

NEWS..

Version 28.0 MAJOR UPDATE

* NEW FEATURE: Slope curves fine adjusted to reflect measurements at 126, 258, and 855 MHz.

* MASTER DATABASE: New MASTERDATABASE including brand new CENELEC measurements on Teleste AC3010 and AC3210. The new Masterdatabase file is named AC3XX-MA.BDT and includes data at both 1218 and 860 MHz. **Great thanks to Brix & Kamp A/S Denmark, for persuading Teleste to finalize these measurements**

Version 27.0

* NEW FEATURE: Re Import from Delivery Point (see [POINT OF DELIVERY](#)) Amplifier ID will be added for identification.
See CACAO HELP, 'Show me how..', 'Improved Link Register Functions' and learn how to use it.

* NEW FEATURE: Re 'Export Cabinet Names' from MICADO, you can select 'Overwrite Subscriber Addresses Yes/No' and
'Owerwrite Line Component Addresses Yes/No'.

* IMPROVEMENT: Improved handling of import of addresses on passive components coming from MICADO

* MASTER DATABASE: Terra Amplifiers are added to TERRA-MA.BDT

* MASTER DATABASE: Teleste APG OUTLETS are added to TELES-MA.BDT

Version 26.0 MAJOR UPDATE

* NEW FEATURE: Upstream Loss Attenuators and slopes can be used. See CACAO HELP, 'Show me how..', 'Upstream Attenuators' and learn how to use it.

* IMPROVEMENT: Link Register is added a field with Component ID for easier identifying. See CACAO HELP, 'Show me how..', 'Improved Link Register Functions' and learn how to use it.

* IMPROVEMENT: Link Register can be added #cabinet name# (link from MICADO) to automatically link linked amplifiers/components to the right MICADO cabinet. See CACAO HELP, 'Show me how..', 'Improved Link Register Functions' and learn how to use it.

* NEW FEATURE: Improved Address Import [B&K] function for easier import of addresses on cabinets with more than one amplifier.
See CACAO HELP, 'Show me how..', 'Improved Address Import [B&K]' and learn how to use it.

Version 25.0

* IMPROVEMENT: Improved SLOPE CURVES for most amplifiers. **Please note that you will be requested to**

reselect LOW and HIGH Upstream frequencies until you save your files again.

* NEW FEATURE: Fiber Nodes may be inserted as delivery points and will also be sloped according to frequency.

* NEW FEATURE: You may set Amplifier Uout as integer values. Set from the 'SysCalc' menu - see [SysCalc](#)

* IMPROVEMENT: The field ' Up dB F' will now show 3 digit frequency like 204 MHz.

Head Ends and 'Open Inputs' are not sloped when you change the frequencies - please use Fiber Nodes if you need this feature.

Version 24.0

* NEW FEATURE: CACAO will not deactivate when the OS and the Network ID is changed.

* NEW FEATURE: As existing function pres 'L' to make a link to a line.
Now you may also press 'd' to make a link to a line with 2 lines space.
see [LINK](#)

* NEW FEATURE: Manual import from MICADO in case the automated communication between MICADO and CACAO does not work.
See the CACAO menu 'MICADO'.

* MASTER DATABASE: CORNING True Split Master Database completed, name is CORNI-MA.BDT

* MASTER DATABASE: Triax Master Database is updated with BONITA Taps/splitters - TRIAX-MA.BDT

* MASTER DATABASE: Technetix Master Database is updated with DGOTX and OSVCX taps/splitters - DGOT-MA.BDT

* MASTER DATABASE: COMEGA Master Database is updated with new numbers - SITS-MA.BDT

(SITS-MA.BDT is still exiting)

Version 23.0

THIS VERSION REQUIRES VERSION 20 OR HIGHER INSTALLED

* NEW FEATURE: When linking from a Fiber network the NODES may now be remote powered from the coaxial sub net in the file linked to the fiber network. See [LINK register](#)

* MASTER DATABASE: Teles-ma.bdt (TELESTE Master-Database) is updated with CX3 amplifiers.

Version 22.2

THIS VERSION REQUIRES VERSION 20 OR HIGHER INSTALLED

* MINOR BUG FIX: Cable loss at high downstream frequency for cable A5 could be

deactivated for saving.

- * MASTER DATABASE: Teles-ma.bdt (TELESTE Master-Database)
- * MASTER DATABASE: Vectr-ma.bdt (Vector 1.2 GHz Amplifiers)
- * MASTER DATABASE: Delta-ma.bdt (Delta 1.2 GHz Amplifiers)
- * MASTER DATABASE: kathr-ma.bdt (KATHREIN 1 G Amplifiers)

Version 22.1

MAJOR UPDATE

You should upgrade all your PC's as files saved from version 22 (or higher) can't be opened from any lower version!

- * MASTER DATABASE: Teles-ma.bdt (TELESTE Master-Database) updated
- * MASTER DATABASE: comeg-ma.bdt (Comega passives) updated
- * MASTER DATABASE: Wisi-ma.bdt (Wisi Amplifiers) updated
- * MASTER DATABASE: macab-ma.bdt (Macab Amplifiers) updated
- * MASTER DATABASE: sits-ma.bdt (Comega SIT/SITS passives) updated

Version 21

- * Cable Tilts and Cable Simulators may now be defined up to 1218 MHz.
- * MASTER DATABASE: Teles-ma.bdt (TELESTE Master-Database) updated with low gain (35 dB) versions of 1218 MHz AC3010, and AC3210 amplifiers.
Most specifications are estimated as Teleste do not give specifications at 7 dB Slope.

Version 20.50

- * improved feature: When using a cable with deleted name CACAO Full Schematic and MICADO would return an error. From this version cables without name will be set to 'NO NAME'.
- * BUG FIX: Selecting 'Gain Tolerance' from 'Settings', 'Project SETTINGS' would have a blind end-
- * NEW OPTICAL DATABASE UPDATES: Teleste 1220 MHz Nodes, AC8710, AC8810, AC9100, and ACE8 added with Transmitters HDO905, HDO905-e, and HDO907. The optical database filenames are installed as HDO905, HDO905-e, and HDO907.

Version 20.3

- * NEW FEATURE FOR CACAO+MICADO: You may now update a Cabinet address in MICADO without having to reestablish all links.
- * MASTER DATABASE: Teles-ma.bdt (TELESTE Master-Database) updated with 1218 MHz ACE3, AC3010, and AC3210 amplifiers.

Version 20.2

- * NEW FEATURE: Delete Cabinet Info made possible.
- * Improved function for Fixed Gain Amplifiers like Teleste RE100 Gain Extender, which can be found in the Master-Database file TELES-MA.bdt.
- * MASTER DATABASES updated with Teleste 3Dpassives to 1218 MHz. The filename is TEL3D-MA.bdt.

Version 20.0

- * NEW FEATURE:
CACAO is fully updated to eDOCSIS 3 frequencies up to 1220 MHz downstream and 200 MHz upstream.

For seeing how to do so, select from CACAO 'help', 'show me how...', and 'how to make 1220 MHz.'

* The MASTERDATABASE is also updated to cable frequencies of 200 and 1200 MHz. Be aware that not all cables are specified to 1200 MHz - **so please check.**

* MASTER DATABASE of COMEGA passives, Signia SIT and SIS are the only components till now specified to 1300 MHz. The file name is SITS-MA.BDT

MASTERDATABASES of Amplifiers, component and cables will be updated as the specifications are available.

Version 19.20

* NEW FEATURE:

You may use Amplifiers with FIXED GAIN like Gain extenders -see also SLOPED GAIN
REMEMBER to set your high forward frequency again before using fixed gain amplifiers - see FREQUENCIES, for project planning

REMEMBER to recalculate (F3) whenever you have made any changes in the signal way before any Fixed Gain amplifiers.

* MASTER DATABASE of TELESTE amplifiers and passives is updated with RE100 Gain Extender - the file name is TELES-MA.BDT

Version 19.10

* Improved function for: Insert copy of complete lines.

* NEW Feature: COMPONENT INFORMATIONs can be inserted as well as CABLE information.

For COMPONENT INFORMATION see TYPE OF COMPONENT

For CABLE INFORMATION see METER OF LINE CABLE

Version 19.00

* Some improvements to optimize performance.

