

*Ultrasoft*  
Toolbox II

for the Sinclair QL

QClone+ is an extension to the QL-Superbasic, which enables you to make backup-copies of almost every program by the use of simple Basic commands.

The following new keywords are available:

CAT	- prints a detailed catalogue of a medium
DEV_USE	- sets up two devices for copying
USE_M	- sets devices to Microdrive 1 and 2
USE_F	- sets devices to Floppy 1 and 2
CLONE	- copies a list of files
CLONE_ALL	- copies all files on a medium
CHANGE	- patches a string in a file
CFORM	- copies the format of a MD-cartridge
CLEAN	- does a limited garbage collection
INFO	- displays system values
SET_BUFFER	- sets a minimum save/load buffer for QDOS
KEYS_ON	- switches function-keys on
KEYS_OFF	- switches function-keys off
ACL_ON	- switch auto-clean on
ACL_OFF	- switch auto-clean off

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## 1. Syntax of the commands

1.1 CAT (#chn,)dnr  
(chn = channel for printing, dnr = device number, Default: chn = 1)

This command works similar to the DIR command, but gives the user more information about the files.

CAT uses the devices which were defined by the DEV\_USE command. The number, which is displayed in front of every filename is the file number used for CLONE and CHANGE.

EXECutable files are marked by an asterisk (not on M/Drive).

Example: CAT#2,1 displays a detailed catalogue of the device 1 in screenwindow 2. If you haven't defined the devices by DEV\_USE this would be MDV1\_.

- 1.2 DEV\_USE 'dev1'(',dev2')  
(dev1 = device 1, dev2 = device 2, max. 4 characters each,  
Default settings: dev1 = 'MDV1', dev2 = 'MDV2')

This command defines the devices for copying (CLONE, CLONE\_ALL) and the CAT and CHANGE commands.  
Each name must have 3 characters and a number, e.g. 'FLP1'.  
If you define only 1 name or if both names are equal, single-drive copy is assumed. You will then be prompted, if a change of the medium is required.

Example: DEV\_USE'flp1','mdv1' will setup FLP1 as device 1 and MDV1 as device 2, so that 'CAT 1' would result in a directory of FLP1\_.

### 1.3 USE\_M

Shortform for DEV\_USE'mdv1','mdv2'. This is the initial setting.

### 1.4 USE\_F

Shortform for DEV\_USE'flp1','flp2'.

### 1.5 CLONE TO dvn;fnr(,fnr,...)

(dvn = device number, fnr = file number, max. 10 files)

CLONE is to be used for copying a single file or a list of files. The file numbers are those, which are displayed by CAT, so that there is no need to type in the filenames.  
The devicenumber is the number of the destination device.

Example: You want to copy some files from MDV2 to FLP1. Let us assume, that these are the files 1,3,4,8 and you have already set MDV2 as device 1 and FLP1 as device 2.

Now there are two possible ways to do this:

```
FOR n=1,3,4,8:CLONE TO 2;n
```

and

```
CLONE TO 2;1,3,4,8
```

Both of these will work perfectly, but the second would be much faster, because your QL will store as much files as possible in memory before saving, if you use the file-list facility.

### 1.6 CLONE\_ALL TO dvn

(dvn = device number)

This command works in the same manner as CLONE with a file-list, but copies all files of a device to another.  
CLONE\_ALL is very fast, because it stores as much files as possible in memory before saving.

Example: To copy all files from MDV1 to FLP1 you only have to type CLONE\_ALL TO 1, assumed that FLP1 is device 1 and MDV1 is device 2.

### 1.7 CHANGE dvn,fnr,old\$,news

(dvn = device number, fnr = file number,  
strings to change must have same length, max. 10 characters each)

This command allows you to patch a string in a file, e.g. the devicename in a BOOT-file after copying it to disk. The strings are searched case independent, that means 'mdv' and 'MDV' are equal while searching the file for it, but the old string will exactly be replaced by the new string you have defined.

