

**TurboCalc**

**COLLABORATORS**

	<i>TITLE :</i> TurboCalc		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
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# Chapter 1

## TurboCalc

### 1.1 TurboCalc by Michael Friedrich

TurboCalc - copyright Michael Friedrich.

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## 1.2 Introduction to TurboCalc 2.0

Introduction to TurboCalc 2.0

TurboCalc is a modern spread-sheet analysis program based on OS2.0, which allows a free design with different character sets, colors and formattings. Besides the normal function "calculate" it can also be used for "presentation" as well as for "representation".

TurboCalc is a brilliant program, not only because of its integrated graphic print. It transfers the processed sheet as a free scaleable graphic to the printer and produces, due to the new scaleable character set of OS2.0, the best possible print quality.

The database function also manages the administration of addresses or any other data in a convenient way.

In spite of these features, TurboCalc remains a pure spread-sheet analysis program: More than 100 functions and 120 macros guarantee that TurboCalc can also be used for your needs.

This manual will help to facilitate your training period with TurboCalc and should also be used as an extensive reference book for your everyday work.

I wish you many pleasant and successful sessions with TurboCalc,

yours Michael Friedrich

## 1.3 Copyright

Copyright

TurboCalc is located on a non copy-protected diskette to facilitate simple installation onto the work diskette. Please appreciate this advantage in contrast to other programs. Any reproductions, even in extracts, are only allowed with the author's explicit permission. An exception from this is the production of one backup diskette for your personal use only. The transmission to a third party is strictly forbidden and violates current operative laws.

## 1.4 Installation

Installation

Contents of the Diskette

On the TurboCalc-diskette you will find the following files - all files were copied to the subdirectory "TurboCalc" to facilitate the installation: Hence simply transfer the whole directory.

TurboCalc the original program

TurboCalc.info the referring icon

TurboCalc.HELP file with help-texts of TurboCalc

TurboCalc.STD2 copy of the internal script-file, see chapter macro and "Executing Macros when loading TurboCalc"

Tutorial (directory) with example sheets of the tutorial

Sheets (directory) with example sheets referring to all categories

ARexx (directory) with a few ARexx examples

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Read.Me a text file with the description of all changes made after this manual went to press (see below)

Naturally, there are a few more files on this diskette, but they correspond to the normal workbench-diskette and are therefore of no importance.

Creating a Backup-Diskette

Before you start working with TurboCalc, you should create a backup-diskette. This is relatively easy to perform with the instruction <DISKCOPY > of the workbench (for more details refer to the DOS-manual of your Amiga).

Installation on a Harddisk/Workdiskette

If your computer is equipped with a harddisk, it is useful to install TurboCalc on this device. To do so, just "pull" the icon of the TurboCalc-directory from the original disk to the desired drive (or directory).

With this step you create the directory on the respective drive and copy all files simultaneously.

If you want to copy TurboCalc alone (e.g. to save space on your harddisk) the file TurboCalc (if necessary together with its icon) will be sufficient. TurboCalc runs alone and does not need the help of other files to work properly - even though it will be delivered together with a few other files (e.g. TurboCalc.HELP).

The 'Read.Me' file

It is possible that there are a few additional commands or hints which came out after this manual went to press. This information can be found in the 'read.me'-file. Therefore it is advisable to read it before starting work. In this case, please execute a double click on the corresponding icon and the text will appear on screen automatically.

## 1.5 Start of TurboCalc

Start of TurboCalc

TurboCalc can be started from the workbench as well as from the CLI. If you use the workbench simply double-click the TurboCalc icon. CLI-users enter 'df0:TurboCalc/TurboCalc'. ("df0:TurboCalc/" is an example for the path by which TurboCalc is accessed on the disk and may vary on your drive.)

Personalizing your Original

If you start TurboCalc for the first time, you will be asked to enter your name and the enclosed registration number. Please enter your complete name (in the first textfield) and the complete registration number (letters and digits including the dash "-").