* MASTER DATABASE of TECHNETIX passives is updated with TESI/TET series- the file name is TECHN-MA.BDT

* MASTER DATABASE of COMEGA passives, Signia SIT and SIS are added- the file name is SITS-MA.BDT

Version 18.99

* NEW feature: In the columns 'COMP. ID' and 'LINE COMP ADDRESS' you can delete any input using the 'DELETE' key on your keyboard.

* NEW Feature: Changes in default CENELEC subscriber signal levels can be saved.

* Updated feature: Easier Address input - see SUBS. ADDRESS

* MASTER DATABASE of TELESTE amplifiers and passives is updated - the file name is TELES-MA.BDT

* Database of TELESTE ACE8 and HDO905E fiber transmitters @10 km fiber are added - file name is ACE8_10K.BWB

* Database of TELESTE ACE8 and HDO905E fiber transmitters @25 km fiber are added - file name is ACE8_25K.BWB

Version 18.95

* Undefined CABLES will be shown on CACAO Full Schematic with '0' + length.

* Import of databases has been added **import of 'Technical Parameters'** - see [IMPORT DATABASES](#)

* MASTER DATABASE of VECTOR amplifiers is updated with GAMMA U33 amplifiers - the file name is VECTR-MA.BDT

* NEW Feature: The amplifier column will turn into ROSA when showing DIGITAL LEVELS - see [Background text](#)

Version 18.87

* NEW Feature: When linking from a DUAL OUTPUT amplifier - see [Dual Out/In Amplifiers](#) - the amplifier address will also be linked, whenever you do a recalculation -see [Recalc, SysCalc options](#).

* IMPROVEMENT: Enhanced check for changes in the Upstream Loss - see [UPSTREAM LOSS](#)

* MASTER DATABASE of TELESTE amplifiers and passives is updated - the file name is TELES-MA.BDT - AC3000 amplifiers are updated with PILOT regulation.

* Database of CISCO fiber transmitters and nodes (SA13_TXT and SA13_TXF) are updated for Uout 100 and 110 dBuV.

Version 18.86

* BUG FIX: Cabinet info was deleted when a new schematic was made.

Version 18.85

* NEW Feature: It is possible to have background text for ANALOG or DIGITAL TV levels on CACAO FULL SCHEMATIC - see [Background text](#)

* MASTER DATABASE of VECTOR amplifiers is updated - the file name is VECTR-MA.BDT

* MASTER DATABASE of DELTA amplifiers is updated - the file name is DELTA-MA.BDT

* MASTER DATABASE of WISI amplifiers is updated - the file name is WISI-MA.BDT

* MASTER DATABASE of MACAB components updated - the file name is MACAB-MA.BDT

Version 18.81

* BUG FIX: Using F7/F8 on subscriber components could give an error message.

* MASTER DATABASE of MACAB components updated - the file name is MACAB-MA.BDT

- * MASTER DATABASE of TERRA amplifiers updated - the file name is TERRA-MA.BDT
- * MASTER DATABASE of TF-passive components updated - the file name is TFPAS-MA.BDT
- * MASTER DATABASE of C-Cor amplifiers updated with Flex-Max 900 - the file name is C-COR-MA.BDT
- * Flex-Max 900 Dual Input/Dual Output example file included as C:\PTE\PROJECTS\EKSEMPLE\FLEX_MAX_900_EXAMPLE.BDT

for further information on Dual In/Out amplifiers see [Dual Out/In Amplifiers](#)

Version 18.8

- * MICADO feature: There is a new function in the MICADO menu - "Remove Line comp. text on 99's" (remove text on 99 components).
- * NEW Feature: It is possible to create your own ATTENUATOR with or without Power Pass. They can be used in both COAX and Fiber networks.
- * Fiber Optic cables will be imported along COAX cables - see [IMPORT DATABASES](#)
- * MASTER DATABASE of TELESTE components updated - the file name is TELES-MA.BDT

Version 18.70

- * NEW Feature: Click on any upstream loss in the UP-field to change to losses at low upstream frequency. Click again to change back to high upstream frequency. See [UPSTREAM LOSS](#).
- * UPDATED feature for inserting Cable Information in the project - see '[Cable Information/ID functions](#)'
- * MASTER DATABASE of VECTOR amplifiers is updated with Hargon amplifiers - the file name is VECTR-MA.BDT
- * MASTER DATABASE of COMEGA components updated with SIGNIA series (lower isolation than first specified) - the file name is COMEG-MA.BDT
- * BUG FIX: When generating Parts List of 'NEW' components only the first 119 components in the database were counted. For 'Parts List' and 'NEW' see [Part list and price calculation](#)

Version 18.68

- * REMOTE CONTROL TOOL added under 'help'. to enable you to let PTE remote control your PC. We are using AMMY ADMIN which does not install and leaves no leftovers on your PC.
- * BUG FIX: Under certain conditions power calculation followed by MICADO Map connection could give the message "recalculation needed".
- * MASTER DATABASE of TELESTE amplifiers is updated with older HE amplifiers - the file name is TELES-MA.BDT
- * MASTER DATABASE of DELTA amplifiers is updated - the file name is DELTA-MA.BDT
- * MASTER DATABASE of DANLAB amplifiers is updated - the file name is DANLB-MA.BDT

Version 18.66

- * MASTER DATABASE of TELESTE amplifiers is updated with CXE280 amplifiers - the file name is TELES-MA.BDT
- * MASTER DATABASE of VECTOR amplifiers is updated with Hargon amplifiers - the file name is VECTR-MA.BDT
- * NEW: MASTER DATABASE of some ATX amplifiers - the file name is ATX-MA.BDT
- * NEW Feature: ['See how to set FILENAME on CACAO Full Schematic'](#)

Version 18.65 INCLUDES ALL UPDATES AND MASTER-DATABASE UPDATES SINCE VERSION 17.85. Please contact PTE for an update of versions older than 17.85.

- * MASTER DATABASE of COMEGA components updated with SIGNIA series and BTE/BSE with Power Pass - the file name is COMEG-MA.BDT
- * MASTER DATABASE of WISI amplifiers is updated - the file name is WISI-MA.BDT
- * Database of TELESTE HDO905 fiber transmitters are updated.
- * Database of CISCO (Scientific Atlanta) SA_13TXT/TXF fiber equipment are updated.
- * BUG FIX - under extreme combinations the calculated current in a cable could be redrawn on a new schematic when no Power Calculation was made.

Version 18.60 MAJOR UPGRADE

- * BUG FIX, users could have difficulties in starting a new Power Calculation.
- * BUG FIX, starting the HOUSE MODULE (see [HOUSE MODULE](#)) from an empty line with no input signal gave an error.
- * MODIFICATION for Network Users (see [Network users](#)). Security check of 'correct file' opened.
- * 'Show me how...' files are updated to new format ([Show me how..](#))

Version 18.55

- * Optical equipment database extended with databases of EDFA's. Edit EDFA's has been added LOAD and SAVE button - see [Fiber Equipment \[active\]](#).
Databases of EDFA's from DKT, MACAB, and TELESTE have been added. **Please report eventually needed EDFA's.**
- * MASTER DATABASE of TRIAX amplifiers updated with new GHV 900 series plus older Hirschmann amplifiers - the file name is TRIAX-MA.BDT
- * MASTER DATABASE of VECTOR amplifiers updated with Hargon series amplifiers - the file name is VECTR-MA.BDT
- * 'Export of Subscriber Addresses' - see [Print or Export Special](#) has been added signal level

direct at Subscriber Tap at High Frequency.

Version 18.5

You should upgrade all your PC's as files saved from version 18.5 (or higher) can't be opened from any older version!

* New feature: Show DIGITAL signal levels only. When recalculating System Parameters Recalc, SysCalc options you may choose to show Digital levels only and to check the digital subscriber levels against the according digital limits (CENELEC).

* New feature: When you select 'Report Amplifier Adjustments' you may correct the Amplifiers output voltages according to extreme temperature conditions during adjustment of the networks. See CACAO CREAM

* MASTER DATABASE of MACAB passives updated with GMM outlets (3* galvanic isolated outlets) - the file name is MACAB-MA.BDT

Version 18.35

* MASTER DATABASE of Ikusi Amplifiers added. The file name is **IKUSI-MA.BDT**

* The FIBER DATABASE has been updated with Teleste HDO903 transmitters combined with DXO100 nodes.

