

 odel X-ray	<b>Odel X-ray</b>	EEN-021
	<b>NAVIGATOR TO ENDEAVOUR CONNECTIONn</b>	Eng. to Eng.Note 2008-04

I'm basing this EEN on original documentation as received, annexed in the end of this document.

To connect a DAP measuring device directly to a R306.3x or R306.4x generator, you need to prepare a small cable composed by:

RJ45 - 8-pin FEMALE

DIN 5s - 5pin male

4 pin cable (10cm it is enough)

**CABLE REQUIREMENT**

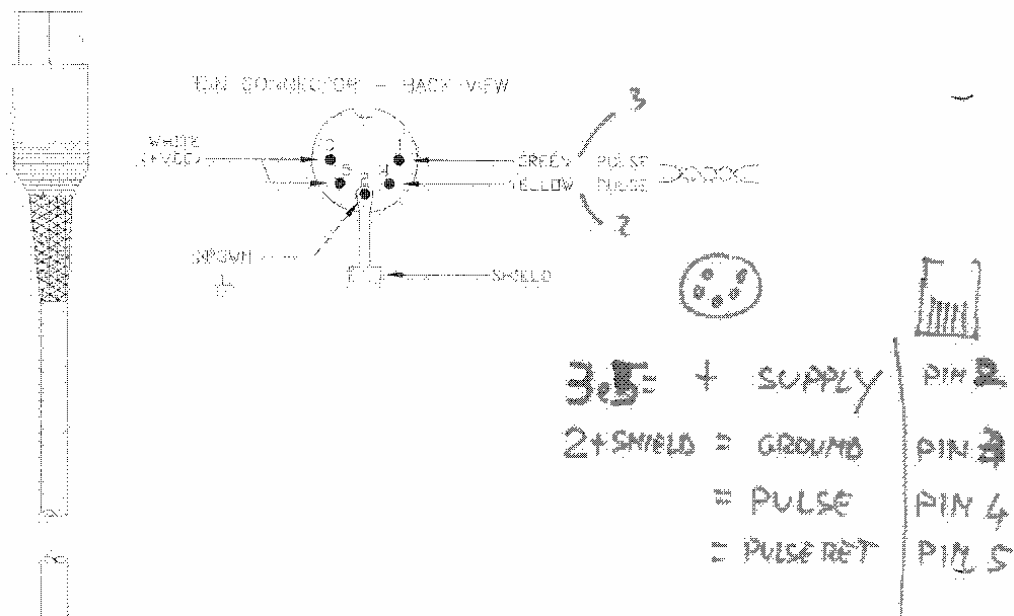
DIN 5s.Pin 1	<-- (PULSE RETURN)	-->	RJ45.Pin 5
DIN 5s.Pin 2	<-- (GROUND)	-->	RJ45.Pin 3
DIN 5s.Pin 3	<-- (POSITIVE SUPPLY)	-->	RJ45.Pin 2
DIN 5s.Pin 4	<-- (PULSE)	-->	RJ45.Pin 4
DIN 5s.Pin 5	<-- (POSITIVE SUPPLY)	-->	RJ45.Pin 2

**OPTIONAL SHIELD**

DIN 5s.SHIELD	<-- (GROUND)	-->	RJ45.Pin 3
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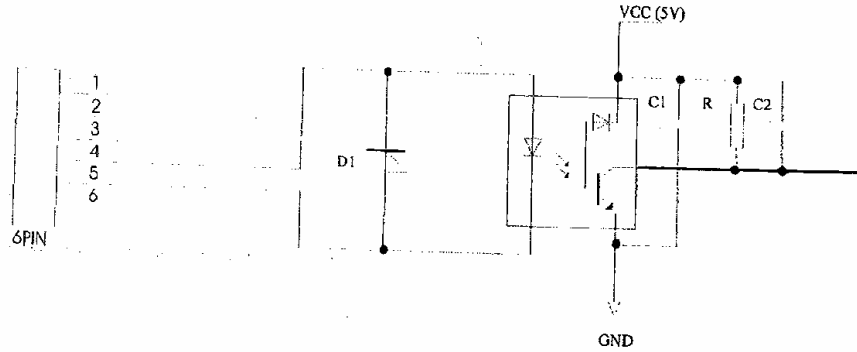
Connect DIN connector of D.A.P. cable to M.C.U. J9 connector

Connect MINIDIN connector of D.A.P. cable D.A.P. chamber connector



DOCUMENTO		FOGLIO
NOMEFILE		1
<small>ISO9000/25 EEN-021 Wellhofer DAP Chamber Connection.doc</small>		di 3

