete all the files in the \WRD directory on the drive represented by the letter L:, including those in subdirectories.
- + RCom reports errorlevels after each command. You can use the DOS-standard IF command (i.e. IF ERRORLEVEL...) to test the success or otherwise of the previous command. The values returned are not quite the same as in DOS - in general the only values returned are 0 for success and 1 for failure.

RCom also has the following commands which are **not** equivalent to any DOS commands:

**Command**

**Usage**

**BACKUP**

Backs up a drive on the Series 3 to the PC. (This command is **not** the same as the DOS BACKUP command - see later for more information.)

**COMPRESS**

Copies a (Flash) SSD, formats it and then copies the files back. This reclaims the space used by deleted files.

**EQUALISE**

Makes the files in two directories the same by copying missing/updated files between the two directories.

**QUIT**

Quits RCom, even in nested batch files.

**XABB**

Displays, sets or removes command abbreviations.

**XR**

Displays or recalls the command line history.

**XRECALL**

Displays or recalls the command line history.

**XSTAT**

Displays the remote link status and sets the errorlevel.

**XSTOP**

Stops programs that have open files on a Series 3 drive.

**XWAIT**

Waits for a remote link or until a specified time.

**Important:** The non-DOS file copying commands like BACKUP and EQUALISE use XCOPY's functionality in order to copy files. To see a list of the *switches* (options) supported by the RCom version of XCOPY, type `help XCOPY` at the RCom command prompt.

**Using BACKUP and COMPRESS**

If you use a Flash SSD, you should ideally use the BACKUP and COMPRESS commands in conjunction with each other to manage copies of the files that the Flash SSD contains.

For example, if you normally back up to the C:\S3BAK area on the PC and wish to compress the information on the Flash SSD in the Series 3's A: drive, use the command:

COMPRESS L: C:\S3BAK\A

to compress the files on the Flash SSD and add a copy of the files to the C:\S3BAK\A backup area at the same time.

### **About BACKUP**

The BACKUP command can be used directly from the RCom command prompt. It is also utilised by the Backup icon installed in the Program Manager on Windows-based PCs.

BACKUP does an *incremental* XCOPY of the Series 3 drives (i.e. it copies only changed files). It works out which files to copy by the file dates and sizes, not the "archive" (or "modified") bit.

**Important:** If all you have done to a Database or Agenda file is to delete one or more entries, BACKUP cannot tell that the file has been changed (because there will have been no change to the file date or size), and so the file will not be included in the backup.

- + BACKUP backs up and restores hidden and system files, maintaining these attributes.
- + BACKUP uses a separate backup scheme to the one built into the Series\~3 System screen.
- + You can use the /F switch with the BACKUP command if you wish to BACKUP all your files, regardless of whether they have been changed or not. Alternatively, you can simply backup to a different area on the PC. (Type `help BACKUP` for more information.)

If you have copies of Series 3 files in your backup area on the PC which no longer exist on your Series 3, BACKUP archives them into an @ARCHIVE subdirectory of the backup area. For example the archive subdirectory of the backup area C:\\S3BAK\\\\ would be C:\\S3BAK\\\\ @ARCHIVE\\. Any subsequent RESTORE command ignores this archived backup area.

- + You can use the /A switch with the BACKUP command to suppress archiving of files which are no longer on the Series 3. (Type `help BACKUP` for more information.)

### **About COMPRESS**

COMPRESS is similar to performing a BACKUP, FORMAT, and RESTORE on the specified drive; it does **not** reclaim the space taken by deleted records in Database and Agenda files. To reclaim the maximum amount of space, compress Database and Agenda files on the Series 3 **before** issuing the COMPRESS command.

If files already exist in the PC directory that you specify with the COMPRESS command, they are overwritten if they have corresponding files of the same name on the Series 3, and are moved into an @ARCHIVE subdirectory if they do not.

The copy of the files on the PC is **not** deleted automatically when the COMPRESS process is finished.

COMPRESS, unlike BACKUP, copies the whole disk by default; it does **not** copy just the files that have changed.

- + You can use the /R switch with the COMPRESS command if you only wish to copy files that have changed since the last backup to the backup area on the PC before formatting the disk. Type `help COMPRESS` for more details.