Version 18.33

* Improved use of F7/F8 'See how to use F7/F8'

News in version 18.32

* New feature in the MASTER DATABASE MASTER DATABASE: Automatically calculation and fill of missing Cable Losses at any frequency (5-1000 MHz).

* MASTER DATABASE of Cables for the Norwegian market added as: **NORSK-MA.BDT** (including Belden, Commscope, Draka, and Nexans cables).

* MASTER DATABASE of Teleste Amplifiers added CXE-160 series. The file name is **TELES-MA.BDT**

* MASTER DATABASES of Cables has been updated to cover all frequencies. File names: **CACAO-MA.BDT** and **TRIAx-MA.BDT**

* NEW Help instruction on how to insert a new line - see Insert or Delete project lines

News in version 18.30

* New feature: CACAO can graph C/N, actual Amplifier Gain and NEEDED Amplifier Gain, to help pinpointing amplifiers that erodes the C/N. See Graph System Parameters

* New feature: **Mark and change out Amplifiers with too high Gain** - 'Find Amps with too high gain' - see Find Addresses/ID's

* New feature: Automatic check for deleted default Outlet - see how to change the DEFAULT SETTINGS...

- * HOUSE MODULE: When selecting number of Outlets in each apartment a 1 minute video presentation has been added. [HOUSE MODULE](#)
- * CACAO Full Schematic: Short presentation of how to use addresses from a txt-file has been added - see [CACAO Full Schematic](#)
- * New feature: When 'marked as NEW' has been used you will have 2 options for the Parts List - see [Mark as New](#) and [Parts List](#)
- * 'Show me how ..' files has been extended. See [Show me how..](#)
- * BUG FIX: Canceling Print to pdf-file twice, from the HOUSE MODULE, could bring an error.
- * BUG FIX: 'Insert Copy of last copied group of passives' did not work.
- * MASTER DATABASE of Delta amplifiers has been added. The file name is 'delta-ma.bdt'.
- * MASTER DATABASE of Technetix DGOT components has been added. The file name is 'dgot-ma.bdt'.

News in version 18.10

- * Auto-copy Point of Delivery D3/D4/D5 amplifiers copies output from Fiber Nodes as well. See [LINK register](#)
- * Open inputs can be imported in any project file - see ['Amplifiers and Open Inputs'](#),
- * New feature for integration with TelMe (TelMe is developed by www.micado.no)
- * BUG FIX: Inserting a HOUSE (see [HOUSE MODULE](#)) directly on a inserted Point of Delivery (see [POINT OF DELIVERY](#)) could create a program error.

News in version 18

- * New feature for integration with TelMe (TelMe is developed by www.micado.no)
- * Adapting to max screen resolution can be changed dynamically - see [Adapt to screen](#)
- * BUG FIX: CACAO could not open files saved from version 9.3 (2001 version).
- * Teleste Master Database file (teles-ma.bdt) has been updated with series of Digital Line passives + some older DXA amplifiers.
- * Arcodan Master Database file (arco-ma.bdt) has been updated with old series of F-taps/splitters (780xx).

News in version 17.98

You should upgrade all your PC's as files saved from version 17.98 (or higher) can't be opened from any older version!

- * CACAO will now handle Coax or Optical Taps/splitter with up to 32 ports.
- * BUG FIX re Editing Passive Components/Optical Taps/splitters.

News in version 17.97

- * CACAO will no longer REMOVE Amplifiers without defined input parameters. Instead they will be ERROR marked for closer inspection.
- * BUG FIX in CACAO Full Schematic where some components could give an 'Runtime 91' Error.

News in version 17.96

- * CACAO Full Schematic is improved (for situations where you have links to multi taps). General information on Full Schematic is found here [CACAO Full Schematic](#).
- * Links to Optical Taps/splitters improved. Please see [LINK](#)
- * Outlets that are wrongly defined as more than one Port will be 'auto-corrected' to avoid CACAO Full Schematic 'Run-time error 91'.

News in version 17.95

- * Link from a line WITHOUT SIGNAL has been disabled. For more information on Internal Links see [LINK](#).
- * You may insert cable as loss measured at another frequency - Please see '[Cable Loss..](#)'
- * The FIBER DATABASE has been updated with Teleste HDO903 transmitters combined with AC8800 and AC9000 nodes.

News in version 17.94

- * NEW feature: Whenever you change an existing splitter CACAO will check if the new one has sufficient splits before you can select it.
- * NEW: When loading Fiber Equipment in the Fiber Module the 'File Name' and any notes will be loaded too.
- * MASTER DATABASE of TERRA amplifiers has been updated with DA140/DA140D. The file name is 'terra-ma.bdt'.
- * Databases of Cisco (Scientific Atlanta) Fiber Transmitters/Nodes have been updated with 90090, 90100, and 90200 Nodes.
- * MASTER DATABASE of Amplifiers has been updated with some new Cisco amplifiers. The file name is arco-ma.bdt.
- * The MASTER DATABASE has been updated to eliminate any possible 'Protected Cell' error.

News in version 17.93

- * The generated part list now includes the number of Connectors used for different types of both Drop Cable and Line Cable - see [Parts List](#)
- * Expert setting for CACAO Full Schematic can now be used to e.g. to set the maximum numbers of taps on a component that will be drawn - see [CACAO Full Schematic - Expert settings](#)

* Fixed Uout may be chosen for All Amplifiers, Trunk Amplifiers, or D3-Amplifiers (NEW FEATURE) - see [Ufixed](#)

* MASTER DATABASE of COMEGA passives has been updated with all variants of type BTE and BSE taps/splitters. The file name is 'comeg-ma.bdt'.

* DATABASE of ARRIS Fiber Transmitters/Nodes has been updated.

* Teleste MASTER DATABASE as been repared as 8 of of 241 Amplifiers could give an 'Protected Cell' error after import.

News in version 17.92

* MASTER DATABASE of Amplifiers has been updated with Kathrein VGP, VGF, VGO, and VOS amplifiers. The file name is 'kathr-ma.bdt'.

* MASTER DATABASE of Amplifiers has been updated with TELESTE AC3200 and TELESTE CXE180 amplifiers. The file name is 'teles-ma.bdt'.

* MASTER DATABASE of Amplifiers has been updated with Cisco 93270 and 93280 amplifiers. The file name is arco-ma.bdt.

* IMPROVED message information when the schematic can't be made.

* IMPROVED check for amplifiers not specified for CTB/DIN.

* IMPROVEMENT when running on a 32 bit Citrix Server solution.

* BUG FIX: Some few amplifiers in the Master-Database could not be imported.

News in version 17.91

* MASTER DATABASE of Amplifiers has been updated with some Cisco (Scientific Atlanta/Arcodan) amplifiers . The file name is 'arco-ma.bdt'.

* BUG FIX - Power calculation on files linked to other files could fail to start.

* SHOW ME HOW TO .. - Most of these presentations are changed to new format. Please report if you have problems seeing some of the presentations. You may find the presentations from [Show me how..](#)

News in version 17.90

* The POWER-MODULE has been updated:

* CACAO Full Schematic can now be generated while you are in Power-Mode - see [POWER MODULE](#)

* MASTER DATABASE of Components has been updated with some Astro components . The file name is 'astro-ma.bdt'

* The separator sign between Cable Name and the current (I= x A) has been changed from '/' to '#' for clarity.

* New feature: You may define a Uin Max Warning Level for Amplifiers. To be edited from 'Techn. Parameters' - see [Technical Parameters, settings](#)

News in version 17.87

- * The POWER-MODULE has been updated:
 - * 'Close on limit' revoke extra detailed recalculation (same as pressing [F3]).
 - * Power feed directional arrows has been double color coded blue and red for each direction.

See [POWER MODULE](#)

- * 'Print Calculation + CABLE TYPES' has been added to the 'Print or Export Special' menu (see [Print or Export Special](#))

- * IP addresses on Amplifiers/Nodes - how to insert/edit see [IP addresses](#)

- * 'Report Amplifier Adjustments' includes a special export option for exporting and consolidating of exported files to one *.txt file which you may open from Excel. Contact PTE in case you want more information on this feature.