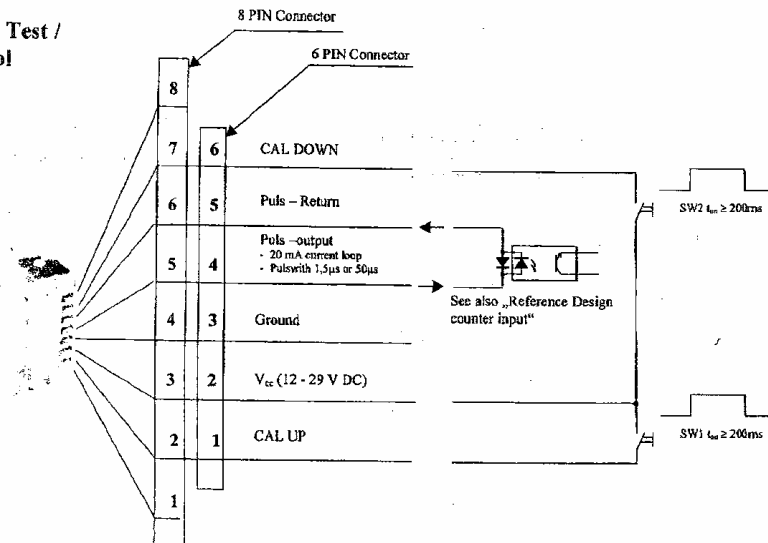
Reference design (counter input)



**BOM of Material**

OK1	Sharp PC 417 (1Mhz coupler)
D1	LL 4148
C1	10µF
C2	470pF
R	820R

**Pulse Readout and Test / Calibration Control**



SW1 (V <sub>cc</sub> to CAL "UP")	"ON"	(t <sub>on</sub> ≥ 200ms)	The electrometer will increase it's sensitivity by appr. 0.5%
SW2 (V <sub>cc</sub> to CAL "DOWN")	"ON"	(t <sub>on</sub> ≥ 200ms)	The electrometer will reduce it's sensitivity by appr. 0.5%
SW1 and SW2	"ON"	(t <sub>on</sub> ≥ 200ms)	Testsqueeze – the electrometer will send 800 to 1200 pulses

DOCUMENTO		FOGLIO
NOMEFILE		2
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		3

Pin number	Function, Primary	Function, Secondary
5	Supply 9 to 28 VDC - 40 mA	
4	Supply 0 Volts	
2	Dose pulse 0 Volts Pulse = 1 mC/kg <sup>cm</sup> <sup>2</sup> max. f = 16 kHz	Fault "High" for > 160 μs
3	Signal Dose pulse 5 Volts pp 50 μs	
1	Cal. up > 2,5 Volt pp	"High" for > 200 ms "High" for > 200 ms "High" for > 220 ms to activate a test number reading "High" for > 12s to set test number to 1000
6	Cal. down Width: > 200 ms Interval: > 200 ms	



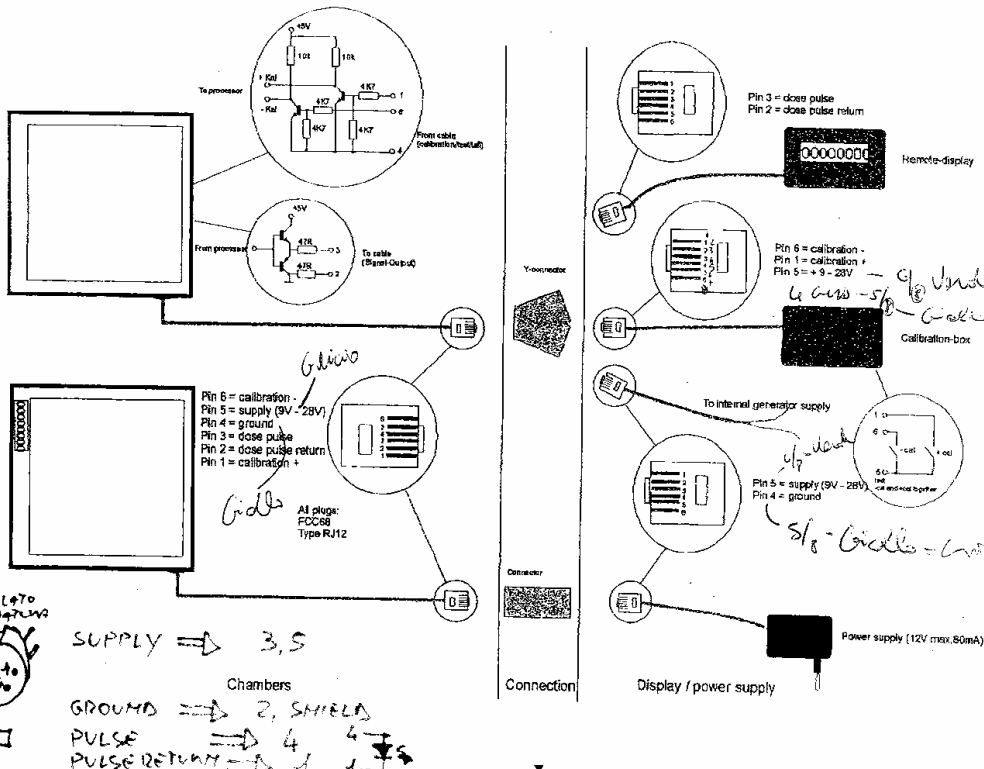
FCC 68 type RJ12 connector  
Cable Typ:  
FCC 68  
6 way

Notes :

Arrows indicate direction of flow. Fault lines will stay high when a fault is detected, power down will cancel fault detector. Cal. up and Cal. down high together (for > 220 msec) will generate test on demand. Auto test is applied 10 seconds after power up. Max cable length 30 m.

\* >2,5 V pp

KERMAX-plus  
Universal Wiring System



KERMAX-plus connection diagram

SCANDITRONIX  
Wellhofer DAP  
Chamber

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