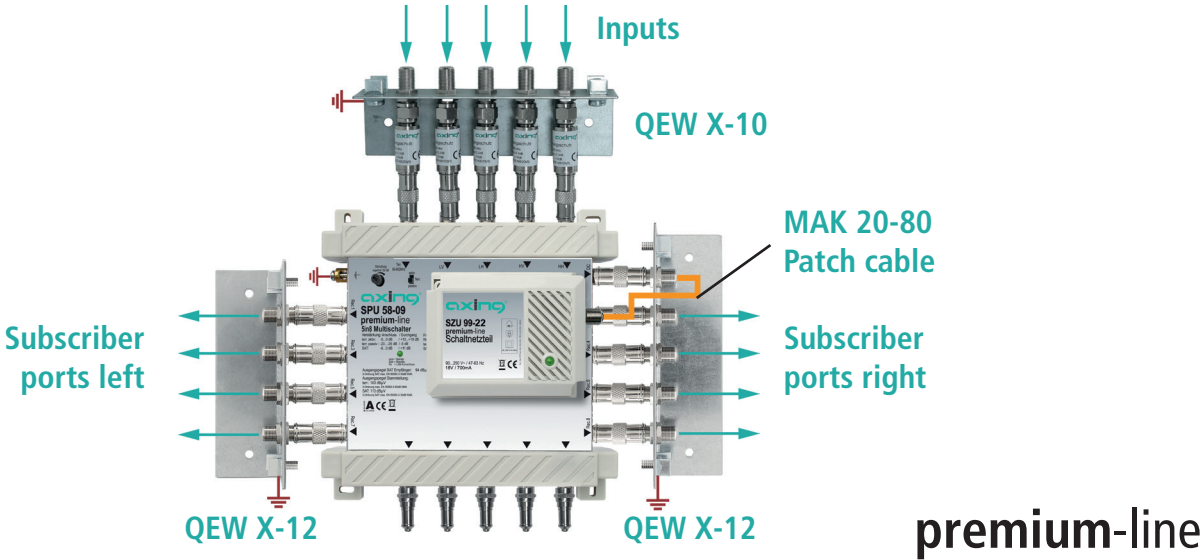
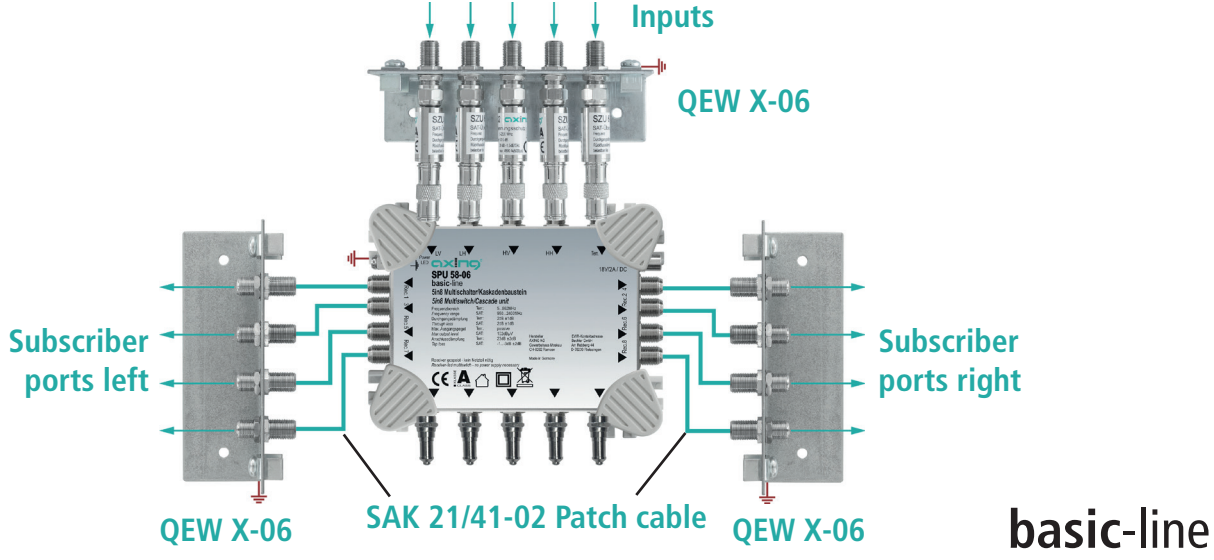