* BUG FIX

- * FIBER MODULE - since version 17.86 Fiber Projects could constantly call for recalculation due to new routines.

- * CACAO Full Schematic (see [CACAO Full Schematic](#)). Right click [F11] on any amplifier, cable or component on the schematic will jump to that amplifier, cable or component in 'Project Mode' as well as pressing [F11] from Project Mode will jump to that amplifier, cable or component in CACAO Full Schematic. **This feature has till now been deactivated in a DEMO LICENSE.**

News in version 17.86

- * Pressing 'L' on an amplifier will now generate a Link to the Output or Input depending on if it's a 'DUAL OUTPUT' or 'DUAL INPUT' Amplifier - see CACAO 'help', 'Show me how', 'Internal LINKS in a Project' or click here [Internal Links](#).

- * When inserting a copy of 'Group af Passives' eventually Links will be calculated and inserted - see CACAO 'help', 'Show me how', 'Internal LINKS in a Project' or click here [Internal Links](#).

- * Ctrl+C and Ctrl+V can be used for copy in DATABASES - see [COPY](#)

- * You will be forced to recalculate [F3] when needed, before you can generate the schematic or make system parameter reports. More about [CALCULATION](#)

- * If the cascade munbers are mixed up you will get a warning to recalculate [F3] which will fix all cascade numbers - see [Amplifier SUFFIX no.](#)

News in version 17.85

- * Automatic Copy of Subscriber Amplifier (D3/D4/D5) output Delivery Points - see CACAO 'help', 'Show me how', 'Delivery Points, Copy and Insert' or click here [Delivery Points](#).

- * MASTER DATABASE of Amplifiers has been updated with some Astro amplifiers . The file name is 'cacao-ma.bdt'

News in version 17.84

* NEW Report including all amplifier adjustments. For more information go to [CACAO CREAM](#)

* NEW The FIBER-DATABASES are updated with Cisco/SA/Arcodan fiber Transmitters and Nodes. Updated by 2 Master-database files

SA_13TXF

SA_13TXT

Including transmitter types 13TXF and 13 TXT 3 to 15 dbm and Fiber Node 90075

* NEW (introduced in version 17.82)

CACAO Cabinet Addresses and Subscriber Addresses can now be selected from addresses in a Address.txt.

Address.txt is a tab separated file with 3 columns: Street, House Number and House Letter. Address.txt must be placed at the \PTE\MI\ADDRESS\ catalogue. Address.txt will be converted to Addresses.map, Addresses.ind and Addresses.org (original .txt file) for more efficient use.

You may contact PTE for further information
[Full Schematic](#)

related object [CACAO](#)

BUG FIXES

* Copy amplifiers [Ctrl+C] and paste the copy [Ctrl+V] was disabled for the new Amplifiers C1 to G9.

* Copy of 'Tap off' (right side signal) from a component that is placed in the same line as a link to another line.

* Copy amplifiers [Ctrl+C] and paste the copy [Ctrl+V] could be disabled.

* CACAO could inform that saving of write protected files was possible.

* **IMPORTANT NOTE** - CACAO is of course free from Virus but you might still get a warning - see [Antivirus Software](#)

News in version 17.83

IMPROVEMENTS

* 'Highlight functions' (see [Highlight Functions](#)) has been improved on 'Highlight Trunk/ or D3'

* When inserting a Fiber Optical Cable you will only be asked for the Wavelength once. Still you can change the wavelength whenever you need. See [Fibre Optic cable](#).

For more information on the FIBER-MODULE select from CACAO - 'Help', 'show me how..', 'FIBER-MODULE'

* MASTER DATABASE of Cable has got a minor update. The file name is 'cacao-ma.bdt'

BUG FIX

* The CASCADE Suffix Number (amplifier number in the cascade) see [Amplifier SUFFIX no.](#) - could be wrongly calculated under rare conditions.

All Cascade Suffix Numbers are now recalculated and fixed whenever you select SysCalc [F3] shortcut (see [CALCULATION](#))

News in version 17.82

- * Power calculation speed optimized
 - * Direct Import of Addresses from Address.txt file - see [CACAO Full Schematic](#)
 - * The FIBERER-DATABASES are updated with ARRIS fiber Transmitters and Nodes. Updated by 4 Master-database files

ARR_1KM	1 km fiber cable
ARR_10KM	10 km fiber cable
ARR_20KM	20 km fiber cable
ARR_30KM	30 km fiber cable
- Including transmitter types CHP-GFX-DXL 2 to 15 dbm and Fiber Node OM2100
incl. AGC

News in version 17.80

- * New secure EXIT functionality - see [EXIT CACAO](#) - Reminds you which file(s) to Auto-Save
- * Minimize CACAO during Recalculation. Enabled/disabled status will be saved in an ini-file. See [Recalc, SysCalc options](#)
- * MASTER DATABASE of WISI amplifiers is updated. The file name is 'wisi-ma.bdt'
- * MASTER DATABASE of Cable is updated. The file name is 'cacao-ma.bdt'

News in version 17.75

You should upgrade all your PC's as files saved from version 17.75 (or higher) can't be opened from any older version!

- * Version 17.75 is Windows 7 (32 bit) compatible.
- * Cable Database management system is optimized. For Help on how use the Cable Codes see [CABLE CODE](#)
- * Automatic conversion of older files optimized.
- * Vector Amplifier EXAMPLE Project file added. Showing how to insert and use Dual-Input and Dual-Output Amplifiers. From CACAO file open \PTE\Projects\VECTOR_GAMMA_PRO30_40 _EXAMPLE.BDT. For further information open 'Help', 'Show me how', 'Power Module & Dual In/Out Amplifiers'
- * Overruled Delivery points will link the overruled technical Parameters from file to file - see [open inputs](#) and [LINK register](#)
- * When you copy 'Right side tap-off' as an Delivery Point to a new file CACAO will check if there is a free tap/split. For more information on Delivery Points [POINT OF DELIVERY](#)
- * The 'Edit' and 'Undo..' are disabled after each new change.
- * C-cor and Magnavox Master-Database is updated with more amplifiers - the file name is still

c-cor-ma.bdt. For more information on Master-Databases see [MASTER DATABASE](#)

- * Keep track of when you save your file first time (using SAVE FILE AS...) see [First Save \(as...\)](#)
- * BUG FIX: Certain combinations of letters and numbers in Amplifier-ID could give Overflow Error in CACAO Full Schematic

News in version 17.72

- * Subscriber Taps with all Taps set as 'NC' (No connection) are included in: Export of Subscriber Addresses - see [Print or Export Special](#)
- * Contact information is updated to our new server and mail: www.ptesoftware.com
email: post@ptesoftware.com
- * Improved logic for the AutoSelect feature ([TYPE OF COMPONENT](#) and [AUTO](#)). If the signal level changes and a single line component are forced to change to a multiple line component you will see a red 'MD' (moved down) on components which you have to move down. 'How to move' see [Insert or Delete project lines](#). The Schematic feature ([AUTODRAW](#)) will warn you in case any red 'MD'.

News in version 17.70

You should upgrade all your PC's as files saved from version 17.70 (or higher) can't be opened from any older version!

MICADO users should upgrade to latest MICACO version - check www.micado.no

- * Local Database of AMPLIFIERS extended from 44 to 71.
- * Double click on any Amplifiers Name (in Database of Amplifiers) to select 'Remove from Selection List' to include only the Amplifiers you are using.
- * BUG FIX: A project file saved with the name 'HE.bdt" would not generate a CACAO Full Schematic.

News in version 17.65

You should upgrade all your PC's as files saved from version 17.65 (or higher) can't be opened from any older version!

- * Local Database of Cables extended from 23 to 53 cables. For Help on how use the Cable Codes see [CABLE CODE](#)
- * 'Find Function' does now also find inserted IP Addresses - see [Find Addresses/ID's](#)
- * IP Addresses may be inserted manual or in automatic mode - see [IP addresses](#)
- * Plugging Subscriber connections on/off from MICADO automatically updates the connected number of Subscribers.
- * A new Clean Up feature to set all Empty Subscriber Tap Addresses as 'NC.' - see [Edit Blank Addresses](#)
- * On some keyboards the Windows Application Key is placed close to the Arrow Keys and could be hit accidentally which would cause e.g. the [F11] key to be deactivated.
From version 17.65 the Windows Application Key are deactivated as long as CACAO is the

active application.

