

Automatic Check Routine Selection in NeuroCheck-Powered Units

NeuroCheck supports 4-5 levels of user-friendly program architecture under automated control. At the lowest 2 levels, tasks which require 1 or dozens of tools elsewhere are combined into single tools in NeuroCheck which are called Check Functions. One level up is subprograms (“Checks”) which can be set up to either be the entire program, or one of many subprograms subject to conditional branching etc. The next level up is the total Check Routine which can be a sum of one or more subprograms. Check Routines are stored and managed as files with a .chr extension. Then, groups of Check Routines can be set up for automatic selection and enabling by various means including external inputs.

As a supplement to the manuals and help files, here are some additional notes regarding Check routine selection via discrete I/O's and the serial port.

Of course, selection by a serial port requires a working serial port. A tested working serial port is included with all our NeuroCheck-powered units.

For selection via I/O, specify a machine vision unit with sufficient spare discrete inputs for this purpose. We recommend that this include sufficient for a binary coded selection amongst all of the check routines in the intended selection group, plus 1 spare input. So, for up to 4 routines, $2+1=3$ inputs. For up to 8 routines $3+1=4$ etc.

Consult your FSI hardware manual for I/O connection specifics. Here is a brief overview plus some additional notes:

- Procure a NeuroCheck-powered unit from FSI with the required interfaces / inputs included and tested.
- Assign check routine numbers in the individual check routines. These numbers should be unique (i.e. not duplicated) within the intended selection group of Check Routines.
- If automatic selection is via a serial port, configure the port for this purpose. (see FSI publication # SDOC-058-006 for additional serial communication notes)
- Under System-> Remote Control: Set it to have serial port or discrete (“digital”) I/O do the check routine selection
- (in NeuroCheck 5.1) Under System->Settings for Automatic mode->Check routine selection. Set up the group of routines from which the active routine will be chosen.
- (in NeuroCheck 5.0) Put the subject check routines into a single folder, double check that no check routine numbers have been duplicated, and point NeuroCheck to it under System -> options -> directories