# Matrix of earthing angles and multiswitches



premium-line

| Type        | Inputs        | Needed patch cable for power supply | Subscriber ports left | Subscriber ports right |
|-------------|---------------|-------------------------------------|-----------------------|------------------------|
| SPU 54-09   | 1 × QEW 5-10  | 1 × MAK 20-80                       | 1 × QEW 3-12          | 1 × QEW 3-12           |
| SPU 56-09   | 1 × QEW 5-10  | 1 × MAK 20-80                       | 1 × QEW 3-12          | 1 × QEW 4-12           |
| SPU 58-09   | 1 × QEW 5-10  | 1 × MAK 20-80                       | 1 × QEW 4-12          | 1 × QEW 5-12           |
| SPU 510-09  | 1 × QEW 5-10  | 1 × MAK 20-80                       | 1 × QEW 5-12          | 1 × QEW 6-12           |
| SPU 516-09  | 1 × QEW 5-10  | 1 × MAK 20-80                       | 1 × QEW 9-12          | 1 × QEW 9-12           |
| SPU 556-09  | -             | -                                   | 1 × QEW 3-12          | 1 × QEW 3-12           |
| SPU 558-09  | -             | -                                   | 1 × QEW 4-12          | 1 × QEW 4-12           |
| SPU 5512-09 | -             | -                                   | 1 × QEW 6-12          | 1 × QEW 6-12           |
| SPU 5518-09 | -             | -                                   | 1 × QEW 9-12          | 1 × QEW 9-12           |
| SPU 5518-19 | -             | -                                   | 1 × QEW 9-12          | 1 × QEW 9-12           |
| SPU 94-09   | 1 × QEW 9-10  | 1 × MAK 20-80                       | 1 × QEW 3-12          | 1 × QEW 3-12           |
| SPU 96-09   | 1 × QEW 9-10  | 1 × MAK 20-80                       | 1 × QEW 3-12          | 1 × QEW 4-12           |
| SPU 910-09  | 1 × QEW 9-10  | 1 × MAK 20-80                       | 1 × QEW 5-12          | 1 × QEW 6-12           |
| SPU 916-09  | 1 × QEW 9-10  | 1 × MAK 20-80                       | 1 × QEW 9-12          | 1 × QEW 9-12           |
| SPU 996-09  | -             | -                                   | 1 × QEW 3-12          | 1 × QEW 3-12           |
| SPU 998-09  | -             | -                                   | 1 × QEW 4-12          | 1 × QEW 4-12           |
| SPU 9912-09 | -             | -                                   | 1 × QEW 6-12          | 1 × QEW 6-12           |
| SPU 9918-09 | -             | -                                   | 1 × QEW 9-12          | 1 × QEW 9-12           |
| SPU 9918-19 | -             | -                                   | 1 × QEW 9-12          | 1 × QEW 9-12           |
| SPU 1708-09 | 1 × QEW 17-10 | 1 × MAK 20-80                       | 1 × QEW 4-12          | 1 × QEW 5-12           |
| SPU 1716-09 | 1 × QEW 17-10 | 1 × MAK 20-80                       | 1 × QEW 9-12          | 1 × QEW 9-12           |
| SPU 1710-09 | -             | -                                   | 1 × QEW 5-12          | 1 × QEW 5-12           |
| SPU 1718-19 | -             | -                                   | 1 × QEW 9-12          | 1 × QEW 9-12           |