News in version 17.60

- * Project planning of Subscriber Networks made more simple as you can reuse parts of earlier made networks. See [Extract Group of Components](#)
- * Minor Bug Fix: Subscriber Components with Power Pass would not be set as power pass if selected by the Auto-Select function.

News in version 17.55

- * New function for Export of Subscriber Addresses - see [Print or Export Special](#)
- * MASTER DATABASE of Vector amplifiers is updated. The file name is 'vectr-ma.bdt'
- * MASTER DATABASE of Arcodan/Scientific Atlanta/Cisco amplifiers is updated in both the file 'CACAO-ma.bdt' and 'Arco-ma.bdt'
- * Smaller BUG FIX re MICADO integration
- * BUG FIX re the Master-Database and Windows Vista
- * For Norwegian users/for Norske brukere: National Standard file: 'Norsk Standard CENELEC' (nony_pte.bdt) er oppgradert med Grensesnitt 1 og 2 - les Post-og teletilsynets veiledning av 25/08/2008. Veiledningen kan downloades fra www.npt.no (kontakt PTE ved tvivl).

News in version 17.51

- * BUG FIX in the file converting system when opening files saved in year 2000

News in version 17.5

- * Database of Components (passives) extended from 120 to 218 components.
- * CON's (Customer Outlet Networks) will be imported when you import database from open file [IMPORT DATABASES](#).
- * CON's (Customer Outlet Networks) may be deleted by pressing [F6].
- * New feature: Default Air Cable temperature variation can be insert besides Default Ground Cable temperature variation. To be edited from 'Techn. Parameters' see [Technical Parameters, settings](#)

If you put: (A) or (L) in front of the Cable name as e.g. (L) QR540 the temperature variation will be set to the default value for Air Cable. See [CABLE NAME and +/- C](#)

- * New feature: Press Ctrl+N on any Amplifier, Cable, or Component to mark in as NEW - see [Mark as New](#)

'Mark as New' can be detected and highlighted in MICADO ([MICADO](#))

- * New feature: Calculation of number of 'Connectors, Line Cable' - see [Parts List](#)

* New feature: 'Extra Order Numbers' see [Order Numbers](#)

* MASTER DATABASE is updated with C-Cor/Magnavox amplifiers. The file name is 'c-cor-ma.bdt'

Files saved from version 17.5 can not be opened from an older CACAO version

News in version 17.2

* New feature: Make-Part-of-File SCHEMATIC features - see [Special Schematic and HIGHLIGHT functions](#)

* New feature: Limited Schematic feature - see [Limited SCHEMATIC](#)

* New feature: Mark Unused Taps/Splitters RED added to [Find Addresses/ID's](#) function

* Disable Password is moved to [SETTINGS](#)

* BUG FIX: Shift +F12 fixed (Relates to MICADO users only)

News in version 17.15

* New FIND ADDRESSES/ID's function - see [Find Addresses/ID's](#)

* New Start-Up option - see EXIT [EXIT CACAO](#)

* Auto-Minimize CACAO during processes that might take some time - see [Recalc, SysCalc options](#)

* The 'System Parameter Report' [CREAM](#) has been updated with Addresses on Transformers (after successful Power Calculation, see [POWER MODULE](#)

* The 'System Parameter Report' [CREAM](#) has been updated with 'IP Addresses' (Contact PTE to get more information on the IP Address Module).

CACAO FULL SCHEMATIC

* When you double click an subscriber Tap to edit Adresses the Tap will turn RED - see [CACAO Full Schematic](#)

* CACAO Full Schematics presentation of OPTICAL splitters has been corrected. [CACAO Full Schematic](#)

MASTER BATABASE UPDATES

WISI-MA.BDT has been updated

COMEGA has been added as COMEG-MA.BDT

TECHNETIX isolated outlets has been added in TECHN-MA.BDT

News in version 17

- * CACAO use the full screen resolution to display Project Lines.
- * You may now SCROLL the total Project Screen by [arrow up/down].
- * New user interface for enhanced version (now up to 373 Project Lines - see [Project lines, 99 or 270 \(or more\)](#))
- * Improved logic and speed for detection of overloaded transformers - see [POWER MODULE](#)
- * The cursor returns to previous position after Recalculation.
- * When you shift between files (see [Windows](#)) the cursor will return to the position where it was when you left the file.
- * All announced Master-Database updates included.
- * CACAO Full Schematic - Schematic "Cabinetname is unset!" bug fixed.

News in version 16.93

- * Project Revision Date (the date last saved) is now written together with the Project Name on the Project screen.
- * Saving of the log file can be deactivated from the main menu 'FILE', 'Set Active Project Archive'.

MASTER-DATABASE updates:

- * Upstream Amplifier Gain and Return path splitter loss can be saved in the Master-Database files. Previous this has been possible in the Project File only - see [Amplifiers](#).
- * Mater-Database update as announced on 08-01-2008 included.

News in version 16.92

- * 'Dish' and 'Antenna' can be made as a passive component. The included Project File \PTE\PROJECTS\Dish_Ant_example.bdt' shows an example.
- * 'Compact Schematic' can be selected. This will improve the layout of 'bigger' projects . See [CACAO Full Schematic Templates](#)
- * Improved 'print menu' in CACAO Full Schematic. Print settings will be kept to next print.
- * Text on cables will be placed with greater distance and less overlay. This relates to CACAO Full Schematic.
- * [F2] - CACAO Full Schematic - The check for missing Upstream Amplifiers has an improved logic.
- * [F2] - CACAO Full Schematic - Check for Upstream Loss out of range will only be made if the project contains subscribers.
- * The 'Report system Parameters' - [CREAM](#) - can be exported as SYSREP.TXT for import in

e.g. Excel.

* 'Report Cabinet Names' added to [CREAM](#) - can be exported as SYSREP.TXT for import in e.g. Excel.

MASTER-DATABASES updates:

* The Master-Database file CACAO-MA is updated with Scientific Atlanta amplifier 93250 plus 5 new CAVEL cables.

Vector Amplifiers has been updated in the Master-Database file Vectr-MA and removed from the Master-Database file CACAO-MA

Version 16.91

Version 16.91 has been distributed for beta test only.

News in version 16.90

* CACAO is now Windows Vista (32 bit) compatible. New installation can be made on Windows NT, 2000, XP, or Vista.

* CACAO Full Schematic can draw in a A4 frame placing the Drawing Head in the lower right corner. See [CACAO Full Schematic Templates](#)

* After completed Power Calculation CACAO Full Schematic will write P(loss) and P(tot) on each transformer.

This relates to [POWER MODULE](#) and [CACAO Full Schematic](#)

* After completed Power Calculation the 'Report System Parameters' function include P(loss), P(tot), and KWH/year for each transformer. Access to this function from [CREAM](#)

* Cabinet addresses can be set independent of Subscriber Tap addresses. This relates to [CACAO Full Schematic](#)

* CACAO Full Schematic draw terminators on unused line taps/splitters.

* The 3 new Amplifier data columns, 'MAX CLIP', 'UPSTREAM LOSS' and 'UPSTREAM GAIN' (see [Amplifiers](#)) are now imported when you import Amplifiers from an open CACAO Project File - [IMPORT DATABASES](#)

News in version 16.84

* AUTO BACKUP feature. CACAO will save a Project File backup to \PTE\AUTOBACK\BACKUP.BDT - This file will be generated for every 5 inputs. In case of power drop or any other failure you just open \PTE\AUTOBACK\BACKUP.BDT - and you have just lost some few inputs.

* Improved POWER CALCULATION speed on overloaded transformers.

* Ctrl+C (copy) and Ctrl+V (insert copy) are active when you are editing database of Cables, Components and Amplifiers.

* [CACAO Full Schematic](#) is updated to draw double lines between stepped components.

MASTER DATABASES

* Master-Database with EIDOLON amplifier included (eidol-ma.bdt).

BUG FIX

- * 'Cabinet Info' not cleared when selecting 'New file as a copy of open file'.

News in version 16.83

- * Project Line No. can be written on [CACAO Full Schematic](#). Select line No. from the template.