Examples:

CHANGE 2,4,'mdv','flp' would change all 'mdv' to 'flp' in file 4 on device 2.

FOR n=1 to 9:CHANGE 1,n,'mdv1','mdv2' swaps 'mdv1' to 'mdv2' in all files on device 1, assumed that there are 9 files on it.

#### 1.8 CFORM TO mnr

(mnr = Microdrive number, 1 and 2 only)

With this command you are able to copy the format of secured MD-Cartridges. These are the programs which need the original cartridge as a key to start the program. After copying the format the backup will be accepted as the original, too.

The mnr ist the number of the destination drive, but be careful:

The cartridge will be formatted !

But don't get nervous when the source drive is running first, because QClone+ has to read the original format first.

Example: CFORM TO 2:CLONE\_ALL TO 2 will copy a whole cartridge from MDV1 to MDV2 including the format, assumed that MDV1 is device 1 and MDV2 is device 2 (default settings).

It's not gentlemen-like to use this facility for piracy !

#### 1.9 CLEAN

This command does a limited garbage collection and deletes all unused items in the common heap.

When making several CFORMS after another, CLEAN should be used between them, otherwise QDOS might get a little bit confused. CLONE and CLONE\_ALL perform a CLEAN automatically.

#### 1.10 INFO (#chn)

All QClone parameters and the amount of free memory are displayed when using this command.

1.11 SET\_BUFFER KBytes (Default: 16 KB)

This command defines a minimum amount of buffer for the Qdos Filing-System. Normally there's no need to change the default setting, but when copying very large files on a unexpanded QL it might happen, that there is not enough memory to store the file. In this case you have to use the COPY command or decrease this buffer size.

But be warned: If it's too small, saving becomes very slow.

Example: SET\_BUFFER 4 sets the buffer size to 4 KBytes.

1.12 KEYS\_ON, KEYS\_OFF (Default: ON)

These commands switch the QClone+ function-keys ON or OFF. They are installed to make QClone+ easier to use, but should be switched off when using other programs, e.g. QUILL. The following keys are used:

Key	Function
-----	-----
F1	CAT
F2	DEV_USE
F3	CLONE TO
F4	CLONE ALL TO
F5	CHANGE
SHIFT-ENTER	repeats last command line

1.13 ACL\_ON, ACL\_OFF (Default: ON)

These commands are used to switch the automatic CLEAN after CLONE and CLONE\_ALL on or off.

It should be switched off when used in conjunction with UltraDisk.

## 2. Error messages and warnings

- 2.1 **fnr: Not enough memory - please use COPY**  
(fnr = file number)

The file to be copied does not fit into memory. Copying continues with the next file, if there is one.

- 2.2 **fnr: File does not exist**  
(fnr = file number)

Occurs if there's a file in the file-list for CLONE that doesn't exist. Copying continues.

- 2.3 **Warning: File too big for medium**

The last file copied might be corrupted, because it doesn't fit on the destination medium. (You'll better delete it.)

- 2.4 **Warning: File already exists**

The file to be copied already exists on the destination medium. Copying continues with the next file.

- 2.5 **Strings not of same length**

The two strings for CHANGE must be of the same length.

- 2.6 **Strings too long**

Maximum stringlength for CHANGE is 10 characters.

- 2.7 **Too many files**

A maximum of 10 files can be copied with CLONE.

- 2.8 **SYNTAX: ...**

If you use a QClone+ command in a wrong manner, then this message will display the correct syntax for the command.

### 3. Transferring QClone+ to disk

The following short program will transfer QClone+ onto a disk:

```
10 DEV_USE'flp1','mdv1'  
20 CLONE_ALL TO 1  
30 CHANGE 1,1,'mdv','flp'
```

QClone+ can now be booted from the disk.

WARNING: Never CHANGE the main program of QClone+ !!!

### 4. Compatibility

QClone+ runs on the following QL-Versions: AH, JM, JS, MG and JSU.

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-Because it was much work in many sleepless nights to write QClone+, it would be very marvellous from you, if you would not give away this program to friends or other people.

