



W2324 phase shifter, additional functions set by using jumpers

Please note that potential differences and static charges (ESD) affect the api® system and may cause harm to the W2324 phase shifter! Before installing the W2324 card, you should therefore discharge yourself by touching a water pipe, a heating pipe or any metal part with an earth connection - potential neutrality is required before every modification and installation of plug-in cards as well as connecting with other equipment and components. Turn off the api® - Box and all connected devices.

Preparation: If necessary, remove the two fastening screws of the module, carefully remove the module and place it on a flat surface with the front panel to the left. Loosen the four fastening screws of the chassis cover and remove it. You can now assign the functions of the jumpers using the three detailed images.

The described jumpers are colored red and they are located on connectors in the upper central area (**K4, high pass**) on the left in the middle (**K14** and **K20, phase** and **K34, ground / chassis**). Make a note of the original jumper setting before each change (or simply take a picture of the original settings) in order to restore the "old" jumper position if necessary.

High pass can be activated by removing jumper **K4**. These jumpers can be removed by gently pulling them upwards. The relationship between the **phase** of the in- and output signal can be set using the two jumpers **K14** and **K20**. These two jumpers can take two positions. The picture below shows a phase relationship of 0. To rotate phase by 180 degrees, move jumper **K14** from top to bottom and move jumper **K20** from bottom to top.

Interference of noise caused by transmitter systems and / or ground loops may occur in rare cases. This can be eliminated by separating the **chassis ground** with removing **K34**.

