

**IceArc**

**COLLABORATORS**

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# Chapter 1

## IceArc

### 1.1 IceArc - Main - (C) S.Gillibrand 1996 - Digital Design

```
IceArc
Multi Format Programmable File Extraction System (phew :!)

Version 1.33
(C) Copyright 1996 S.Gillibrand - Digital Design Productions

FREEMWARE

What Is IceArc?

System Requirements

How Do I Install IceArc?

Usage

BrainFile Editting

RAM:IceArc.Results

Known Bugs

History

How To Contact The Author

What/Who Is Digital Design?
```

### 1.2 IceArc - What The Hell Is This? - (C) S.Gillibrand 1996 - Digital Design

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What Is IceArc?
+-----+
```

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IceArc is a MFPPES! (: multi-format programmable file extraction system :-), design by me because I was sick of all the other "Multi-Extractors" out there - Like LX, DeCompress, UnArchive, Etc. Etc. - They all had quirks like one didn't WORK at all, another was compiled arexx (urgh!) and LX (The best I had seen) didn't allow a "<DEST>" parameter (because of ZIP/etc. not taking that - But that's just a lame excuse IMHO). Not only is it configurable but it does what I haven't seen ANY other multi-unarc'er do - It:

- \* Tests
- \* Deletes
- \* Adds
- \* Lists

Making IceArc truly versatile.

So here is IceArc - IceArc loads a brainfile every time it is executed, this brainfile contains data on how to identify/handle/execute certain file formats and thus making IceArc compatible with \*ANY\* archiver (in theory). This is what makes IceArc so special :) It's great for:

- o BBS's unarchiving files to be virus checked.
- o Can also be adapted to view JPEGs upon recognition of such a file!
- o It also works a treat with DOpus - Configure the "Drag-M-Drag" to use IceArc and it will unarchive ANYTHING from the <source> to the <destination>!
- o Makes Mail Tossers life a dream - Unarchiving LZX/LHA/ZIP/ARJ/ARC/RAR for import.

Those are just a few of the uses IceArc can be put to - Now retrace (:) and take a look how to install IceArc and how to configure the BrainFile!

### 1.3 ICEARC - System Requirements - (C) S.Gillibrand 1996 - Digital Design

System Requirements

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- 1) An Amiga ;- ) <Why is it EVERY guide has this in - It's not funny ;0>
- 2) OS 2.0+
- 3) Archiver EXE's in search path. (e.g. C:LHA, C:LZX, C:ZIP, C:UNZIP).
- 4) Erm, hhuhuhuhuh - SHUTUP BEAVIS, right - erm, That's it :)

### 1.4 IceArc - How To Install IceArc - (C) S.Gillibrand 1996 - Digital Design

How Do I Install IceArc?

+-----+

Follow these simple steps OR use the provided C=ommodore Installer script.

1. Copy c/IceArc into your search path (reccomend "C:").
2. Copy s/IceArc.brain to "S:".

3. copy docs/IceArc.guide to your docs dir (reccomend "AMIGAGUIDE:").
4. Read how to edit the Brainfile.
5. EDIT IT! (If Needed :o))

Told yer it was simple ;-)

## 1.5 IceArc - Usage - (C) S.Gillibrand 1996 - Digital Design

Usage

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Self explanatory really!

IceArc -<Operation> <Source Archive> [Destination Path]

\_Operation\_ being one of:

- ! - display archive format
- x - unarchive <Source Archive> to [Destination]
- a - add [Destination] to <Source Archive>
- d - delete [Destination] from <Source Archive>
- t - test <Source Archive>
- l - list <Source Archive>

% - list known formats (read the docs for archive programming info)

- e.g. "IceArc -l flist\_2b11.lha" would list the archive contents to STDIO  
 "IceArc -! flist\_2b12.lha" would display the archive format to STDIO  
 "IceArc -x upl11.lha ram:" would extract upl11.lha to RAM:  
 "IceArc -a ta2.lha S:User-Startup" would add S:User-Startup to TA2.lha  
 "IceArc -d f2.lha (?.c|?.foo)" would delete ?.c & ?.foo from f2.lha

Supplying no options will result in IceArc displaying the format and quitting  
 If no Destination is specified then IceArc defaults to "Ram:"

Quotation Marks (") for files with spaces are supported. e.g. "Fire Starter.lha"

Wildcards for source filenames are now fully supported.

Upon recognition of a DMS File IceArc will attempt to read data from a file in ENV: called "IceArc\_FF" - inside this file there should exist a device name to which IceArc will "UNDMS" the dms file to. FF0: is reccomended, RAD: or (in the worst case senario) DF0: could be used also, after "UnDMSing" IceArc will attempt to copy the contents of this device to the original directory (if it is DOS) therefore making it possible to "UnDMS" to a directory!

Report any bugs to  
 Me  
 please.

## 1.6 IceArc - Known Bugs - (C) S.Gillibrand 1996 - Digital Design

## Known Bugs

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None.