If you have entered both correctly, this information will be stored in TurboCalc and there is nothing to do for the next time. If something went wrong (e.g. a typing mistake in your registration number) you will be asked to redo your input.

Remark: As described above, TurboCalc will save your name and the registration number, so that you need not reenter it the next time. This should (normally) be done automatically; but in some rare situations it may be impossible for TurboCalc to locate itself (and so the information cannot be saved). If this should happen, you will be asked for the complete name (with path) of TurboCalc (e.g. "dh0:TurboCalc/TurboCalc"). Enter the name and click on >OK<: TurboCalc will proceed as mentioned above. (If you do not know the correct name and path, simply click on >Abort<: TurboCalc will continue without saving. The next time you start TurboCalc, you will have to redo the personalizing procedure.

## 1.6 Information about the Manual

Information about the Manual

This manual is divided as follows:

- \* The first chapter deals with general hints concerning TurboCalc.
- \* It is followed by a tutorial, which shows in examples the general operation possibilities of TurboCalc and gives a few tips and hints for the work with TurboCalc.
- \* In the third chapter follows a line of input possibilities (with mouse or keyboard) and an explanation of these functions. This information should be read in any case to ensure the best possible work with TurboCalc.
- \* The following chapters contain extended information about some TurboCalc features: charts, database, names.
- \* Menu survey: Here, all menu items and the connected requesters and instructions are listed and explained. If you have any problems during your work with TurboCalc, you will find everything worth knowing here.
- \* Functions: It follows a sorted list of all functions (according to function range and function name) of TurboCalc, as well as a description about input and creation of functions at the beginning of this paragraph.
- \* Macros/ARexx: Here you will find some information about macros, in particular a paragraph of how to record and create them on your own. Subsequently it follows a list of all macros- and ARexx instructions (again in alphabetical order).
- \* Final chapter: The appendix contains a few helpful tables (list of all functions and a keymap survey) as well as some further descriptions.

If you are new to Spreadsheets

For beginners it is advisable to start with the tutorial and to work through it step by step. Then you should be familiar with TurboCalc and be able to create a few own little sheets.

Then (if necessary or during a silent hour) you should read the menu-survey. You will find a few, up to now unknown functions, which can be very useful. The chapter input is also recommended - perhaps you may find hints how to improve and accelerate the input and editing. If you are familiar with the input, you will find some various few tips on how functions should be created in chapter "Functions". The last outstanding feature is the programming of macros - this point is a little bit more complicated but with the help of the automatic "recording" it will not be a problem for advanced users ( which you will already be at that time).

If you are familiar with Spreadsheets

If you count yourself to the advanced users of spread sheet programs (or of computers in general), the tutorial is naturally no necessity. Probably you will already know about most of the mentioned functions.

In any case (especially if you do not read the tutorial) you should read the chapter "input", because TurboCalc offers a lot of useful and necessary input possibilities (e.g. direct input of date and hour in different formattings; input of formulas by mouse...).

Furthermore you will surely be interested in the chapter "functions" and the menu survey may offer some interesting functions as well. The last point you should look at are the ARexx- and macro-functions.

If you are a Spreadsheet-Professional

If you count yourself among the professionals you will probably take a quick glance at the instructions only.

Nevertheless it is advisable to read the chapter "input" by all means. Besides that, all chapters are designed to be used as a survey as well as a reference. I would like to draw your attention to the macro/ARexx-

functions, which provide good possibilities especially for the professional user to make full use of TurboCalc (e.g. enlarging TurboCalc by embedding own routines).

