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[\[SENSe<Ch>:\]CORRection:COLLect:AUTO:ASSignment<Asg>:DEFine <TestPort1>, <CalUnitPort1>, <TestPort2>...](#)

Manually defines port assignment no. <Asg> for channel no. <Ch>.

With manual configuration a non-minimal set of port assignments can be created, which may increase measurement accuracy. On the other hand, it is up to the user to ensure that the created set of port assignments is complete and valid for the chosen calibration type (see [\[SENSe<Ch>:\]CORRection:COLLect:AUTO:CONFIgure](#)).

Note that during the corresponding calibration sweep the R&S ZNB/ZNBT expects the physical port connections to be established exactly as defined by the port pairs.

Use

- [\[SENSe<Ch>:\]CORRection:COLLect:AUTO:ASSignment<Asg>:DEFine:TPORT](#) command to take advantage of auto-detection of port connections.
- [\[SENSe<Ch>:\]CORRection:COLLect:AUTO:ASSignment:DEFine:DEFAULT](#) or [\[SENSe<Ch>:\]CORRection:COLLect:AUTO:ASSignment:DEFine:TPORT:DEFAULT](#) to create the default assignments instead.

See ["Multiple Port Assignments"](#) for background information.

Suffix:

<Ch> Number of the channel
 <Asg> Number of the port assignment

Parameters:

<TestPort1> First test port number
 <CalUnitPort1> Number of the calibration unit port that is assigned to the first test port
 <TestPort2> Second test port number ...

Example: Let's perform a full 3-port calibration with a two-port calibration unit, using factory characterization and the port assignments given in the table below. Prerequisite: the adequate calibration unit was selected before using

[SYSTem:COMMunicate:RDEvice:AKAL:ADDRESS](#)

SENSe1:CORRection:COLLect:AUTO:ASSignment:DELeTe:ALL

Deletes all available port assignments.

SENSe1:CORRection:COLLect:AUTO:CONFIgure 'FNPort', ''

Sets the automatic calibration to "Full n-port" with factory characterization.

SENSe1:CORRection:COLLect:AUTO:ASSignment1:DEFine
 2, 1, 3, 2

Creates port assignment 1 explicitly (no auto-detection).

SENSe1:CORRection:COLLect:AUTO:ASSignment2:DEFine:TPORT
 3, 4

Creates port assignment 2 implicitly (auto-detection).

Before starting the calibration sweep for port assignment 1, ensure test port 2 is connected to cal unit port 1 and test port 3 to cal unit port 2

SENSe1:CORRection:COLLect:AUTO:ASSignment1:ACQUire

Performs the calibration sweep for port assignment 1

Before starting the calibration sweep for port assignment 2, ensure test ports 3 and 4 are connected to the cal unit (in any order)

SENSe1:CORRection:COLLect:AUTO:ASSignment2:ACQUire

Performs the calibration sweep for port assignment 2; auto-detects the existing port-connections at runtime

SENSe1:CORRection:COLLect:AUTO:SAVE

Checks whether the acquired calibration data are sufficient to calculate the system error correction. If yes, applies them to the selected channel.

See ["MultiCal \(with Calibration Unit\)"](#) for a MultiCal example.

Manual operation: See ["Cal Unit / Port Assignments"](#)

Test Port	Port Assignment 1	Port Assignment 2
2	Cal Unit Port 1	-
3	Cal Unit Port 2	auto-detected
4	-	auto-detected

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