**Important:** If all you have done to the files on the Flash SSD since the last backup or compress is to delete an entry in a database or agenda, the deleted entries will reappear after the compress if you use the /R flag in this way.

## **Example uses of RCom**

In the following examples RCom is already running and is set to use the default letters to represent drives on the Series 3 (I: for the Series 3 Internal drive, L: for the SSD drive A:, and R: for the SSD drive B:).

### **Backing up information to the PC**

**Windows based PCs:** just select the Backup icon to back up the Series 3 drives which were specified for Backing up (in the RCom Setup program).

**DOS-based PCs:** you can back up any of the Series 3 drives from within RCom. The following example backs up files on all three drives of a Series 3 to the S3BAK directory on the PC's C: drive.

- + Windows-based PC users may also wish to use the BACKUP command in the following way, for example when Rcom is currently set to backup just the Series 3 Internal drive with the Backup icon.

1. Type `BACKUP I: C:\S3BAK\I\` at the RCom prompt.

This copies all the files on the Series 3 internal disk to C:\S3BAK\I\.

2. Type `BACKUP L: C:\S3BAK\A\`

This copies all the files on the Series 3 A: SSD drive to C:\S3BAK\A\.

3. Type `BACKUP R: C:\S3BAK\B\`

This copies all the files on the Series 3 B: SSD drive to C:\S3BAK\B\.

- + If the destination directory does not exist on the PC, it is created automatically.
- + Windows-based PC users: you need to enter the location where the backup is to be stored only if it is different than the location you specified with RCom Setup.

### **Compressing information on an SSD**

This example compresses the information stored on an SSD in the Series 3 A: drive to free some memory.

1. Type `COMPRESS L: C:\TMP` at the RCom prompt.

2. Type `Y` to confirm.

This copies all the files on the SSD in the Series 3's A: drive to C:\TMP on the PC, formats the SSD and then copies back all of the files from C:\TMP.

- + You can use the /N switch with the COMPRESS command to turn off confirmation of formatting. Type `help COMPRESS` for more details.

3. Type `DEL C:\TMP\*.*` to delete the copies of the files on the PC.

### ***Synchronising files on an SSD and the PC***

This example makes the files in the \WRD directory of an SSD in the A: drive of a Series 3 the same as those in the C:\S3\WRD directory on a PC. You might wish to use the EQUALISE command in this way to restore files that you have deleted from your Series 3 without doing a full RESTORE.

1. Type `EQUALISE L:\WRD C:\S3\WRD` at the RCom prompt.

- + To make the files in subdirectories of the specified directory the same, use the /S switch with the EQUALISE command. In the above example you would type `EQUALISE L:\WRD C:\S3\WRD /S`
- + EQUALISE compares files by file name, size and date. If you have two files with the same name, EQUALISE will retain the file with the most recent date. **Beware if you have two or more unique files with the same name as the file with the most recent date will overwrite the other files!**

### ***Printing a file from the Series 3 to a printer attached to the PC***

This example prints a Word file from the Series 3 to a postscript printer attached to the COM2 serial port on the PC.

- + The printer can be connected to the PC's parallel or serial port.

1. **Windows based PCs:** use the RPrint icon in the Program Manager.

- + The 'RPrint' icon in Windows simply runs the RPRINT.EXE program using the settings in the RCom Setup program; printing through Windows and DOS-based PCs is otherwise the same.

**DOS-based PCs:** type RPRINT, then the name of the port to which the printer is attached, and then -C followed by the name of the port to which the Series 3 is attached. For example:

```
RPRINT LPT1 -CCOM1
```

This runs the RPRINT.EXE program which was copied onto the PC as part of the installation process.

- + You can use a number of switches on the command line to run RPRINT on DOS-based PCs, for example to suppress printer status messages. See the RPRINT documentation on the 3Link disk for more details.
2. Use the 'Printer setup' option on the Series 3 System screen (the 'Printer' option on the Series 3a) and set the 'Printer device' to 'Serial'.
  3. In the Word application, open the file you want to print.
  4. Use the 'Print setup' option to set the 'Printer model' to 'Postscript'. Modify the page layout, if you need to.
  5. Use the 'Print' option to print the file.

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Version 0.9      June 1994

Part no. ...      English