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Macro Instructions

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## ARexx Instructions

## Menu Reference

## Project

- New
- Open
- Close
- Save
- Save as
- Import from
- Export to
- Print (Text)
- Print (Graphic)
- About
- Iconify
- Quit

## Edit

- Cut
- Copy
- Paste
- Paste only
- Clear Contents
- Remove Cells
- Insert Cells
- Fill
- Insert Data
- Save Block as
- Transpose
- Translate Formulas

## Command

- Paste
- Define Names
- Find
- Goto
- Show active Cell
- Recalculate

## Format

- Numeric Format
- Alignment
- Font
- Colors
- Pattern
- Frame
- Cell Protection
- Column Width
- Row Height
- Freeze
- Hide
- Show
- Default Font
- Print Format

## Data

- Find
- Extract
- Delete
- Sort Database
- Define Database

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- Define Criteria
- Sort Range
- Create Series
- Create Chart
- Show Chart

#### Options

- Print Range
- Sheet
- Display
- Locale
- Protection Flags
- Show Sheet-Window
- Hide Sheet-Window
- New Sheet-Window
- Arrange Windows
- Screen - individual
- Screen - on Workbench
- Screen - as WB-Copy
- Screen - Font
- Screen - Colors
- Screen - Default Colors
- Screen- Smartrefresh
- Config - Load
- Config - Save
- Config - Delete

#### Macro

- Play
- Stop Playing
- Record
- Stop Recording
- Define Name

#### Help

- Info
- Help Items

#### Chart Menus

##### Chart

- Chart-Refresh
- Chart-Save as IFF-Picture
- Chart-Print
- Chart-Hide
- Chart-Remove

##### Chart-Presentation

- Chart-Type
- Chart-Parameters
- Chart-Patterns
- Chart-Title
- Chart-Legend
- Chart-Axis Labeling
- Chart-Y-Axis

#### Toolbar

#### Functions

##### Operators

##### Mathematical Functions

- ABS (Number)
- ARCCOS (Number)
- ARCSIN (Number)

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ARCTAN (Number)  
COS (Number)  
COSHYP (Number)  
DEGTORAD (Angle)  
EXP (Number)  
FAC (Number)  
INTEGER (Number)  
LG (Number)  
LN (Number)  
LOG (Number)  
LOG10 (Number)  
MOD (Number1;Number2)  
PI ()  
RADTODEG (Angle)  
RND ()  
ROUND (Number;Positions)  
SIGN (Number)  
SIN (Angle)  
SINHYP (Number)  
SQR (Number)  
SQRT (Number)  
TAN (Angle)  
TANHYP (Number)

Boolean Functions  
AND (Value1; Value2;...)  
FALSE ()  
IF (Condition;Value1;Value2)  
ISDATE (Value)  
ISEMPTY (Reference)  
ISERR (Reference)  
ISSTRING (Value)  
ISTIME (Value)  
ISVALUE (Value)  
NOT (Value)  
OR (Value1; Value2;...)  
TRUE ()  
XOR (Value1;Value2;...)

Text Functions  
Plus: +  
CHAR (ASCII-Code)  
CLEAN (Text)  
CODE (Text)  
LEFT (Text;Number)  
LENGTH (Text)  
LOWER (Text)  
MID (Text;Number1;Number2)  
PART (Text;Number1;Number2)  
REPEAT (Text;Number)  
RIGHT (Text;Number)  
TEXT (Data [;Format])  
TRIM (Text)  
UPPER (Text)  
UPPER2 (Text)  
VALUE (Text)

Date Functions  
Plus: +, minus: -  
DATE (Year;Month;Day)

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DATEVALUE (Text)  
 DAY (Date)  
 MONTH (Date)  
 NOW ()  
 TIMEVALUE (Text)  
 TODAY ()  
 WEEKDAY (Date)  
 YEAR (Date)

## Sheet Functions

AVERAGE (Range)  
 COUNT (Range)  
 COUNT2 (Range)  
 MAX (Range)  
 PRODUCT (Range)  
 SUM (Range)

## Database Functions

DBAVERAGE (Database; Column; Criteria)  
 DBCOUNT (Database; Column, Criteria)  
 DBCOUNT2 (Database; Column, Criteria)  
 DBMAX (Database; Column; Criteria)  
 DBMIN (Database; Column; Criteria)  
 DBPRODUCT (Database; Column; Criteria)  
 DBSUM (Database; Column; Criteria)