**1.7 IceArc - History - (C) S.Gillibrand 1996 - Digital Design**

## History

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## \*Version 1.0

-----  
Date           Details28-Mar-96   First Public Release Of IceArc.  
-----

## \*Version 1.1-1.2

-----  
Date           Details??-??-96   Internal Alpha/Betas of IceArc, limited distribution.  
            Bug fixes/faster/code optimised.  
-----

## \*Version 1.3[1][2]

-----  
Date           Details

19-Apr-96   Default destination now changed to Current Directory instead of RAM:.  
[0][1][2]   Destination path can now contain a trailing "/" or not, totally ←  
            optional.  
            If destination path doesn't exist, IceArc will attempt to create it.  
            Now excepts source/destination with [Spaces] in them.  
            Now auto-detects DMS Files and will unarchive them to a Fake Device  
            as defined in ENV:IceArc\_FF and then will attempt to copy file(s) to the  
            original destination! :).

            Heavily optimised code some more :).

            Now when using "-a" if the SOURCE archive doesn't exist IceArc will  
            list all known archives and ask you which flavour you'd like the NEW  
            archive to be in! [Amazing!!].

            Now uses dynamic stack allocating code.  
            Main structure now hits the memory direct instead of stack allocation,  
            10000 bytes of stack should suffice for IceArc.  
            Now accepts amigados wildcards for source filepath.  
            Cleaned up the source and formatted printing some more.  
            Some Auto-Variables now given their own register for greater speed.  
            Now fully expands most path names for greater archiver compatibility.  
            Amended typos in the GUIDE file :).

[3]         Fixed bug whereby when creating a NEW archive the input from the user  
            was discarded and replaced with "0"  
            Oops :) That's what you get from using "auto-variables" - Wildcard  
            file scanning now uses malloc() instead of the stack :).  
            Creates a file called RAM:IceArc.Results which contains details on

which files Failed/Successful. (See GUIDE).  
IceArc will use at maximum 60k of MEMF\_ANY memory during operation, all  
of which will be freed when it is complete.

-----01-May-96--

## 1.8 IceArc - How To Contact The Author - (C) S.Gillibrand 1996 - Digital Design

How To Contact The Author

+-----+

Please do contact me for  
    Bug Reports  
    or  
    Improvement  
    ideas that you have.

You can contact me via the following methods:

BBS:

Digital Dreams Amiga BBS UK - 44-1772-454995 - 24 Hours

NETMAIL:

2:250/602.0

E-MAIL:

psychoed@digitald.demon.co.uk  
sysop@digitald.demon.co.uk

SNAIL MAIL:

Stuart Gillibrand,  
8, Thornton Drive,  
Farington Moss,  
Leyland,  
Preston,  
Lancashire.  
PR5 3QH  
ENGLAND

Don't hesitate to contact me no matter how trivial the matter.

## 1.9 IceArc - The Famous Digital Design! - (C) S.Gillibrand 1996 - Digital Design

What/Who is Digital Design

+-----+

Digital Design is a group of people who code all types of programmes for BBSs  
around the world, TransAmiga, DLG, Xeno, ANY Basically.

It was founded by

---



Stuart Gillibrand  
in February 1995.

President: Stuart Gillibrand - psychoed@digitald.demon.co.uk  
Vice President: Jamie Prince - cosysop@digitald.demon.co.uk

Programmers:  
Stuart Gillibrand  
Jamie Prince

ANSI Artists:  
Stuart Gillibrand  
Jamie Prince

Documentation writers:  
Stuart Gillibrand  
Jamie Prince

Ideas:  
Stuart Gillibrand  
Jamie Prince

If you would like to join Digital Design as a Programmer, Doc Writer, Artist or Idea Conceptor (!?) then contact

ME

.

We ONLY accept programming in the languages:

Arexx, C, E and ASM.

You will need to show us an example of your skill if you wish to join, which both Jamie and I will look over before contacting you.

## 1.10 IceArc - How do I edit this BRAINFILE then !?! - (C) S.Gillibrand 1996 - Digital Design

Ok here's what a segment of my example brainfile looks like:

```

--><-----
LHA/LZH Archive          <- Archive Label (ID)
3                        <- Characters to skip before SIGNature is read
-lh                      <- The signature to look for (case sensitive!)
lha -X -F -M x %s %d <NIL:  <- The extract command (% commands listed below)
lha -X -F -M t %s <NIL:    <- The test command
lha -X -M v %s <NIL:      <- The list command
lha -X -F a %s %d <NIL:    <- The add command
lha -X -F d %s %d <NIL:    <- The delete command
--><-----

```

[ % Parameters ]

%s = Source File

%d = Destination File

Now here's what IceArc would do if the brainfile contained that SINGLE entry and it was given a file called "MadAsAHatter.lha" ([:]) (File is an LHA archive)  
- Option given was "-x" - Destination was "ram:";