Thanks a lot,

signed: Martin Berndt

## 1. The Standard RAM-Disk

### 1.1 Loading

To load the RAM-Disk driver the following command line has to be typed in:

```
LRUN mdv1_ramdisk <ENTER>
```

The driver is installed when the Ultrasoft logo appears.

### 1.2 Formatting

The RAM-Disk is created by formatting it. The size in sectors must be given place of the usual medium name. If no size is given the RAM-Disk will be deleted.

Example:           FORMAT ram1\_200 or FORMAT ram2\_50 etc.

### 1.3 Accessing the RAM-Disk

All filing system commands will work with the RAM-Disk, provided the filename starts with RAM instead of MDV or FLP.

Examples:           DIR ram1\_           prints a directory of RAM1  
                  SAVE ram1\_test       saves file 'test' to RAM1  
                  COPY ram1\_e,mdv1\_e   copies a file named 'e' to MDV1

### 1.4 Emulation

The Standard RAM-Disk also includes a command to change the name of the RAM device.

```
RAM_USE 'mdv'
```

sets the name of the RAM device to 'MDV', so that all subsequent calls for microdrives will access the RAM-Disk instead.

### 1.5 Compatibility

The Standard RAM-Disk is compatible with all QDOS commands and extensions.  
All the QClone+ commands will work correctly with the RAM-Disk, too.

Example:           DEV\_USE'ram1','mdv1':CLONE\_ALL TO 1 would copy all files from MDV1 to RAM1, provided that a RAM-Disk has been created by FORMAT.



## 2. The High-Speed RAM-Disk

### 2.1 Loading

Type the following command line to load the High-Speed RAM-Disk (HSR):

```
LRUN mdv1_ultradisk
```

The driver is initialized when the logo appears.

### 2.2 Formatting

In normal use the HSR needn't be formatted at all, because it is fully dynamic. But for some programs (e.g. QUILL) it is necessary to format, because otherwise the program might grab all the RAM available. Different to all other RAM-Disks, files in the HSR will not be erased when formatting. Just the size of the RAM-Disk is changed. To erase a RAM-Disk completely you have to format it without giving the number of sectors, e.g.:

```
FORMAT udk1_
```

### 2.3 Accessing the HSR

Please refer to 1.3, but use 'udk' instead of 'ram'.

### 2.4 Emulation

Please refer to 1.4, but use UDK\_USE instead of RAM\_USE.

### 2.5 Compatibility

The HSR may co-reside and interact with the Standard Ramdisk concurrently in memory.

Because of the dynamic layout the HSR might be incompatible to some programs, including QLone+.

Caution:

CLEAN will destroy all files in the HSR !

## ULTRASOFT DISK MONITOR

EXEC W DISKMON  
EXEC DISKMON (Ctl/c job control)

The disk monitor is a menu driven monitor.

### Main Menu:

F1 a directory - enter drive number. Esc to return.  
F2 file editing - enter drive number and exact file name, i.e 1 (enter) filename\_doc. Handling menu appears.  
F3 sector track editing - enter drive number, track number, sector number. Handling menu appears.  
F4 refresh.  
F5 exit to Superbasic.

### Handling Menu:

F1 next half sector.  
F2 write the edited sector.  
F3 the next sector.  
F4 the previous sector.  
TAB toggle between HEX and ASCII representation.  
F5 quit editing procedure.

Diskmonitor also edits the sector headers for all known disk systems except MP.

SIMPLE AND SAFE TO USE - JUST ENTER THE HEX OR ASCII CODE ON SCREEN BEFORE WRITING THE SECTOR.

## ULTRASOFT CLOCKS

LRUN CLOCK4  
LRUN CLOCK8

After loading a clock just depress Shift/Alt for a real multitasking clock that does not run as a job. This allows the further use of respr. Ideal when working with the Psion package. It does not disturb the background and you when you are working.

Use clock4 for mode 4 and clock8 for both modes( 4 & 8 ). Do not forget to set the ql clock when booting for the first time with SDATE.

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