MASTER DATABASES

- * New TRIAX Master Database [MASTER DATABASE](#)
- * New TRIAX Fiber Equipment Database [Nodes, database](#)
- * DANLAB Fiber Equipment Database is updated
- * TELESTE Master Database is updated with CXE202 amplifiers

BUGS

- * Selecting Return Amps. ON/OFF did not always perform correctly.
- * Editing Fiber Database/Master Databases as the first operation after start-up could force "can't find dialog in database" error.

News in version 16.82

- * Calculated currents (Amp) will be written on each cable. See [POWER MODULE](#) and [CACAO Full Schematic](#)
- * CABLE INFO - write additional information on any line cable. See [METER OF LINE CABLE](#)
- * DIPLEXERS for Return Path can be inserted. See [Diplexers](#)
- * Integration with Telemator Fiber Documentation System from MX Data AS. Contact PTE for further information.
- * Correction of some smaller bugs

News in version 16.81

- * CACAO starts by loading the 'start up file' directly. See [STARTFILE](#)
- * When you open an older project file CACAO does recalculation if needed.
- * NEW file-in-use locking for Network users. See [Network users](#)
The previous Master/Slave function are changed out by the new file-in-use locking.
- * The standard component No. 93 SPLICE can have an address label like all other components.

BUG FIXES

- * Under certain conditions [F3]-recalculation could invoke an error causing to save the file and

restart.

* Amplifiers imported from one project file to another project file are not updated on the estimated cascade number.

News in version 16.80

IMPORTANT: Files saved from version 16.80 won't open on older versions

* CACAO can now do Upstream calculations on amplifiers with different upstream gain or e.g. splitter loss at the input of return amplifiers - see [Amplifiers](#)

* When selecting an Amplifiers CACAO will check both Downstream Gain, Upstream Gain and Supply voltage. See... [Select Amplifier](#)

* Optical Amplifiers (EDFA's) can now be used an C/N be calculated. See.. [Fiber Equipment \[active\]](#)

MASTER-DATABASE

* C-COR database is added, see C-COR-MA.BDT

* KATHREIN database is updated, see KATHR-MA.BDT

* DANLAB is updated, see DANL-MA.BDT

* SCIENTIFIC ATLANTA (Arcodan) database is updated, see CACAO-MA.BDT

* The open MASTER-DATABASE can now be exported to a txt file.

News in version 16.78

* CACAO Full Schematic has been updated with new symbols for pilotregulatd amplifiers.

* Teleste MASTER-DATABASE file has been updated with Teleste outlets.

* Some minor bug fixes has been made.

News in version 16.77

* CACAO Full Schematic show 'current direction arrows' on cables where current is running. See [POWER MODULE](#) for general information on Power calculations.

* CACAO Full schematic has been updated with more spacing between components to make text more readable. See [CACAO Full Schematic](#) for more information on the Full Schematic module.

* Amplifier Suffix Number is now set as the Amplifier Cascade Number. See [Amplifier SUFFIX no.](#) for general information.

* Fiber Database updated with TELESTE transmitters and nodes. Example project file 'Teleste Fiber Example.bdt' installed in :\\PTE\PROJECTS.

BUG FIXES:

- * Power calculation over line 202 could in some cases not find any solution.
- * Change of Outlet could be difficult.
- * Insert Group of Components is now checking the maximum available line numbers. See [GROUP](#) for further information.
- * [PgDn] from 'Adresse/System Parameters' mode would be stopped from line 200 on high resolution screens.

News in version 16.76

- * 'EDIT', 'COPY' added 'COPY COMPLETE LINES'. With this new function it is possible to copy any number of lines from a project file. The copied area can be insert in the same or NEW project file.
- * Delete lines [F6] has been updated with a new user interface.
- * CACAO Full Schematic has been updated with correct symbols for 'Marker', 'Broadband Forward B/F', and 'Isolator'
- * The MASTER DATABASE file Cacao-ma.bdt has been updated with more Vector amplifiers.

News in version 16.7

- * Enhanced mode from 198 to 270 Project Lines - see [Project lines, 99 or 270](#)
- * Component shortcut to filtered list - see [Component shortcut](#)
- * NEW SERVICE DATABASE as option. Contact PTE for further information.

IMPORTANT NOTE: Files saved from version 16.7 can't be opened on older CACAO versions, so please update all users.

News in version 16.65

- * CACAO, news

MIN/MAX UPSTREAM LOSS ON THE SCHEMATIC. When you initiate [F2] AutoDraw/CACAO Full Schematic, CACAO will check if any subscriber return path losses are outside limits before generating the schematic.

If your project file includes subscribers AutoDraw/CACAO Full Schematic will include information on minimum and maximum subscriber return path loss.

For **CACAO Full Schematic** you can chose to include the min/max values in the TITLE FIELD setup. Please see the default TEMPLATE to learn how 'Subscriber US' can be included.

[CACAO Full Schematic UPSTREAM LOSS](#)

- * HOUSE-MODULE, news

Whenever you SAVE or PRINT the house calculations CACAO will check if any subscriber

return path losses are outside limits before generating the saving or schematic. When you PRINT the drawing TITLE FIELD will include minimum and maximum subscriber return path losses.

[F7] and [F8] can be used in the HOUSE MODULE as in CACAO. Place the cursor on an OUTLET and press [F7] or [F8] to select lower or higher value.

News in version 16.63

* CACAO, news detected at each

CACAO will be set to

function

Power Components

clear of 'Extra Project Cost'

* CACAO Full Schematic

MONITOR DETECTION

SCREEN RESOLUTION and number of visible lines are auto

CACAO START.

If you change between monitors (laptops in docking stations)

the resolution on the monitor on which you start CACAO.

[F9] used on Autoselected components has got a new toggle

See TYPE OF COMPONENT

TRANSFORMERS can be edited with decimals like 4,4 Amp

Manual Edit of Subscriber Component ID from Project Mode

BUG FIX: Selecting 'New file as a copy of open file' added

Added possibility for LINK to Reversed '99' component

IMPORTANT NOTE: Files saved from version 16.63 can't be opened on older CACAO versions, so please update all users.

News in version 16.6

* CACAO, news Cable Codes.

will draw

* Power Module amplifiers

* HOUSE MODULE layout features. Fully baseband Ethernet technology.

software package from PTE

CABLE TILTS and CABLE SIMULATORS can be inserted as

See Cable TILT and Cable Simulator

The old CACAO Schematic and the new CACAO Full Schematic

the new symbols

Transformers may now be inserted direct on the output of an without any limitations

Now up to 12 outlets in cascade (for eg hotel systems) + more integration and calculation of MULTILET

The HOUSE-MODULE is also available as a stand-alone

* **NEW MASTER DATABASE** **New Wisi amplifiers in a new Master Database file wisi-ma.bdt**

News in version 16.59

* **CACAO Full Schematic + MICADO** **New feature for extra 'Cabinet Information' on the schematics. MICADO users should install the latest MICADO update**

* **CACAO, news resolution)** **From next update 'Number of Lines on screen' (screen menu, will be remembered, but can still be changed from the Main 'Settings', 'User Interface', and 'Adapt to screen'**

* **CACAO calculation prints** **New footer including: Date & time, Project name, Reference, and Company + user initials (from the project file)**

* **Power Module now** **The '65 volt test' (carried out when overload is detected) may be deselected.**

* **BUG FIXES** **Using the new 'INHOUSE Components' as a Line Component did create an error when pressing 'Autodraw'.**

Print out of DATABASES added some pages of 'empty paper'

News in version 16.58

* **CACAO Full Schematic:** **Bug fixes related to BETA version 16.57**

- ' Bug fix on "lost cabinet names"
- ' Remember template when updating title field from schematic

* **CACAO calculation prints** **Bug fix; Time 10.xx could be printed as 00.xx**

News in version 16.57

* **CACAO Full Schematic: SETUP'** **Added 'TITLE FIELD' - can be edited from 'CACAO Schematic**

* **Power Module:** **Added functionality for detection of non legal power links**

* **CACAO calculation prints** **New footer including: Date & time, Project name, Reference, and Company**

* **FIBER MODULE the** **New function: When you insert a fiber optical cable and know the total loss, insert this as 'Estimated Total Loss [dB]'**

News in version 16.56

* **BUG FIXES**

General features:

Changing drop cables to >90 meters would clear subscriber addresses.