## Cell Functions

#Reference  
 AT (Sheet; reference)  
 CELL (Row; Column)  
 CELLLABS (Row; Column)  
 CHOOSE (Index; Value1; Value2; Value3...)  
 COLUMNNUMBER (Range)  
 INDIRECT (Text)  
 HLOOKUP (Value; Range; Offset; [Exact])  
 LOOKUP (Value; Range; [Exact])  
 RANGEABS (Row; Column; Height; Width)  
 RANGEHEIGHT (Range)  
 RANGEWIDTH (Range)  
 RANGEX ([Range])  
 RANGEY ([Range])  
 ROWNUMBER (Range)  
 SHEETNAME ()  
 VLOOKUP (Value; Range; Offset; [Exact])

## Financial Functions

ENDUPCAPITAL (Capital; Interest Rate; Term[; Period])  
 ENDUPINTERESTCAPITAL (Installment; Interest rate; Term[; Period])  
 INSTALLMENTAMOUNT (Endup value; Interest rate; Term[; Period])

INSTALLMENTTERM (Endup value; Instalment amount; Interest rate; [; Period])

INTERESTRATE (Capital; Endup value; Term[; Period])  
 STARTUPCAPITAL (Endup value; Interest rate; Term[; Period])  
 TERM (Capital; Endup value; Interest Rate[; Period])

## Miscellaneous Functions

DEMOVERSION ()  
 REVISION ()  
 SETxxx (Condition; Value1; Value2 [; Reference])  
 VERSION ()

## Instructions

## Generals

- Numbers
- Booleans
- Texts
- Cell/Range
- Omission of some Parameters
- Omission of all Parameters

## Block Instructions

- ADD (Data;Block)
- CLEAR (Data;block)
- COPY ([Block])
- CUT ([Block])
- FILL (Mode; [Block])
- LANGUAGE (Mode;Block)
- PASTE ([Block])
- PASTEDATA (Mode; [Range])
- REMOVE (Data; [Block])
- SERIES (Type; Increment; Columns; Range)
- SORT (Ascending; Direction; Cell; Range)
- TRANSPOSE ([Block])

## Formatting Instructions

- ALIGNMENT ([Hor]; [Vert]; [Block])
- BOX (Left; Right; Top; Bottom; [Block])
- CHANGESTYLE (Num; [Block])
- COLORS ([Color1]; [Color2]; [block])
- COLUMNWIDTH (Width; [Block])
- FONT ([Num]; (Character set); [Block])
- FRAME (Left; Right; Top; Bottom; [Block])
- FREEZE (Cell)
- HIDE (Row; [Block])
- NUMERICFORMAT (Format; [Block])
- PATTERN (Number; [Block])
- PROTECTION ([Write]; [Formula]; [Block])
- ROWHEIGHT (Height; Block)
- SHOW (Row; [Block])
- STDFONT (Character set)

## Cursor Control

- COLUMN (Column)
- CURRENTCELL ()
- GOTOCOLUMN (Column)
- GOTOLINE (Line)
- LASTCOLUMN ()
- LASTROW ()
- LEFT (Num)
- RIGHT (Num)
- UP (Num)
- DOWN (Num)
- LINE (Line)
- FIND (Text; Part; Case; Columns; Range)
- SELECT ([Block])

## Input Instructions

- BEEP ()
- DELAY (Time)
- INPUT (Text [; Title]; [Cell])
- INSERTFORMULA ()
- INSERTMACRO ()