basic-line

| Type        | Inputs        | Subscriber ports | Needed patch cable for subscriber ports |
|-------------|---------------|------------------|-----------------------------------------|
| SPU 58-06   | 1 × QEW 5-06  | 2 × QEW 4-06     | 8 × SAK 21-02/SAK 41-02                 |
| SPU 512-06  | 1 × QEW 5-06  | 2 × QEW 6-06     | 12 × SAK 21-02/SAK 41-02                |
| SPU 516-06  | 1 × QEW 5-06  | 2 × QEW 8-06     | 16 × SAK 21-02/SAK 41-02                |
| SPU 524-06  | 1 × QEW 5-06  | 2 × QEW 12-06    | 24 × SAK 21-02/SAK 41-02                |
| SPU 532-06  | 1 × QEW 5-06  | 2 × QEW 16-06    | 32 × SAK 21-02/SAK 41-02                |
| SPU 98-06   | 1 × QEW 9-06  | 2 × QEW 4-06     | 8 × SAK 21-02/SAK 41-02                 |
| SPU 912-06  | 1 × QEW 9-06  | 2 × QEW 6-06     | 12 × SAK 21-02/SAK 41-02                |
| SPU 916-06  | 1 × QEW 9-06  | 2 × QEW 8-06     | 16 × SAK 21-02/SAK 41-02                |
| SPU 924-06  | 1 × QEW 9-06  | 2 × QEW 12-06    | 24 × SAK 21-02/SAK 41-02                |
| SPU 932-06  | 1 × QEW 9-06  | 2 × QEW 16-06    | 32 × SAK 21-02/SAK 41-02                |
| SPU 1308-06 | 1 × QEW 13-06 | 2 × QEW 4-06     | 8 × SAK 21-02/SAK 41-02                 |
| SPU 1312-06 | 1 × QEW 13-06 | 2 × QEW 6-06     | 12 × SAK 21-02/SAK 41-02                |
| SPU 1316-06 | 1 × QEW 13-06 | 2 × QEW 8-06     | 16 × SAK 21-02/SAK 41-02                |
| SPU 1324-06 | 1 × QEW 13-06 | 2 × QEW 12-06    | 24 × SAK 21-02/SAK 41-02                |
| SPU 1332-06 | 1 × QEW 13-06 | 2 × QEW 16-06    | 32 × SAK 21-02/SAK 41-02                |
| SPU 1708-06 | 1 × QEW 17-06 | 2 × QEW 4-06     | 8 × SAK 21-02/SAK 41-02                 |
| SPU 1712-06 | 1 × QEW 17-06 | 2 × QEW 6-06     | 12 × SAK 21-02/SAK 41-02                |
| SPU 1716-06 | 1 × QEW 17-06 | 2 × QEW 8-06     | 16 × SAK 21-02/SAK 41-02                |
| SPU 1724-06 | 1 × QEW 17-06 | 2 × QEW 12-06    | 24 × SAK 21-02/SAK 41-02                |
| SPU 1732-06 | 1 × QEW 17-06 | 2 × QEW 16-06    | 32 × SAK 21-02/SAK 41-02                |