Power Module:

Power calculations without Trafo ID could be impossible.

CACAO Full Schematic: Could draw 3-splitters with power as 4-splitters.

*** NEW MASTER DATABASES**

New Danlab amplifiers in a new Master Database file danlb-ma.bdt

New Wisi amplifiers in a new Master Database file wisi-ma.bdt

Please check these files for new amplifiers or changed specifications

News in version 16.55 (MAJOR UPDATE)

*** GENERAL**

- DROP CABLE SETTINGS

All drop cables can be set to same length or reset to the calculated min/max length.

See - [MAX/MIN DROP CABLE](#)

*** POWER MODULE**

- Shortcut detection improved

- Color marking added **RED** marking of components without power parameters -see [POWER MODULE](#)

- It is possible to use a Power Inserter to feed in power from 'dead' cables. Open the project file C:\PTE\PWRINS-PTE.BDT

- [Ctrl+R] added trace of TRANSFORMERS. When Power calculation is made: Place the cursor on any amplifier, cable, or component supplied from any transformer and press [Ctrl+R]. When you then make The CACAO FULL Schematic or Export all to MICADO the block diagram will be a POWER SCHEMATIC with all network supplied from the marked transformer only.

See also - [Trace Signal, \[CTRL+R\]](#)

See also - [CACAO Full Schematic](#)

*** DATABASES**

-Autocalc of cable losses at any unspecified frequency see [Cable loss Edit](#)

- Import of cables from the Master Database could create 'protected cell' error

News in version 16.52

*** Part list and price calculations are exported to file - see [Part list and price calculation](#)**

*** BUG FIXES**

- Components defined for power pass, but with no power pass set, could cause failure.

- Setting default outlet would select outlet one number higher than selected.

- A left side power link (e.g. an dual output amplifier) just after an transformer could create unbalance.

News in version 16.51

*** Your mouse wheel can control 'PAGE UP', 'PAGE DOWN', and [TAB] - see [Mouse functions](#)**

*** You may insert Upstream Amplifiers with higher than the default GAIN whenever needed.**

CACAO will detect this situation and guide you. [UPSTREAM LOSS](#)

Upstream Amplifier GAIN will be shown on both AutoDraw and the new

CACAO Full schematic [CACAO Full Schematic](#)

MICADO and CACAO Full schematic is updated with new compact annotation for both

up- and downstream parameters.

* The HOUSE MODULE now includes insertion and checking of Baseband Ethernet like MULTILET. Contact PTE for further information.

* The HOUSE MODULE shows 3 digit drop cables correct.
see [HOUSE MODULE](#)

* The new Power Module can find and isolate any transformer(s) loaded too high. [POWER MODULE](#)

* Fixed component '93 SPLICE' with power pass is made (through loss is 0,2 dB).

* BUG FIXES

Saving a file using Ctrl+S after 'Save and close windows' could save the file with a wrong name.

[INS] could be deactivated. [Insert or Delete project lines](#)

Amplifier prices edited in older versions of Master-Database files could be read as text.

News in version 16.5

* The Power Module is redesigned for auto detection of short circuits. [POWER MODULE](#)

* The HOUSE MODULE is updated with automatic floor numbering from 0 or 1 - [HOUSE MODULE](#)

News in version 16.42

BUG FIX in version 16.41

* For MICADO users: [SHIFT+F11] could give an non lincended message

* CACAO: [GoTo line] fix [Go to line...](#)

IMPROVEMENTS:

* CACAO Full Schematic: 'Termination of unused ports' + 'Drawing of reversed taps' improved [CACAO Full Schematic](#)

News in version 16.41

This is a minor update including:

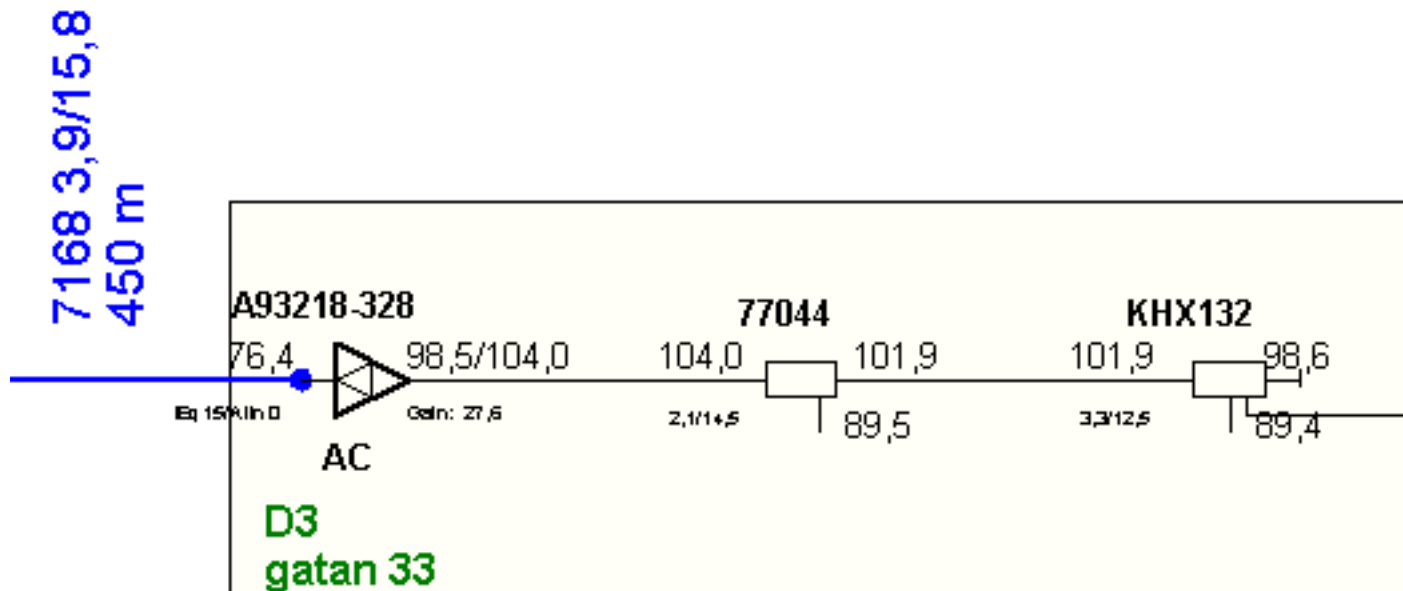
* Reverse of '99' component added (Nice feature for CACAO Full Schematic user) - see [REVERSE](#)

* 'Clear Component' - [F6] from Database of Components - added clear 'Notes' and 'Order Number'

News in version 16.4

* Insert/Delete lines using [INS] and [DEL] updated to move subscriber addresses as well - see [Insert or Delete project lines](#)

- * Define your own 'Customer Inhouse Outlet Networks' [Inhouse NETWORK of taps/splitters/outlets](#)
- * Sort function in Database of Components - sort CODE (function) or names (from database menu 'EDIT')
- * HOUSE MODULE is added design of 'Central Star system' [HOUSE MODULE](#)
- * BUG FIX: If one amplifier was set to Fixed Uout [F3] recalc could set all amplifiers to Fixed Uout
- * CACAO Full Schematic insert terminations on unused through ports - plus signal level



For more information on CACAO Full Schematic [CACAO Full Schematic](#)

News in version 16.31

- * **FIBER MODULE** fully integrated
 - [Fiber Equipment \[active\]](#)
 - [Transmitters, database](#)
 - [Nodes, database](#)
 - [Optical taps/splitters](#)
 - [Fibre Optic cable](#)

See 'Show me how' for demonstartion [FIBERSHW](#)

Open the project file C:\PTE\PROJECTS\SIMPLE FIBRE NETWORKS PTE.BDT - so see example

Contact PTE for more information on how to get the FIBER MODULE

- * [F7]/[F8] Step component Up/Down now works independant of the number series you have given the passive components.
- * Easier identification of amplifiers on the SELECT AMPLIFIER dialog + more sorting options
[Select Amplifier](#)

News in version 16.21-22

- * **CACAO accepts LONG FILE and LONG DIRECTORY names INCLUDING special characters like ÄÖÆØÅ. The lenght of a path is now non restricted.**
- * New EASY LINK TO LINE function - see ['Easy Link' to line..](#)
- * New EASY Insert or remove project lines for minimising the use of lines - [Insert or Delete project lines](#)
- * When setting High downstream frequency lower than an amplifiers high frequency individual amplifier adjustment has been easier to follow - see [AMPLIFIER SETTINGS](#)
- * For **CACAO Full Schematic** user there is a new option for selective schematic draw of
 - A. The trunk network in a file
 - B. Any D3 amplifier network in an filesee [CACAO Full Schematic](#)
- * The **HOUSE MODULE** has been updated. It is now possible to create network down to 1 stair/cascade

Further information on the House Module - [HOUSE MODULE](#)
- * The **POWER MODULE**, bug fix: Power links to both outputs on DUAL OUTPUT could make impossible

News in version 16.1

'Personalized A-disk' is no longer needed for activating CACAO

Power module:

1. Calculated power price on each transformer has been added '+fixed yearly costs'.
2. BUG FIX: Current limits on passive components and amplifiers can be set from 70% to 100% (70% is recommended to minimize the risk of hum modulation).
3. BUG FIX: Removing inserted 'power-stops' would not reset power pass.

