

BASE527 SPECTROMETER SERIES

DESCRIPTION

As there are different photomultipliers available there are different variants of the Base527 socket connection available. This is to document the principal schematics of the available variants. Other variants, principally also with negative HV, upon request.

Variant name	R877p	C636A*	R1306p	R6231p	R6231-01p**	R9420	XP2060B	9102B
applicable PMTs	R877, 9305K, R6231-100, (R1306)	9305K	R1306, R1307	R6231, R6232	R6231-100-01, R6231-01	R9420	XP2060, 9102B	9102B
socket / pin connection	B14	B14	B14	B14	B14	B12	B12	B12
K	14	14	14	14	14	12	12	12
G	13	-	13	13	1	-	-	-
D1	1	1	1	1	3	1	1	1
D2	2	2	2	3	4	11	11	11
D3	3	3	3	4	5	2	2	2
D4	4	4	4	5	6	10	10	10
D5	5	5	5	6	7	3	3	3
D6	6	6	6	7	8	9	9	9
D7	7	7	7	10	9	4	4	4
D8	8	8	8	11	10	8	8	8
D9	9	9	-	-	-	(5)	5	5
D10	10	10	-	-	-	(7)	7	7
A	11	11	11	12	11	6	6	6
component values								
R1	330k	330k	330k	680k	680k	1M	680k	680k
R2	330k	330k	330k	680k	680k	0	0	0
R3	330k	330k	330k	330k	330k	330k	330k	330k
R4	330k	330k	330k	330k	330k	330k	330k	330k
R5	330k	330k	330k	330k	330k	220k	330k	330k
R6	330k	330k	330k	330k	330k	220k	330k	330k
R7	330k	330k	330k	330k	330k	220k	330k	330k
R8	330k	330k	330k	330k	330k	220k	330k	330k
R9	330k	330k	330k	330k	330k	220k	330k	680k
R10	330k	330k	330k	330k	330k	0	330k	1M
R11	330k	330k	0	0	0	0	330k	1.3M
R12	330k	330k	0	0	0	220k	330k	1M
R13	1M	100k	330k	330k	330k	2.2M	2.2M	2.2M
R14	10k	0	0	10k	10k	0	0	0
R15	1M	1M	1M	1M	1M	1M	1M	1M
C1	-	-	10 nF	10 nF	10 nF	-	-	-
C2	-	-	10 nF	10 nF	10 nF	10 nF	10 nF	10 nF
C3	10 nF	10 nF	10 nF	10 nF	10 nF	-	10 nF	10 nF
C4	10 nF	10 nF	-	-	-	-	10 nF	10 nF
C5	20 nF	10 nF	-	-	-	10 nF	10 nF	10 nF
C6	4.7 nF	4.7 nF	4.7 nF	4.7 nF	4.7 nF	10 nF	10 nF	10 nF
C7	4.7 nF	4.7 nF	4.7 nF	4.7 nF	4.7 nF	10 nF	10 nF	10 nF

*depreciated, the variant R877p with pin13 connected is more universal and should replace it.

**The R6231-01 is a pinout variant of the R6231, used by Crismatec, the R1306p variant will also do.

Using a PMT with a wrong socket will normally not harm the PMT but may lead to no or too small signal output or deteriorated resolution.

For the B14 socket, the variant R877p may be the most universal one, as it will also work with the 9305k and the R6231, and possibly with a little bit increased voltage also with the R1306. The R6231/R6232 is incompatible with all others as it uses Pin 12 for output.

For the B12 socket, the XP2060B might be the most universal, but it might be inferior for 8 Dynode PMT's.

The list of PMT's is not comprehensive.
For PMT's not mentioned here please request.

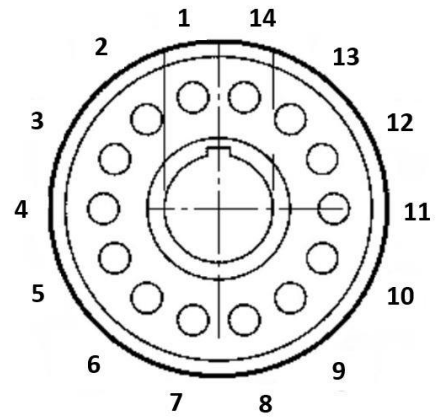


Figure1: Jedec B14 Pinout Base socket (Front side view)

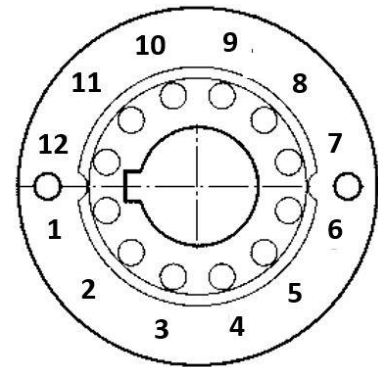


Figure 2: Jedec B12 Pinout Base socket (Front side view)

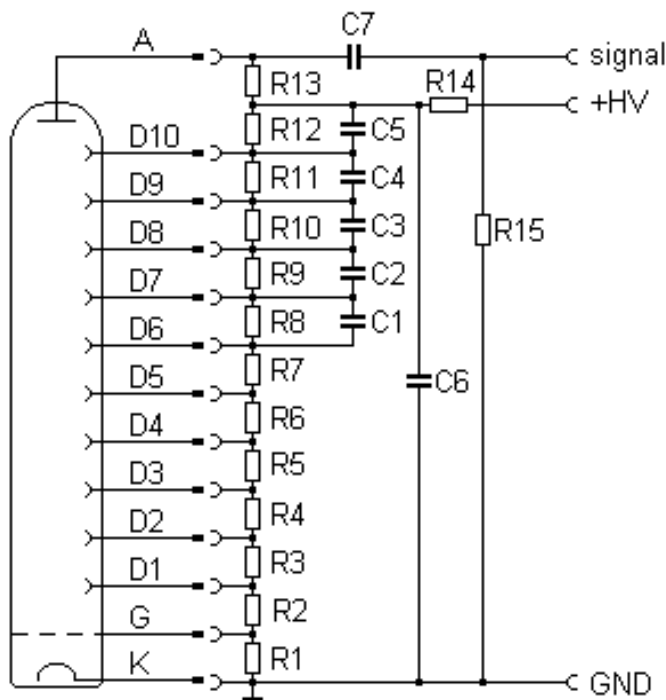


Figure 3: Schematic of the external 14-pin PMT wiring

We hope that you have found the information you are looking for.
Feel free to contact us if you have any queries.