```

Skip first 3 characters:          &a-
Read next 3 and compare against "-lh"  -lh
-* match found *-
Get extract command line        lha -X -F -M x %s %d <NIL:
Parse command line              lha -X -F -M x madasahatter.lha ram: <NIL:

```

Fairly simple if you let it sink in... The only difficulty in adding a new archiver might possibly be finding a signature - Well the best way to find a sig is as follows:-

1. Find 5-10 files of the SAME format (make sure you're certain).
2. Look for a common occurrence (e.g. ZIP files have PK at the front of the file).
3. When you have found this occurrence then you need to add it to the brainfile:  
Edit it with Ced/Ed/Ged/Etc. and add the following:

```

PK ZIP Archive                  <- Archive Label (ID)
0                               <- Characters to skip before SIGNature is read
PK                              <- The signature to look for (case sensitive!)
unzip %s <NIL:                  <- The extract command (% commands listed below)
unzip -t %s <NIL:               <- The test command
unzip -l %s <NIL:               <- The list command
zip %s %d <NIL:                 <- The add command
zip -d %s %d <NIL:             <- The delete command

```

And there you have it - You've just added a new file form to IceArc's brain!

Specifying a single "#" on any COMMAND line defines that function as unavailable;  
e.g.:

```

--><-----
RAR File
0
Rar
unrar x %s <NIL:
unrar t %s <NIL:
unrar l %s <NIL:
#
#
--><-----

```

(Above denoting that Adding/Deleting is not available in RAR format).

[BTW if someone finds a RAR (Not UnRar I have that!) can you uuencode to me?!]

For further help contact  
ME  
.

## 1.11 IceArc - What's IceArc.Results all about then ?! - (C) S.Gillibrand 1996 - Digital Design

During the operation of IceArc, it will produce a file in RAM: called "IceArc. Results".  
 This file is for people who run IceArc in scripts / programmes / rexx macros and want  
 to be able to see what IceArc made of the file(s)/function(s) passed to it, like in  
 my "Up1" uploading software for TransAmiga which originally inspired IceArc!

The format is as follows:

```
--><-----
<Filename Alone>      (prodigy.lzx)
<Fullpath + Filename> (bbs:bbsuploads/prodigy.lzx)
<Status>              (LZX Archive)
.. etc.
.. etc.
.. etc.
--><-----
```

<Status> being one of:

```
!IOFAIL              - IceArc had problems with Input/Output on the file.
!NEWARC [x] - [y]    - A new archive was created by the user.
                    [x] being the archive NUMBER (As In IceArc.Brain)
                    [y] being the archive LABEL (As In IceArc.Brain)
!UNKNOWN_FORM       - IceArc's brainfile couldn't recognise this file.
<Archive Label>    - If IceArc was succesful then it will print out the
                    format's label (As In IceArc.Brain).
```

2 examples of a IceArc.Results file:

CLI:

```
(0)-16}-[Work:Comm/AmiTCP/usr/PsychOEd]> icearc -x a#? ram:
```

```
--><-----
ansihijack.lha
Work:Comm/AmiTCP/usr/PsychOEd/ansihijack.lha
LHA/LZH Archive
ansihijack.readme
Work:Comm/AmiTCP/usr/PsychOEd/ansihijack.readme
!FORM_UNKNOWN
ansimall.lha
Work:Comm/AmiTCP/usr/PsychOEd/ansimall.lha
LHA/LZH Archive
ansimall.readme
Work:Comm/AmiTCP/usr/PsychOEd/ansimall.readme
!FORM_UNKNOWN
ansirender.lha
Work:Comm/AmiTCP/usr/PsychOEd/ansirender.lha
LHA/LZH Archive
ansirender.readme
Work:Comm/AmiTCP/usr/PsychOEd/ansirender.readme
!FORM_UNKNOWN
AmiFTP.prefs
Work:Comm/AmiTCP/usr/PsychOEd/AmiFTP.prefs
!FORM_UNKNOWN
AddPower95_4.lha
```

```
Work:Comm/AmiTCP/usr/PsychOEd/AddPower95_4.lha
LHA/LZH Archive
DoesntExist.lha
Work:Comm/AmiTCP/usr/PsychOEd/DoesntExist.lha
!IOFAIL
```

```
--><-----
```

```
CLI:
(0)-16}-[Work:Comm/AmiTCP/usr/PsychOEd]> icearc -a tmp:example.lzx s:#?
```

```
--><-----
```

```
example.lzx
tmp:example.lzx
!NEWARC 1 - LZX Archive
```

```
--><-----
```

---