CACAO

4. Power inserters with defined current pass may now be constructed from Database of Components.
5. BUG FIX: When 'multiplying amplifiers' using features like 'edit amplifiers' => error.
6. BUG FIX: Tolerances on pilot regulated amplifiers could increase on recalculation.
7. BUG FIX: 'Transfer to U-fixed' from amplifier dialog would give en error

News in version 16.03

1. BUG FIX: Price calculation on older 148/198 line project files would cause a 'Install a printer driver

on this PC'.

2. BUG FIX: Opening older files including power components without defined power pass would cause an error.
3. Registration dialog was deactivated in version 16.01/02.
4. When you look up or edit the database of amplifiers USED amplifiers are marked grey.
5. Checking 'Components/Cables' for missing power pass NOW ALSO check Amplifiers for remote powering/current pass options.
6. When editing Components the 'cancel' function has been improved.

News in version 16.01/02

1. 16.01 supports the new CACAO FULL SCHEMATIC option. If you do not get a mail re this feature please contact PTE.
2. Direct Go To Line... [Go to line...](#)

News in version 16:

1. CACAO now accepts **long file names**
DO NOT USE special characters like ÆØÅ, in directory or file names
The total path (directories and filename) may be up to 100 characters. The new file handling system will warn if the total path is too long.
2. File saved are now verified. Project files will get an encrypted code which will be verified after each saving.
3. Database of CABLE enhanced from 14 to 24 cables at the same time.
4. FIBRE OPTICAL calculation module as an option. Contact PTE for further information.
A sample of automatic calculation of CTB an C/N on the combination of transmitters and receivers can be seen from the project file installed as:
:\PTE\PROJECTS\SIMPLE FIBRE NETWORK PTE.BDT
5. Database of COMPONENTS - component number range enhanced by a factor 10, from 100-9999 to 100-99999
6. ALL DATABASES has been added 'Order No.' and 'Notes' - Also added in the Master-Database.
7. Amplifiers outside limits are marked **red** on the project screen.
8. Print out of price calculation changed. Only used equipment will come on the part list/price calculation.
9. MASTER-DATABASE file from Triax A/S installed as :\PTE\MASTERDB\triax-ma.bdt

FILES SAVED FROM VERSION 16 CAN'T BE OPENED IN OLDER VERSION OF CACAO - PLEASE UPDATE ALL PC'S SHARING FILES

News in **version 15**

1. HURRA, HURRA: Standard Windows function for FILE OPEN/SAVE implemented.
Warning: Do not use Æ, Ø, or Å in any directory used to store CACAO files
2. Trace the signal flow - [Trace Signal, \[CTRL+R\]](#) introduced in version 14.5 has been EXTENDED.
If you use AutoDraw [F2] after CTRL+R (Trace signal flow) only the highlighted way of signal will be draw.
3. Project setting has been added field for 'Initials' - [File Save Options](#)
4. Syscalc [F3] operates faster. Screen movement during Syscalc is now deactivated [SysCalc](#)

Recalc, SysCalc options

5. Bug correction from version 14.5:

Linking project lines from over line 148 could give wrong parameters. If you have made project files including more than

148 lines, open these files and recalc [F3].

News in **version 14.5**

1. 148 Project Lines mode is enhanced to 198 Lines - [Project lines, 99 or 198](#)

2. Trace the signal flow - [Trace Signal, \[CTRL+R\]](#)

3. Graph System Parameters combined with TRACE SIGNAL FLOW - [Graph System Parameters](#)

IMPORTANT: Files saved from version 14.5 can't be opened from an older version

BUG FIXES

A. A 'space' in the directory path to Link Register Files could disable writing in the file more than once - [LINK register](#)

B. Component-ID could be removed when Linking from one line to another - [LINK](#)

News in **version 14.30**

1. Fixed Uout for amplifiers can be selected as the database Ufixed default OR ANY VALUE you would like to test [U-HIGH](#)

News in **version 14.20**

1. Enhanced help for selecting the right amplifier for the job. Amplifier database is added 'Maximum practical cascade' for each amplifier. When selecting amplifiers you may sort the selecting list [Select Amplifier](#)

2. 'Maximum practical cascade' is also added in the MASTER DATABASE [MASTER DATABASE](#)

3. 'Quick build' - after inserting any '99' or component just press 'a' and the cursor will move to next Amplifier position.

4. Selecting 'As Build' when saving => see [File Save Options](#)

News in **version 14.10**

1. In case you change the low Project frequency [FREQUENCIES, for project planning](#) the Amplifier Qqualizer will be calculated correct from 50 MHz to the high Amplifier frequency. Equalizers are shown on the 'AutoDraw' [AUTODRAW](#) and in MICADO [MICADO](#)

2. The Amplifier adjust screen has got a new checkbox for 'check for 'SORRY' on AutoSelect' [AMPLIFIER SETTINGS](#)

3. Improved check for selected LINK REGISTER file [LINK register](#)

4. Easier shift from 99 to 148 Project lines. No retart needed. [Project lines, 99 or 148](#)

5. AutoDraw now keeps 'link from line number' information when 'Amplifier suffix no.' is disabled. [AUTODRAW](#)

6. [BUG FIX] Using 1280*1024 resolution could cause the 'ID's' and 'Addresses' to be offset on the screen when using the LINK TO LINE function [LINK](#)

7. Subscriber Taps/splitters with 12 or 24 ports are treated as 'DISTRIBUTION BOXES'. The 'address' will be the address of the box. [SUBS. ADDRESS](#)

8. Users who have updated to version 14.05 without having the requested version 13.xx installed will get wrong amplifier slopes. This is corrected from version 14.10. After opening files saved from version 14.05 just press [F3] for Syscalc.

News in **version 14.05**

1. 'Cancel' when asked for LINK REGISTER FILE could create error.
2. Saving a 148 project line file from 99 project line mode could create error.

News in version **14.02**

A. LOW and HIGH downstream frequency can be set as you like [FREQUENCIES, for project planning](#)
Cable loss will be recalculated to the chosen frequencies without any time delay.

B. Upstream frequencies can be set as you like [UPSTREAM LOSS](#)

C. U-low in database of Amplifiers is changed to U-high. This is made to enable CACAO to calculate correct Amplifier SLOPES when you change the low downstream frequency. [U-HIGH](#)

D. Copy Amplifiers and components using CTRL+C [Copy Amplifiers/components, project mode](#)

E. NEW LINK REGISTER system. You can have as many link registers as you like - and they can be shared on a NETWORK SERVER. [LINK register](#)

F. UNDO move/clear lines is added UNDO last UNDO by pressing UNDO again. [EDIT](#)

G. When editing the MASTER-DATABASE you mark an copy any number of Amplifiers, components, or Cables - and insert in any Master-Database file. [MASTER DATABASE](#)

H. From the HOUSE-MODULE you can define up to 6 temporary cascable outlets for test. [HOUSE MODULE](#)

I 'Print Special' feature added to menu 'File' - to reduce use of paper [FILE](#)

J The latest Windows security updates could give a message 'filename is changed'. This has been changed.

K B/F Broadband Forward Points and Power Inserters can be defined in your database of components [SELECTION](#)