

## Communication Software for Stepper Motor Power Stages

### ServiceBus-Comm

The phytron ServiceBus-Comm communication software, designed for Windows<sup>®</sup> PC, assists the user to program and operate stepper motor power stages – e. g. MCD<sup>+</sup>, MR8<sup>+</sup>, PAB<sup>+</sup> – equipped with **ServiceBus**<sup>1</sup> interface.

Operating parameters like run current, stop current, step resolution, current delay time or other parameters depending on the type of power stage, can be edited by PC, saved and transmitted to each power stage.












ServiceBus-Comm helps to monitor the actual current, power stage or motor temperature during operation.

Status windows show input states and make it possible to set outputs or display detailed error messages.

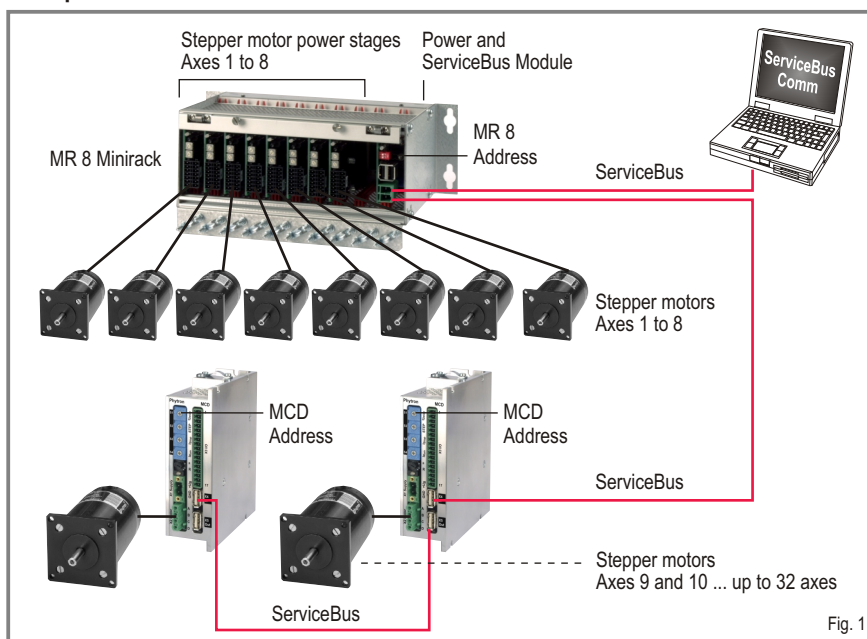
Up to 32 stepper motor axes can be simultaneously distributed by ServiceBus-Comm.

<sup>1</sup> All types of phytron control units with ServiceBus functions are labeled +.

### Functions

-  Make new .spc parameter file
-  Open parameter file
-  Save parameter file
-  Print parameter file
-  Open help menu
-  Search for power stages connected to the ServiceBus
  -  Power stage is offline
  -  Power stage is connected
  -  Power stage connected, parameter file ready for transmission
  -  Power stage error
-  Reset power stage

### Example: 10 Axes ServiceBus



### Technical Information

- Communication software for stepper motor power stages with ServiceBus interface
- ServiceBus-Comm<sup>®</sup> is a registered trademark of the Phytron-Elektronik GmbH.
- Putting into operation, configuration and error diagnosis
- Programming power stage parameters
- Online status display for safe operation and easy maintenance
- Parameter memory for data backup
- Designed for PC under Windows<sup>®</sup> 95, 98, 2000, NT, XP
- Browser independent installation software
- Installation from CD
- RS485/4-wire connection of the power stages or ServiceBus modules
- Connection to the PC by USB, RS485/4-wire or RS422

### Menu Examples

The screenshot displays the ServiceBus-Comm software interface. The main window, titled 'ServiceBus-Comm - [00] Name 1', features a menu bar (File, View, Power stage, Windows, Help) and a toolbar. On the left, a 'Power stages' tree view lists various stages: PAB, MR8, [00] Name 1 (selected), [01] Name 2, [02], [03], [04], [05], [06], [07], and MCD. The main area shows the configuration for '[00] Name 1'. It includes an 'Axis name' field set to 'Name 1' with a 'Set!' button. Below this are three current setting sliders: 'Stop cur.' (0 to 2.5 A, set to 0.50 A), 'Run cur.' (0 to 2.5 A, set to 1.00 A), and 'Boost cur.' (0 to 2.5 A, set to 1.00 A). Further down are 'More power stage parameters' including 'Step resolution' (1/8 Step), 'Pref. motor direction' (Negativ), 'Input logic level' (High aktiv), 'Input function' (Boost), 'Current delay time' (40 ms), 'Activation' (Aktiviert), 'Output function' (Fehlersumme), and 'Operation mode' (Bus & Schalter). On the right, there are 'Save settings' buttons (Save actual parameters, Load basic parameters, Transmit settings) and a 'Power stage short status' section with radio buttons for Error: Undervoltage, Error: Overtemperature, Error: Short circuit in power stage, Hardware reset (Watchdog?) (with a Delete button), and Power stage in basic position. At the bottom right of this section are buttons for 'Stat. pwr stage >>' and 'Reset power stage'. A dialog box titled 'Power stage status and test functions' is open in the foreground. It has a 'Test functions' section with a 'Reset!' button. The 'Power stage status' section shows 'Power stage - software' as 'MR8 V0.06a'. It includes status indicators for Ready (green circle), Under voltage, Over temperature, Short circuit, Output, and Input. A 'Total status (HEX):' field shows '0000'. At the bottom, it displays 'Power stage temperature:' and an 'OK' button.

#### ServiceBus-Comm Overview

- Menu-driven desktop, mouse functions
- Hotkeys
- Selectable menu dialog language: English / German / French
- ServiceBus-Comm operates dynamically, i. e. RAM is only occupied as long as actually required.
- Easy and quick parameter setting up to 32 power stages
- Old and new parameters can be compared.
- Parameter settings are editable as well online as offline.

#### Individual Solutions without ServiceBus-Comm Software

- Optionally, ServiceBus instructions and functions can be handled by individual software. Readable ASCII string instructions are editable with LabView, HyperTerminal or C language.

Any questions? Please contact us.