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INSERTNAME (
MESSAGE (Text [,Title])
PUT (Contents [,Cell])
REQUEST (Text [,Title])
Load / Save
CSVINSERT ([Block]; [Name]; [Separator])
CSVLOAD ([Name]; [Separator])
CSVSAVE ([Name]; [Separator])
CSVSAVEBLOCK ([Block]; [Name]; [Separator])
LOAD ([Name])
LOADCONFIG (
PROCCALCINSERT ([Block]; [Name])
PROCCALCLOAD ([Name])
SAVE ([Name])
SAVEAS ([Name])
SAVEBLOCK ([Block]; [Name])
SAVECONFIG (
SYLKINSERT ([Block]; [Name])
SYLKLOAD ([Name])
SYLKSAVE ([Name])
SYLKSAVEBLOCK ([Block]; [Name])
TCDINSERT ([Block]; [Name])
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CRITERIA ([Range])
DATABASE ([Range])
DBDELETE (
DBEXTRACT ([Cell])
DBFIND ([Cell])
DBSORT (Ascending; [Cell])
Options
DISPLAY (Title; Raster; Toolbar; Formulas; Zero)
FORMFEED (Flag)
LOCALE (NF1; NF2; DF; Currency; CPrefix; CSuffix; Inch)

PRINTFORMAT (LM; RM; UM; BM; STYLE; HEADLINE; HEADTEXT; FOOTER; FOOTTEXT; TITLE; RASTER)

PRINTRANGE (Activate; [Range])
REFRESH (Mode)
SHANGHAI (Mode)
SHEETFLAGS (Maxwidth; Maxheight; Calculation; Return; Direction; Icons)
SMARTREFRESH (Flag)
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DELMENUITEM (Title; Item)
DELMENUTITLE (Title)
DELMENUSUB (Title; Item; Sub)
ADDMENUITEM (Name; Instruction; [Title; Item])
ADDMENUTITLE (Name; [Title])
ADDMENUSUB (Name; Instruction; [Title; Item; Sub])
NEWMENU (
SHOWMENU (
Macro Control
BLOCKVARIABLE (Name; Block)
CLOSESHEET (Now)
DELETEVARIABLE (Name)
EXECUTE (File; Parameter; [Window])
MACROPLAY (Cell)
NEWSHEET (Name)

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PRINT (Printer;File;NQL;Range;Page1;Page2;LPI;Colored;Break;Size;Width;Height)

QUIT ([Flag])  
RECALC ([Mode])  
RUN (File;Parameter; [Window])  
SELECTSHEET (Name [,Windownumber])  
START (Filename)  
UNCHANGED ()  
VARIABLE (Name;Value)

#### Screen Control

ACTIVATEWINDOW ()  
CHANGECOLOR (Color;Red;Green;Blue)  
CHANGEWINDOW (X;Y;Width;Height)  
ICONIFY ()  
MOVEWINDOW (X;Y)  
OLDCOLORS ()  
SCREEN (Width;Height;Depth;Mode)  
SETFONT (CharacterSet;Mode)  
SHEETHIDE (Sheetname;Windownumber)  
SHEETSHOW (Sheetname;Windownumber)  
SIZEWINDOW (Width;Height)  
STDCOLORS ()  
WINDOWTOBACK ()  
WINDOWTOFRONT ()

#### Instructions

ABOUT ()  
DIASHOW ()  
HELP (Num;File)  
NEWWINDOW ()  
POSWINDOW ()  
POSWINDOW2 ()  
PROTECTFLAGS ()  
RECORD ()  
STOPRECORD ()  
SYSINFO ()

#### Macro Control

CALL (Cell)  
GOTO (Cell)  
IFGOTO (Condition;Cell)  
LOOP ()  
MACRO (...)  
RETURN ([Cell])  
STEP ([Flag])  
UNTIL (Condition)  
WHILE (Condition)

#### Special ARexx-Instructions

GETCURSORPOS  
GETFORMULA [Cell]  
GETVALUE [Value]  
REM ...

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### Keyboard Handling

### Alphabetical Listing of Built-in Functions

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Functions: German - English

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Alphabetical Listing of Built-in Macros  
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