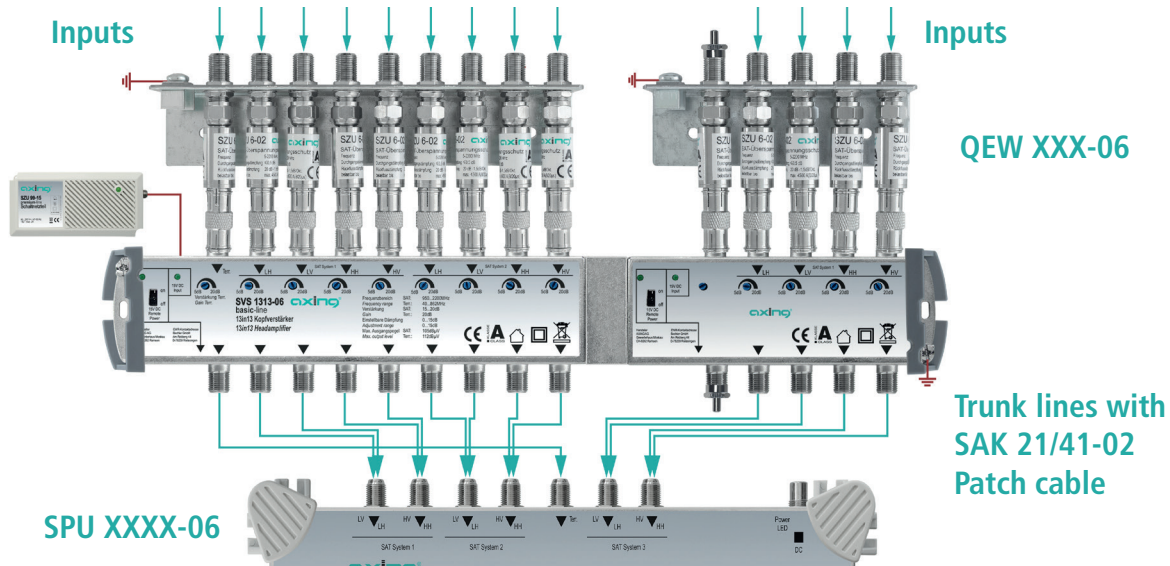


# Matrix of earthing angles and multiswitches

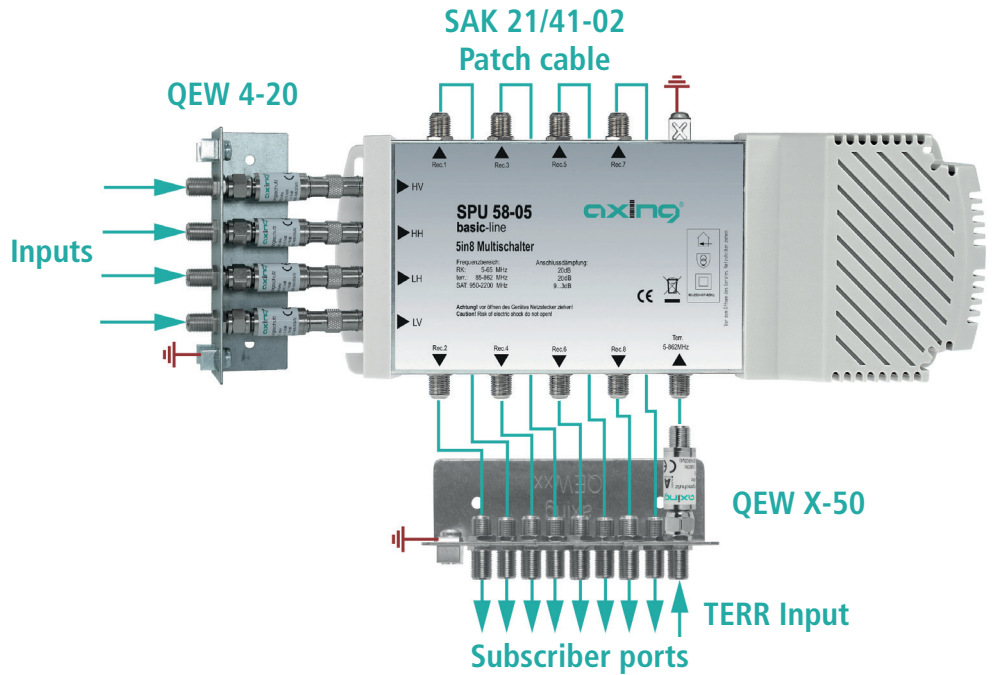
| Type                                           | Inputs       | Subscriber ports                | Needed patch cables for subscriber ports                                  |
|------------------------------------------------|--------------|---------------------------------|---------------------------------------------------------------------------|
| <b>Multiswitches basic-line</b>                |              |                                 |                                                                           |
| SPU 54-05                                      | 1 × QEW 4-20 | 1 × QEW 5-50                    | 5* × SAK 21-02/SAK 41-02                                                  |
| SPU 56-05                                      | 1 × QEW 4-20 | 1 × QEW 7-50                    | 7* × SAK 21-02/SAK 41-02                                                  |
| SPU 58-05                                      | 1 × QEW 4-20 | 1 × QEW 9-50                    | 9* × SAK 21-02/SAK 41-02                                                  |
| SPU 512-05                                     | 1 × QEW 4-20 | 1 × QEW 13-50                   | 13* × SAK 21-02/SAK 41-02                                                 |
| SPU 516-05                                     | 1 × QEW 4-20 | 1 × QEW 17-50                   | 17* × SAK 21-02/SAK 41-02                                                 |
| <b>Single cable multiswitches premium-line</b> |              |                                 |                                                                           |
| SES 522-06                                     | 1 × QEW 5-06 | 1 × CFA 7-01/CFA 9-01**         | 1 or 2 × SAK 21-02/SAK 41-02**                                            |
| SES 5216-06                                    | 1 × QEW 5-06 | 1 × CFA 9-01                    | 7 × SAK 21-02/SAK 41-02                                                   |
| SES 988-06                                     | 1 × QEW 9-06 | 2 × QEW 4-06                    | 8 × SAK 21-02/SAK 41-02                                                   |
| SES 5532-19                                    | 1 × QEW 5-10 | 1 × CFA 7-01 or<br>2 × CFA 9-01 | 1 or 2 × SAK 21-02/SAK 41-02<br>(plus 5 × SAK 21-02/SAK 41-02 for inputs) |

\* 1 patch cable additionally for terrestrial input | \*\* depending on the used outputs of the SES 522-06

| Type                               | Inputs                          | Needed patch cables for trunk lines |
|------------------------------------|---------------------------------|-------------------------------------|
| <b>Headamplifiers premium-line</b> |                                 |                                     |
| SVS 550-09                         | 1 × QEW 5-10                    | —                                   |
| SVS 990-09                         | 1 × QEW 9-10                    | —                                   |
| SVS 1717-09                        | 1 × QEW 17-10                   | —                                   |
| <b>Headamplifiers basic-line</b>   |                                 |                                     |
| SVS 550-06                         | 1 × QEW 513-06                  | 5 × SAK 21-02/SAK 41-02             |
| SVS 990-06                         | 1 × QEW 917-06                  | 9 × SAK 21-02/SAK 41-02             |
| SVS 1306-06                        | 1 × QEW 513-06   1 × QEW 917-06 | 13 × SAK 21-02/SAK 41-02            |
| SVS 1706-06                        | 2 × QEW 917-06                  | 17 × SAK 21-02/SAK 41-02            |



## Multiswitches basic-line



## Single cable multiswitches premium-line

